TROUBLE SHOOTING MANUAL

HIGHLIGHTS

REVISION NO. 54 May 01/08

Pages which have been revised are outlined below, together with the Highlights of the Revision

| CH/SE/SU C PAGES | REASON FOR CHANGE | EFFECTIVITY |
|---------------------|-------------------|-------------|
| | | |

CHAPTER 27

| L.E.P. 1-10 | REVISED TO REFLECT THIS REVISION INDICATING NEW, REVISED, AND/OR DELETED PAGES | |
|--|--|--|
| T. OF C. 7- 9, 23 | REVISED TO REFLECT THIS REVISION | |
| 27-ECAM | MOD.26525P4866 INCORPORATED NAVIGATION - GPWS - INSTALL EGPWC | 201-225, 227-227, 229-245, 254-299, 426-499, 503-549, |
| | (OLD SPECIFICATION) | 551-599, 701-749, |
| A104,A118- | | 205-205, 232-232, 245-245, |
| B108 | INDICATING/RECORDING SYSTEMS - FWC - | 256-275, 451-475, 553-553, |
| | INSTALL FWC STANDARD H2E4 | 555-555, 564-599, |
| | MOD.28916P6437 REMOVED | ALL |
| | INDICATING RECORDING SYSTEM-FWS INTRODUCE FWC STANDARD H1PE3P | |
| | SB 32-1336 INCORPORATED | 201-225, 227-227, 229-299, |
| | LANDING GEAR - NORMAL BRAKING - INSTALL BSCU | 426-450, 476-499, 503-549, |
| | STD 10 BY SB ONLY. | 551-599, 701-749, |
| | FAULT LIST UPDATED | ALL |
| 27-0BSV 102, 113- 115, 117- 120 | FAULT LIST UPDATED | ALL |
| 27-CFDS | SB 32-1336 INCORPORATED | 201-225, 227-227, 229-299, |
| | LANDING GEAR - NORMAL BRAKING - INSTALL BSCU | 426-450, 476-499, 503-549, |
| | STD 10 BY SB ONLY. | 551-599, 701-749, |
| | EFFECTIVITY UPDATED | |
| 220 | EFFECTIVITY UPDATED (THROUGHOUT THE TEXT) | 201-225, 227-227, 229-299, |
| | | 426-455, 476-499, 503-549, |
| | | 551-599, 701-749, |
| 27-51-00 | EFFECTIVITY UPDATED | |
| 235, 246- | MOD.26649J1662 INCORPORATED | 201-206, 209-225, 227-227, |
| 247, 250- | WINGS-FLAPS-MODIFY FLAP RIGGING | 229-277, 279-299, 426-499, |
| A219 | PROCEDURE | 503-549, 551-599, 701-749, |
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| | SB 27-1119 O8 INCORPORATED WINGS - FLAPS - MODIFY FLAP RIGGING PROCEDURE TITLE OF TASK(S) DATA UPDATED EFFECTIVITY UPDATED (THROUGHOUT THE TEXT) | 201-206, 209-225, 227-227, 229-277, 279-299, 426-499, 503-549, 551-599, 701-749, ALL 201-225, 227-227, 229-284, 426-478, 551-599, 701-749, | | | | |
| 27-51-00 314 | EFFECTIVITY UPDATED EFFECTIVITY UPDATED (THROUGHOUT THE TEXT) | 201-225, 227-227, 229-275, 426-475, 551-599, 701-749, | | | | |
| 27-60-00 205- 206 | EFFECTIVITY UPDATED (THROUGHOUT THE TEXT) | 227-227, 229-232, 276-281, 476-477, | | | | |
| 27-81-00 231 | EFFECTIVITY UPDATED (THROUGHOUT THE TEXT) | 201-225, 227-227, 229-275, 426-475, 551-599, 701-749, | | | | |
| 27-93-00 A295-B202, B258-B267, B289 | EFFECTIVITY UPDATED EFFECTIVITY UPDATED (THROUGHOUT THE TEXT) | 201-225, 227-227, 229-254, 276-299, 426-450, 476-499, 503-549, 551-599, 701-749, | | | | |
| 27-94-00 A221-A224 | LAYOUT IMPROVED OR EFFECTIVITY UPDATED | | | | | |
| 27-95-00 234 | EFFECTIVITY UPDATED (THROUGHOUT THE TEXT) | 201-225, 227-227, 229-299, 426-455, 476-499, 503-549, 551-599, 701-749, | | | | |
| 27-96-00 202- 204, 206- 208 | EFFECTIVITY UPDATED (THROUGHOUT THE TEXT) | 227-227, 229-247, 426-429, 701-749, | | | | |

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CHAPTER 27

FLIGHT CONTROLS

LIST OF EFFECTIVE PAGES

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| OF TEMP. | | | | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/05 |
| REVISION | | | | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/05 |
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| T. of C. | | 1 | - | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/07 |
| T. of C. | | | May01/07 | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/07 |
| T. of C. | | | | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/05 |
| T. of C. | | 4 | Aug01/06 | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/05 |
| T. of C. | | 5 | Aug01/06 | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/07 |
| T. of C. | | 6 | Aug01/06 | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/07 |
| T. of C. | R | 7 | _ | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/05 |
| T. of C. | R | 8 | * | 27-ECAM | | | Aug01/07 | 27-ECAM | | | Feb01/06 |
| T. of C. | R | 9 | May01/08 | 27-ECAM | | | Nov01/07 | 27-ECAM | | 162 | Feb01/06 |
| T. of C. | | | Feb01/08 | 27-ECAM | | 121 | Nov01/07 | 27-ECAM | F | 163 | May01/08 |
| T. of C. | | 11 | Feb01/08 | 27-ECAM | | 122 | Nov01/07 | 27-ECAM | F | 164 | May01/08 |
| T. of C. | | 12 | Feb01/08 | 27-ECAM | | 123 | Nov01/07 | 27-ECAM | F | 165 | May01/08 |
| T. of C. | | 13 | Feb01/08 | 27-ECAM | | 124 | Nov01/07 | 27-ECAM | F | 166 | May01/08 |
| T. of C. | | 14 | Feb01/08 | 27-ECAM | | 125 | Nov01/07 | 27-ECAM | F | 167 | May01/08 |
| T. of C. | | 15 | Feb01/08 | 27-ECAM | | 126 | Nov01/07 | 27-ECAM | F | 168 | May01/08 |
| T. of C. | | 16 | Feb01/08 | 27-ECAM | | 127 | Nov01/07 | 27-ECAM | F | 169 | May01/08 |
| T. of C. | | 17 | Feb01/08 | 27-ECAM | | 128 | Nov01/07 | 27-ECAM | F | 170 | May01/08 |
| T. of C. | | 18 | Feb01/08 | 27-ECAM | | 129 | Nov01/07 | 27-ECAM | F | 171 | May01/08 |
| T. of C. | | 19 | Feb01/08 | 27-ECAM | | 130 | Nov01/07 | 27-ECAM | F | 172 | May01/08 |
| T. of C. | | 20 | Feb01/08 | 27-ECAM | | 131 | Nov01/07 | 27-ECAM | F | 173 | May01/08 |
| T. of C. | | 21 | Feb01/08 | 27-ECAM | | 132 | Nov01/07 | 27-ECAM | F | 174 | May01/08 |
| T. of C. | | 22 | Feb01/08 | 27-ECAM | | | Nov01/07 | 27-ECAM | F | | May01/08 |
| T. of C. | R | | • | 27-ECAM | | | Nov01/07 | 27-ECAM | | | Aug01/05 |
| T. of C. | | | Feb01/08 | 27-ECAM | | 135 | Nov01/07 | 27-ECAM | | 177 | May01/07 |
| T. of C. | | | | 27-ECAM | | | Nov01/07 | 27-ECAM | | 178 | • |
| T. of C. | | | | 27-ECAM | | 137 | | 27-ECAM | | | Aug01/05 |
| T. of C. | | | Feb01/08 | 27-ECAM | | 138 | Nov01/07 | 27-ECAM | | | Feb01/08 |
| T. of C. | | 28 | - | 27-ECAM | | 139 | Nov01/07 | 27-ECAM | | | Feb01/08 |
| T. of C. | | 29 | Feb01/08 | 27-ECAM | | 140 | Nov01/07 | 27-ECAM | | | Feb01/08 |
| T. of C. | | 30 | Feb01/08 | 27-ECAM | | 141 | - | 27-ECAM | | 183 | May01/07 |
| | | | | 27-ECAM | | | Aug01/05 | 27-ECAM | | | Aug01/07 |
| 27-ECAM | R | | May01/08 | 27-ECAM | | | Aug01/07 | 27-ECAM | | | May01/07 |
| 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/05 | 27-ECAM | | | May01/07 |
| 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/05 | 27-ECAM | | | Aug01/07 |
| 27-ECAM | | | Aug01/07 | 27-ECAM | | | Aug01/05 | 27-ECAM | | | May01/07 |
| 27-ECAM | | | Aug01/07 | 27-ECAM | | | Feb01/07 | 27-ECAM | | | May01/07 |
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| 27-ECAM | | Aug01/05 | 27-ECAM | | | May01/08 | 27-ECAM | | | May01/08 |
| 27-ECAM | | Aug01/05 | 27-ECAM | | | May01/08 | 27-ECAM | | | May01/08 |
| 27-ECAM | | Aug01/05 | 27-ECAM | | | May01/08 | 27-ECAM | | | May01/08 |
| 27-ECAM | | Aug01/05 | 27-ECAM | | | May01/08 | 27-ECAM | | | May01/08 |
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| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-ECAM | | | May01/08 |
| 27-ECAM | | May01/07 | 27-ECAM | | | May01/08 | 27-ECAM | | | May01/08 |
| 27-ECAM | | May01/07 | 27-ECAM | | | May01/08 | 27-ECAM | F | | May01/08 |
| 27-ECAM | | Aug01/07 | 27-ECAM | | | May01/08 | 27-ECAM | | _ | |
| 27-ECAM | | Aug01/07 | 27-ECAM | | | May01/08 | 27-ECAM | | _ | |
| 27-ECAM | | Aug01/07 | 27-ECAM | | | May01/08 | 27-ECAM | | | |
| 27-ECAM | | Aug01/07 | 27-ECAM | | | May01/08 | 27-ECAM | | | |
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| 27-ECAM | | Aug01/07 | 27-ECAM | | | May01/08 | 27-ECAM | | | |
| 27-ECAM | | Aug01/07 | 27-ECAM | | | May01/08 | 27-ECAM | | | |
| 27-ECAM | | Aug01/07 | 27-ECAM | | | May01/08 | 27-ECAM | | | |
| 27-ECAM | | Aug01/07 | 27-ECAM | | | May01/08 | 27-ECAM | | | |
| 27-ECAM | | Aug01/07 | 27-ECAM | | | May01/08 | 27-ECAM | L | B118 | |
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| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | | 101 | Feb01/08 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | F | | May01/08 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | r | | Feb01/08 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | | | Feb01/08 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | | | Feb01/08 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | | | May01/07 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | | | Aug01/07 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | | | May01/07 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | | | May01/07 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | | | Aug01/07 |
| 27-ECAM | | May01/08 | 27-ECAM | | | May01/08 | 27-0BSV | | | May01/07 |
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| 27-ECAM | R A135 | May01/08 | 27-ECAM | R | A 186 | May01/08 | 27-0BSV | | 116 | Feb01/08 |
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| 27-CFDS | | | Feb01/06 | 27-10-00 | | May01/07 | 27-20-00 | | | Feb01/07 |
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| 27-CFDS | | | Feb01/08 | 27-10-00 | | Feb01/08 | 27-20-00 | | | Feb01/07 |
| 27-CFDS | | | Feb01/08 | 27-10-00 | | May01/07 | 27-20-00 | | | Feb01/08 |
| 27-CFDS | _ | | Feb01/08 | 27-10-00 | | May01/07 | 27-20-00 | | | Feb01/08 |
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| 27-CFDS | R | | May01/08 | 27-10-00 | | May01/07 | 27-20-00 | | | Feb01/08 |
| 27-CFDS | R | | May01/08 | 27-10-00 | | Feb01/08 | 27-20-00 | | | Feb01/08 |
| 27-CFDS | | | Feb01/08 | 27-10-00 | | May01/07 | 27-20-00 | R | | May01/08 |
| 27-CFDS | | | Feb01/08 | 27-10-00 | | May01/07 | 27-20-00 | | | Feb01/08 |
| 27-CFDS | R | | May01/08 | 27-10-00 | | May01/07 | 27-20-00 | | | Feb01/08 |
| 27-CFDS | R | | May01/08 | 27-10-00 | | May01/07 | 27-20-00 | | 223 | Feb01/08 |
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| 27-10-00 | | 205 | May01/05 | 27-10-00 | 256 | Feb01/08 | 27-30-00 | | 206 | Aug01/03 |
| 27-10-00 | | 206 | May01/05 | 27-10-00 | 257 | May01/07 | 27-30-00 | | 207 | Aug01/03 |
| 27-10-00 | | 207 | May01/05 | 27-10-00 | 258 | May01/07 | 27-30-00 | | 208 | Nov01/99 |
| 27-10-00 | | 208 | Feb01/08 | 27-10-00 | 259 | May01/07 | 27-30-00 | | 209 | Feb01/99 |
| 27-10-00 | | 209 | May01/05 | 27-10-00 | 260 | May01/07 | 27-30-00 | | 210 | Nov01/99 |
| 27-10-00 | | 210 | May01/00 | 27-10-00 | 261 | May01/07 | 27-30-00 | | 211 | Feb01/06 |
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| 27-10-00 | | | Aug01/00 | 27-10-00 | | May01/07 | 27-30-00 | | | Feb01/99 |
| 27-10-00 | | | Aug01/00 | 27-10-00 | | May01/07 | 27-30-00 | | | Nov01/06 |
| 27-10-00 | | | Aug01/00 | 27-10-00 | | May01/07 | 27-30-00 | | | Nov01/06 |
| 27-10-00 | | | Aug01/00 | 27-10-00 | | May01/07 | 27-30-00 | | | Nov01/06 |
| 27-10-00 | | | Aug01/00 | 27-10-00 | | May01/07 | 27-30-00 | | | Nov01/06 |
| 27-10-00 | | | Aug01/00 | 27-10-00 | | May01/07 | 27-30-00 | | | Aug01/03 |
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| 27-30-00 | | | Feb01/06 | 27-30-00 | | Nov01/06 | 27-51-00 | | | Feb01/08 |
| 27-30-00 | | | Nov01/07 | 27-30-00 | | Nov01/06 | 27-51-00 | | | Feb01/03 |
| 27-30-00 | | | Aug01/00 | 27-30-00 | | Nov01/06 | 27-51-00 | | | Feb01/99 |
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| 3 Loss of the THS Command Transducer | | 268 | ALL |
| Signal for the SEC 1 Loss of the THS Monitor Transducer | | 270 | ALL |
| Signal for the SEC 1 Loss of the Servo Motor 2 Signal | | 273 | ALL |
| on the THS Actuator for the SEC 1 Loss of the THS Command Transducer | | 275 | ALL |
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|---|----------|----------|----------------|------------|
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| Loss of the LGCIU1 BUS2 for the SEC2 | | | A247 ALL | |
| Loss of the LGCIU1 BUS1 for the SEC1 | | | A248 ALL | |
| Loss of the LGCIU2 BUS1 for the SEC3 | | | A249 ALL | |
| Loss of the LGCIU2 BUS1 for the SEC2 | | | A250 ALL | |
| Loss of the LGCIU2 BUS2 for the SEC1 | | | A251 ALL | |
| Disagree between LGCIU1 and LGCIU2 for the SEC | | | A252 ALL | |
| Loss of the Side Stick Priority | | | A256 ALL | |
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| Signal for the SEC 2 Loss of the ELAC 1 MON BUS 1 | | | A260 ALL | |
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| CONCENTRATOR) FAULT ISOLATION PROCEDURES | | | 201 ALL | |
| Loss of the FCDC2 Fail Discrete | | | 201 ALL | |
| Signal for the FCDC1 | | | ZUI ALL | |
| Failure of the FCDC2 | | | 202 ALL | |
| Failure of the FCDC1 | | | 203 ALL | |
| Loss of the ELAC 1 BUS 2 Signal | | | 204 ALL | |
| for the FCDC 1 | | | LO- ALL | |
| Loss of the ELAC 1 BUS 2 Signal for the FCDC 2 | | | 205 ALL | |
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| Loss of the Side Stick Priority Indication on the Glareshield | | | 224 | ALL |
| Panel | | | | |
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| Loss of the F/CTL Page Automatic | | | 233 | ALL |
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| MAINTENANCE AND SAFETY TESTS/BITE | 27-96-00 | | | |
| FAULT ISOLATION PROCEDURES | | | 201 | ALL |
| Result of the Operational Test of | | | 201 | ALL |
| the Logics that Activates the ELAC | | | | |
| 1&2 and SEC 1 STBY PWR SPLY not | | | | |

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Operational Test of the THS
Actuator Electrical Control not OK

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|-----------------------|--------|---------------------|--------------------|---|-----------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |

Upper ECAM DU Warnings

| | | | |
|---|--|------|---------------------------|
| | CONFIG associated with F/CTL - Speedbrakes not retracted | | 270000 P 201 T 810 801 |
| R | CONFIG associated with F/CTL - FLAPS - Flaps not in TO configuration | | 275100 P 274 T 810 833 |
| | CONFIG associated with F/CTL - SLATS - Slats not in TO configuration | | 278100 P 267 T 810 827 |
| R | CONFIG FLAPS NOT IN T.O CONFIG | | 275100 P 274 T 810 833 |
| | CONFIG L SIDESTICK FAULT | | 270000 P 201 T 810 801 |
| | CONFIG PITCH TRIM NOT IN T.O RANGE | | 270000 P 201 T 810 801 |
| | CONFIG R SIDESTICK FAULT | | 270000 P 201 T 810 801 |
| | CONFIG RUD TRIM | | 270000 P 201 T 810 801 |
| | CONFIG SLATS NOT IN T.O CONFIG | | 278100 P 267 T 810 827 |
| | CONFIG SPD BRK NOT RETRACTED | | 270000 P 201 T 810 801 |
| | <u>F/CTL</u> ADR DISAGREE | | 279300 PB251 T 810 929 |

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|-------|-----|--|--|
| SROS | | | |

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|--|--------|--|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | C | : : |
| F/CTL AIL SERVO FAULT associated with VIBRATIONS - Vibrations felt in the FWD cabin and in the cockpit | | | | | 271000 P 264 T 810 835 |
| F/CTL AIL SERVO FAULT | | | | | 279300 PB268 T 810 937 |
| F/CTL AIL SERVO FAULT | EFCS 1 | CHECK L AIL CHANGE OVER OF ELAC1 | 279334 | 1 | 271000 P 220 T 810 811 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | CHECK R AIL CHANGE OVER OF ELAC1 | 279334 | 1 | 271000 P 249 Т 810 825 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC1 AIL ORDER DISAGREE | 279334 | 1 | 279300 PB287 T 810 950 |
| | IDENT: | EFCS 2 | | | 1 010 750 |
| F/CTL AIL SERVO FAULT associated with | EFCS 1 | ELAC1 AIL ORDER DISAGREE | 279334 | 1 | 279300 PB287 T 810 950 |
| F/CTL Roll jerk | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC1 COM OR WIRING FROM L B AIL POS XDCR 33CE3 | 279334 | 1 | 271000 P 209 T 810 805 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC1 COM OR WIRING FROM R G AIL POS XDCR 33CE2 | 279334 | 1 | 271000 P 239 T 810 820 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC1 MON OR WIRING FROM L B AIL POS XDCR 33CE3 | 279334 | 1 | 271000 P 209 Т 810 805 |
| | IDENT: | |] | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC1 MON OR WIRING FROM R G AIL POS XDCR 33CE2 | 279334 | 1 | 271000 P 239 T 810 820 |
| | IDENT: | EFCS 2 | | | <u> </u> |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---------------------------------------|---------------------|--|---------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC1 OR INPUT OF L PEDALS XDCR UNIT 25CE1 | 279334 | 1 | 271000 P 201 T 810 801 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC1 OR INPUT OF R PEDALS XDCR UNIT 25CE2 | 279334 | 1 | 271000 P 203 T 810 802 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC2 AIL ORDER DISAGREE | 279334 | 1 | 271000 P 225 T 810 814 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT associated with | EFCS 1 | ELAC2 AIL ORDER DISAGREE | 279334 | 1 | 271000 P 225 T 810 814 |
| F/CTL Roll jerk | IDENT: | EFCS 2 | | | L |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC2 COM OR WIRING FROM L G AIL POS XDCR 33CE1 | 279334 | 1 | 271000 P 224 T 810 813 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC2 COM OR WIRING FROM R B AIL POS XDCR 33CE4 | 279334 | 1 | 271000 P 252 т 810 827 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC2 MON OR WIRING FROM L G AIL POS XDCR 33CE1 | 279334 | 1 | 271000 P 224 T 810 813 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | ELAC2 MON OR WIRING FROM R B AIL POS XDCR 33CE4 | 279334 | 1 | 271000 P 252 T 810 827 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | L B AIL MODE VLV 33CE3 | 271451 | 1 | 271000 P 216 T 810 810 |
| | IDENT: | EFCS 2 | | | 1 010 010 |
| F/CTL AIL SERVO FAULT | EFCS 1 | L B AIL POS XDCR 33CE3 | 271451 | 1 | 271000 P 207 T 810 804 |
| | IDENT: | EFCS 2 | | | |

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|---------------------------------------|------------|---|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL AIL SERVO FAULT | EFCS 1 | L B AIL POS XDCR 33CE3 | 271451 | 1 | 279000 P 214 T 810 807 | |
| | EFCS 1 | R G AIL POS XDCR 33CE2 | 271451 | 1 | 010 001 | |
| <u></u> | IDENT: | EFCS 2 | | | <u></u> | |
| F/CTL AIL SERVO FAULT | EFCS 1 | L B AIL SERVO VLV 33CE3 | 271451 | 1 | 271000 P 214 T 810 809 | |
| <u></u> | IDENT: | EFCS 2 | | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | L B AIL SERVO VLV 33CE3 OR OUTPUT FROM ELAC1 | 271451 | 1 | 271000 P 210 T 810 807 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | L G AIL MODE VLV 33CE1 | 271451 | 1 | 271000 P 233 T 810 818 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | L G AIL POS XDCR 33CE1 | 271451 | 1 | 271000 P 222 T 810 812 | |
| | IDENT: | EFCS 2 | | | 1 010 012 | |
| F/CTL AIL SERVO FAULT | EFCS 1 | L G AIL POS XDCR 33CE1 | 271451 | 1 | 279000 P 216 T 810 808 | |
| | EFCS 1 | R B AIL POS XDCR 33CE4 | 271451 | 1 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | L G AIL SERVO VLV 33CE1 | 271451 | 1 | 271000 P 231 T 810 817 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | L G AIL SERVO VLV 33CE1 OR OUTPUT FROM ELAC2 | 271451 | 1 | 271000 P 227 T 810 815 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL AIL SERVO FAULT associated with | EFCS 1 | L OR R PEDALS XDCR UNIT | 279215 | 1 | 271000 P 205 T 810 803 | |
| F/CTL ALTN LAW | IDENT: | EFCS 2 | | | | |

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| LIADNINGS /MALEUNGTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|---------------------|---|-----------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL AIL SERVO FAULT | EFCS 1 | R B AIL MODE VLV 33CE4 | 271451 | 1 | 271000 P 259 |
| | IDENT: | EFCS 2 | · | | Т 810 831 |
| F/CTL AIL SERVO FAULT | EFCS 1 | R B AIL POS XDCR 33CE4 | 271451 | | 271000 P 250 T 810 826 |
| | IDENT: | EFCS 2 | | | 1 010 020 |
| F/CTL AIL SERVO FAULT | EFCS 1 | R B AIL SERVO VLV 33CE4 | 271451 | | 271000 P 257 T 810 830 |
| | IDENT: | EFCS 2 | | | 1 010 030 |
| F/CTL AIL SERVO FAULT | EFCS 1 | R B AIL SERVO VLV 33CE4 OR OUTPUT FROM ELAC2 | 271451 | 1 | 271000 P 253 T 810 828 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | R G AIL MODE VLV 33CE2 | 271451 | | 271000 P 245 T 810 824 |
| | IDENT: | | 1 010 024 | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | R G AIL POS XDCR 33CE2 | 271451 | | 271000 P 237 T 810 819 |
| | IDENT: | EFCS 2 | | | 1 010 017 |
| F/CTL AIL SERVO FAULT | EFCS 1 | R G AIL SERVO VLV 33CE2 | 271451 | | 271000 P 243 T 810 823 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 1 | R G AIL SERVO VLV 33CE2 OR OUTPUT FROM ELAC1 | 271451 | 1 | 271000 P 240 Т 810 821 |
| | IDENT: | EFCS 2 | | | |
| F/CTL AIL SERVO FAULT | EFCS 2 | CHECK L AIL CHANGE OVER OF ELAC1 | 279334 | 1 | 271000 P 220 T 810 811 |
| F/CTL AIL SERVO FAULT | EFCS 2 | CHECK R AIL CHANGE OVER OF ELAC1 | 279334 | 1 | 271000 P 249 T 810 825 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC1 AIL ORDER DISAGREE | 279334 | 1 | 279300 PB287 T 810 950 |
| F/CTL AIL SERVO FAULT associated with F/CTL Roll jerk | EFCS 2 | ELAC1 AIL ORDER DISAGREE | 279334 | 1 | 279300 PB287 T 810 950 |

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| WARNINGS/MALFUNCTIONS | <u>T</u> | CFDS FAULT MESSAGES | S | FAULT |
|---|----------|---|--------|-----------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA (| - ISOLATION PROCEDURE |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC1 COM OR WIRING FROM L B AIL POS XDCR 33CE3 | 279334 | 1 271000 P 209 T 810 805 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC1 COM OR WIRING FROM R G AIL POS XDCR 33CE2 | 279334 | 1 271000 P 239 T 810 820 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC1 MON OR WIRING FROM L B AIL POS XDCR 33CE3 | 279334 | 1 271000 P 209 T 810 805 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC1 MON OR WIRING FROM R G AIL POS XDCR 33CE2 | 279334 | 1 271000 P 239 T 810 820 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC1 OR INPUT OF L PEDALS XDCR UNIT 25CE1 | 279334 | 1 271000 P 201 T 810 801 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC1 OR INPUT OF R PEDALS XDCR UNIT 25CE2 | 279334 | 1 271000 P 203 T 810 802 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC2 AIL ORDER DISAGREE | 279334 | 1 271000 P 225 T 810 814 |
| F/CTL AIL SERVO FAULT associated with F/CTL Roll jerk | EFCS 2 | ELAC2 AIL ORDER DISAGREE | 279334 | 1 271000 P 225 T 810 814 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC2 COM OR WIRING FROM L G AIL POS XDCR 33CE1 | 279334 | 1 271000 P 224 T 810 813 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC2 COM OR WIRING FROM R B AIL POS XDCR 33CE4 | 279334 | 1 271000 P 252 T 810 827 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC2 MON OR WIRING FROM L G AIL POS XDCR 33CE1 | 279334 | 1 271000 P 224 T 810 813 |
| F/CTL AIL SERVO FAULT | EFCS 2 | ELAC2 MON OR WIRING FROM R B AIL POS XDCR 33CE4 | 279334 | 1 271000 P 252 T 810 827 |
| F/CTL AIL SERVO FAULT | EFCS 2 | L B AIL MODE VLV 33CE3 | 271451 | 1 271000 P 216 T 810 810 |
| F/CTL AIL SERVO FAULT | EFCS 2 | L B AIL POS XDCR 33CE3 | 271451 | 1 271000 P 207 T 810 804 |
| F/CTL AIL SERVO FAULT | | L B AIL POS XDCR 33CE3 associated with R G AIL POS XDCR 33CE2 | 271451 | 1 279000 P 214 T 810 807 |
| L | EFCS 2 | | C | ' |

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| LIADNINGS (MALEUNCITONS | | CFDS FAULT MESSAGES | S | FAULT ISOLATION |
|---|--------|---|--------|-----------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | C PROCEDURE |
| F/CTL AIL SERVO FAULT | EFCS 2 | L B AIL SERVO VLV 33CE3 | 271451 | 1 271000 P 214 T 810 809 |
| F/CTL AIL SERVO FAULT | EFCS 2 | L B AIL SERVO VLV 33CE3 OR OUTPUT FROM ELAC1 | 271451 | 1 271000 P 210 T 810 807 |
| F/CTL AIL SERVO FAULT | EFCS 2 | L G AIL MODE VLV 33CE1 | 271451 | 1 271000 P 233 T 810 818 |
| F/CTL AIL SERVO FAULT | EFCS 2 | L G AIL POS XDCR 33CE1 | 271451 | 1 271000 P 222 T 810 812 |
| F/CTL AIL SERVO FAULT | EFCS 2 | L G AIL POS XDCR 33CE1 | j | 1 279000 P 216 T 810 808 |
| | EFCS 2 | R B AIL POS XDCR 33CE4 | 271451 | 1 |
| F/CTL AIL SERVO FAULT | EFCS 2 | L G AIL SERVO VLV 33CE1 | 271451 | 1 271000 P 231 T 810 817 |
| F/CTL AIL SERVO FAULT | EFCS 2 | L G AIL SERVO VLV 33CE1 OR OUTPUT FROM ELAC2 | 271451 | 1 271000 P 227 T 810 815 |
| F/CTL AIL SERVO FAULT associated with F/CTL ELAC 2 PITCH FAULT and F/CTL ALTN LAW | EFCS 2 | L OR R PEDALS XDCR UNIT | 279215 | 1 271000 P 205 T 810 803 |
| F/CTL AIL SERVO FAULT | EFCS 2 | R B AIL MODE VLV 33CE4 | 271451 | 1 271000 P 259 T 810 831 |
| F/CTL AIL SERVO FAULT | EFCS 2 | R B AIL POS XDCR 33CE4 | 271451 | 1 271000 P 250 T 810 826 |
| F/CTL AIL SERVO FAULT | EFCS 2 | R B AIL SERVO VLV 33CE4 | 271541 | 1 271000 P 257 T 810 830 |
| F/CTL AIL SERVO FAULT | EFCS 2 | R B AIL SERVO VLV 33CE4 OR OUTPUT FROM ELAC2 | 271451 | 1 271000 P 253 T 810 828 |
| F/CTL AIL SERVO FAULT | EFCS 2 | R G AIL MODE VLV 33CE2 | 271451 | 1 271000 P 245 T 810 824 |
| F/CTL AIL SERVO FAULT | EFCS 2 | R G AIL POS XDCR 33CE2 | 271451 | 1 271000 P 237 T 810 819 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|--|---------------------|---|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | !! | |
| F/CTL AIL SERVO FAULT | EFCS 2 | R G AIL SERVO VLV 33CE2 | 271451 | 1 | 271000 P 243 Т 810 823 | |
| F/CTL AIL SERVO FAULT | EFCS 2 | R G AIL SERVO VLV 33CE2 OR OUTPUT FROM ELAC1 | 271451 | 1 | 271000 P 240 T 810 821 | |
| F/CTL ALTN LAW associated with F/CTL DIRECT LAW and STS-Inop System RA 1+2 | | | | | 344200 P 273 T 810 841 | |
| F/CTL ALTN LAW associated with | ADR 1 | ADIRU1 (1FP1) | 341234 | | 341300 P 201 T 810 801 | |
| NAV ADR 1+2 FAULT | IDENT: / | | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ADR 1 | AOA SENSOR1 (3FP1) | 341119 | 1 | 341100 P 228 T 810 829 | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ADR 1 | AOA SENSOR1 (3FP1) | 341119 | 1 | 341100 P 228 T 810 829 | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ADR 1 | AOA SENSOR1 (3FP1) SPLY | 240000 | 1 | 341100 P 201 T 810 801 | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ADR 1 | AOA SENSOR1 (3FP1) SPLY | 240000 | 1 | 341100 P 201 T 810 801 | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ADR 1 | AOA SENSOR1 (3FP1)/ ADIRU1 (1FP1) | 341119 | 1 | 341300 PA211 T 810 906 | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ADR 1 | AOA SENSOR1 (3FP1)/ ADIRU1 (1FP1) | 341119 | 1 | 341300 PA211 T 810 906 | |

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| HADNINGS /MALEUNGTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|--|---|---|------------------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | !!! | |
| F/CTL ALTN LAW associated with NAV ADR 1 FAULT and STS-Maintenance ADR | ADR 1 | TAT SENSOR (11FP1)/ ADIRU1 (1FP1) associated with TAT SENSOR (11FP1)/ ADIRU3 (1FP3) | 341118 341118 | | 341381 P 217 T 810 816 | |
| F/CTL ALTN LAW associated with | ADR 2 | ADIRU2 (1FP2) | 341234 | | 341300 P 257 T 810 851 | |
| NAV ADR 1+2 FAULT | | IDENT: AFS, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 2, EIS 3, EIU1FAD, EIU2FAD, IR 1, IR 3, SFCC 1, SFCC 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ADR 2 | AOA SENSOR2 (3FP2) | 341119 | 1 | 341100 P 230 T 810 830 | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ADR 2 | AOA SENSOR2 (3FP2) | 341119 | 1 | 341100 P 230 T 810 830 | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ADR 2 | AOA SENSOR2 (3FP2) SPLY | 240000 | 1 | 341100 P 203 T 810 802 | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ADR 2 | AOA SENSOR2 (3FP2) SPLY | 240000 | 1 | 341100 P 203 T 810 802 | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ADR 2 | AOA SENSOR2 (3FP2)/ ADIRU2 (1FP2) | 341119 | 1 | 341300 PA213 T 810 907 | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ADR 2 | AOA SENSOR2 (3FP2)/ ADIRU2 (1FP2) | 341119 | 1 | 341300 PA213 T 810 907 | |
| F/CTL ALTN LAW associated with | ADR 3 | ADIRU3 (1FP3) | 341234 | 1 | 341300 P 217 T 810 817 | |
| NAV ADR 1+3 FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | | |

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| HADNINGS (MALIFINGTIONS | | CFDS FAULT MESSAGES | S | | FAULT | |
|--|---|---|----------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| F/CTL ALTN LAW associated with | ADR 3 | ADIRU3 (1FP3) | 341234 | | 341300 P 217 T 810 817 | |
| NAV ADR 2+3 FAULT | | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ADR 3 | AOA SENSOR3 (3FP3) | 341119 | 1 | 341100 P 232 T 810 831 | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ADR 3 | AOA SENSOR3 (3FP3) | 341119 | 1 | 341100 P 232 T 810 831 | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ADR 3 | AOA SENSOR3 (3FP3) SPLY | 240000 | 1 | 341100 P 205 T 810 803 | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ADR 3 | AOA SENSOR3 (3FP3) SPLY | 240000 | 1 | 341100 P 205 T 810 803 | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ADR 3 | AOA SENSOR3 (3FP3)/ ADIRU3 (1FP3) | 341119 | 1 | 341300 PA215 T 810 908 | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ADR 3 | AOA SENSOR3 (3FP3)/ ADIRU3 (1FP3) | 341119 | 1 | 341300 PA215 T 810 908 | |
| F/CTL ALTN LAW associated with | AFS | AFS: ADIRU1 | 341234 | | 341400 P 207 T 810 804 | |
| NAV IR 1+2 FAULT | IDENT: | 1 010 004 | | | | |
| F/CTL ALTN LAW associated with | AFS | AFS: ADIRU1 | 341234 | | 341300 P 211 T 810 811 | |
| NAV ADR 1+2 FAULT | IDENT: AFS, ATC 1, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 3, EIU1FAD, EIU2FAD, GPWC, IR 2, IR 3, SFCC 1, SFCC 2 | | | | | |
| F/CTL ALTN LAW associated with | AFS | AFS: ADIRU2 | 341234 | | 341400 P 237 T 810 829 | |
| NAV IR 1+2 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, RADAR 2 | , EIS 2, | | | |

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| LIADNINGS (MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|----------------------------------|--------|--|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !! | |
| F/CTL ALTN LAW associated with | AFS | AFS: ADIRU2 | 341234 | | 341300 P 267 T 810 861 | |
| NAV ADR 1+2 FAULT | | IDENT: AFS, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 2, EIS 3, EIU1FAD, EIU2FAD, IR 1, IR 3, SFCC 1, SFCC 2 | | | | |
| F/CTL ALTN LAW associated with | AFS | AFS: ADIRU3 | 341234 | | 341300 P 249 T 810 846 | |
| NAV ADR 1+3 FAULT | j | AFS, ATC 1, ATC 2, CFDS, I ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with | AFS | AFS: ADIRU3 | 341234 | | 341300 P 249 T 810 846 | |
| NAV ADR 2+3 FAULT | j | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with | AFS | AFS: ADIRU3 | 341234 | | 341400 P 262 T 810 849 | |
| NAV IR 1+3 FAULT | | IDENT: AFS, CFDS, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, RADAR 1, RADAR 2 | | | | |
| F/CTL ALTN LAW associated with | AFS | AFS: ADIRU3 | 341234 | | 341400 P 262 | |
| NAV IR 2+3 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 2, EIS 3, RADAR 1, RAI | | | -т 810 849 | |
| <u>F/CTL</u> ALTN LAW | AFS | AFS: CHK FAC1-ELAC1/2 WRG | 279334 | 1 | 226600 P 294 T 810 866 | |
| <u>F/CTL</u> ALTN LAW | AFS | AFS: CHK FAC2-ELAC1/2 WRG | 279334 | 1 | 226600 P 296 T 810 867 | |
| <u>F/CTL</u> ALTN LAW | AFS | AFS: ELAC1/BUS WIRG/FAC1 | 279334 | 1 | 226600 P 259 T 810 846 | |
| <u>F/CTL</u> ALTN LAW | AFS | AFS: ELAC1/BUS WIRG/FAC2 | 279334 | 1 | 226600 P 262 T 810 849 | |
| <u>F/CTL</u> ALTN LAW | AFS | AFS: ELAC2/BUS WIRG/FAC1 | 279334 | 1 | 226600 P 260 T 810 847 | |
| <u>F/CTL</u> ALTN LAW | AFS | AFS: ELAC2/BUS WIRG/FAC2 | 279334 | 1 | 226600 P 261 T 810 848 | |

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| HADNINGS /MALEUNGTIONS | | FAULT ISOLATION | | | |
|---|------------|---|------------------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | |
| F/CTL ALTN LAW associated with | AFS | AFS: FAC1 | 226634 | | 226600 P 201 T 810 801 |
| AUTO FLT FAC 1+2 FAULT | | CFDS, ECAM 1, ECAM 2, EIS EIS 2, EIS 3 | 1, | | |
| F/CTL ALTN LAW associated with AUTO FLT FAC 1+2 FAULT | AFS | AFS: FAC1/C-M ARINC LINK | 226634 | 1 | 226600 P 209 T 810 805 |
| F/CTL ALTN LAW associated with | AFS | AFS: FAC1/C-M ARINC LINK | 226634 | | 226600 P 207 T 810 803 |
| ! | ! | ECAM 1, ECAM 2, EIS 1, EIS EIS 3 | \$ 2, | | 810 803 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER 1 and AUTO FLT RUD TRIM1 FAULT and AUTO FLT RUD TRV LIM 1 | AFS | AFS: FAC1/P-B SW 12CC1 | 226634 | 1 | 226600 PA230 T 810 894 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS and AUTO FLT RUD TRIM SYS and AUTO FLT RUD TRV LIM SYS | AFS AFS | AFS: FAC1/P-B SW 12CC1 associated with AFS: FAC2/P-B SW 12CC2 | 226634 226634 | | 226600 PA230 T 810 894 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: FAC1/YD ACTR1 3CC1 | 226634 | 1 | 226300 P 201 T 810 801 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: FAC1/YD ENGD FDBK | 226634 | 1 | 226300 P 211 T 810 803 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: FAC1/YD RVDT BX 2CC | 226634 | 1 | 226300 P 215 T 810 805 |
| F/CTL ALTN LAW associated with | AFS | AFS: FAC2 | 226634 | 1 | 226600 P 204 T 810 802 |
| AUTO FLT FAC 1+2 FAULT | ! | IDENT: ECAM 1, ECAM 2, EIS 1, EIS 2, EIS 3 | | | 010 002 |

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| HARNINGS (MALIFINISTIONS | CFDS FAULT MESSAGES | | | | FAULT |
|--|---------------------|--|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL ALTN LAW associated with AUTO FLT FAC 1+2 FAULT | AFS | AFS: FAC2/C-M ARINC LINK | 226634 | 1 | 226600 P 210 T 810 806 |
| F/CTL ALTN LAW associated with | AFS | AFS: FAC2/C-M ARINC LINK | 226634 | | 226600 P 208 T 810 804 |
| AUTO FLT FAC 1+2 FAULT | ! | ECAM 1, ECAM 2, EIS 1, EIS | 5 2, | | 010 004 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER 2 and AUTO FLT RUD TRIM2 FAULT and AUTO FLT RUD TRV LIM 2 | AFS | AFS: FAC2/P-B SW 12CC2 | 226634 | 1 | 226600 PA230 T 810 894 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: FAC2/YD ACTR2 3CC2 | 226634 | 1 | 226300 P 206 T 810 802 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: FAC2/YD ENGD FDBK | 226634 | 1 | 226300 P 213 T 810 804 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: FAC2/YD RVDT BX 2CC | 226634 | 1 | 226300 P 218 T 810 806 |
| F/CTL ALTN LAW associated with AUTO FLT FAC 1+2 FAULT | AFS | AFS: FMGC1/FAC1 (HLTY CKT) | 228334 | 1 | 226600 P 211 T 810 807 |
| F/CTL ALTN LAW associated with AUTO FLT FAC 1+2 FAULT | AFS AFS | AFS: FMGC1/FAC2 (HLTY CKT) associated with AFS: FAC2 | 228334 | | 226600 P 213 T 810 809 |
| F/CTL ALTN LAW associated with AUTO FLT FAC 1+2 FAULT | AFS | AFS: FMGC2/FAC1 (HLTY CKT) associated with AFS: FAC1 | 228334 | | 226600 P 212 T 810 808 |
| F/CTL ALTN LAW associated with AUTO FLT FAC 1+2 FAULT | AFS | AFS: FMGC2/FAC2 (HLTY CKT) | 228334 | 1 | 226600 P 214 T 810 810 |

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| WARNINGS/MALFUNCTIONS | [| CFDS FAULT MESSAGES | | | |
|--|--|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: HYD G 1151GN | 293212 | 1 | 226300 P 225 T 810 811 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: HYD Y 3151GN | 293212 | 1 | 226300 P 227 T 810 812 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: 231 XPA BUS BAR | 245000 | 1 | 226300 P 222 T 810 808 |
| F/CTL ALTN LAW associated with AUTO FLT YAW DAMPER SYS | AFS | AFS: 431 XPA BUS BAR | 245000 | 1 | 226300 P 221 T 810 807 |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ATC 1 | ADIRU 1/3 (1FP1/3)/ ATC1 (1SH1) | 341234 | 1 | 341300 P 265 T 810 857 |
| INAV APR 113 TAGET | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ATC 1 | ADIRU 1/3 (1FP1/3)/ ATC1 (1SH1) | 341234 | 1 | 341300 P 265 T 810 857 |
| NAV ADR 273 FAULT | İ | AFS, ATC 1, ATC 2, CFDS, I ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ATC 1 | ADIRU 1/3 (1FP1/3)/ ATC1 (1SH1) | 341234 | 1 | 341300 P 213 T 810 813 |
| NAV ADR 172 FAULT | IDENT: AFS, ATC 1, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 3, EIU1FAD, EIU2FAD, GPWC, IR 2, IR 3, SFCC 1, SFCC 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ATC 1 | ATC1 : NO DATA FROM ADIRU | 341234 | 1 | 341300 P 265 T 810 857 |
| NAY AUR ITS FAULI | İ | AFS, ATC 1, ATC 2, CFDS, I ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | |

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| HADNINGS (MALEUNCTIONS | | FAULT ISOLATION | | | |
|--|---|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ATC 1 | ATC1 : NO DATA FROM ADIRU | 341234 | 1 | 341300 P 265 T 810 857 |
| INAV ADR 213 TAGET | İ | AFS, ATC 1, ATC 2, CFDS, ECAM 2, EFCS 1, EFCS 2, EEES 2, EIS 3, IR 1, IR 2 | - | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ATC 1 | ATC1 : NO DATA FROM | 341234 | 1 | 341300 P 213 T 810 813 |
| INAV ADA TIZ TAGET | | AFS, ATC 1, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 1, EIS EIU1FAD, EIU2FAD, GPWC, II IR 3, SFCC 1, SFCC 2 | S 3, | • | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ATC 2 | ADIRU 2/3 (1FP2/3) / ATC2 (1SH2) | 341234 | 1 | 341300 P 245 T 810 841 |
| INAV ADR 173 PAGET | IDENT: | | | | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ATC 2 | ADIRU 2/3 (1FP2/3) / ATC2 (1SH2) | 341234 | 1 | 341300 P 245 T 810 841 |
| NAV ADR 273 FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ATC 2 | ADIRU 2/3 (1FP2/3) / ATC2 (1SH2) | 341234 | 1 | 341300 P 269 T 810 863 |
| IND APR ITE FAULT | IDENT: AFS, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 2, EIS 3, EIU1FAD, EIU2FAD, IR 1, IR 3, SFCC 1, SFCC 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | ATC 2 | ATC2 : NO DATA FROM ADIRU | 341234 | 1 | 341300 P 245 T 810 841 |
| NAV ADR ITS FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|--|---|---|-----------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | ATC 2 | ATC2 : NO DATA FROM ADIRU | 341234 | 1 | 341300 P 245 T 810 841 | |
| NAV ADR 275 FAULT | IDENT: | AFS, ATC 1, ATC 2, CFDS, I ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | ATC 2 | ATC2 : NO DATA FROM ADIRU | 341234 | 1 | 341300 P 269 T 810 863 | |
| NAV ADR ITZ FAULI | | AFS, ATC 2, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 2, EIS EIU1FAD, EIU2FAD, IR 1, II SFCC 1, SFCC 2 | S 3, | • | | |
| F/CTL ALTN LAW associated with | CFDS | NO ADR1 DATA | 341234 | | 341300 P 210 T 810 808 | |
| NAV ADR 1+2 FAULT | IDENT: | | 1 010 000 | | | |
| F/CTL ALTN LAW associated with | CFDS | NO ADR2 DATA | 341234 | | 341300 P 266 T 810 858 | |
| NAV ADR 1+2 FAULT | IDENT: AFS, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 2, EIS 3, EIU1FAD, EIU2FAD, IR 1, IR 3, SFCC 1, SFCC 2 | | | | | |
| F/CTL ALTN LAW associated with | CFDS | NO ADR3 DATA | 341234 | | 341300 P 246 T 810 842 | |
| NAV ADR 1+3 FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | 010 042 | |
| F/CTL ALTN LAW associated with | CFDS | NO ADR3 DATA | 341234 | 1 | 341300 P 246 T 810 842 | |
| NAV ADR 2+3 FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | 1 010 042 | |
| F/CTL ALTN LAW | CFDS | NO IR1 DATA | 341234 | 1 | 341400 P 210 T 810 807 | |
| associated with NAV IR 1+2 FAULT | IDENT: | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, GPWC, RADAR 1, TCAS | - | , | | |

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| HADNINGS (MALEUNCTIONS | | | FAULT ISOLATION | | |
|------------------------------------|--------|---|--------------------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| F/CTL ALTN LAW associated with | CFDS | NO IR2 DATA | 341234 | | 341400 P 277 T 810 862 |
| NAV IR 1+2 FAULT | ! | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, RADAR 2 | , EIS 2, | | 010 002 |
| F/CTL ALTN LAW associated with | CFDS | NO IR3 DATA | 341234 | | 341400 P 265 T 810 852 |
| NAV IR 1+3 FAULT | • | AFS, CFDS, EFCS 1, EFCS 2, EIS 2, EIS 3, RADAR 1, RAI | - | | 010 032 |
| F/CTL ALTN LAW associated with | CFDS | NO IR3 DATA | 341234 | | 341400 P 265 T 810 852 |
| NAV IR 2+3 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 2, EIS 3, RADAR 1, RAI | | | 010 032 |
| F/CTL ALTN LAW | ECAM 1 | FWC1 : NO DATA FROM ADC1 | 341234 | | 341300 P 206 T 810 805 |
| associated with NAV ADR 1+2 FAULT | IDENT: | | 810 803 | | |
| F/CTL ALTN LAW associated with | ECAM 1 | FWC1 : NO DATA FROM ADC2 | 341234 | | 341300 P 262 T 810 855 |
| NAV ADR 1+2 FAULT | IDENT: | | | | |
| F/CTL ALTN LAW associated with | ECAM 1 | FWC1 : NO DATA FROM ADC3 | 341234 | | 341300 P 237 T 810 834 |
| NAV ADR 1+3 FAULT | j | AFS, ATC 1, ATC 2, CFDS, E ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | 1 610 634 |
| F/CTL ALTN LAW | ECAM 1 | FWC1 : NO DATA FROM ADC3 | 341234 | 1 | 341300 P 237 T 810 834 |
| associated with NAV ADR 2+3 FAULT | j | AFS, ATC 1, ATC 2, CFDS, E ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | 1 010 034 |

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| | | CFDS FAULT MESSAGES | S | FAULT |
|-------------------------------------|--------|---|--------|-----------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | ISOLATION C PROCEDURE |
| F/CTL ALTN LAW | ECAM 1 | FWC2 : NO DATA FROM ADC1 | 341234 | |
| associated with NAV ADR 1+2 FAULT | | AFS, ATC 1, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 1, EIS EIU1FAD, EIU2FAD, GPWC, IF IR 3, SFCC 1, SFCC 2 | 3, | T 810 803 , |
| F/CTL ALTN LAW associated with | ECAM 1 | FWC2 : NO DATA FROM ADC2 | 341234 | 1 341300 P 260 T 810 853 |
| NAV ADR 1+2 FAULT | | AFS, ATC 2, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 2, EIS EIU1FAD, EIU2FAD, IR 1, IF SFCC 1, SFCC 2 | 3, | ! |
| F/CTL ALTN LAW associated with | ECAM 1 | FWC2 : NO DATA FROM ADC3 | 341234 | 1 341300 P 226 T 810 825 |
| NAV ADR 1+3 FAULT | | AFS, ATC 1, ATC 2, CFDS, E ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | 1 010 023 |
| F/CTL ALTN LAW associated with | ECAM 1 | FWC2 : NO DATA FROM ADC3 | 341234 | 1 341300 P 226 T 810 825 |
| NAV ADR 2+3 FAULT | | AFS, ATC 1, ATC 2, CFDS, E ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | 1 010 023 |
| F/CTL ALTN LAW associated with | ECAM 2 | FWC1 : NO DATA FROM ADC1 | 341234 | 1 341300 P 206 T 810 805 |
| NAV ADR 1+2 FAULT | | AFS, ATC 1, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 1, EIS EIU1FAD, EIU2FAD, GPWC, IF IR 3, SFCC 1, SFCC 2 | 3, | ! |
| F/CTL ALTN LAW | ECAM 2 | FWC1 : NO DATA FROM ADC2 | 341234 | 1 341300 P 262 T 810 855 |
| associated with NAV ADR 1+2 FAULT | | AFS, ATC 2, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 2, EIS EIU1FAD, EIU2FAD, IR 1, IF SFCC 1, SFCC 2 | 3, | ! |
| F/CTL ALTN LAW associated with | ECAM 2 | FWC1 : NO DATA FROM ADC3 | 341234 | 1 341300 P 237 T 810 834 |
| NAV ADR 1+3 FAULT | İ | AFS, ATC 1, ATC 2, CFDS, E ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | 1 010 034 |

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| LIADNINGS (MALEUNGTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|------------------------------------|---|---|---------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! | |
| F/CTL ALTN LAW associated with | ECAM 2 | FWC1 : NO DATA FROM ADC3 | 341234 | 1 | 341300 P 237 T 810 834 | |
| NAV ADR 2+3 FAULT | İ | AFS, ATC 1, ATC 2, CFDS, I ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | 1 610 654 | |
| F/CTL ALTN LAW associated with | ECAM 2 | FWC2 : NO DATA FROM ADC1 | 341234 | | 341300 P 204 T 810 803 | |
| NAV ADR 1+2 FAULT | IDENT: AFS, ATC 1, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 3, EIU1FAD, EIU2FAD, GPWC, IR 2, IR 3, SFCC 1, SFCC 2 | | | | 810 803 | |
| F/CTL ALTN LAW associated with | ECAM 2 | FWC2 : NO DATA FROM ADC2 | 341234 | | 341300 P 260 T 810 853 | |
| NAV ADR 1+2 FAULT | IDENT: AFS, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 2, EIS 3, EIU1FAD, EIU2FAD, IR 1, IR 3, SFCC 1, SFCC 2 | | | | 610 633 | |
| F/CTL ALTN LAW associated with | ECAM 2 | FWC2 : NO DATA FROM ADC3 | 341234 | 1 | 341300 P 226 T 810 825 | |
| NAV ADR 1+3 FAULT | IDENT: | | 010 023 | | | |
| F/CTL ALTN LAW associated with | ECAM 2 | FWC2 : NO DATA FROM ADC3 | 341234 | | 341300 P 226 T 810 825 | |
| NAV ADR 2+3 FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | 1 610 623 | |
| F/CTL ALTN LAW | EFCS 1 | ACCLRM 1 12CE1 associated with | 279216 | 1 | 279200 P 206 T 810 808 | |
| | EFCS 1 | ! | 279216 | 1 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ALTN LAW | EFCS 1 | ADR1 | 341234 | | 341300 P 205 T 810 804 | |
| associated with NAV ADR 1+2 FAULT | IDENT: AFS, ATC 1, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 3, EIU1FAD, EIU2FAD, GPWC, IR 2, IR 3, SFCC 1, SFCC 2 | | | | 1 010 004 | |

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| LIADNINGS (MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|--|--------------|---|------------------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | !! | |
| F/CTL ALTN LAW associated with | EFCS 1 | ADR2 | 341234 | 1 | 341300 P 261 T 810 854 | |
| NAV ADR 1+2 FAULT | <u> </u> | AFS, ATC 2, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 2, EIS EIU1FAD, EIU2FAD, IR 1, IF SFCC 1, SFCC 2 | S 3, | • | | |
| F/CTL ALTN LAW associated with | EFCS 1 | ADR3 | 341234 | 1 | 341300 P 228 T 810 827 | |
| NAV ADR 1+3 FAULT | | AFS, ATC 1, ATC 2, CFDS, E ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | - | | | |
| F/CTL ALTN LAW associated with | EFCS 1 | ADR3 | 341234 | 1 | 341300 P 228 T 810 827 | |
| NAV ADR 2+3 FAULT | | AFS, ATC 1, ATC 2, CFDS, E ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | - | | | |
| F/CTL ALTN LAW associated with F/CTL L AIL FAULT and F/CTL R AIL FAULT | EFCS 1 | associated with | | | Т 810 949 | |
| F/CTL ALTN LAW | EFCS 1 | ELAC1 IR DATA DISAGREE | 279334 | 1 | 279300 PB250 T 810 928 | |
| F/CTL ALTN LAW | EFCS 1 | ELAC1 OR INPUT OF L PEDALS XDCR UNIT 25CE1 | 279334 | 1 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 1 | ELAC1 OR INPUT OF R PEDALS XDCR UNIT 25CE2 | 279334 | 1 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 1 | ELAC1 OR WIRING FROM FAC1/2 | 279334 | 1 | 279300 PB256 T 810 932 | |
| F/CTL ALTN LAW | EFCS 1 | ELAC1 OR WIRING FROM FAC1/2 associated with ELAC2 OR WIRING FROM FAC1/2 | 279334 279334 | | 279300 PB278 T 810 946 | |
| <u>F/CTL</u> ALTN LAW | EFCS 1 | | 279334 | 1 | 279000 P 250 T 810 826 | |

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TROUBLE SHOOTING MANUAL

| HARNINGS (MALIFILMSTICMS | | CFDS FAULT MESSAGES | S | | FAULT |
|--------------------------------|----------|--|----------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ISOLATION PROCEDURE |
| F/CTL ALTN LAW | EFCS 1 | ELAC2 OR INPUT OF R PEDALS XDCR UNIT 25CE2 | 279334 | 1 | 279000 P 250 T 810 826 |
| F/CTL ALTN LAW | EFCS 1 | ELAC2 OR WIRING FROM FAC1/2 | 279334 | 1 | 279300 PB257 T 810 933 |
| F/CTL ALTN LAW associated with | EFCS 1 | IR1 | 341234 | | 341400 P 208 T 810 805 |
| NAV IR 1+2 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, GPWC, RADAR 1, TCAS | | | 1 010 003 |
| F/CTL ALTN LAW associated with | EFCS 1 | IR2 | 341234 | | 341400 P 238 T 810 830 |
| NAV IR 1+2 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, RADAR 2 | , EIS 2, | | 010 030 |
| F/CTL ALTN LAW associated with | EFCS 1 | IR3 | 341234 | | 341400 P 263 T 810 850 |
| NAV IR 1+3 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 2, EIS 3, RADAR 1, RAI | | | |
| F/CTL ALTN LAW associated with | EFCS 1 | IR3 | 341234 | | 341400 P 263 T 810 850 |
| NAV IR 2+3 FAULT | IDENT: | . 0.0 030 | | | |
| F/CTL ALTN LAW associated with | EFCS 1 | L OR R PEDALS XDCR UNIT | 279215 | | 271000 P 205 T 810 803 |
| ! | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | <u> </u> | , | | | |
| F/CTL ALTN LAW | EFCS 1 | RA1 | 344233 | 2 | 279000 P 250 T 810 826 |
| F/CTL ALTN LAW | EFCS 1 | RA2 | 344233 | 2 | 279000 P 250 T 810 826 |
| F/CTL ALTN LAW | EFCS 1 | SFCC1 | 275134 | 2 | 279000 P 250 T 810 826 |
| F/CTL ALTN LAW | EFCS 1 | SFCC1 - SLAT | 275134 | 2 | 279000 P 250 T 810 826 |
| F/CTL ALTN LAW | EFCS 1 | SFCC2 | 275134 | 2 | 279000 P 250 T 810 826 |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|---|---|---|------------------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! | |
| F/CTL ALTN LAW | EFCS 1 | SFCC2 SLAT | 275134 | 2 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW associated with F/CTL STABILIZER JAM | EFCS 1 | ! | 274451 274451 | | 274000 P 215 T 810 807 | |
| | EFCS 1 | OF ELAC1 and THS ACTR POS ERROR 9CE OF SEC2 | 274451 | 2 | | |
| | IDENT: | EFCS 2 | | | | |
| <u>F/CTL</u> ALTN LAW | EFCS 2 | ACCLRM 1 12CE1 | 279216 | 1 | 279200 P 206 T 810 808 | |
| | EFCS 2 | ACCLRM 2 12CE2 | 279216 | 1 | | |
| F/CTL ALTN LAW associated with | EFCS 2 | ADR1 | 341234 | 1 | 341300 P 252 T 810 848 | |
| NAV ADR 1+2 FAULT | IDENT: | • | | | | |
| F/CTL ALTN LAW associated with | EFCS 2 | ADR2 | 341234 | 1 | 341300 PA207 T 810 895 | |
| NAV ADR 1+2 FAULT | <u> </u> | AFS, ATC 2, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 2, EIS EIU1FAD, EIU2FAD, IR 1, II SFCC 1, SFCC 2 | S 3, | • | 1 610 673 | |
| F/CTL ALTN LAW | EFCS 2 | ADR3 | 341234 | 1 | 341300 P 240 T 810 836 | |
| associated with NAV ADR 1+3 FAULT | į | AFS, ATC 1, ATC 2, CFDS, I ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with | EFCS 2 | ADR3 | 341234 | 1 | 341300 P 240 T 810 836 | |
| NAV ADR 2+3 FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | . 510 030 | |
| F/CTL ALTN LAW | EFCS 2 | ELAC1 IR DATA DISAGREE | 279334 | 1 | 279300 PB250 T 810 928 | |

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TROUBLE SHOOTING MANUAL

| LIADNINGS / MALEUNGITONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|--------------------------------|--------|--|----------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! | |
| F/CTL ALTN LAW | EFCS 2 | ELAC1 OR INPUT OF L PEDALS XDCR UNIT 25CE1 | 279334 | 1 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 2 | ELAC1 OR INPUT OF R PEDALS XDCR UNIT 25CE2 | 279334 | 1 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 2 | ELAC1 OR WIRING FROM FAC1/2 | 279334 | 1 | 279300 PB256 T 810 932 | |
| F/CTL ALTN LAW | EFCS 2 | ELAC1 OR WIRING FROM FAC1/2 associated with | 279334 | 1 | 279300 PB278 T 810 946 | |
| | EFCS 2 | ELAC2 OR WIRING FROM FAC1/2 | 279334 | 1 | | |
| F/CTL ALTN LAW | EFCS 2 | ELAC2 OR INPUT OF L PEDALS XDCR UNIT 25CE1 | 279334 | 1 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 2 | ELAC2 OR INPUT OF R PEDALS XDCR UNIT 25CE2 | 279334 | 1 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 2 | ELAC2 OR WIRING FROM FAC1/2 | 279334 | 1 | 279300 PB257 T 810 933 | |
| F/CTL ALTN LAW associated with | EFCS 2 | IR1 | 341234 | | 341400 P 209 T 810 806 | |
| NAV IR 1+2 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, GPWC, RADAR 1, TCAS | | | | |
| F/CTL ALTN LAW associated with | EFCS 2 | IR2 | 341234 | | 341400 P 239 T 810 831 | |
| NAV IR 1+2 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, RADAR 2 | , EIS 2, | | | |
| F/CTL ALTN LAW associated with | EFCS 2 | IR3 | 341234 | 1 | 341400 P 264 T 810 851 | |
| NAV IR 1+3 FAULT | ! | AFS, CFDS, EFCS 1, EFCS 2, EIS 2, EIS 3, RADAR 1, RAI | - | • | | |
| F/CTL ALTN LAW associated with | EFCS 2 | IR3 | 341234 | 1 | 341400 P 264 T 810 851 | |
| NAV IR 2+3 FAULT | ! | AFS, CFDS, EFCS 1, EFCS 2, EIS 2, EIS 3, RADAR 1, RAI | - | , | | |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|---|----------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | PROCEDURE | |
| F/CTL ALTN LAW associated with F/CTL AIL SERVO FAULT and F/CTL ELAC 2 PITCH FAULT | EFCS 2 | L OR R PEDALS XDCR UNIT | 279215 | 1 | 271000 P 205 T 810 803 | |
| F/CTL ALTN LAW | EFCS 2 | RA1 | 344233 | 2 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 2 | RA2 | 344233 | 2 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 2 | SFCC1 | 275134 | 2 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 2 | SFCC1 - SLAT | 275134 | 2 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 2 | SFCC2 | 275134 | 2 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW | EFCS 2 | SFCC2 - SLAT | 275134 | 2 | 279000 P 250 T 810 826 | |
| F/CTL ALTN LAW associated with F/CTL STABILIZER JAM | EFCS 2 | THS ACTR POS ERROR 9CE OF ELAC2 associated with | 274451 | 1 | 274000 P 215 T 810 807 | |
| TOTAL STABILIZER JAM | EFCS 2 | THS ACTR POS ERROR 9CE OF ELAC1 | 274451 | 1 | | |
| | EFCS 2 | and THS ACTR POS ERROR 9CE OF SEC2 | 274451 | 2 | | |
| F/CTL ALTN LAW associated with | EIS 1 | DMC1 : NO ADC3 DATA | 341234 | 1 | 341300 P 238 T 810 835 | |
| NAV ADR 2+3 FAULT | IDENT: / | (60 010 03 | | | | |
| F/CTL ALTN LAW associated with | EIS 1 | DMC1 : NO ADC3 DATA | 341234 | 1 | 341300 P 238 T 810 835 | |
| NAV ADR 1+3 FAULT | ļ i | AFS, ATC 1, ATC 2, CFDS, I ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | . 010 033 | |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|----------------------------------|---|---|----------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL ALTN LAW associated with | EIS 1 | DMC1 : NO ADC3 DATA | 341234 | | 341300 P 202 T 810 802 | |
| NAV ADR 1+2 FAULT | | AFS, ATC 1, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 3, EIU EIU2FAD, GPWC, IR 2, IR 3, SFCC 1, SFCC 2 | J1FAD, | | 610 602 | |
| F/CTL ALTN LAW associated with | EIS 1 | DMC1 : NO IRS1 DATA | | | 341400 P 203 T 810 802 | |
| NAV IR 1+2 FAULT | ! | AFS, CFDS, EFCS 1, EFCS 2, GPWC, RADAR 1, TCAS | | | 010 002 | |
| F/CTL ALTN LAW associated with | EIS 1 | DMC1 : NO IRS3 DATA | 341234 | | 341400 P 266 T 810 853 | |
| NAV IR 1+3 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 2, EIS 3, RADAR 1, RAI | | | | |
| F/CTL ALTN LAW associated with | EIS 1 | DMC1 : NO IRS3 DATA | 341234 | | 341400 P 266 T 810 853 | |
| NAV IR 2+3 FAULT | | | | | | |
| F/CTL ALTN LAW associated with | EIS 2 | DMC2 : NO ADC2 DATA | 341234 | | 341300 P 258 T 810 852 | |
| NAV ADR 1+2 FAULT | | AFS, ATC 2, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 3, EIU EIU2FAD, IR 1, IR 3, SFCC SFCC 2 | J1FAD, | | | |
| F/CTL ALTN LAW associated with | EIS 2 | DMC2 : NO ADC3 DATA | 341234 | | 341300 PA225 T 810 913 | |
| NAV ADR 1+3 FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | | |
| F/CTL ALTN LAW associated with | EIS 2 | DMC2 : NO ADC3 DATA | 341234 | 1 | 341300 PA225 T 810 913 | |
| NAV ADR 2+3 FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | | |
| F/CTL ALTN LAW associated with | EIS 2 | DMC2 : NO IRS2 DATA | 341234 | 1 | 341400 P 234 T 810 827 | |
| NAV IR 1+2 FAULT | ! | AFS, CFDS, EFCS 1, EFCS 2, RADAR 2 | , EIS 3, | , | 1 010 021 | |

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| LIADNINGS (MALFUNCTIONS | | CFDS FAULT MESSAG | ES | Ţ | FAULT ISOLATION | |
|-----------------------------------|--------|--|-----------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL ALTN LAW | EIS 3 | DMC3 : NO ADC1 DATA | 341234 | | 341300 P 207 T 810 806 | |
| associated with NAV ADR 1+2 FAULT | IDENT: | IDENT: AFS, ATC 1, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 3, EIU1FAD, EIU2FAD, GPWC, IR 2, IR 3, SFCC 1, SFCC 2 | | | | |
| F/CTL ALTN LAW associated with | EIS 3 | DMC3 : NO ADC2 DATA | 341234 | | 341300 P 263 T 810 856 | |
| NAV ADR 1+2 FAULT | IDENT: | AFS, ATC 2, CFDS, ECAM 1 EFCS 1, EFCS 2, EIS 2, E EIU1FAD, EIU2FAD, IR 1, SFCC 1, SFCC 2 | IS 3, | | 1 810 830 | |
| F/CTL ALTN LAW associated with | EIS 3 | DMC3 : NO ADC3 DATA | 341234 | | 341300 P 218 T 810 818 | |
| NAV ADR 1+3 FAULT | IDENT: | AFS, ATC 1, ATC 2, CFDS, ECAM 2, EFCS 1, EFCS 2, EIS 2, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with | EIS 3 | DMC3 : NO ADC3 DATA | 341234 | | 341300 P 218 T 810 818 | |
| NAV ADR 2+3 FAULT | IDENT: | AFS, ATC 1, ATC 2, CFDS, ECAM 2, EFCS 1, EFCS 2, EIS 2, IR 1, IR 2 | | | 1 010 010 | |
| F/CTL ALTN LAW associated with | EIS 3 | DMC3 : NO IRS1 DATA | 341234 | | 341400 P 211 T 810 808 | |
| NAV IR 1+2 FAULT | IDENT: | AFS, CFDS, EFCS 1, EFCS EIS 3, GPWC, RADAR 1, TC | | | 1 610 606 | |
| F/CTL ALTN LAW associated with | EIS 3 | DMC3 : NO IRS2 DATA | 341234 | | 341400 P 241 T 810 833 | |
| NAV IR 1+2 FAULT | IDENT: | AFS, CFDS, EFCS 1, EFCS EIS 3, RADAR 2 | 2, EIS 2, | | 1 010 055 | |
| F/CTL ALTN LAW associated with | EIS 3 | DMC3 : NO IRS3 DATA | 341234 | | 341400 P 258 T 810 847 | |
| NAV IR 1+3 FAULT | IDENT: | AFS, CFDS, EFCS 1, EFCS EIS 2, RADAR 1, RADAR 2 | 2, EIS 1, | | 1 010 041 | |
| F/CTL ALTN LAW associated with | EIS 3 | DMC3 : NO IRS3 DATA | 341234 | | 341400 P 258 T 810 847 | |
| NAV IR 2+3 FAULT | IDENT: | AFS, CFDS, EFCS 1, EFCS EIS 2, RADAR 1, RADAR 2 | 2, EIS 1, | | | |

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| LIADNINGS (MALEUNGITONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|--|---|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| F/CTL ALTN LAW associated with | GPWC | ADIRU1 (1FP1)/GPWC (1WZ) | 341234 | | 341400 P 231 T 810 825 |
| NAV IR 1+2 FAULT | | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, GPWC, RADAR 1, TCAS | | | |
| F/CTL ALTN LAW associated with | GPWC | ADIRU1 (1FP1)/GPWC (1WZ) | 341234 | 1 | 341300 P 209 T 810 807 |
| NAV ADR 1+2 FAULT | | AFS, ATC 1, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 1, EIS EIU1FAD, EIU2FAD, GPWC, IF IR 3, SFCC 1, SFCC 2 | S 3, | • | |
| F/CTL ALTN LAW associated with NAV IR 1+2 FAULT | IR 1 | ADIRS CTLPNL(2FP/221VU)/ ADIRU1 (1FP1) | 341234 | 1 | 341400 PA219 T 810 892 |
| NAV IR IIZ TAOLI | | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, GPWC, RADAR 1, TCAS | | • | |
| F/CTL ALTN LAW associated with | IR 1 | ADIRU1 (1FP1) | 341234 | | 341400 P 201 T 810 801 |
| NAV IR 1+2 FAULT | IDENT: AFS, CFDS, EFCS 1, EFCS 2, EIS 1, EIS 3, GPWC, RADAR 1, TCAS | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | IR 1 | ADIRU2 (1FP2)/ADIRU1 (1FP1) | 341234 | 1 | 341300 P 268 T 810 862 |
| NAV ADR 172 FAULT | IDENT: | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | IR 1 | ADIRU3 (1FP3)/ADIRU1 (1FP1) | 341234 | 1 | 341300 P 273 T 810 867 |
| NOT ANY ITS FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | IR 1 | ADIRU3 (1FP3)/ADIRU1 (1FP1) | 341234 | 1 | 341300 P 273 T 810 867 |
| NAV AUR 273 FAULI | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | |

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| WARNINGS/MALFUNCTIONS | <u> </u> | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|--|---|---|----------|---|---------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ! | |
| F/CTL ALTN LAW associated with NAV IR 1+2 FAULT | IR 2 | ADIRS CTLPNL(2FP/221VU)/ ADIRU2 (1FP2) | 341234 | 1 | 341400 PA219 T 810 892 | |
| IN THE PAGE | ! | AFS, CFDS, EFCS 1, EFCS 2, EIS 3, RADAR 2 | , EIS 2, | • | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | IR 2 | ADIRU1 (1FP1)/ADIRU2 (1FP2) | 341234 | 1 | 341300 P 212 T 810 812 | |
| INAV ADR 172 FAULT | IDENT: AFS, ATC 1, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 3, EIU1FAD, EIU2FAD, GPWC, IR 2, IR 3, SFCC 1, SFCC 2 | | | | | |
| F/CTL ALTN LAW associated with | IR 2 | ADIRU2 (1FP2) | 341234 | | 341400 P 232 T 810 826 | |
| NAV IR 1+2 FAULT | IDENT: | | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+3 FAULT | IR 2 | ADIRU3 (1FP3)/ADIRU2 (1FP2) | 341234 | 1 | 341300 P 251 T 810 847 | |
| INAV ADA 113 TAGET | j | AFS, ATC 1, ATC 2, CFDS, I ECAM 2, EFCS 1, EFCS 2, E EIS 2, EIS 3, IR 1, IR 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 2+3 FAULT | IR 2 | ADIRU3 (1FP3)/ADIRU2 (1FP2) | 341234 | 1 | 341300 P 251 T 810 847 | |
| NAV AUR 273 FAULT | IDENT: AFS, ATC 1, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, IR 1, IR 2 | | | | | |
| F/CTL ALTN LAW associated with NAV IR 1+3 FAULT | IR 3 | ADIRS CTLPNL(2FP/221VU)/ ADIRU3 (1FP3) | 341234 | 1 | 341400 PA219 T 810 892 | |
| NAV IN ITS PAULI | IDENT: AFS, CFDS, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, RADAR 1, RADAR 2 | | | , | | |
| F/CTL ALTN LAW associated with NAV IR 2+3 FAULT | IR 3 | ADIRS CTLPNL(2FP/221VU)/ ADIRU3 (1FP3) | 341234 | 1 | 341400 PA219 T 810 892 | |
| IN E.S TROET | ! | AFS, CFDS, EFCS 1, EFCS 2, EIS 2, EIS 3, RADAR 1, RAI | - | • | | |

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| LIADNINGS /MALEUNGITONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|--|---|---|----------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | IR 3 | ADIRU1 (1FP1)/ADIRU3 (1FP3) | 341234 | 1 | 341300 P 214 T 810 814 | |
| INAV APR TIE TAGET | | AFS, ATC 1, CFDS, ECAM 1, EFCS 1, EFCS 2, EIS 1, EIS EIU1FAD, EIU2FAD, GPWC, IF IR 3, SFCC 1, SFCC 2 | S 3, | • | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | IR 3 | ADIRU2 (1FP2)/ADIRU3 (1FP3) | 341234 | 1 | 341300 P 270 T 810 864 | |
| INAV APR 112 TAULT | AFS, ATC 1, ATC 2, CFDS, E ECAM 2, EFCS 1, EFCS 2, E EIS 3, EIU1FAD, EIU2FAD, C IR 1, SFCC 1, SFCC 2 | [S 2, | | | | |
| F/CTL ALTN LAW associated with | IR 3 | ADIRU3 (1FP3) | 341234 | | 341400 P 256 T 810 846 | |
| NAV IR 1+3 FAULT | IDENT: | | 010 040 | | | |
| F/CTL ALTN LAW associated with | IR 3 | ADIRU3 (1FP3) | 341234 | | 341400 P 256 T 810 846 | |
| NAV IR 2+3 FAULT | IDENT: AFS, CFDS, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, RADAR 1, RADAR 2 | | | | 010 040 | |
| F/CTL ALTN LAW associated with NAV IR 1+2 FAULT | RADAR 1 | RADAR1 NO DATA FROM ADIRU | 341234 | 1 | 341400 P 205 T 810 803 | |
| NAV IR ITZ FAULT | IDENT: AFS, CFDS, EFCS 1, EFCS 2, EIS 1, EIS 3, GPWC, RADAR 1, TCAS | | | | | |
| F/CTL ALTN LAW associated with NAV IR 1+3 FAULT | RADAR 1 | RADAR1 NO DATA FROM ADIRU | 341234 | 1 | 341400 P 260 T 810 848 | |
| TAUL TAUL | IDENT: AFS, CFDS, EFCS 1, EFCS 2, EIS 1, EIS 2, EIS 3, RADAR 1 | | | , | | |
| F/CTL ALTN LAW associated with NAV IR 2+3 FAULT | RADAR 1 | RADAR1 NO DATA FROM ADIRU | 341234 | 1 | 341400 P 260 T 810 848 | |
| NAV IR 273 FAULT | ! | AFS, CFDS, EFCS 1, EFCS 2, EIS 2, EIS 3, RADAR 1 | , EIS 1, | • | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT | |
|--|--|--------------------------|--------|-------|---------------------------------|
| | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | SFCC 1 | FLP 1 NO ADIRU 1 DATA | 341234 | | 341300 P 216 T 810 816 |
| | IDENT: AFS, ATC 1, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 3, EIU1FAD, EIU2FAD, GPWC, IR 2, IR 3, SFCC 1, SFCC 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | SFCC 1 | SLT 1 NO ADIRU 2 DATA | 341234 | | 341300 P 272 T 810 866 |
| | IDENT: AFS, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 2, EIS 3, EIU1FAD, EIU2FAD, IR 1, IR 3, SFCC 1, SFCC 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | SFCC 2 | FLP 2 NO ADIRU 1 DATA | 341234 | | 341300 P 215 T 810 815 |
| | IDENT: AFS, ATC 1, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 1, EIS 3, EIU1FAD, EIU2FAD, GPWC, IR 2, IR 3, SFCC 1, SFCC 2 | | | | |
| F/CTL ALTN LAW associated with NAV ADR 1+2 FAULT | SFCC 2 | SLT 2 NO ADIRU 2 DATA | 341234 | | 341300 P 271 T 810 865 |
| | IDENT: AFS, ATC 2, CFDS, ECAM 1, ECAM 2, EFCS 1, EFCS 2, EIS 2, EIS 3, EIU1FAD, EIU2FAD, IR 1, IR 3, SFCC 1, SFCC 2 | | | | |
| F/CTL ALTN LAW associated with NAV IR 1+2 FAULT | TCAS | ADIRU1 (1FP1)/TCAS (1SG) | 341234 | 1 | 341400 P 254 T 810 844 |
| | IDENT: AFS, CFDS, EFCS 1, EFCS 2, EIS 1, EIS 3, GPWC, RADAR 1, TCAS | | | | 010 044 |
| F/CTL ALTN LAW associated with NAV IR 1+2 FAULT | TCAS | ADIRU1(1FP1)/TCAS(100SG) | 341234 | 1 | 344300 P 282 T 810 834 |
| F/CTL DIRECT LAW associated with F/CTL ALTN LAW and STS-Inop System RA 1+2 | | | | | 344200 P 273 T 810 841 |

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| LIADNINGS (MALEUNGTIONS | | FAULT ISOLATION | | | | |
|---|--------------------|---|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL DIRECT LAW | EFCS 1 | ACCLRM 1 12CE1 | 279216 | 1 | 279200 P 206 T 810 808 | |
| | EFCS 1 | ! | 279216 | 1 | 1 610 606 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL DIRECT LAW | EFCS 2 | ACCLRM 1 12CE1 associated with | 279216 | 1 | 279200 P 206 T 810 808 | |
| | EFCS 2 | 1 | 279216 | 1 | 1 0 10 000 | |
| F/CTL ELAC 1 FAULT | | | | | 279300 PB279 T 810 947 | |
| F/CTL ELAC 1 FAULT associated with F/CTL ELAC 2 FAULT | | | | | 279300 PB283 T 810 948 | |
| F/CTL ELAC 1 FAULT | EFCS 1 | CAPT PITCH CTL SSTU 4CE3 | 279212 | 1 | 279300 P 220 T 810 811 | |
| | IDENT: | EFCS 2 | | | 1 010 011 | |
| F/CTL ELAC 1 FAULT | EFCS 1 | CAPT ROLL CTL SSTU 4CE1 | 279212 | 1 | 279300 P 217 T 810 809 | |
| | IDENT: | EFCS 2 | | | 010 007 | |
| F/CTL ELAC 1 FAULT | EFCS 1 | ELAC1 | 279334 | 1 | 279300 PB203 T 810 896 | |
| | IDENT: | AFS, EFCS 2 | | | | |
| F/CTL ELAC 1 FAULT associated with | EFCS 1 | ELAC1 | 279334 | 1 | 279300 PB258 T 810 934 | |
| AUTO FLT AP OFF | IDENT: | AFS, EFCS 2 | | | | |
| F/CTL ELAC 1 FAULT associated with | EFCS 1 | ELAC1 | 279334 | 1 | 279300 PB270 T 810 939 | |
| F/CTL Roll jerk | IDENT: AFS, EFCS 2 | | | | | |
| F/CTL ELAC 1 FAULT | EFCS 1 | ELAC1 OR BUS FROM ELAC2 | 279334 | 1 | 279300 PB212 T 810 899 | |
| | IDENT: | IDENT: AFS, EFCS 2 | | | | |
| F/CTL ELAC 1 FAULT | EFCS 1 | ELAC1 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279334 | 1 | 279300 P 205 T 810 803 | |
| | IDENT: | EFCS 2 | | | 1 | |

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| WARNINGS/MALFUNCTIONS | <u> </u> | FAULT ISOLATION | | | |
|--|---------------|--|----------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | !!! |
| F/CTL ELAC 1 FAULT | EFCS 1 | ELAC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279334 | 1 | 279300 P 201 T 810 801 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 FAULT associated with F/CTL Roll jerk | EFCS 1 | ELAC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279334 | 1 | 279300 P 201 T 810 801 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 FAULT | EFCS 1 | ELAC1 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279334 | 1 | 279300 P 207 Т 810 804 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 FAULT | EFCS 1 | ELAC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279334 | 1 | 279300 P 203 T 810 802 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 FAULT associated with F/CTL Roll jerk | EFCS 1 | ELAC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279334 | 1 | 279300 P 203 T 810 802 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 FAULT | EFCS 1 | ELAC1 RACKING INPUTS | 279334 | | 279300 PB210 T 810 897 |
| | IDENT: | AFS, EFCS 2 | | | |
| F/CTL ELAC 1 FAULT | EFCS 1 | ELAC1 SDI INPUTS | 279334 | | 279300 PB211 T 810 898 |
| <u></u> | IDENT: | AFS, EFCS 2 | | | |
| F/CTL ELAC 1 FAULT | EFCS 1 | F/O PITCH CTL SSTU 4CE4 | 279212 | 1 | 279300 P 222 T 810 812 |
| | IDENT: | EFCS 2 | - | | |
| F/CTL ELAC 1 FAULT | EFCS 1 | F/O ROLL CTL SSTU 4CE2 | 279212 | 1 | 279300 P 219 T 810 810 |
| | IDENT: EFCS 2 | | | | |
| F/CTL ELAC 1 FAULT | EFCS 2 | CAPT PITCH CTL SSTU 4CE3 | 279212 | 1 | 279300 P 220 T 810 811 |
| F/CTL ELAC 1 FAULT | EFCS 2 | CAPT ROLL CTL SSTU 4CE1 | 279212 | 1 | 279300 P 217 T 810 809 |

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| CFDS FAULT MESSAGES WARNINGS/MALFUNCTIONS | | | | | FAULT ISOLATION | |
|--|--------|---|------------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | : : | |
| F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 | 279334 | 1 | 279300 PB203 | |
| | IDENT: | AFS | . | | Т 810 896 | |
| F/CTL ELAC 1 FAULT associated with | EFCS 2 | ELAC1 | 279334 | 1 | 279300 PB258 T 810 934 | |
| AUTO FLT AP OFF | IDENT: | AFS | | | | |
| F/CTL ELAC 1 FAULT associated with | EFCS 2 | ELAC1 | 279334 | 1 | 279300 PB270 T 810 939 | |
| F/CTL Roll jerk | IDENT: | AFS | | | | |
| F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 OR BUS FROM ELAC2 | 279334 | 1 | 279300 PB212 T 810 899 | |
| | IDENT: | AFS | | | | |
| F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279334 | 1 | 279300 P 205 T 810 803 | |
| F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279334 | 1 | 279300 P 201 T 810 801 | |
| F/CTL ELAC 1 FAULT associated with F/CTL Roll jerk | EFCS 2 | ELAC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279334 | 1 | 279300 P 201 T 810 801 | |
| F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279334 | 1 | 279300 P 207 T 810 804 | |
| F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279334 | 1 | 279300 P 203 T 810 802 | |
| F/CTL ELAC 1 FAULT associated with F/CTL Roll jerk | EFCS 2 | ELAC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279334 | 1 | 279300 P 203 T 810 802 | |
| F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 RACKING INPUTS | 279334 | 1 | 279300 PB210 T 810 897 | |
| | IDENT: | | 1 0 10 0 7 | | | |
| F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 SDI INPUTS | 279334 | 1 | 279300 PB211 T 810 898 | |
| | IDENT: | | | | | |
| F/CTL ELAC 1 FAULT | EFCS 2 | F/O PITCH CTL SSTU 4CE4 | 279212 | 1 | 279300 P 222 T 810 812 | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|--------------------------|---------------------|---|--------|------------|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | |
| F/CTL ELAC 1 FAULT | EFCS 2 | F/O ROLL CTL SSTU 4CE2 | 279212 | 1 | 279300 P 219 T 810 810 |
| F/CTL ELAC 1 PITCH FAULT | | | | | 270000 P 201 T 810 801 |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | CHECK PITCH CHANGE OVER OF ELAC1 | 279334 | 1 | 279300 PB254 T 810 931 |
| | IDENT: / | AFS, EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE associated with | 279334 | 1 | 279000 P 222 T 810 811 |
| | EFCS 1 | ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 and | 279334 | 1 | |
| | EFCS 1 | ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 | 279334 | 1 | |
| | IDENT: I | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | | |
|--------------------------|---------------------|---|--------|---|---------------------------|--|--|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE associated with | 279334 | 1 | 279000 P 226 T 810 813 | | |
| | EFCS 1 | ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 | 279334 | 1 | | | |
| | EFCS 1 | ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 | 279334 | 1 | | | |
| | EFCS 1 | ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE | 279334 | 1 | | | |
| | EFCS 1 | | 279334 | 1 | | | |
| | EFCS 1 | | 279334 | 1 | | | |
| | EFCS 1 | ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279334 | 1 | | | |
| | EFCS 1 | ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279334 | 1 | | | |
| | IDENT: | EFCS 2 | | | _ | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE | 279334 | 1 | 279300 P 279 T 810 839 | | |
| | IDENT: | IDENT: EFCS 2 | | | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 COM OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279334 | 1 | 279300 PA217 T 810 860 | | |
| | IDENT: | IDENT: EFCS 2 | | | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 COM OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279334 | 1 | 279300 PA254 T 810 873 | | |
| | IDENT: | EFCS 2 | | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | |
|--------------------------|--------|---|--------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE associated with | 279334 | 1 | 279000 P 224 T 810 812 |
| | EFCS 1 | ELAC1 OR WIRING FROM L ELEV POS MON XDCR | 279334 | 1 | |
| | EFCS 1 | ELAC1 OR WIRING FROM R ELEV POS MON XDCR | 279334 | 1 | |
| | EFCS 1 | ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279334 | 1 | |
| | EFCS 1 | | 279334 | 1 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE | 279334 | 1 | 279300 P 283 T 810 841 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 MON OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279334 | 1 | 279300 PA219 T 810 861 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 MON OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279334 | 1 | 279300 PA256 T 810 874 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 OR WIRING FROM L ELEV POS MON XDCR | 279334 | 1 | 279300 PA215 T 810 859 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 | 279334 | 1 | 279300 PA213 T 810 858 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279334 | 1 | 279300 PA237 T 810 868 |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | |
|--|--------|---|--------|---|---------------------------|
| WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 OR WIRING FROM R ELEV POS MON XDCR | 279334 | 1 | 279300 PA252 T 810 872 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 | 279334 | 1 | 279300 PA250 T 810 871 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279334 | 1 | 279300 PA275 T 810 881 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 OR WIRING TO L G ELEV SOL VLV 34CE1 | 279334 | 1 | 279300 PA245 T 810 870 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 OR WIRING TO R Y ELEV SOL VLV 34CE2 | 279334 | 1 | 279300 PA282 T 810 883 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | ELAC1 OR WIRING TO THS ACTR SERVO MOT2 9CE | 279334 | 1 | 279300 P 286 T 810 843 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT associated with | EFCS 1 | L B ELEV MODE XDCR 34CE3 | 273451 | 1 | 279000 P 248 T 810 824 |
| F/CTL ELAC 2 PITCH FAULT and | EFCS 1 | L ELEV POS MON XDCR OF ELAC2/SEC2 | 273451 | 1 | |
| STS-Maintenance F/CTL | EFCS 1 | R B ELEV MODE XDCR 34CE4 | 273451 | 1 | |
| | EFCS 1 | and R ELEV POS MON XDCR OF ELAC2 / SEC2 and | 273451 | 1 | |
| | EFCS 1 | ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE | 279334 | 1 | |
| | EFCS 1 | SEC2 MON OR INPUT OF THS | 279434 | 2 | |

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| WARNINGS/MALFUNCTIONS | <u> </u> | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|----------|---|---------------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL ELAC 1 PITCH FAULT associated with | EFCS 1 | L B ELEV MODE XDCR 34CE3 associated with | 273451 | 1 | 279000 P 248 T 810 824 |
| F/CTL ELAC 2 PITCH FAULT and STS-Maintenance | EFCS 1 | L ELEV POS MON XDCR OF ELAC2/SEC2 | 273451 | 1 | 0.0 02. |
| F/CTL | EFCS 1 | R B ELEV MODE XDCR 34CE4 | 273451 | 1 | |
| | EFCS 1 | R ELEV POS MON XDCR OF ELAC2 / SEC2 | 273451 | 1 | |
| | EFCS 1 | ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE | 279334 | 1 | |
| | EFCS 1 | SEC2 MON OR INPUT OF THS | 279434 | 2 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT associated with F/CTL ELEV SERVO FAULT | EFCS 1 | L B ELEV POS XDCR 34CE3 COM E1/S1:USE STBY XDCR associated with | 273451 | 1 | 279000 P 238 T 810 819 |
| TYCIL ELEV SERVO FACET | EFCS 1 | R B ELEV POS XDCR 34CE4 COM E1/S1:USE STBY XDCR | 273451 | 1 | |
| | EFCS 1 | THS ACTR XDCR2 9CE | 274451 | 1 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 1 PITCH FAULT associated with F/CTL ELEV SERVO FAULT | EFCS 1 | ELAC1/SEC1 | 273451 | 1 | 279000 P 240 Т 810 820 |
| FICIL ELEV SERVO FAOLI | EFCS 1 | associated with L G ELEV MODE XDCR 34CE1 and | 273451 | 1 | |
| | EFCS 1 | | 273451 | 1 | |
| | EFCS 1 | R Y ELEV MODE XDCR 34CE2 | 273451 | 1 | |
| | EFCS 1 | THS ACTR XDCR2 MON 9CE | 274451 | 1 | |
| | IDENT: | EFCS 2 | - | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | L G ELEV MODE VLV 34CE1 | 273451 | 1 | 279300 PA240 T 810 869 |
| <u> </u> | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | FAULT - ISOLATION | | | |
|--|--------|---|--------|-------------------------------|--|--|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | C PROCEDURE | | | |
| F/CTL ELAC 1 PITCH FAULT associated with | | L G ELEV POS XDCR 34CE1 | 273451 | 1 279000 P 246 T 810 823 | | | |
| F/CTL ELAC 2 PITCH FAULT and STS-Maintenance F/CTL | EFCS 1 | associated with R Y ELEV POS XDCR 34CE2 COM E2/S2:USE STBY XDCR | 273451 | 1 | | | |
| | EFCS 1 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE | 279334 | 1 | | | |
| | EFCS 1 | SEC2 COM OR INPUT OF THS | 279434 | 2 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | R Y ELEV MODE VLV 34CE2 | 273451 | 1 279300 PA277 - T 810 882 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | THS ACTR POS ERROR 9CE OF ELAC1 | 274451 | 1 279300 P 288 T 810 844 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | THS ACTR SERVO MOT 2 9CE | 274451 | 1 279300 P 285 - T 810 842 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | THS ACTR SERVO MOT 2 9CE OF ELAC1 | 274451 | 1 279300 P 291 T 810 845 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | THS ACTR XDCR2 MON 9CE | 274451 | 1 279300 P 281 - T 810 840 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | THS ACTR XDCR2 9CE | 274451 | 1 279300 P 277 | | | |
| | IDENT: | IDENT: EFCS 2 | | | | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | CHECK PITCH CHANGE OVER OF ELAC1 | 279334 | 1 279300 PB254 T 810 931 | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT | |
|--------------------------|---------------------|---|--------|-------|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE associated with | 279334 | 1 | 279000 P 222 T 810 811 |
| | EFCS 2 | ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 | 279334 | 1 | |
| | EFCS 2 | | 279334 | 2 | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE associated with | 279334 | 1 | 279000 P 226 T 810 813 |
| | EFCS 2 | ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 | 279334 | 1 | |
| | EFCS 2 | = - | 279334 | 2 | |
| | EFCS 2 | ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE | 279334 | 1 | |
| | EFCS 2 | = - | 279334 | 1 | |
| | EFCS 2 | = - | 279334 | 1 | |
| | EFCS 2 | ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279334 | 1 | |
| | EFCS 2 | ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279334 | 1 | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE | 279334 | 1 | 279300 Р 279 Т 810 839 |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 COM OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279334 | 1 | 279300 PA217 T 810 860 |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 COM OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279334 | 1 | 279300 PA254 T 810 873 |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|---------------------------------|---------------------|---|--------|--------------------|---------------------------|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | |
| | F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE associated with | 279334 | 1 | 279000 P 224 T 810 812 |
| | | EFCS 2 | ELAC1 OR WIRING FROM L ELEV POS MON XDCR | 279334 | 1 | |
| | | EFCS 2 | ELAC1 OR WIRING FROM R ELEV POS MON XDCR | 279334 | 1 | |
| | | EFCS 2 | ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279334 | 1 | |
| | | EFCS 2 | ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279334 | 1 | |
| | <u>F/CTL</u> ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE | 279334 | 1 | 279300 P 283 T 810 841 |
| | F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 MON OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279334 | 1 | 279300 PA219 T 810 861 |
| R | F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 MON OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279334 | 1 | 279300 PA256 T 810 874 |
| | <u>F/CTL</u> ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 OR WIRING FROM L ELEV POS MON XDCR | 279334 | 1 | 279300 PA215 T 810 859 |
| | <u>F/CTL</u> ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 | 279334 | 1 | 279300 PA213 T 810 858 |
| | F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279334 | 1 | 279300 PA237 T 810 868 |
| | F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 OR WIRING FROM R ELEV POS MON XDCR | 279334 | 1 | 279300 PA252 T 810 872 |
| | F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 | 279334 | 1 | 279300 PA250 T 810 871 |
| | F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279334 | 1 | 279300 PA275 T 810 881 |
| | F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 OR WIRING TO L G ELEV SOL VLV 34CE1 | 279334 | 1 | 279300 PA245 T 810 870 |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|---|--------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 OR WIRING TO RY ELEV SOL VLV 34CE2 | 279334 | 1 | 279300 PA282 T 810 883 | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | ELAC1 OR WIRING TO THS ACTR SERVO MOT2 9CE | 279334 | 1 | 279300 P 286 T 810 843 | |
| F/CTL ELAC 1 PITCH FAULT associated with F/CTL ELEV SERVO FAULT | EFCS 2 | L B ELEV POS XDCR 34CE3 COM E1/S1:USE STBY XDCR associated with | 273451 | 1 | 279000 P 238 T 810 819 | |
| TYCIL ELEV SERVO FACEI | EFCS 2 | R B ELEV POS XDCR 34CE4 COM E1/S1:USE STBY XDCR | 273451 | 1 | | |
| | EFCS 2 | | 274451 | 1 | | |
| F/CTL ELAC 1 PITCH FAULT associated with F/CTL ELEV SERVO FAULT | EFCS 2 | L ELEV POS MON XDCR OF ELAC1/SEC1 associated with | 273451 | 1 | 279000 P 240 T 810 820 | |
| TYOTE ELLY SERVO TROET | EFCS 2 | | 273451 | 1 | | |
| | EFCS 2 | | 273451 | 1 | | |
| | EFCS 2 | R Y ELEV MODE XDCR 34CE2 | 273451 | 1 | | |
| | EFCS 2 | I = | 274451 | 1 | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | L G ELEV MODE VLV 34CE1 | 273451 | 1 | 279300 PA240 T 810 869 | |
| F/CTL ELAC 1 PITCH FAULT associated with F/CTL ELAC 2 PITCH FAULT | | L G ELEV POS XDCR 34CE1 COM E2/S2:USE STBY XDCR associated with | | 1 | 279000 P 246 T 810 823 | |
| | | R Y ELEV POS XDCR 34CE2 COM E2/S2:USE STBY XDCR | 273451 | 1 | | |
| | EFCS 2 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE | 279334 | 1 | | |
| | EFCS 2 | and SEC2 COM OR INPUT OF THS ACT XDCR3 9CE | 279434 | 2 | | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | R Y ELEV MODE VLV 34CE2 | 273451 | 1 | 279300 PA277 T 810 882 | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 2 | THS ACTR POS ERROR 9CE OF ELAC1 | 274451 | 1 | 279300 P 288 T 810 844 | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|---|---|----------|---|--------|---|---------------------------|--|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ! | |
| | <u>F/CTL</u> ELAC 1 PITCH FAULT | EFCS 2 | THS ACTR SERVO MOT 2 9CE | 274451 | 1 | 279300 P 285 T 810 842 | |
| | <u>F/CTL</u> ELAC 1 PITCH FAULT | EFCS 2 | THS ACTR SERVO MOT 2 9CE OF ELAC1 | 274451 | 1 | 279300 P 291 T 810 845 | |
| | <u>F/CTL</u> ELAC 1 PITCH FAULT | EFCS 2 | THS ACTR XDCR2 MON 9CE | 274451 | 1 | 279300 P 281 T 810 840 | |
| | <u>F/CTL</u> ELAC 1 PITCH FAULT | EFCS 2 | THS ACTR XDCR2 9CE | 274451 | 1 | 279300 P 277 T 810 838 | |
| R | <u>F/CTL</u> ELAC 2 FAULT | | | | | 279300 PB279 T 810 947 | |
| | F/CTL ELAC 2 FAULT associated with F/CTL ELAC 1 FAULT | | | | | 279300 PB283 T 810 948 | |
| | F/CTL ELAC 2 FAULT | EFCS 1 | CAPT PITCH CTL SSTU 4CE3 | 279212 | 1 | 279300 P 220 T 810 811 | |
| | | IDENT: E | EFCS 2 | | | | |
| | <u>F/CTL</u> ELAC 2 FAULT | EFCS 1 | CAPT ROLL CTL SSTU 4CE1 | 279212 | 1 | 279300 P 217 T 810 809 | |
| | | IDENT: E | EFCS 2 | | | | |
| | F/CTL ELAC 2 FAULT | EFCS 1 | ELAC2 | 279334 | 1 | 279300 PB214 T 810 901 | |
| | | IDENT: / | AFS, EFCS 2 | | | | |
| | F/CTL ELAC 2 FAULT associated with | EFCS 1 | ELAC2 | 279334 | ! | 279300 PB263 T 810 935 | |
| | AUTO FLT AP OFF | IDENT: / | AFS, EFCS 2 | | | | |
| | <u>F/CTL</u> ELAC 2 FAULT | EFCS 1 | ELAC2 OR BUS FROM ELAC1 | 279334 | 1 | 279300 PB223 T 810 904 | |
| | | IDENT: / | AFS, EFCS 2 | | | | |
| | F/CTL ELAC 2 FAULT | EFCS 1 | ELAC2 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279334 | 1 | 279300 P 213 T 810 807 | |
| | | IDENT: E | EFCS 2 | | | | |

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| LIADNINGS /MALEUNCTIONS | | FAULT ISOLATION | | | | |
|------------------------------------|------------|--|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL ELAC 2 FAULT | EFCS 1 | ELAC2 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279334 | 1 | 279300 P 209 Т 810 805 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 FAULT | EFCS 1 | ELAC2 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279334 | 1 | 279300 P 215 T 810 808 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 FAULT | EFCS 1 | ELAC2 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279334 | 1 | 279300 P 211 T 810 806 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 FAULT | EFCS 1 | ELAC2 RACKING INPUTS | 279334 | 1 | 279300 PB221 T 810 902 | |
| | IDENT: | AFS, EFCS 2 | | | | |
| F/CTL ELAC 2 FAULT | EFCS 1 | ELAC2 SDI INPUTS | 279334 | 1 | 279300 PB222 T 810 903 | |
| | IDENT: | AFS, EFCS 2 | | | 1 010 703 | |
| F/CTL ELAC 2 FAULT | EFCS 1 | F/O PITCH CTL SSTU 4CE4 | 279212 | 1 | 279300 P 222 T 810 812 | |
| | IDENT: | EFCS 2 | | | 1 010 012 | |
| F/CTL ELAC 2 FAULT | EFCS 1 | F/O ROLL CTL SSTU 4CE2 | 279212 | 1 | 279300 P 219 T 810 810 | |
| | IDENT: | EFCS 2 | | | 010 010 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | CAPT PITCH CTL SSTU 4CE3 | 279212 | 1 | 279300 P 220 T 810 811 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | CAPT ROLL CTL SSTU 4CE1 | 279212 | 1 | 279300 P 217 Т 810 809 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | ELAC2 | 279334 | 1 | 279300 PB214 T 810 901 | |
| | IDENT: AFS | | | | 1 0 10 70 1 | |
| F/CTL ELAC 2 FAULT associated with | EFCS 2 | ELAC2 | 279334 | 1 | 279300 PB263 T 810 935 | |
| AUTO FLT AP OFF | IDENT: | AFS | | | | |

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| LIADNINGS / MALEUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|--------------------------|--------|---|----------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| F/CTL ELAC 2 FAULT | EFCS 2 | ELAC2 OR BUS FROM ELAC1 | 279334 | 1 | 279300 PB223 T 810 904 | |
| | IDENT: | AFS | | | 1 610 704 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | ELAC2 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279334 | 1 | 279300 P 213 T 810 807 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | ELAC2 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279334 | 1 | 279300 P 209 T 810 805 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | ELAC2 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279334 | 1 | 279300 P 215 T 810 808 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | ELAC2 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279334 | 1 | 279300 P 211 T 810 806 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | ELAC2 RACKING INPUTS | 279334 | 1 | 279300 PB221 T 810 902 | |
| | IDENT: | AFS | | | 1 610 702 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | ELAC2 SDI INPUTS | 279334 | 1 | 279300 PB222 T 810 903 | |
| | IDENT: | AFS | - | | | |
| F/CTL ELAC 2 FAULT | EFCS 2 | F/O PITCH CTL SSTU 4CE4 | 279212 | 1 | 279300 P 222 T 810 812 | |
| F/CTL ELAC 2 FAULT | EFCS 2 | F/O ROLL CTL SSTU 4CE2 | 279212 | 1 | 279300 P 219 T 810 810 | |
| F/CTL ELAC 2 PITCH FAULT | | | | | 270000 P 201 T 810 801 | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ACCLRM 3 12 CE3 | 279216 | 1 | 279200 P 205 T 810 807 | |
| | EFCS 1 | ACCLRM 4 12 CE4 | 279216 | 1 | 010 001 | |
| | IDENT: | IDENT: EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | CHECK PITCH CHANGE OVER OF ELAC2 | 279334 | 1 | 279300 PB252 T 810 930 | |
| | IDENT: | AFS, EFCS 2 | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT |
|--------------------------|--------|--|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE associated with | 279334 | 1 | 279000 P 228 T 810 814 |
| | EFCS 1 | ! | 279334 | 1 | |
| | EFCS 1 | ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 | 279334 | 1 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE associated with | 279334 | 1 | 279000 P 232 T 810 816 |
| | EFCS 1 | ! | 279334 | 1 | |
| | EFCS 1 | ! | 279334 | 1 | |
| | EFCS 1 | ! | 279334 | 1 | |
| | EFCS 1 | ! | 279334 | 1 | |
| | EFCS 1 | ! | 279334 | 1 | |
| | EFCS 1 | ! | 279334 | 1 | |
| | EFCS 1 | ELAC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279334 | 1 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE | 279334 | 1 | 279300 P 263 T 810 833 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 COM OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279334 | 1 | 279300 PA233 T 810 866 |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | FAULT ISOLATION | |
|--------------------------|--------|---|--------|--------------------|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 COM OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279334 | 1 | 279300 PA270 T 810 879 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE associated with | 279334 | 1 | 279000 P 230 T 810 815 |
| | EFCS 1 | ELAC2 OR WIRING FROM L ELEV POS MON XDCR | 279334 | 1 | |
| | EFCS 1 | ELAC2 OR WIRING FROM R ELEV POS MON XDCR | 279334 | 1 | |
| | EFCS 1 | ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 | 279334 | 1 | |
| | EFCS 1 | ELAC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279334 | 1 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE | 279334 | 1 | 279300 P 266 T 810 834 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 MON OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279334 | 1 | 279300 PA235 T 810 867 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 MON OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279334 | 1 | 279300 PA272 T 810 880 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 OR INPUT OF L PEDALS XDCR UNIT 25CE1 | 279334 | 1 | 279300 P 223 T 810 813 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 OR INPUT OF R PEDALS XDCR UNIT 25CE2 | 279334 | 1 | 279300 P 225 T 810 814 |
| | IDENT: | EFCS 2 | | | <u> </u> |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|--------------------------|--------|--|--------|---|---------------------------|--|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 OR OUTPUT TO THS ACTR SERVO MOT 1 9CE | 279334 | 1 | 279300 P 269 T 810 835 | |
| | IDENT: | EFCS 2 | | | <u></u> | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 OR WIRING FROM L ELEV POS MON XDCR | 279334 | 1 | 279300 PA231 T 810 865 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 | 279334 | 1 | 279300 PA222 T 810 862 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 | 279334 | 1 | 279300 PA229 T 810 864 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 OR WIRING FROM R ELEV POS MON XDCR | 279334 | 1 | 279300 PA268 T 810 878 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279334 | 1 | 279300 PA259 T 810 875 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 | 279334 | 1 | 279300 PA266 T 810 877 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | L B ELEV MODE VLV 34CE3 | 273451 | | 279300 PA224 T 810 863 | |
| | IDENT: | EFCS 2 | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|--|--------|---|------------------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| associated with F/CTL ELAC 1 PITCH FAULT and | İ | ELAC2/SEC2 | 273451 273451 | | Т 810 824 |
| STS-Maintenance F/CTL | EFCS 1 | and R B ELEV MODE XDCR 34CE4 and | 273451 | 1 | |
| | EFCS 1 | R ELEV POS MON XDCR OF ELAC2 / SEC2 | 273451 | 1 | |
| | EFCS 1 | ! | 279334 | 1 | |
| | EFCS 1 | ! | 279434 | 2 | |
| F/CTL ELAC 2 PITCH FAULT associated with | EFCS 1 | L B ELEV MODE XDCR 34CE3 | 273451 | 1 | 279000 P 248 T 810 824 |
| F/CTL ELAC 1 PITCH FAULT and STS-Maintenance | EFCS 1 | L ELEV POS MON XDCR OF ELAC2/SEC2 | 273451 | 1 | |
| F/CTL | EFCS 1 | R B ELEV MODE XDCR 34CE4 | 273451 | 1 | |
| | EFCS 1 | R ELEV POS MON XDCR OF ELAC2 / SEC2 | 273451 | 1 | |
| | EFCS 1 | ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE | 279334 | 1 | |
| | EFCS 1 | and SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE | 279434 | 2 | |
| | IDENT: | EFCS 2 | L | ь | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|---|------------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL ELAC 2 PITCH FAULT associated with F/CTL ELAC 1 PITCH FAULT | | L G ELEV POS XDCR 34CE1 COM E2/S2:USE STBY XDCR associated with | | | 279000 P 246 T 810 823 | |
| and STS-Maintenance F/CTL | EFCS 1 | R Y ELEV POS XDCR 34CE2 COM E2/S2:USE STBY XDCR and | 273451 | | | |
| | EFCS 1 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE and | 279334 | 1 | | |
| | EFCS 1 | SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE | 279434 | 2 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | L OR R PEDALS XDCR UNIT | 279215 | 1 | 271000 P 205 T 810 803 | |
| F/CTL ELAC 2 PITCH FAULT associated with | EFCS 1 | L OR R PEDALS XDCR UNIT | 279215 | 1 | 271000 P 205 T 810 803 | |
| F/CTL AIL SERVO FAULT and F/CTL ALTN LAW | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | R B ELEV MODE VLV 34CE4 | 273451 | 1 | 279300 PA261 T 810 876 | |
| | IDENT: | EFCS 2 | | | 010 010 | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | THS ACTR POS ERROR 9CE OF ELAC2 | 274451 | 1 | 279300 P 271 T 810 836 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | THS ACTR SERVO MOT 1 9CE | 274451 | | 279300 P 274 T 810 837 | |
| | IDENT: | IDENT: EFCS 2 | | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ACCLRM 3 12CE3 associated with | 279216 | 1 | 279200 P 205 T 810 807 | |
| | EFCS 2 | 1 | 279216 | 1 | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | CHECK PITCH CHANGE OVER OF ELAC2 | 279334 | 1 | 279300 PB252 T 810 930 | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | |
|--------------------------|-----------|--|--------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE associated with | 279334 | 1 | 279000 P 228 T 810 814 |
| | EFCS 2 | ! | 279334 | 1 | |
| | EFCS 2 | ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 | 279334 | 1 | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE | 279334 | 1 | 279300 P 263 T 810 833 |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE associated with | 279334 | 1 | 279000 P 232 T 810 816 |
| | EFCS 2 | ! | 279334 | 1 | |
| | EFCS 2 | ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 | 279334 | 1 | |
| | EFCS 2 | and ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE | 279334 | 1 | |
| | EFCS 2 | ELAC2 OR WIRING FROM L ELEV POS MON XDCR | 279334 | 1 | |
| | EFCS 2 | ELAC2 OR WIRING FROM R ELEV POS MON XDCR | 279334 | 1 | |
| | EFCS 2 | ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 and | 279334 | 1 | |
| | EFCS 2 | ! | 279334 | 1 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 COM OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279334 | 1 | 279300 PA233 T 810 866 |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 COM OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279334 | 1 | 279300 PA270 T 810 879 |

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| | LIADNINGS / MALEUNCTIONS | L | CFDS FAULT MESSAGES | | | |
|---|----------------------------------|--------|--|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS - | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE | 279334 | 1 | 279000 P 230 T 810 815 |
| | | EFCS 2 | associated with ELAC2 OR WIRING FROM L ELEV POS MON XDCR | 279334 | 1 | |
| | | EFCS 2 | and ELAC2 OR WIRING FROM R ELEV POS MON XDCR and | 279334 | 1 | |
| | | EFCS 2 | ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 | 279334 | 1 | |
| | | EFCS 2 | ELAC2 OR WIRING FROM R B | 279334 | 1 | |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE | 279334 | 1 | 279300 P 266 T 810 834 |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 MON OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279334 | 1 | 279300 PA235 T 810 867 |
| R | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 MON OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279334 | 1 | 279300 PA272 T 810 880 |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 OR INPUT OF L PEDALS XDCR UNIT 25CE1 | 279334 | 1 | 279300 P 223 T 810 813 |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 OR INPUT OF R PEDALS XDCR UNIT 25CE2 | 279334 | 1 | 279300 P 225 T 810 814 |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 OR OUTPUT TO THS ACTR SERVO MOT 1 9CE | 279334 | 1 | 279300 P 269 T 810 835 |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 OR WIRING FROM L ELEV POS MON XDCR | 279334 | 1 | 279300 PA231 T 810 865 |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 | 279334 | 1 | 279300 PA222 T 810 862 |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 | 279334 | 1 | 279300 PA229 T 810 864 |
| | F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 OR WIRING FROM R ELEV POS MON XDCR | 279334 | 1 | 279300 PA268 T 810 878 |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|----------|---|--------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279334 | 1 | 279300 PA259 T 810 875 |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 | 279334 | 1 | 279300 PA266 T 810 877 |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | L B ELEV MODE VLV 34CE3 | 273451 | 1 | 279300 PA224 T 810 863 |
| F/CTL ELAC 2 PITCH FAULT associated with F/CTL ELAC 1 PITCH FAULT | | L G ELEV POS XDCR 34CE1 COM E2/S2:USE STBY XDCR associated with | 273451 | 1 | 279000 P 246 T 810 823 |
| and STS-Maintenance F/CTL | EFCS 2 | | 273451 | 1 | |
| | EFCS 2 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE and | 279334 | 1 | |
| | EFCS 2 | SEC2 COM OR INPUT OF THS ACT XDCR3 9CE | 279434 | 2 | |
| F/CTL ELAC 2 PITCH FAULT associated with F/CTL AIL SERVO FAULT and F/CTL ALTN LAW | EFCS 2 | L OR R PEDALS XDCR UNIT | 279215 | 1 | 271000 P 205 Т 810 803 |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | R B ELEV MODE VLV 34CE4 | 273451 | 1 | 279300 PA261 T 810 876 |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | THS ACTR POS ERROR 9CE OF ELAC2 | 274451 | 1 | 279300 P 271 T 810 836 |
| F/CTL ELAC 2 PITCH FAULT | EFCS 2 | THS ACTR SERVO MOT 1 9CE | 274451 | 1 | 279300 P 274 T 810 837 |
| F/CTL ELEV SERVO FAULT | EFCS 1 | L B ELEV MODE XDCR 34CE3 | 273451 | 1 | 273000 P 215 T 810 809 |
| | IDENT: I | EFCS 2 | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | L B ELEV POS XDCR 34CE3 COM E1/S1:USE STBY XDCR | 273451 | 1 | 273000 P 201 T 810 801 |
| | IDENT: I | EFCS 2 | | | <u> </u> |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|---|----------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| F/CTL ELEV SERVO FAULT associated with F/CTL ELAC 1 PITCH FAULT | | L B ELEV POS XDCR 34CE3 COM E1/S1:USE STBY XDCR associated with | 273451 | 1 | 279000 P 238 T 810 819 | |
| FICH FAULT | | | 273451 | 1 | | |
| | EFCS 1 | I = | 274451 | 1 | | |
| | IDENT: I | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | L B ELEV SERVO VLV 34CE3 | 273451 | | 273000 P 210 T 810 806 | |
| | IDENT: I | EFCS 2 | | | 010 000 | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | L ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | 273000 P 205 T 810 803 | |
| | IDENT: I | EFCS 2 | | | | |
| associated with | | ELAC1/SEC1 | 273451 | 1 | 279000 P 240 T 810 820 | |
| F/CTL ELAC 1 PITCH FAULT | EFCS 1 | associated with L G ELEV MODE XDCR 34CE1 and | 273451 | 1 | | |
| | EFCS 1 | R ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | | |
| | EFCS 1 | | 273451 | 1 | | |
| | EFCS 1 | THS ACTR XDCR2 MON 9CE | 274451 | 1 | | |
| | IDENT: I | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | L ELEV POS MON XDCR OF ELAC2/SEC2 | 273451 | 1 | 273000 P 227 T 810 814 | |
| | IDENT: I | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | L G ELEV MODE XDCR 34CE1 | 273451 | 1 | 273000 P 236 T 810 820 | |
| | IDENT: I | EFCS 2 | | | L | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | L G ELEV POS XDCR 34CE1 COM E2/S2:USE STBY XDCR | 273451 | 1 | 273000 P 223 T 810 812 | |
| | IDENT: I | EFCS 2 | | | | |

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| | | | CFDS FAULT MESSAGES | S | | FAULT |
|--------|-------------------------------|----------|--|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| | F/CTL ELEV SERVO FAULT | EFCS 1 | L G ELEV SERVO VLV 34CE1 | 273451 | 1 | 273000 P 231 T 810 817 |
| | | IDENT: I | EFCS 2 | | | |
| R R | F/CTL ELEV SERVO FAULT | EFCS 1 | R B ELEV MODE XDCR 34CE4 | 273451 | 1 | 273000 P 258 T 810 831 |
| R | | IDENT: I | EFCS 2 | | | L |
| | <u>F/CTL</u> ELEV SERVO FAULT | EFCS 1 | R B ELEV POS XDCR 34CE4 COM E1/S1:USE STBY XDCR | 273451 | 1 | 273000 P 244 T 810 823 |
| | | IDENT: I | EFCS 2 | | | |
| | F/CTL ELEV SERVO FAULT | EFCS 1 | R B ELEV SERVO VLV 34CE4 | 273451 | 1 | 273000 P 253 T 810 828 |
| | | IDENT: I | EFCS 2 | | | 1 010 020 |
| | <u>F/CTL</u> ELEV SERVO FAULT | EFCS 1 | R ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | 273000 P 248 T 810 825 |
| | | IDENT: I | EFCS 2 | | | |
| | <u>F/CTL</u> ELEV SERVO FAULT | EFCS 1 | R ELEV POS MON XDCR OF ELAC2 / SEC2 | 273451 | 1 | 273000 P 270 T 810 836 |
| | | IDENT: I | EFCS 2 | | | |
| R R | F/CTL ELEV SERVO FAULT | EFCS 1 | R Y ELEV MODE XDCR 34CE2 | 273451 | 1 | 273000 P 279 T 810 842 |
| R | | IDENT: I | EFCS 2 | | | 010 042 |
| | <u>F/CTL</u> ELEV SERVO FAULT | EFCS 1 | R Y ELEV POS XDCR 34CE2 COM E2/S2:USE STBY XDCR | 273451 | | 273000 P 266 T 810 834 |
| | | | | | | |
| | F/CTL ELEV SERVO FAULT | EFCS 1 | R Y ELEV SERVO VLV 34CE2 | 273451 | 1 | 273000 P 274 T 810 839 |
| | | IDENT: I | EFCS 2 | | | . 010 03/ |
| | <u>F/CTL</u> ELEV SERVO FAULT | EFCS 1 | SEC1 COM OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279434 | 1 | 273000 P 211 T 810 807 |
| | | IDENT: I | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|------------------------|--------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFORCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 COM OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279434 | 1 | 273000 P 254 T 810 829 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 MON OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279434 | 1 | 273000 P 213 T 810 808 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 MON OR WIRING TO L G ELEV SOL VLV 34CE1 | 279434 | 1 | 273000 P 240 T 810 822 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 MON OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279434 | 1 | 273000 P 256 T 810 830 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 MON OR WIRING TO R Y ELEV SOL VLV 34CE2 | 279434 | 1 | 273000 P 283 T 810 844 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 OR WIRING FROM L ELEV POS MON XDCR | 279434 | 1 | 273000 P 208 T 810 805 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 | 279434 | 1 | 273000 P 203 T 810 802 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279434 | 1 | 273000 P 238 T 810 821 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 OR WIRING FROM R ELEV POS MON XDCR | 279434 | 1 | 273000 P 251 T 810 827 | |
| | IDENT: | EFCS 2 | | | <u> </u> | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|------------------------|--------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFORCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 | 279434 | 1 | 273000 P 246 T 810 824 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279434 | 1 | 273000 P 281 T 810 843 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 COM OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279434 | 1 | 273000 P 232 T 810 818 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 COM OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279434 | 1 | 273000 P 275 T 810 840 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 MON OR WIRING TO L B ELEV SOL VLV 34CE3 | 279434 | 1 | 273000 P 219 T 810 811 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 MON OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279434 | 1 | 273000 P 234 T 810 819 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 MON OR WIRING TO R B ELEV SOL VLV 34CE4 | 279434 | 1 | 273000 P 262 T 810 833 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 MON OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279434 | 1 | 273000 P 277 T 810 841 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 OR WIRING FROM L ELEV POS MON XDCR | 279434 | 1 | 273000 P 229 T 810 816 | |
| | IDENT: | EFCS 2 | | | <u> </u> | |

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| WARNINGS/MALFUNCTIONS | L | | FAULT ISOLATION | | |
|---|--------|---|--------------------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 | 279434 | 1 | 273000 P 225 T 810 813 |
| | IDENT: | EFCS 2 | · | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 OR WIRING FROM R ELEV POS MON XDCR | 279434 | 1 | 273000 P 272 T 810 838 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279434 | 1 | 273000 P 260 T 810 832 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 | 279434 | 1 | 273000 P 268 T 810 835 |
| | IDENT: | EFCS 2 | | |] |
| F/CTL ELEV SERVO FAULT | EFCS 1 | SEC2 OR WIRING TO L B ELEV MODE XDCR 34CE3 | 279434 | 1 | 273000 P 217 T 810 810 |
| | IDENT: | EFCS 2 | | | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | L B ELEV MODE XDCR 34CE3 | 273451 | 1 | 273000 P 215 T 810 809 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | L B ELEV POS XDCR 34CE3 COM E1/S1:USE STBY XDCR | 273451 | 1 | 273000 P 201 T 810 801 |
| F/CTL ELEV SERVO FAULT associated with F/CTL ELAC 1 PITCH FAULT | EFCS 2 | L B ELEV POS XDCR 34CE3 COM E1/S1:USE STBY XDCR | 273451 | 1 | 279000 P 238 T 810 819 |
| FOR ELAC PITCH FAULT | | associated with R B ELEV POS XDCR 34CE4 COM E1/S1:USE STBY XDCR | 273451 | 1 | |
| | EFCS 2 | and THS ACTR XDCR2 9CE | 274451 | 1 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | L B ELEV SERVO VLV 34CE3 | 273451 | 1 | 273000 P 210 T 810 806 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | L ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | 273000 P 205 T 810 803 |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|--------|--|--------|--|--------|-------|---------------------------|--|
| | WARNINGS/ MALFORCTIONS | SOURCE | MESSAGE | ATA | С | !!! | |
| | F/CTL ELEV SERVO FAULT associated with | EFCS 2 | L ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | 279000 P 240 T 810 820 | |
| | F/CTL ELAC 1 PITCH FAULT | EFCS 2 | associated with L G ELEV MODE XDCR 34CE1 and | 273451 | 1 | | |
| | | EFCS 2 | R ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | | |
| | | EFCS 2 | R Y ELEV MODE XDCR 34CE2 and | | | | |
| | | EFCS 2 | THS ACTR XDCR2 MON 9CE | 274451 | 1 | | |
| | <u>F/CTL</u> ELEV SERVO FAULT | EFCS 2 | L ELEV POS MON XDCR OF ELAC2/SEC2 | 273451 | 1 | 273000 P 227 T 810 814 | |
| R R | F/CTL ELEV SERVO FAULT | EFCS 2 | L G ELEV MODE XDCR 34CE1 | 273451 | 1 | 273000 P 236 T 810 820 | |
| | F/CTL ELEV SERVO FAULT | EFCS 2 | L G ELEV POS XDCR 34CE1 COM E2/S2:USE STBY XDCR | 273451 | 1 | 273000 P 223 T 810 812 | |
| | F/CTL ELEV SERVO FAULT | EFCS 2 | L G ELEV SERVO VLV 34CE1 | 273451 | 1 | 273000 P 231 T 810 817 | |
| R R | F/CTL ELEV SERVO FAULT | EFCS 2 | R B ELEV MODE XDCR 34CE4 | 273451 | 1 | 273000 P 258 T 810 831 | |
| | F/CTL ELEV SERVO FAULT | EFCS 2 | R B ELEV POS XDCR 34CE4 COM E1/S1:USE STBY XDCR | 273451 | 1 | 273000 P 244 T 810 823 | |
| | F/CTL ELEV SERVO FAULT | EFCS 2 | R B ELEV SERVO VLV 34CE4 | 273451 | 1 | 273000 P 253 T 810 828 | |
| | F/CTL ELEV SERVO FAULT | EFCS 2 | R ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | 273000 P 248 T 810 825 | |
| | F/CTL ELEV SERVO FAULT | EFCS 2 | R ELEV POS MON XDCR OF ELAC2 / SEC2 | 273451 | 1 | 273000 P 270 T 810 836 | |
| R R | F/CTL ELEV SERVO FAULT | EFCS 2 | R Y ELEV MODE XDCR 34CE2 | 273451 | 1 | 273000 P 279 T 810 842 | |
| | F/CTL ELEV SERVO FAULT | EFCS 2 | R Y ELEV POS XDCR 34CE2 COM E2/S2:USE STBY XDCR | 273451 | 1 | 273000 P 266 T 810 834 | |

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| WARNINGS/MALFUNCTIONS | L | CFDS FAULT MESSAGES | | | |
|------------------------|--------|---|--------|-----------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | - ISOLATION C PROCEDURE | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | R Y ELEV SERVO VLV 34CE2 | 273451 | 1 273000 P 274 T 810 839 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 COM OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279434 | 1 273000 P 211 T 810 807 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 COM OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279434 | 1 273000 P 254 T 810 829 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 MON OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279434 | 1 273000 P 213 T 810 808 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 MON OR WIRING TO L G ELEV SOL VLV 34CE1 | 279434 | 1 273000 P 240 T 810 822 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 MON OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279434 | 1 273000 P 256 T 810 830 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 MON OR WIRING TO R Y ELEV SOL VLV 34CE2 | 279434 | 1 273000 P 283 T 810 844 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 OR WIRING FROM L ELEV POS MON XDCR | 279434 | 1 273000 P 208 T 810 805 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 | 279434 | 1 273000 P 203 T 810 802 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279434 | 1 273000 P 238 T 810 821 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 OR WIRING FROM R ELEV POS MON XDCR | 279434 | 1 273000 P 251 T 810 827 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 | 279434 | 1 273000 P 246 T 810 824 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279434 | 1 273000 P 281 T 810 843 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 COM OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279434 | 1 273000 P 232 T 810 818 | |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 COM OR WIRING TO R Y ELEV VLV 34CE2 | 279434 | 1 273000 P 275 T 810 840 | |

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| LIADNINGS (MALEUNCTIONS | | CFDS FAULT MESSAGES | | | |
|-------------------------|--------|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 MON OR WIRING TO L B ELEV SERVO VLV 34CE1 | 279434 | 1 | 273000 P 234 T 810 819 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 MON OR WIRING TO L B ELEV SOL VLV 34CE3 | 279434 | 1 | 273000 P 219 T 810 811 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 MON OR WIRING TO R B ELEV SOL VLV 34CE4 | 279434 | 1 | 273000 P 262 T 810 833 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 MON OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279434 | 1 | 273000 P 277 T 810 841 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 OR WIRING FROM L ELEV POS MON XDCR | 279434 | 1 | 273000 P 229 T 810 816 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 | 279434 | 1 | 273000 P 225 T 810 813 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 OR WIRING FROM R ELEV POS MON XDCR | 279434 | 1 | 273000 P 272 T 810 838 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279434 | 1 | 273000 P 260 T 810 832 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 | 279434 | 1 | 273000 P 268 T 810 835 |
| F/CTL ELEV SERVO FAULT | EFCS 2 | SEC2 OR WIRING TO L B ELEV MODE XDCR 34CE3 | 279434 | 1 | 273000 P 217 T 810 810 |
| F/CTL FCDC 1 FAULT | ECAM 1 | FWC1 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 248 T 810 840 |
| F/CTL FCDC 1 FAULT | ECAM 1 | FWC1 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 250 T 810 842 |
| F/CTL FCDC 1 FAULT | ECAM 1 | FWC2 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 249 T 810 841 |
| F/CTL FCDC 1 FAULT | ECAM 1 | FWC2 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 251 T 810 843 |
| F/CTL FCDC 1 FAULT | ECAM 2 | FWC1 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 248 T 810 840 |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|-----------------------------|--------|---|--------|---------------------|---------------------------|
| | WARNINGS/ FIALL ONC LIONS | SOURCE | MESSAGE | АТА | С | ! ! |
| R | <u>F/CTL</u> FCDC 1 FAULT | ECAM 2 | FWC1 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 250 T 810 842 |
| R | <u>F/CTL</u> FCDC 1 FAULT | ECAM 2 | FWC2 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 249 T 810 841 |
| R | <u>F/CTL</u> FCDC 1 FAULT | ECAM 2 | FWC2: NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 251 T 810 843 |
| | F/CTL FCDC 1 FAULT | EFCS 1 | FCDC1 | 279534 | 1 | 279500 P 203 T 810 803 |
| | | ! | CFDS, ECAM 1, ECAM 2, EFCS EIS 1, EIS 2, EIS 3 | S 2, | | 1 010 003 |
| | <u>F/CTL</u> FCDC 1 FAULT | EFCS 1 | FCDC1 BUS 3 | 279534 | 2 | 279500 P 232 T 810 836 |
| | F/CTL FCDC 1 FAULT | EFCS 1 | FCDC1 SDI INPUTS | 279534 | 1 | 279500 P 220 T 810 820 |
| | | | CFDS, ECAM 1, ECAM 2, EFCS | s 2, | | . 0.0 020 |
| | <u>F/CTL</u> FCDC 1 FAULT | EFCS 2 | FCDC1 | 279534 | 1 | 279500 P 203 T 810 803 |
| | | ! | CFDS, ECAM 1, ECAM 2, EIS | 1, | | |
| | <u>F/CTL</u> FCDC 1 FAULT | EFCS 2 | FCDC1 BUS 3 | 279534 | 2 | 279500 P 232 T 810 836 |
| | <u>F/CTL</u> FCDC 1 FAULT | EFCS 2 | FCDC1 SDI INPUTS | 279534 | 1 | 279500 P 220 T 810 820 |
| | | | CFDS, ECAM 1, ECAM 2, EIS EIS 2, EIS 3 | 1, | | |
| | <u>F/CTL</u> FCDC 1+2 FAULT | | | | | 270000 P 201 T 810 801 |
| R | <u>F/CTL</u> FCDC 2 FAULT | ECAM 1 | FWC1 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 248 T 810 840 |
| R | <u>F/CTL</u> FCDC 2 FAULT | ECAM 1 | FWC1 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 250 T 810 842 |
| R | <u>F/CTL</u> FCDC 2 FAULT | ECAM 1 | FWC2 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 249 T 810 841 |

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| HADNINGS (MALIFINISTIONS | | CFDS FAULT MESSAGES | | FAULT | |
|--------------------------|-----------|--|--------|-------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ISOLATION PROCEDURE |
| F/CTL FCDC 2 FAULT | ECAM 1 | FWC2 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 251 T 810 843 |
| F/CTL FCDC 2 FAULT | ECAM 2 | FWC1 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 248 T 810 840 |
| F/CTL FCDC 2 FAULT | ECAM 2 | FWC1 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 250 T 810 842 |
| F/CTL FCDC 2 FAULT | ECAM 2 | FWC2 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 249 T 810 841 |
| F/CTL FCDC 2 FAULT | ECAM 2 | FWC2 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 251 T 810 843 |
| F/CTL FCDC 2 FAULT | EFCS 1 | FCDC2 | 279534 | 1 | 279500 P 202 T 810 802 |
| | | CFDS, ECAM 1, ECAM 2, EFCS EIS 1, EIS 2, EIS 3 | \$ 2, | | 010 002 |
| F/CTL FCDC 2 FAULT | EFCS 1 | FCDC2 BUS 3 | 279534 | 2 | 279500 P 232 T 810 836 |
| F/CTL FCDC 2 FAULT | EFCS 1 | FCDC2 SDI INPUTS | 279534 | 1 | 279500 P 221 T 810 821 |
| | | CFDS, ECAM 1, ECAM 2, EFCS | s 2, | | 0.0 02. |
| F/CTL FCDC 2 FAULT | EFCS 2 | FCDC2 | 279534 | 1 | 279500 P 202 T 810 802 |
| | | CFDS, ECAM 1, ECAM 2, EIS EIS 2, EIS 3 | 1, | | 010 002 |
| F/CTL FCDC 2 FAULT | EFCS 2 | FCDC2 BUS 3 | 279534 | 2 | 279500 P 232 T 810 836 |
| F/CTL FCDC 2 FAULT | EFCS 2 | FCDC2 SDI INPUTS | 279534 | 1 | 279500 P 221 T 810 821 |
| | IDENT: | | | | |
| F/CTL FLAP ATTACH SENSOR | SFCC 1 | FLP LH PROX SNSR 1 37CV OR LGCIU 1 associated with | 275115 | 2 | 275100 PA215 T 810 853 |
| | SFCC 2 | ! | 323171 | 1 | |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|--------------------------|---------------------|--|--------|-----|---------------------------|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 1 | FLP LH PROX SNSR 1 37CV OR LGCIU 1 associated with | 275115 | | 275100 PA215 T 810 853 |
| | | SFCC 2 | FLP 2 NO SFCC 1 DATA | 275134 | 2 | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 1 | FLP RH PROX SNSR 1 38CV OR LGCIU 1 associated with | 275115 | | 275100 PA215 T 810 853 |
| | | SFCC 2 | FLP 2 NO LGCIU 2 DATA | 323171 | 1 | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 1 | FLP RH PROX SNSR 1 38CV OR LGCIU 1 associated with | 275115 | | 275100 PA215 T 810 853 |
| | | SFCC 2 | FLP 2 NO SFCC 1 DATA | 275134 | 2 | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 1 | FLP 1 NO LGCIU 1 DATA associated with | 323171 | | 275100 PA215 T 810 853 |
| | | SFCC 2 | FLP 2 NO LGCIU 2 DATA | 323171 | . ! | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 1 | FLP 1 NO LGCIU 1 DATA associated with | 323171 | | 275100 PA215 T 810 853 |
| | | SFCC 2 | FLP 2 NO SFCC 1 DATA | 275134 | . ! | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 1 | FLP 1 NO SFCC 2 DATA associated with | 275134 | | 275100 PA215 T 810 853 |
| | | SFCC 2 | FLP 2 NO LGCIU 2 DATA | 323171 | 1 | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 1 | FLP 1 NO SFCC 2 DATA associated with | 275134 | | 275100 PA215 T 810 853 |
| | | SFCC 2 | FLP 2 NO SFCC 1 DATA | 275134 | 2 | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 1 | SFCC1 21CV associated with | 275134 | . ! | 275100 PA215 T 810 853 |
| | | SFCC 1 | FLP 1 NO LGCIU 1 DATA | 323171 | ╌┼ | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 2 | FLP LH PROX SNSR 2 39CV OR LGCIU 2 | 275115 | | 275100 PA215 T 810 853 |
| | | SFCC 1 | associated with FLP 1 NO LGCIU 1 DATA | 323171 | 1 | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 2 | FLP LH PROX SNSR 2 39CV OR LGCIU 2 | 275115 | | 275100 PA215 T 810 853 |
| | | SFCC 1 | associated with FLP 1 NO SFCC 2 DATA | 275134 | j | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT - ISOLATION | |
|---|--|--------|--|--------|---|---------------------------|--|
| | WARNINGS/ MALFORCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 2 | FLP RH PROX SNSR 2 40CV OR LGCIU 2 associated with | 275115 | 2 | 275100 PA215 T 810 853 | |
| | | SFCC 1 | FLP 1 NO LGCIU 1 DATA | 323171 | 1 | | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 2 | FLP RH PROX SNSR 2 40CV OR LGCIU 2 associated with | 275115 | 2 | 275100 PA215 T 810 853 | |
| | | SFCC 1 | FLP 1 NO SFCC 2 DATA | 275134 | 2 | <u> </u> | |
| R | F/CTL FLAP ATTACH SENSOR | SFCC 2 | SFCC2 22CV associated with | 275134 | 1 | 275100 PA215 T 810 853 | |
| | | SFCC 2 | FLP 2 NO LGCIU 2 DATA | 323171 | 1 | | |
| | F/CTL FLAP SYS 1 FAULT | | | | | 275100 P 233 T 810 814 | |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | | | | | 275100 P 233 T 810 814 | |
| | F/CTL FLAP SYS 1 FAULT associated with F/CTL FLAP SYS 2 FAULT | | | | | 275100 P 241 T 810 815 | |
| | F/CTL FLAP SYS 1 FAULT associated with F/CTL FLAP SYS 2 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | | | | | 275100 P 241 T 810 815 | |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | FLP FPPU 27CV OR WIRING TO FLP 1 | 275119 | 1 | 275100 P 218 T 810 808 | |
| R | <u>F/CTL</u> FLAP SYS 1 FAULT | SFCC 1 | FLP PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 275100 PA204 T 810 847 | |
| R | F/CTL FLAP SYS 1 FAULT | SFCC 1 | FLP PIN PROG INCOMPATIBL E AIRCRAFT TYPE | 275134 | 1 | 275100 PA204 T 810 847 | |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|--|---------------------|--|--------|---|---------------------------|
| | | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL FLAP SYS 1 FAULT associated with STS-Inop System FLAPS and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 1 | FLP 1 NO LGCIU 1 DATA | 323171 | 1 | 275100 P 269 T 810 831 |
| | F/CTL FLAP SYS 1 FAULT associated with Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber and FLAPS SLOW shown in green on STATUS page | SFCC 1 | FLP 1 PCU VALVEBLOCK 23CV | 275453 | 1 | 275100 P 201 T 810 802 |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | FLP 1 PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 275100 P 216 T 810 807 |
| | F/CTL FLAP SYS 1 FAULT associated with STS-Maintenance SFCS and FLAPS SLOW shown in green on STATUS page | SFCC 1 | FLP 1 PIN PROG DISAGREE CONFIGURATION | 275134 | 1 | 275100 P 216 T 810 807 |
| | F/CTL FLAP SYS 1 FAULT associated with STS-Maintenance SFCS and FLAPS SLOW shown in green on STATUS page | SFCC 1 | FLP 1 PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 275100 P 216 T 810 807 |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|---|--|----------|---|--------|---|---------------------------|--|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| R | F/CTL FLAP SYS 1 FAULT associated with STS-Inop System FLAPS and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 1 | FLP1 NO CFDIU DATA | 313234 | 1 | 275100 P 276 T 810 834 | |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | LH FLP APPU 29CV OR WIRING TO FLP 1 | 275118 | 1 | 275100 P 221 T 810 809 | |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | RH FLP APPU 30CV OR WIRING TO FLP 1 | 275118 | 1 | 275100 P 221 T 810 809 | |
| R | F/CTL FLAP SYS 1 FAULT associated with STS-Inop System FLAPS and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber and FLAPS SLOW shown in green on STATUS page | SFCC 1 | SFCC 1 FLP HALF SPEED CHECK PCU 6201CM | 275451 | 1 | 275100 P 260 T 810 826 | |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 OR FLP FPPU | 275100 | 1 | 275100 P 207 T 810 804 | |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 OR FLP LH APPU | 275100 | 1 | 275100 P 205 T 810 803 | |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in | SFCC 1 | SFCC1 OR FLP PCU VALVEBLOCK | 275100 | 1 | 275100 P 201 T 810 802 | |
| | green on STATUS page | IDENT: A | AFS, CFDS | | | <u> </u> | |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT - ISOLATION | |
|---|--|---------------------|--|--------|----------------------|---------------------------|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 OR FLP RH APPU | 275100 | 1 | 275100 P 205 T 810 803 |
| R | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 21CV | 275134 | 1 | 275100 PA200 T 810 845 |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | SLT/FLP CSU 51CV | 275117 | 1 | 275100 P 228 T 810 811 |
| | F/CTL FLAP SYS 1 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | SLT/FLP CSU 51CV OR WIRING TO FLP 1 | 275117 | 1 | 275100 P 211 T 810 805 |
| | F/CTL FLAP SYS 2 FAULT | | | | | 275100 P 233 T 810 814 |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | | | | | 275100 P 233 T 810 814 |
| | F/CTL FLAP SYS 2 FAULT associated with F/CTL FLAP SYS 1 FAULT | | | | | 275100 P 241 T 810 815 |
| | F/CTL FLAP SYS 2 FAULT associated with F/CTL FLAP SYS 1 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | | | | | 275100 P 241 T 810 815 |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 OR FLP PPU POWER | 275100 | 1 | 275100 P 231 T 810 812 |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|--|--------|---|--------|---|---------------------------|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | !! |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | FLP FPPU 27CV OR WIRING TO FLP 2 | 275119 | 1 | 275100 P 218 T 810 808 |
| R | F/CTL FLAP SYS 2 FAULT | SFCC 2 | FLP PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 275100 PA204 T 810 847 |
| R | F/CTL FLAP SYS 2 FAULT | SFCC 2 | FLP PIN PROG INCOMPATIBL E AIRCRAFT TYPE | 275134 | 1 | 275100 PA204 T 810 847 |
| R | F/CTL FLAP SYS 2 FAULT associated with STS-Inop System FLAPS and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 2 | FLP 2 NO LGCIU 2 DATA | 323171 | 1 | 275100 P 269 T 810 831 |
| | F/CTL FLAP SYS 2 FAULT associated with Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber and FLAPS SLOW shown in green on STATUS page | SFCC 2 | FLP 2 PCU VALVEBLOCK 24CV | 275453 | 1 | 275100 P 201 T 810 802 |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | FLP 2 PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 275100 P 216 T 810 807 |
| | F/CTL FLAP SYS 2 FAULT associated with STS-Maintenance SFCS and FLAPS SLOW shown in green on STATUS page | SFCC 2 | FLP 2 PIN PROG DISAGREE CONFIGURATION | 275134 | 1 | 275100 P 216 T 810 807 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT - ISOLATION | |
|---|--|--------|---|--------|---|---------------------------|--|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | !! | |
| | F/CTL FLAP SYS 2 FAULT associated with STS-Maintenance SFCS and FLAPS SLOW shown in green on STATUS page | SFCC 2 | FLP 2 PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 275100 P 216 T 810 807 | |
| R | F/CTL FLAP SYS 2 FAULT associated with STS-Inop System FLAPS and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 2 | FLP2 NO CFDIU DATA | 313234 | 1 | 275100 P 276 T 810 834 | |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | LH FLP APPU 29CV OR WIRING TO FLP 2 | 275118 | 1 | 275100 P 221 T 810 809 | |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | RH FLP APPU 30CV OR WIRING TO FLP 2 | 275118 | 1 | 275100 P 221 T 810 809 | |
| R | F/CTL FLAP SYS 2 FAULT associated with STS-Inop System FLAPS and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber and FLAPS SLOW shown in green on STATUS page | SFCC 2 | SFCC 2 FLP HALF SPEED CHECK PCU 6201CM | 275451 | 1 | 275100 P 260 T 810 826 | |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 OR FLP FPPU | 275100 | 1 | 275100 P 207 T 810 804 | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|---|----------|---|--------|---|---------------------------|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 OR FLP LH APPU | 275100 | 1 | 275100 P 205 T 810 803 |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in | SFCC 2 | SFCC2 OR FLP PCU VALVEBLOCK | 275100 | 1 | 275100 P 201 T 810 802 |
| | green on STATUS page | IDENT: / | AFS, CFDS | | | |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 OR FLP PPU POWER | 275100 | 1 | 275100 P 231 T 810 812 |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 OR FLP RH APPU | 275100 | 1 | 275100 P 205 T 810 803 |
| R | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 22CV | 275134 | 1 | 275100 PA200 T 810 845 |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | SLT/FLP CSU 51CV | 275117 | 1 | 275100 P 228 T 810 811 |
| | F/CTL FLAP SYS 2 FAULT associated with FLAPS SLOW shown in green on STATUS page | SFCC 2 | SLT/FLP CSU 51CV OR WIRING TO FLP 2 | 275117 | 1 | 275100 P 211 T 810 805 |
| R | F/CTL FLAP SYS 2 FAULT | SFCC 2 | WRONG INHIBIT SIGN FROM CARGO DOOR YELLOW SYSTEM | ! | 3 | 275100 P 294 T 810 841 |
| R | F/CTL FLAP TIP BRK FAULT | SFCC 1 | FLP LH WTB BLU SOLENOID 33CV OR WIRING TO FLP 1 | 275151 | 1 | 275100 P 281 T 810 836 |
| R | F/CTL FLAP TIP BRK FAULT | SFCC 1 | FLP RH WTB BLU SOLENOID 34CV OR WIRING TO FLP 1 | 275151 | 1 | 275100 P 284 T 810 837 |
| R | F/CTL FLAP TIP BRK FAULT | SFCC 1 | FLP 1 WTB C/B 10CV | 275100 | 1 | 275100 P 279 T 810 835 |

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| | LIADNINGS / MALEUNGITONS | | | FAULT ISOLATION | | |
|---|--|--------|--|--------------------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! ! |
| R | <u>F/CTL</u> FLAP TIP BRK FAULT | SFCC 2 | FLP LH WTB YEL SOLENOID 33CV OR WIRING TO FLP 2 | 275151 | 1 | 275100 P 281 T 810 836 |
| R | F/CTL FLAP TIP BRK FAULT | SFCC 2 | FLP RH WTB GRN SOLENOID 34CV OR WIRING TO FLP 2 | 275151 | 1 | 275100 P 284 T 810 837 |
| R | <u>F/CTL</u> FLAP TIP BRK FAULT | SFCC 2 | FLP 2 WTB C/B 12CV | 275100 | 1 | 275100 P 279 T 810 835 |
| R | F/CTL FLAPS FAULT | SFCC 1 | FLP PIN PROG DISAGREE | 275134 | 1 | 275100 PA204 T 810 847 |
| | | SFCC 2 | associated with FLP PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | |
| R | <u>F/CTL</u> FLAPS FAULT | SFCC 1 | FLP PIN PROG INCOMPATIBL E AIRCRAFT TYPE associated with | 275134 | 1 | 275100 PA204 T 810 847 |
| | | SFCC 2 | FLP PIN PROG INCOMPATIBL E AIRCRAFT TYPE | 275134 | 1 | |
| R | <u>F/CTL</u> FLAPS FAULT | SFCC 1 | FLP 1 PCU VALVEBLOCK 23CV | 275453 | 1 | 275100 PA211 T 810 851 |
| | | SFCC 2 | associated with FLP 2 PCU VALVEBLOCK 24CV | 275453 | 1 | |
| | <u>F/CTL</u> FLAPS FAULT | SFCC 1 | FLP 1 SYSTEM JAM CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 224 T 810 810 |
| | | SFCC 2 | associated with FLP 2 SYSTEM JAM CHECK FLP MECH DRIVE | 275000 | 1 | |
| | F/CTL FLAPS FAULT associated with F/CTL SLAT TIP BRK FAULT and STS-Inop System | SFCC 2 | SLT 2 WTB C/B 11CV | 278100 | 1 | 278100 P 249 T 810 821 |
| | SLATS and Upper ECAM DU Flags SLAT indication is shown in amber and | | | | | |
| | S-LOCKED indication is shown in amber | | | | L | |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|--|------------------|---|------------------|------------|---------------------------|--|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ! | |
| R | F/CTL FLAPS LOCKED associated with F/CTL - FLAPS - WTB applied during APU start on batteries | | | | | 275100 PA208 T 810 849 | |
| R | <u>F/CTL</u> FLAPS LOCKED | SFCC 1 | CHECK CSU LEVER MECHANIC associated with CHECK CSU LEVER MECHANIC | | | т 810 828 | |
| | <u>F/CTL</u> FLAPS LOCKED | SFCC 1 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 associated with | 275100 | 1 | 275100 P 250 T 810 819 | |
| | | SFCC 2 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 and | 275100 | | | |
| | | SFCC 1 | FLP 1 ASYMMETRY LH CHECK FLP MECH DRIVE and | | | | |
| | | SFCC 2 | FLP 2 ASYMMETRY LH CHECK FLP MECH DRIVE | 275000 | 1 | | |
| | F/CTL FLAPS LOCKED | SFCC 1 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 associated with | 275100 | 1 | 275100 P 250 T 810 819 | |
| | | SFCC 2 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 and | 275100 | 1 | | |
| | | SFCC 1 | FLP 1 ASYMMETRY RH CHECK FLP MECH DRIVE and | 275000 | 1 | | |
| | | SFCC 2 | FLP 2 ASYMMETRY RH CHECK FLP MECH DRIVE | 275000 | 1 | | |
| | <u>F/CTL</u> FLAPS LOCKED | SFCC 1 SFCC 2 | FLP 1 CHK LH MECH DRIVE associated with FLP 2 CHK LH MECH DRIVE | 275100 275100 | | 275100 P 245 T 810 818 | |
| | <u>F/CTL</u> FLAPS LOCKED | SFCC 1 | FLP 1 CHK LH MECH DRIVE | 275100 | 1 | 275100 P 245 T 810 818 | |
| | F/CTL FLAPS LOCKED | SFCC 1 | FLP 1 CHK RH MECH DRIVE associated with | 275100 | 1 | 275100 P 245 T 810 818 | |
| | | SFCC 2 | FLP 2 CHK RH MECH DRIVE | 275100 | 1 | | |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT - ISOLATION | |
|---|---------------------------|---------------------|---|--------|---|---------------------------|--|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ! | |
| | <u>F/CTL</u> FLAPS LOCKED | SFCC 1 | FLP 1 CHK RH MECH DRIVE | 275100 | 1 | 275100 P 245 T 810 818 | |
| R | F/CTL FLAPS LOCKED | SFCC 1 | FLP 1 OVERSPEED CHECK FLP MECH DRIVE associated with | 275000 | 1 | 275100 P 290 T 810 840 | |
| | | SFCC 2 | FLP 2 OVERSPEED CHECK FLP MECH DRIVE | 275000 | 1 | | |
| | | SFCC 1 | and FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 | 275100 | 1 | | |
| | | SFCC 2 | and FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 | 275100 | 1 | | |
| R | <u>F/CTL</u> FLAPS LOCKED | SFCC 1 | FLP 1 OVERSPEED LH CHECK FLP MECH DRIVE associated with | 275000 | 1 | 275100 P 290 T 810 840 | |
| | | SFCC 2 | FLP 2 OVERSPEED LH CHECK FLP MECH DRIVE | 275000 | 1 | | |
| | | SFCC 1 | SFCC 1 & SFCC 2 | 275100 | 1 | | |
| | | SFCC 2 | and FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 | 275100 | 1 | | |
| R | F/CTL FLAPS LOCKED | SFCC 1 | FLP 1 OVERSPEED RH CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 290 T 810 840 | |
| | | SFCC 2 | associated with FLP 2 OVERSPEED RH CHECK FLP MECH DRIVE | 275000 | 1 | | |
| | | SFCC 1 | and FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 | 275100 | 1 | | |
| | | SFCC 2 | and FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 | 275100 | 1 | | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|---------------------------|--------|---|--------|---|---------------------------|--|
| | WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | ! | |
| R | F/CTL FLAPS LOCKED | SFCC 1 | FLP 1 RUNAWAY CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 254 T 810 820 | |
| | | SFCC 2 | associated with FLP 2 RUNAWAY CHECK FLP MECH DRIVE and | 275000 | 1 | | |
| | | SFCC 1 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 | 275100 | 1 | | |
| | | SFCC 2 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 | 275100 | 1 | | |
| R | F/CTL FLAPS LOCKED | SFCC 1 | SFCC 1 FLP UNCOMM MOVE CHECK PCU 6201CM associated with | 275451 | 1 | 275100 P 258 Т 810 825 | |
| | | SFCC 2 | SFCC 2 FLP UNCOMM MOVE CHECK PCU 6201CM | 275451 | 1 | | |
| | | SFCC 1 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 and | 275100 | 1 | | |
| | | SFCC 2 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 | 275100 | 1 | | |
| R | F/CTL FLAPS LOCKED | SFCC 1 | SLT/FLP 1 LEVER MECHANIC associated with | 275143 | 1 | 275100 P 265 T 810 828 | |
| | | SFCC 2 | SLT/FLP 2 LEVER MECHANIC and | 275143 | 1 | | |
| | | SFCC 1 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 and | 275100 | 1 | | |
| | | SFCC 2 | FLP SYS LOCKED CHECK SFCC 1 & SFCC 2 | 275100 | 1 | | |
| | F/CTL FLAPS LOCKED | SFCC 2 | FLP 2 CHK LH MECH DRIVE | 275100 | 1 | 275100 P 245 T 810 818 | |
| | <u>F/CTL</u> FLAPS LOCKED | SFCC 2 | FLP 2 CHK RH MECH DRIVE | 275100 | 1 | 275100 P 245 T 810 818 | |
| | F/CTL GND SPLR FAULT | EFCS 1 | L THROTTLE CTL UNIT 8KS1 | 732500 | 1 | 276000 P 215 T 810 808 | |
| | | IDENT: | EFCS 2 | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|--------------------------|-----------|--|----------|---------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL GND SPLR FAULT | EFCS 1 | R THROTTLE CTL UNIT 8KS2 | 732500 | 1 | 276000 P 217 T 810 809 |
| | IDENT: | EFCS 2 | | | |
| F/CTL GND SPLR FAULT | EFCS 2 | L THROTTLE CTL UNIT 8KS1 | 732500 | 1 | 276000 P 215 T 810 808 |
| F/CTL GND SPLR FAULT | EFCS 2 | R THROTTLE CTL UNIT 8KS2 | 732500 | 1 | 276000 P 217 T 810 809 |
| F/CTL GND SPLR 1+2 FAULT | EFCS 1 | SEC3 OR INPUT OF L THROTTLE CTL UNIT 8KS1 | 279434 | 1 | 276000 P 209 T 810 805 |
| | IDENT: | EFCS 2 | | | |
| F/CTL GND SPLR 1+2 FAULT | EFCS 1 | SEC3 OR INPUT OF R THROTTLE CTL UNIT 8KS2 | 279434 | 1 | 276000 P 213 т 810 807 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL GND SPLR 1+2 FAULT | EFCS 2 | SEC3 OR INPUT OF L THROTTLE CTL UNIT 8KS1 | 279434 | 1 | 276000 P 209 T 810 805 |
| F/CTL GND SPLR 1+2 FAULT | EFCS 2 | SEC3 OR INPUT OF R THROTTLE CTL UNIT 8KS2 | 279434 | 1 | 276000 P 213 T 810 807 |
| F/CTL GND SPLR 3+4 FAULT | EFCS 1 | SEC1 OR INPUT OF L THROTTLE CTL UNIT 8KS1 | 279434 | 1 | 276000 P 207 T 810 804 |
| | IDENT: | EFCS 2 | <u> </u> | <u></u> | |
| F/CTL GND SPLR 3+4 FAULT | EFCS 1 | SEC1 OR INPUT OF R THROTTLE CTL UNIT 8KS2 | 279434 | 1 | 276000 P 211 T 810 806 |
| | IDENT: | EFCS 2 | | | |
| F/CTL GND SPLR 3+4 FAULT | EFCS 2 | SEC1 OR INPUT OF L THROTTLE CTL UNIT 8KS1 | 279434 | 1 | 276000 P 207 T 810 804 |
| F/CTL GND SPLR 3+4 FAULT | EFCS 2 | SEC1 OR INPUT OF R THROTTLE CTL UNIT 8KS2 | 279434 | 1 | 276000 P 211 T 810 806 |
| F/CTL IR DISAGREE | | | | | 279300 PB250 T 810 928 |

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| HADNINGS /MALEUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|--|---------------|---|--------|---------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | : |
| F/CTL L AIL FAULT | | | | | 271000 P 262 T 810 833 |
| F/CTL L AIL FAULT associated with F/CTL R AIL FAULT and F/CTL ALTN LAW | EFCS 1 | ELAC1 AIL ORDER DISAGREE associated with ELAC2 AIL ORDER DISAGREE | | İ | Т 810 949 |
| F/CTL L ELEV FAULT | | | | | 273000 P 287 T 810 845 |
| F/CTL L ELEV FAULT | EFCS 1 | L ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | 273000 P 207 T 810 804 |
| | IDENT: I | EFCS 2 | | | |
| F/CTL L ELEV FAULT | EFCS 1 | L ELEV POS MON XDCR OF ELAC2/SEC2 | 273451 | 1 | 273000 P 207 T 810 804 |
| | IDENT: I | EFCS 2 | | | |
| F/CTL L ELEV FAULT | EFCS 2 | L ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | 273000 P 207 T 810 804 |
| F/CTL L ELEV FAULT | EFCS 2 | L ELEV POS MON XDCR OF ELAC2/SEC2 | 273451 | 1 | 273000 P 207 T 810 804 |
| F/CTL L SIDESTICK FAULT | EFCS 1 | CAPT PITCH CTL SSTU 4CE3 | 279212 | 1 | 279300 P 220 T 810 811 |
| | IDENT: I | EFCS 2 | | | |
| F/CTL L SIDESTICK FAULT | EFCS 1 | CAPT ROLL CTL SSTU 4CE1 | 279212 | 1 | 279300 P 217 T 810 809 |
| | IDENT: EFCS 2 | | | 010 007 | |
| F/CTL L SIDESTICK FAULT | EFCS 1 | SEC1 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279434 | 1 | 279400 P 205 T 810 803 |
| | IDENT: | EFCS 2 | | | |
| F/CTL L SIDESTICK FAULT | EFCS 1 | SEC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 1 | 279400 P 201 T 810 801 |
| | IDENT: I | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|-------------------------|--------|--|--------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL L SIDESTICK FAULT | EFCS 1 | SEC2 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279434 | 1 | 279400 P 213 T 810 807 |
| | IDENT: | EFCS 2 | | | |
| F/CTL L SIDESTICK FAULT | EFCS 1 | SEC2 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 1 | 279400 P 209 T 810 805 |
| | IDENT: | EFCS 2 | | | |
| F/CTL L SIDESTICK FAULT | EFCS 1 | SEC3 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 1 | 279400 P 217 Т 810 809 |
| | IDENT: | EFCS 2 | | | |
| F/CTL L SIDESTICK FAULT | EFCS 2 | CAPT PITCH CTL SSTU 4CE3 | 279212 | 1 | 279300 P 220 T 810 811 |
| F/CTL L SIDESTICK FAULT | EFCS 2 | CAPT ROLL CTL SSTU 4CE1 | 279212 | 1 | 279300 P 217 T 810 809 |
| F/CTL L SIDESTICK FAULT | EFCS 2 | SEC1 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279434 | 1 | 279400 P 205 T 810 803 |
| F/CTL L SIDESTICK FAULT | EFCS 2 | SEC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 1 | 279400 P 201 T 810 801 |
| F/CTL L SIDESTICK FAULT | EFCS 2 | SEC2 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279434 | 1 | 279400 P 213 T 810 807 |
| F/CTL L SIDESTICK FAULT | EFCS 2 | SEC2 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 1 | 279400 P 209 T 810 805 |
| F/CTL L SIDESTICK FAULT | EFCS 2 | SEC3 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 1 | 279400 P 217 T 810 809 |
| F/CTL L+R ELEV FAULT | | | | | 273000 P 289 T 810 847 |
| F/CTL R AIL FAULT | | | | [| 271000 P 263 T 810 834 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT |
|--------------------------------------|---------------------|---|--------|----------------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL R AIL FAULT associated with | EFCS 1 | ELAC1 AIL ORDER DISAGREE | 279334 | 1 | 279300 PB285 T 810 949 |
| F/CTL L AIL FAULT and F/CTL ALTN LAW | EFCS 1 | ELAC2 AIL ORDER DISAGREE | 279334 | | ! |
| F/CTL R ELEV FAULT | | | | | 273000 P 28 T 810 846 |
| F/CTL R ELEV FAULT | EFCS 1 | R ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | 273000 P 25 T 810 826 |
| | IDENT: | EFCS 2 | | | |
| F/CTL R ELEV FAULT | EFCS 1 | R ELEV POS MON XDCR OF ELAC2 / SEC2 | 273451 | 1 | 273000 P 25 T 810 826 |
| | IDENT: | EFCS 2 | | | |
| F/CTL R ELEV FAULT | EFCS 2 | R ELEV POS MON XDCR OF ELAC1/SEC1 | 273451 | 1 | 273000 P 25 T 810 826 |
| F/CTL R ELEV FAULT | EFCS 2 | R ELEV POS MON XDCR OF ELAC2 / SEC2 | 273451 | 1 | 273000 P 25 T 810 826 |
| F/CTL R SIDESTICK FAULT | EFCS 1 | F/O PITCH CTL SSTU 4CE4 | 279212 | 1 | 279300 P 22 T 810 812 |
| | IDENT: | EFCS 2 | | | 11 010 012 |
| F/CTL R SIDESTICK FAULT | EFCS 1 | F/O ROLL CTL SSTU 4CE2 | 279212 | 1 | 279300 P 21 T 810 810 |
| | IDENT: | EFCS 2 | | | |
| F/CTL R SIDESTICK FAULT | EFCS 1 | SEC1 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279434 | 1 | 279400 P 20 T 810 804 |
| | IDENT: | EFCS 2 | | | |
| F/CTL R SIDESTICK FAULT | EFCS 1 | SEC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 1 | 279400 P 20 T 810 802 |
| | IDENT: | EFCS 2 | | |] |

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| HADNINGS /MALEUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|-------------------------|---------------------|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ! ! |
| F/CTL R SIDESTICK FAULT | EFCS 1 | SEC2 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279434 | 1 | 279400 P 215 T 810 808 |
| | IDENT: | EFCS 2 | | | |
| F/CTL R SIDESTICK FAULT | EFCS 1 | SEC2 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 1 | 279400 P 211 T 810 806 |
| | IDENT: | EFCS 2 | | | |
| F/CTL R SIDESTICK FAULT | EFCS 1 | SEC3 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 1 | 279400 P 219 T 810 810 |
| | IDENT: | EFCS 2 | | | |
| F/CTL R SIDESTICK FAULT | EFCS 2 | F/O PITCH CTL SSTU 4CE4 | 279212 | 1 | 279300 P 222 T 810 812 |
| F/CTL R SIDESTICK FAULT | EFCS 2 | F/O ROLL CTL SSTU 4CE2 | 279212 | 1 | 279300 P 219 T 810 810 |
| F/CTL R SIDESTICK FAULT | EFCS 2 | SEC1 OR INPUT OF F/O | 279434 | 1 | 279400 P 207 T 810 804 |
| F/CTL R SIDESTICK FAULT | EFCS 2 | SEC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 1 | 279400 P 203 T 810 802 |
| F/CTL R SIDESTICK FAULT | EFCS 2 | SEC2 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279434 | 1 | 279400 P 215 T 810 808 |
| F/CTL R SIDESTICK FAULT | EFCS 2 | SEC2 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 1 | 279400 P 211 T 810 806 |
| F/CTL R SIDESTICK FAULT | EFCS 2 | SEC3 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 1 | 279400 P 219 T 810 810 |
| F/CTL SEC 1 FAULT | | | | | 279400 PA266 T 810 901 |
| F/CTL SEC 1 FAULT | EFCS 1 | SEC1 | 279434 | | 279400 PA211 T 810 860 |
| | IDENT: | EFCS 2 | | | 0 10 000 |
| F/CTL SEC 1 FAULT | EFCS 1 | SEC1 COM BUS 3 | 279434 | 1 | 279400 PA215 T 810 864 |
| <u> </u> | IDENT: | EFCS 2 | | | . 0.0 004 |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | 3 | | FAULT ISOLATION |
|---|---------------------------|----------|---------------------|---------|---|---------------------------|
| | WARNINGS/ FIALL ONC LIONS | SOURCE | MESSAGE | ATA | С | i i |
| R | F/CTL SEC 1 FAULT | EFCS 1 | SEC1 MON BUS 3 | 279434 | 1 | 279400 PA215 T 810 864 |
| | | IDENT: 6 | EFCS 2 | | | L |
| R | F/CTL SEC 1 FAULT | EFCS 2 | SEC1 | 279434 | 1 | 279400 PA211 T 810 860 |
| | | IDENT: | EFCS 2 | | | |
| R | <u>F/CTL</u> SEC 1 FAULT | EFCS 2 | SEC1 COM BUS 3 | 279434 | 1 | 279400 PA215 T 810 864 |
| R | F/CTL SEC 1 FAULT | EFCS 2 | SEC1 MON BUS 3 | 279434 | 1 | 279400 PA215 T 810 864 |
| R | F/CTL SEC 2 FAULT | | | | | 279400 PA269 T 810 902 |
| R | F/CTL SEC 2 FAULT | EFCS 1 | SEC2 | 279434 | 1 | 279400 PA216 T 810 865 |
| | | IDENT: 6 | EFCS 2 | | | |
| R | F/CTL SEC 2 FAULT | EFCS 1 | SEC2 COM BUS 3 | 279434 | 1 | 279400 PA220 T 810 869 |
| | | IDENT: E | EFCS 2 | | | L |
| R | F/CTL SEC 2 FAULT | EFCS 1 | SEC2 MON BUS 3 | 279434 | 1 | 279400 PA220 T 810 869 |
| | | IDENT: E | EFCS 2 | | | |
| R | F/CTL SEC 2 FAULT | EFCS 2 | SEC2 | 279434 | 1 | 279400 PA216 T 810 865 |
| R | F/CTL SEC 2 FAULT | EFCS 2 | SEC2 COM BUS 3 | 279434 | 1 | 279400 PA220 T 810 869 |
| R | <u>F/CTL</u> SEC 2 FAULT | EFCS 2 | SEC2 MON BUS 3 | 279434 | 1 | 279400 PA220 T 810 869 |
| R | F/CTL SEC 3 FAULT | | | | | 279400 PA272 T 810 903 |
| R | F/CTL SEC 3 FAULT | EFCS 1 | SEC3 | 279434 | 1 | 279400 PA221 T 810 870 |
| | | IDENT: E | EFCS 2 | | | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|--|----------|-----------------------|---------|-------------------|---------------------------|
| | WARNINGS/ MALFORCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| R | F/CTL SEC 3 FAULT | EFCS 1 | SEC3 COM BUS 3 | 279434 | 1 | 279400 PA225 T 810 874 |
| | | IDENT: | EFCS 2 | | | |
| R | F/CTL SEC 3 FAULT | EFCS 1 | SEC3 MON BUS 3 | 279434 | 1 | 279400 PA225 T 810 874 |
| | | IDENT: E | EFCS 2 | | | |
| R | F/CTL SEC 3 FAULT | EFCS 2 | SEC3 | 279434 | 1 | 279400 PA221 T 810 870 |
| R | F/CTL SEC 3 FAULT | EFCS 2 | SEC3 COM BUS 3 | 279434 | 1 | 279400 PA225 T 810 874 |
| R | F/CTL SEC 3 FAULT | EFCS 2 | SEC3 MON BUS 3 | 279434 | 1 | 279400 PA225 T 810 874 |
| | F/CTL SIDESTICK PRIORITY associated with | EFCS 1 | CHECK PRIORITY WIRING | 279334 | 1 | 279200 P 225 T 810 830 |
| | STS-Maintenance F/CTL | IDENT: | | 010 030 | | |
| | F/CTL SIDESTICK PRIORITY | EFCS 1 | CHECK PRIORITY WIRING | 279334 | 1 | 279300 PB239 T 810 919 |
| | | IDENT: E | EFCS 2 | | | |
| | F/CTL SIDESTICK PRIORITY associated with STS-Maintenance F/CTL | EFCS 2 | CHECK PRIORITY WIRING | 279334 | 1 1 | 279200 P 225 T 810 830 |
| | F/CTL SIDESTICK PRIORITY | EFCS 2 | CHECK PRIORITY WIRING | 279334 | 1 | 279300 PB239 T 810 919 |
| | F/CTL SLAT SYS 1 FAULT | | | | | 278100 P 229 T 810 811 |
| | F/CTL SLAT SYS 1 FAULT associated with Upper ECAM DU Flags F/CTL - SLATS - A-LOCK flashes in cyan on EWD | | | | | 278100 P 285 T 810 839 |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|---|---------------------|---|--------|--------------------|---------------------------|
| | WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| R | F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | LH SLT APPU 31CV OR WIRING TO SLT 1 | 278118 | 1 | 278100 P 220 T 810 807 |
| R | F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | RH SLT APPU 32CV OR WIRING TO SLT 1 | 278118 | 1 | 278100 P 220 T 810 807 |
| R | F/CTL SLAT SYS 1 FAULT associated with STS-Inop System SLATS and Upper ECAM DU Flags SLAT indication is shown in amber and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SFCC 1 SLT HALF SPEED CHECK PCU 6001CM | 278451 | 1 | 278100 P 259 T 810 824 |
| | F/CTL SLAT SYS 1 FAULT associated with | SFCC 1 | SFCC1 OR SLAT PCU VALVEBLOCK | 278100 | 1 | 278100 P 201 T 810 801 |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | IDENT: A | AFS, CFDS | | | |
| | F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 OR SLT FPPU | 278100 | 1 | 278100 P 209 T 810 803 |
| | F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 OR SLT LH APPU | 278100 | 1 | 278100 P 205 T 810 802 |

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| WARNINGS/MALFUNCTIONS | | | FAULT ISOLATION | | |
|---|--------|--|--------------------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 OR SLT PPU POWER | 278100 | 1 | 278100 P 222 T 810 808 |
| F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 OR SLT RH APPU | 278100 | 1 | 278100 P 205 T 810 802 |
| F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 21CV | 275134 | 1 | 278100 P 273 T 810 832 |
| F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SLT FPPU 28CV OR WIRING TO SLT 1 | 278119 | 1 | 278100 P 218 T 810 806 |
| F/CTL SLAT SYS 1 FAULT associated with Upper ECAM DU Flags SLAT indication is shown in amber and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SLT 1 PCU VALVEBLOCK 25CV | 278453 | 1 | 278100 P 201 T 810 801 |
| F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SLT 1 PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 278100 P 215 T 810 805 |
| F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SLT 1 PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 278100 P 215 T 810 805 |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|---|---------------------|---|--------|---|---------------------------|
| | WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | ! ! |
| | F/CTL SLAT SYS 1 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SLT/FLP CSU 51CV OR WIRING TO SLT 1 | 275117 | 1 | 278100 P 212 T 810 804 |
| R | F/CTL SLAT SYS 1 FAULT associated with STS-Inop System SLATS and Upper ECAM DU Flags SLAT indication is shown in amber and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SFCC 2 SLT HALF SPEED CHECK PCU 6001CM | 278451 | 1 | 278100 P 259 T 810 824 |
| R | <u>F/CTL</u> SLAT SYS 2 FAULT | | | | | 278100 P 229 T 810 811 |
| | F/CTL SLAT SYS 2 FAULT associated with Upper ECAM DU Flags F/CTL - SLATS - A-LOCK flashes in cyan on EWD | | | | | 278100 P 285 T 810 839 |
| R | F/CTL SLAT SYS 2 FAULT associated with F/CTL SLAT TIP BRK FAULT and STS-Inop System SLATS and Upper ECAM DU Flags SLAT indication is shown in amber and S-LOCKED indication is shown in amber | SFCC 1 | SLT 1 WTB C/B 9CV | 278100 | 1 | 278100 P 249 T 810 821 |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|---|---------------------|--|---------|--------------------|---------------------------|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| R | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | LH SLT APPU 31CV OR WIRING TO SLT 2 | 278118 | 1 | 278100 P 220 T 810 807 |
| R | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | RH SLT APPU 32CV OR WIRING TO SLT 2 | 278118 | 1 | 278100 P 220 T 810 807 |
| | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS | SFCC 2 | SFCC2 OR SLAT PCU VALVEBLOCK | 278100 | 1 | 278100 P 201 T 810 801 |
| | SLOW shown in green on STATUS page | IDENT: | AFS, CFDS | <u></u> | - | |
| | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 OR SLT FPPU | 278100 | 1 | 278100 P 209 T 810 803 |
| | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 OR SLT LH APPU | 278100 | 1 | 278100 P 205 T 810 802 |
| R | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 OR SLT PPU POWER | 278100 | 1 | 278100 P 222 T 810 808 |
| | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 OR SLT RH APPU | 278100 | 1 | 278100 P 205 T 810 802 |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|---|---------------------|--|--------|---|---------------------------|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | !! |
| | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 22CV | 275134 | 1 | 278100 P 273 T 810 832 |
| | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SLT FPPU 28CV OR WIRING TO SLT 2 | 278119 | 1 | 278100 P 218 T 810 806 |
| | F/CTL SLAT SYS 2 FAULT associated with Upper ECAM DU Flags SLAT indication is shown in amber and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SLT 2 PCU VALVEBLOCK 26CV | 278453 | 1 | 278100 P 201 T 810 801 |
| R | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SLT 2 PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 278100 P 215 T 810 805 |
| R | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SLT 2 PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 278100 P 215 T 810 805 |
| | F/CTL SLAT SYS 2 FAULT associated with F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SLT/FLP CSU 51CV OR WIRING TO SLT 2 | 275117 | 1 | 278100 P 212 T 810 804 |

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| | LIADNINGS /MALEUNGTIONS | CFDS FAULT MESSAGES | | | FAULT - ISOLATION | |
|---|---|---------------------|--|--------|----------------------|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | PROCEDURE |
| R | F/CTL SLAT TIP BRK FAULT associated with STS-Inop System SLATS and | SFCC 1 | SLT LH WTB BLU SOLENOID 35CV OR WIRING TO SLT 1 | 278151 | 1 | 278100 P 251 T 810 822 |
| | Upper ECAM DU Flags F/CTL - FLAPS - FLAPS LOCKED is shown in amber | | | | | |
| R | F/CTL SLAT TIP BRK FAULT | SFCC 1 | SLT LH WTB BLU SOLENOID 35CV OR WIRING TO SLT 1 | 278151 | 1 | 278100 P 251 T 810 822 |
| R | F/CTL SLAT TIP BRK FAULT associated with STS-Inop System SLATS and Upper ECAM DU Flags F/CTL - FLAPS - FLAPS LOCKED is shown in amber | SFCC 1 | SLT RH WTB BLU SOLENOID 36CV OR WIRING TO SLT 1 | 278151 | 1 | 278100 P 255 T 810 823 |
| R | F/CTL SLAT TIP BRK FAULT | SFCC 1 | SLT RH WTB BLU SOLENOID 36CV OR WIRING TO SLT 1 | 278151 | 1 | 278100 P 255 T 810 823 |
| R | F/CTL SLAT TIP BRK FAULT associated with F/CTL SLAT SYS 2 FAULT and STS-Inop System SLATS and Upper ECAM DU Flags SLAT indication is shown in amber and S-LOCKED indication is shown in amber | SFCC 1 | SLT 1 WTB C/B 9CV | 278100 | 1 | 278100 P 249 T 810 821 |
| R | F/CTL SLAT TIP BRK FAULT associated with STS-Inop System SLATS and Upper ECAM DU Flags F/CTL - FLAPS - FLAPS LOCKED is shown in amber | SFCC 2 | SLT LH WTB GRN SOLENOID 35CV OR WIRING TO SLT 2 | 278151 | 1 | 278100 P 251 T 810 822 |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|--|---------------------|---|------------------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !! |
| R | <u>F/CTL</u> SLAT TIP BRK FAULT | SFCC 2 | SLT LH WTB GRN SOLENOID 35CV OR WIRING TO SLT 2 | 278151 | 1 | 278100 P 251 T 810 822 |
| R | F/CTL SLAT TIP BRK FAULT associated with STS-Inop System SLATS and Upper ECAM DU Flags F/CTL - FLAPS - FLAPS LOCKED is shown in amber | SFCC 2 | SLT RH WTB GRN SOLENOID 36CV OR WIRING TO SLT 2 | 278151 | 1 | 278100 P 255 T 810 823 |
| R | <u>F/CTL</u> SLAT TIP BRK FAULT | SFCC 2 | SLT RH WTB GRN SOLENOID 36CV OR WIRING TO SLT 2 | 278151 | 1 | 278100 P 255 T 810 823 |
| R | F/CTL SLAT TIP BRK FAULT associated with F/CTL FLAPS FAULT and STS-Inop System SLATS and Upper ECAM DU Flags SLAT indication is shown in amber and S-LOCKED indication is shown in amber | SFCC 2 | SLT 2 WTB C/B 11CV | 278100 | 1 | 278100 P 249 T 810 821 |
| | <u>F/CTL</u> SLATS FAULT | SFCC 1 | SLT 1 PCU VALVEBLOCK 25CV associated with SLT 2 PCU VALVEBLOCK 26CV | 278453 278453 | | 278100 P 280 T 810 836 |
| R | <u>F/CTL</u> SLATS FAULT | SFCC 1 | SLT 1 SYSTEM JAM CHECK SLT MECH DRIVE associated with SLT 2 SYSTEM JAM CHECK SLT MECH DRIVE | 278000 278000 | | 278100 P 224 T 810 810 |
| | F/CTL SLATS LOCKED associated with F/CTL - SLATS - WTB comes on during APU start with batteries | | | | | 278100 P 277 T 810 834 |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|---------------------------|--------|---|--------|---|---------------------------|
| | WARNINGS/ MALFORCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL SLATS LOCKED | SFCC 1 | SFCC 1 SLT UNCOMM MOVE CHECK PCU 6001CM associated with | 278451 | 1 | 278100 P 245 T 810 817 |
| | | SFCC 2 | SFCC 2 SLT UNCOMM MOVE CHECK PCU 6001CM | 278451 | 1 | |
| | | SFCC 1 | | 278100 | 1 | |
| | | SFCC 2 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 | 278100 | 1 | |
| R | <u>F/CTL</u> SLATS LOCKED | SFCC 1 | SLT 1 ASYMMETRY LH CHECK SLT MECH DRIVE associated with | 278000 | 1 | 278100 P 238 T 810 813 |
| | | SFCC 2 | SLT 2 ASYMMETRY LH CHECK SLT MECH DRIVE and | 278000 | 1 | |
| | | SFCC 1 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 and | 278100 | 1 | |
| | | SFCC 2 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 | 278100 | 1 | |
| R | F/CTL SLATS LOCKED | SFCC 1 | SLT 1 ASYMMETRY RH CHECK SLT MECH DRIVE associated with | 278000 | 1 | 278100 P 238 T 810 813 |
| | | SFCC 2 | SLT 2 ASYMMETRY RH CHECK SLT MECH DRIVE and | 278000 | 1 | |
| | | SFCC 1 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 and | 278100 | 1 | |
| | | SFCC 2 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 | 278100 | 1 | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|------------------------|--------|---|--------|---|---------------------------|
| | WARNINGS/ MALFORCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL SLATS LOCKED | SFCC 1 | SLT 1 OVERSPEED CHECK SLT MECH DRIVE associated with | 278000 | 1 | 278100 P 243 T 810 815 |
| | | SFCC 2 | SLT 2 OVERSPEED CHECK SLT MECH DRIVE | 278000 | 1 | |
| | | SFCC 1 | | 278100 | 1 | |
| | | SFCC 2 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 | 278100 | 1 | |
| R | F/CTL SLATS LOCKED | SFCC 1 | SLT 1 OVERSPEED LH CHECK SLT MECH DRIVE associated with | 278000 | 1 | 278100 P 243 T 810 815 |
| | | SFCC 2 | SLT 2 OVERSPEED LH CHECK SLT MECH DRIVE and | 278000 | 1 | |
| | | SFCC 1 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 and | 278100 | 1 | |
| | | SFCC 2 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 | 278100 | 1 | |
| R | F/CTL SLATS LOCKED | SFCC 1 | SLT 1 OVERSPEED RH CHECK SLT MECH DRIVE associated with | 278000 | 1 | 278100 P 243 T 810 815 |
| | | SFCC 2 | SLT 2 OVERSPEED RH CHECK SLT MECH DRIVE and | 278000 | 1 | |
| | | SFCC 1 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 and | 278100 | 1 | |
| | | SFCC 2 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 | 278100 | 1 | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|---|---------------------------------------|----------|--|--------|---|---------------------------|--|
| | WARNINGS/ MALFORE TIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| R | F/CTL SLATS LOCKED | SFCC 1 | SLT 1 RUNAWAY CHECK SLT MECH DRIVE associated with | 278000 | 1 | 278100 P 241 T 810 814 | |
| | | SFCC 2 | SLT 2 RUNAWAY CHECK SLT MECH DRIVE and | 278000 | 1 | | |
| | | SFCC 1 | | 278100 | 1 | | |
| | | SFCC 2 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 | 278100 | 1 | | |
| R | F/CTL SLATS LOCKED | SFCC 1 | SLT/FLP 1 LEVER MECHANIC associated with | 275143 | 1 | 278100 P 248 T 810 820 | |
| | | SFCC 2 | SLT/FLP 2 LEVER MECHANIC and | 275143 | 1 | | |
| | | SFCC 1 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 and | 278100 | 1 | | |
| | | SFCC 2 | SLT SYS LOCKED CHECK SFCC 1 & SFCC 2 | 278100 | 1 | | |
| | F/CTL SPD BRK DISAGREE | | | | | 270000 P 201 T 810 801 | |
| | F/CTL SPD BRK FAULT | EFCS 1 | SPBK CTL XDCR UNIT 7CE | 279213 | 1 | 276000 P 205 T 810 803 | |
| | | IDENT: 6 | EFCS 2 | | | | |
| | F/CTL SPD BRK FAULT | EFCS 2 | SPBK CTL XDCR UNIT 7CE | 279213 | 1 | 276000 P 205 T 810 803 | |
| | F/CTL SPD BRK STILL OUT | | | | | 270000 P 201 T 810 801 | |
| | F/CTL SPD BRK 2 FAULT | EFCS 1 | SEC3 OR INPUT OF SPBK CTL XDCR UNIT 7CE | 279434 | 1 | 276000 P 203 T 810 802 | |
| | | IDENT: E | EFCS 2 | | | | |
| | F/CTL SPD BRK 2 FAULT associated with | EFCS 1 | SPBK CTL XDCR UNIT 7CE | 279213 | 1 | 276000 P 205 T 810 803 | |
| | STS-Maintenance F/CTL | IDENT: E | EFCS 2 | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | T | FAULT ISOLATION |
|---|--------------|--|---------|-------|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL SPD BRK 2 FAULT | EFCS 2 | SEC3 OR INPUT OF SPBK CTL XDCR UNIT 7CE | 279434 | | 276000 P 203 T 810 802 |
| F/CTL SPD BRK 2 FAULT | EFCS 2 | SPBK CTL XDCR UNIT 7CE | 279213 | | 276000 P 205 T 810 803 |
| F/CTL SPD BRK 3+4 FAULT | EFCS 1 | SEC1 OR INPUT OF SPBK CTL XDCR UNIT 7CE | 279434 | | 276000 P 201 T 810 801 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPD BRK 3+4 FAULT associated with | EFCS 1 | SPBK CTL XDCR UNIT 7CE | 279213 | | 276000 P 205 T 810 803 |
| STS-Maintenance F/CTL | IDENT: | EFCS 2 | | | 1 010 000 |
| F/CTL SPD BRK 3+4 FAULT | EFCS 2 | SEC1 OR INPUT OF SPBK CTL XDCR UNIT 7CE | 279434 | | 276000 P 201 T 810 801 |
| F/CTL SPD BRK 3+4 FAULT | EFCS 2 | SPBK CTL XDCR UNIT 7CE | 279213 | | 276000 P 205 T 810 803 |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR1 POS ERROR 31CE1 | 276451 | | 276000 P 232 T 810 816 |
| | IDENT: | EFCS 2 | | _ | 1 610 616 |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR1 POS XDCR 31CE1 | 276451 | | 276000 P 219 T 810 810 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR1 POS XDCR 31CE1 | 276451 | | 279000 P 210 T 810 805 |
| | EFCS 1 | ! | 276451 | | . 0.0 002 |
| | IDENT: | EFCS 2 | r | _ | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR1 SERVO VLV 31CE1 OR OUTPUT FROM SEC3 | 276451 | | 276000 P 227 T 810 814 |
| | IDENT: | EFCS 2 | | _ | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR2 POS ERROR 31CE3 | 276451 | | 276000 P 246 T 810 824 |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | | |
|-----------------------|--------|--|---------|-------------------------------|--|--|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | - ISOLATION C PROCEDURE | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR2 POS XDCR 31CE3 | 276451 | 1 276000 P 236 - T 810 818 | | | |
| | IDENT: | EFCS 2 | <u></u> | | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR2 POS XDCR 31CE3 | 276451 | 1 279000 P 212 T 810 806 | | | |
| | EFCS 1 | ! | 276451 | ! | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR2 SERVO VLV 31CE3 OR OUTPUT FROM SEC3 | 276451 | 1 276000 P 242 T 810 822 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR3 POS ERROR 31CE5 | 276451 | 1 276000 P 260 T 810 832 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR3 POS XDCR 31CE5 | 276451 | 1 276000 P 250 T 810 826 | | | |
| | IDENT: | EFCS 2 | | 1 010 020 | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR3 POS XDCR 31CE5 | 276451 | 1 279000 P 204 T 810 802 | | | |
| | EFCS 1 | ! | 276451 | | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR3 SERVO VLV 31CE5 OR OUTPUT FROM SEC1 | 276451 | 1 276000 P 256 T 810 830 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR4 POS ERROR 31CE7 | 276451 | 1 276000 P 276 - T 810 840 | | | |
| | IDENT: | EFCS 2 | | 1 010 040 | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR4 POS XDCR 31CE7 | 276451 | 1 276000 P 264 T 810 834 | | | |
| | IDENT: | EFCS 2 | | | | | |

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| LIADNINGS (MALFLINGITONS | | | FAULT | | |
|--------------------------|--------|--|---------|--------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR4 POS XDCR 31CE7 | 276451 | 1 | 279000 P 206 T 810 803 |
| | EFCS 1 | R SPLR4 POS XDCR 31CE8 | 276451 | 1 | !! |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR4 SERVO VLV 31CE7 OR OUTPUT FROM SEC1 | 276451 | 1 | 276000 P 272 T 810 838 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR5 POS ERROR 31CE9 | 276451 | 1 | 276000 P 292 T 810 848 |
| | IDENT: | EFCS 2 | | | 1 010 040 |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR5 POS XDCR 31CE9 | 276451 | 1 | 276000 P 280 T 810 842 |
| | IDENT: | EFCS 2 | | | L |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR5 POS XDCR 31CE9 | 276451 | 1 | 279000 P 208 T 810 804 |
| | EFCS 1 | R SPLR5 POS XDCR 31CE10 | 276451 | 1 L | !!! |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | L SPLR5 SERVO VLV 31CE9 OR OUTPUT FROM SEC2 | 276451 | 1 | 276000 P 288 T 810 846 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR1 POS ERROR 31CE2 | 276451 | 1 | 276000 P 234 T 810 817 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR1 POS XDCR 31CE2 | 276451 | | 276000 P 225 T 810 813 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR1 SERVO VLV 31CE2 OR OUTPUT FROM SEC3 | 276451 | 1 | 276000 P 230 T 810 815 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR2 POS ERROR 31CE4 | 276451 | 1 | 276000 P 248 T 810 825 |
| | IDENT: | EFCS 2 | | | |

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| LIADNINGS /MALEUNCTIONS | | CFDS FAULT MESSAGES | | FAULT | |
|-------------------------|--------|--|--------|-----------------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ISOLATION PROCEDURE |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR2 POS XDCR 31CE4 | 276451 | 1 | 276000 P 240 T 810 821 |
| | IDENT: | EFCS 2 | | | 1 610 621 |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR2 SERVO VLV 31CE4 OR OUTPUT FROM SEC3 | 276451 | 1 | 276000 P 244 T 810 823 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR3 POS ERROR 31CE6 | 276451 | 1 | 276000 P 262 T 810 833 |
| | IDENT: | EFCS 2 | | | 610 655 |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR3 POS XDCR 31CE6 | 276451 | 1 | 276000 P 254 T 810 829 |
| | IDENT: | EFCS 2 | | | 010 027 |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR3 SERVO VLV 31CE6 OR OUTPUT FROM SEC1 | 276451 | 1 | 276000 P 258 T 810 831 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR4 POS ERROR 31CE8 | 276451 | 1 | 276000 P 278 T 810 841 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR4 POS XDCR 31CE8 | 276451 | 1 | 276000 P 270 T 810 837 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR4 SERVO VLV 31CE8 OR OUTPUT FROM SEC1 | 276451 | 1 | 276000 P 274 T 810 839 |
| | IDENT: | EFCS 2 | · | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR5 POS ERROR 31CE10 | 276451 | 1 | 276000 P 294 T 810 849 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR5 POS XDCR 31CE10 | 276451 | 1 | 276000 P 286 T 810 845 |
| | IDENT: | EFCS 2 | | 1 810 845 | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | | |
|-----------------------|--------|--|--------|---|---------------------------|--|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | | |
| F/CTL SPLR FAULT | EFCS 1 | R SPLR5 SERVO VLV 31CE10 OR OUTPUT FROM SEC2 | 276451 | 1 | 276000 P 290 T 810 847 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC1 COM OR WIRING FROM L SPLR3 POS XDCR 31CE5 | 279434 | 1 | 276000 P 252 T 810 827 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC1 COM OR WIRING FROM L SPLR4 POS XDCR 31CE7 | 279434 | 1 | 276000 P 266 T 810 835 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC1 COM OR WIRING FROM R SPLR3 POS XDCR 31CE6 | 279434 | 1 | 276000 P 253 T 810 828 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC1 COM OR WIRING FROM R SPLR4 POS XDCR 31CE8 | 279434 | 1 | 276000 P 268 T 810 836 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC1 MON OR WIRING FROM L SPLR 3 POS XDCR 31CE5 | 279434 | 1 | 276000 P 252 T 810 827 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC1 MON OR WIRING FROM L SPLR 4 POS XDCR 31CE7 | 279434 | 1 | 276000 P 266 T 810 835 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC1 MON OR WIRING FROM R SPLR 3 POS XDCR 31CE6 | 279434 | 1 | 276000 P 253 T 810 828 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC1 MON OR WIRING FROM R SPLR 4 POS XDCR 31CE8 | 279434 | 1 | 276000 P 268 T 810 836 | | |
| | IDENT: | EFCS 2 | | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|------------------------|--------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| F/CTL SPLR FAULT | EFCS 1 | SEC2 COM OR WIRING FROM L SPLR 5 POS XDCR 31CE9 | 279434 | 1 | 276000 P 282 T 810 843 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC2 COM OR WIRING FROM R SPLR 5 POS XDCR 31CE10 | 279434 | 1 | 276000 P 284 T 810 844 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC2 MON OR WIRING FROM L SPLR 5 POS XDCR 31CE9 | 279434 | 1 | 276000 P 282 T 810 843 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC2 MON OR WIRING FROM R SPLR 5 POS XDCR 31CE10 | 279434 | 1 | 276000 P 284 T 810 844 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC3 COM OR WIRING FROM L SPLR 1 POS XDCR 31CE1 | 279434 | 1 | 276000 P 221 T 810 811 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC3 COM OR WIRING FROM L SPLR 2 POS XDCR 31CE3 | 279434 | 1 | 276000 P 238 T 810 819 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC3 COM OR WIRING FROM R SPLR 1 POS XDCR 31CE2 | 279434 | 1 | 276000 P 223 T 810 812 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC3 COM OR WIRING FROM R SPLR 2 POS XDCR 31CE4 | 279434 | 1 | 276000 P 239 T 810 820 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC3 MON OR WIRING FROM L SPLR 1 POS XDCR 31CE1 | 279434 | 1 | 276000 P 221 T 810 811 | |
| | IDENT: | EFCS 2 | | | <u> </u> | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|------------------------|--------|---|------------------|-------|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| F/CTL SPLR FAULT | EFCS 1 | SEC3 MON OR WIRING FROM L SPLR 2 POS XDCR 31CE3 | 279434 | 1 | 276000 P 238 T 810 819 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC3 MON OR WIRING FROM R SPLR 1 POS XDCR 31CE2 | 279434 | 1 | 276000 P 223 T 810 812 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 1 | SEC3 MON OR WIRING FROM R SPLR 2 POS XDCR 31CE4 | 279434 | 1 | 276000 P 239 T 810 820 |
| | IDENT: | EFCS 2 | | | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR1 POS ERROR 31CE1 | 276451 | 1 | 276000 P 232 T 810 816 |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR1 POS XDCR 31CE1 | 276451 | 1 | 276000 P 219 T 810 810 |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR1 POS XDCR 31CE1 associated with R SPLR1 POS XDCR 31CE2 | 276451 276451 | İ | 279000 P 210 T 810 805 |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR1 SERVO VLV 31CE1 OR OUTPUT FROM SEC3 | <u> </u> | ├ | 276000 P 227 T 810 814 |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR2 POS ERROR 31CE3 | 276451 | 1 | 276000 P 246 T 810 824 |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR2 POS XDCR 31CE3 | 276451 | 1 | 276000 P 236 T 810 818 |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR2 POS XDCR 31CE3 associated with | 276451 | 1 | 279000 P 212 T 810 806 |
| | EFCS 2 | R SPLR2 POS XDCR 31CE4 | 276451 | 1 | <u> </u> |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR2 SERVO VLV 31CE3 OR OUTPUT FROM SEC3 | 276451 | 1 | 276000 P 242 T 810 822 |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR3 POS ERROR 31CE5 | 276451 | 1 | 276000 P 260 T 810 832 |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR3 POS XDCR 31CE5 | 276451 | 1 | 276000 P 250 T 810 826 |

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| LIADNINGS /MALEUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|-------------------------|-----------|--|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR3 POS XDCR 31CE5 associated with | 276451 | 1 | 279000 P 204 T 810 802 | |
| | EFCS 2 | R SPLR3 POS XDCR 31CE6 | 276451 | 1 | | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR3 SERVO VLV 31CE5 OR OUTPUT FROM SEC1 | 276451 | 1 | 276000 P 256 T 810 830 | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR4 POS ERROR 31CE7 | 276451 | 1 | 276000 P 276 T 810 840 | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR4 POS XDCR 31CE7 | 276451 | 1 | 276000 P 264 T 810 834 | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR4 POS XDCR 31CE7 associated with | 276451 | 1 | 279000 P 206 T 810 803 | |
| | EFCS 2 | R SPLR4 POS XDCR 31CE8 | 276451 | 1 | 1 010 003 | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR4 SERVO VLV 31CE7 OR OUTPUT FROM SEC1 | 276451 | 1 | 276000 P 272 T 810 838 | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR5 POS ERROR 31CE9 | 276451 | 1 | 276000 P 292 T 810 848 | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR5 POS XDCR 31CE9 | 276451 | 1 | 276000 P 280 T 810 842 | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR5 POS XDCR 31CE9 | 276451 | 1 | 279000 P 208 T 810 804 | |
| | EFCS 2 | R SLPR5 POS XDCR 31CE10 | 276451 | 1 | 1 0 10 00 4 | |
| F/CTL SPLR FAULT | EFCS 2 | L SPLR5 SERVO VLV 31CE9 OR OUTPUT FROM SEC2 | 276451 | 1 | 276000 P 288 T 810 846 | |
| F/CTL SPLR FAULT | EFCS 2 | R SLPR5 POS XDCR 31CE10 | 276451 | 1 | 276000 P 286 T 810 845 | |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR1 POS ERROR 31CE2 | 276451 | 1 | 276000 P 234 T 810 817 | |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR1 POS XDCR 31CE2 | 276451 | 1 | 276000 P 225 T 810 813 | |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR1 SERVO VLV 31CE2 OR OUTPUT FROM SEC3 | 276451 | 1 | 276000 P 230 T 810 815 | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT |
|-----------------------|---------------------|---|--------|---|---------------------------|
| | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR2 POS ERROR 31CE4 | 276451 | 1 | 276000 P 248 T 810 825 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR2 POS XDCR 31CE4 | 276451 | 1 | 276000 P 240 T 810 821 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR2 SERVO VLV 31CE4 OR OUTPUT FROM SEC3 | 276451 | 1 | 276000 P 244 T 810 823 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR3 POS ERROR 31CE6 | 276451 | 1 | 276000 P 262 T 810 833 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR3 POS XDCR 31CE6 | 276451 | 1 | 276000 P 254 T 810 829 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR3 SERVO VLV 31CE6 OR OUTPUT FROM SEC1 | 276451 | 1 | 276000 P 258 T 810 831 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR4 POS ERROR 31CE8 | 276451 | 1 | 276000 P 278 T 810 841 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR4 POS XDCR 31CE8 | 276451 | 1 | 276000 P 270 T 810 837 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR4 SERVO VLV 31CE8 OR OUTPUT FROM SEC1 | 276451 | 1 | 276000 P 274 T 810 839 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR5 POS ERROR 31CE10 | 276451 | 1 | 276000 P 294 T 810 849 |
| F/CTL SPLR FAULT | EFCS 2 | R SPLR5 SERVO VLV 31CE10 OR OUTPUT FROM SEC2 | 276451 | 1 | 276000 P 290 Т 810 847 |
| F/CTL SPLR FAULT | EFCS 2 | SEC1 COM OR WIRING FROM L SPLR3 POS XDCR 31CE5 | 279434 | 1 | 276000 P 252 T 810 827 |
| F/CTL SPLR FAULT | EFCS 2 | SEC1 COM OR WIRING FROM L SPLR4 POS XDCR 31CE7 | 279434 | 1 | 276000 P 266 T 810 835 |
| F/CTL SPLR FAULT | EFCS 2 | SEC1 COM OR WIRING FROM R SPLR3 POS XDCR 31CE6 | 279434 | 1 | 276000 P 253 T 810 828 |
| F/CTL SPLR FAULT | EFCS 2 | SEC1 COM OR WIRING FROM R SPLR4 POS XDCR 31CE8 | 279434 | 1 | 276000 P 268 T 810 836 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT - ISOLATION |
|-----------------------|---------------------|---|--------|-----------------------------|
| | SOURCE | MESSAGE | ATA | ! : |
| F/CTL SPLR FAULT | EFCS 2 | SEC1 MON OR WIRING FROM L SPLR 3 POS XDCR 31CE5 | 279434 | 1 276000 P 252 T 810 827 |
| F/CTL SPLR FAULT | EFCS 2 | SEC1 MON OR WIRING FROM L SPLR 4 POS XDCR 31CE7 | 279434 | 1 276000 P 266 T 810 835 |
| F/CTL SPLR FAULT | EFCS 2 | SEC1 MON OR WIRING FROM R SPLR 3 POS XDCR 31CE6 | 279434 | 1 276000 P 253 T 810 828 |
| F/CTL SPLR FAULT | EFCS 2 | SEC1 MON OR WIRING FROM R SPLR 4 POS XDCR 31CE8 | 279434 | 1 276000 P 268 T 810 836 |
| F/CTL SPLR FAULT | EFCS 2 | SEC2 COM OR WIRING FROM L SPLR 5 POS XDCR 31CE9 | 279434 | 1 276000 P 282 T 810 843 |
| F/CTL SPLR FAULT | EFCS 2 | SEC2 COM OR WIRING FROM R SPLR 5 POS XDCR 31CE10 | 279434 | 1 276000 P 284 T 810 844 |
| F/CTL SPLR FAULT | EFCS 2 | SEC2 MON OR WIRING FROM L SPLR 5 POS XDCR 31CE9 | 279434 | 1 276000 P 282 T 810 843 |
| F/CTL SPLR FAULT | EFCS 2 | SEC2 MON OR WIRING FROM R SPLR 5 POS XDCR 31CE10 | 279434 | 1 276000 P 284 T 810 844 |
| F/CTL SPLR FAULT | EFCS 2 | SEC3 COM OR WIRING FROM L SPLR 1 POS XDCR 31CE1 | 279434 | 1 276000 P 221 T 810 811 |
| F/CTL SPLR FAULT | EFCS 2 | SEC3 COM OR WIRING FROM L SPLR 2 POS XDCR 31CE3 | 279434 | 1 276000 P 238 T 810 819 |
| F/CTL SPLR FAULT | EFCS 2 | SEC3 COM OR WIRING FROM R SPLR 1 POS XDCR 31CE2 | 279434 | 1 276000 P 223 T 810 812 |
| F/CTL SPLR FAULT | EFCS 2 | SEC3 COM OR WIRING FROM R SPLR 2 POS XDCR 31CE4 | 279434 | 1 276000 P 239 T 810 820 |
| F/CTL SPLR FAULT | EFCS 2 | SEC3 MON OR WIRING FROM L SPLR 1 POS XDCR 31CE1 | 279434 | 1 276000 P 221 T 810 811 |
| F/CTL SPLR FAULT | EFCS 2 | SEC3 MON OR WIRING FROM L SPLR 2 POS XDCR 31CE3 | 279434 | 1 276000 P 238 T 810 819 |
| F/CTL SPLR FAULT | EFCS 2 | SEC3 MON OR WIRING FROM R SPLR 1 POS XDCR 31CE2 | 279434 | 1 276000 P 223 T 810 812 |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|---|--------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| F/CTL SPLR FAULT | EFCS 2 | SEC3 MON OR WIRING FROM R SPLR 2 POS XDCR 31CE4 | 279434 | 1 | 276000 P 239 T 810 820 | |
| F/CTL STABILIZER JAM associated with F/CTL ALTN LAW | EFCS 1 | THS ACTR POS ERROR 9CE OF ELAC2 associated with | 274451 | 1 | 274000 P 215 T 810 807 | |
| | EFCS 1 | THS ACTR POS ERROR 9CE OF ELAC1 and | 274451 | 1 | | |
| | EFCS 1 | THS ACTR POS ERROR 9CE OF SEC2 | 274451 | 2 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL STABILIZER JAM associated with F/CTL ALTN LAW | EFCS 2 | THS ACTR POS ERROR 9CE OF ELAC2 associated with | 274451 | 1 | 274000 P 215 T 810 807 | |
| | EFCS 2 | THS ACTR POS ERROR 9CE OF ELAC1 and | 274451 | 1 | | |
| | EFCS 2 | THS ACTR POS ERROR 9CE OF SEC2 | 274451 | 2 | | |

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| R | FLAPS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 1 | FLP 1 NO LGCIU 1 DATA | 323171 | 1 | 275100 P 269 T 810 831 |
|---|--|--------|-----------------------|--------|---|---------------------------|
| R | FLAPS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 1 | FLP1 NO CFDIU DATA | 313234 | 1 | 275100 P 276 T 810 834 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT - ISOLATION | |
|---|---|---------------------|---|--------|---|---------------------------|--|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| R | FLAPS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber and FLAPS SLOW shown in green on STATUS page | SFCC 1 | SFCC 1 FLP HALF SPEED CHECK PCU 6201CM | 275451 | 1 | 275100 P 260 T 810 826 | |
| R | FLAPS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 2 | FLP 2 NO LGCIU 2 DATA | 323171 | 1 | 275100 P 269 T 810 831 | |
| R | FLAPS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 2 | FLP2 NO CFDIU DATA | 313234 | 1 | 275100 P 276 T 810 834 | |
| R | FLAPS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber and FLAPS SLOW shown in green on STATUS page | SFCC 2 | SFCC 2 FLP HALF SPEED CHECK PCU 6201CM | 275451 | 1 | 275100 P 260 T 810 826 | |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT - ISOLATION | |
|---|--|---------------------|--|--------|---|---------------------------|--|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | !! | |
| R | SLATS associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT and Upper ECAM DU Flags SLAT indication is shown in amber and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SFCC 1 SLT HALF SPEED CHECK PCU 6001CM | 278451 | 1 | 278100 P 259 T 810 824 | |
| R | SLATS associated with Upper ECAM DU Warnings F/CTL SLAT TIP BRK FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAPS LOCKED is shown in amber | SFCC 1 | SLT LH WTB BLU SOLENOID 35CV OR WIRING TO SLT 1 | 278151 | 1 | 278100 P 251 T 810 822 | |
| R | SLATS associated with Upper ECAM DU Warnings F/CTL SLAT TIP BRK FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAPS LOCKED is shown in amber | SFCC 1 | SLT RH WTB BLU SOLENOID 36CV OR WIRING TO SLT 1 | 278151 | 1 | 278100 P 255 T 810 823 | |
| R | SLATS associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT and F/CTL SLAT TIP BRK FAULT and Upper ECAM DU Flags SLAT indication is shown in amber and S-LOCKED indication is shown in amber | SFCC 1 | SLT 1 WTB C/B 9CV | 278100 | 1 | 278100 P 249 T 810 821 | |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|---|---------------------|--|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | SLATS associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT and Upper ECAM DU Flags SLAT indication is shown in amber and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SFCC 2 SLT HALF SPEED CHECK PCU 6001CM | 278451 | 1 | 278100 P 259 T 810 824 |
| R | SLATS associated with Upper ECAM DU Warnings F/CTL SLAT TIP BRK FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAPS LOCKED is shown in amber | SFCC 2 | SLT LH WTB GRN SOLENOID 35CV OR WIRING TO SLT 2 | 278151 | 1 | 278100 P 251 T 810 822 |
| R | SLATS associated with Upper ECAM DU Warnings F/CTL SLAT TIP BRK FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAPS LOCKED is shown in amber | SFCC 2 | SLT RH WTB GRN SOLENOID 36CV OR WIRING TO SLT 2 | 278151 | 1 | 278100 P 255 T 810 823 |
| R | SLATS associated with Upper ECAM DU Warnings F/CTL FLAPS FAULT and F/CTL SLAT TIP BRK FAULT and Upper ECAM DU Flags SLAT indication is shown in amber and S-LOCKED indication is shown in amber | SFCC 2 | SLT 2 WTB C/B 11CV | 278100 | 1 | 278100 P 249 T 810 821 |

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| LIADNINGS / MAI FUNCTIONS | | FAULT ISOLATION | | | |
|---------------------------|--------|--------------------|-----|---|-----------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |

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| | | | | 271000 P 241 T 810 822 |
|---------------|--|---------------------------------|--|---------------------------------|
| AFS IDENT: | AFS: ADIRU1 AFS, EFCS 1, EFCS 2 | 341234 | 1 | 341400 P 213 T 810 809 |
| AFS IDENT: | AFS: ADIRU2 AFS, EFCS 1, EFCS 2, RADA | <u> </u> | 1 | 341400 P 243 T 810 834 |
| AFS IDENT: | AFS: R/A1 AFS, EFCS 1, EFCS 2 | 344233 | 2 | 344200 P 209 T 810 804 |
| AFS IDENT: | AFS: R/A2 AFS, EFCS 1, EFCS 2 | 344233 | 2 | 344200 P 213 T 810 806 |
| | TACHOMETER | | | 324200 P 234 T 810 818 |
| | TACHOMETER | İ | İ | 324200 P 234 T 810 818 |
| | IDENT: AFS IDENT: AFS IDENT: BSCU 1 EFCS 1 IDENT: BSCU 1 IDENT: | IDENT: AFS, EFCS 1, EFCS 2 AFS | IDENT: AFS, EFCS 1, EFCS 2 AFS AFS: ADIRU2 341234 IDENT: AFS, EFCS 1, EFCS 2, RADAR 2 AFS AFS: R/A1 344233 IDENT: AFS, EFCS 1, EFCS 2 AFS AFS: R/A2 344233 IDENT: AFS, EFCS 1, EFCS 2 BSCU 1 TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER IDENT: EFCS 2 BSCU 1 TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER IDENT: EFCS 2 BSCU 1 TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER IDENT: EFCS 2 | IDENT: AFS, EFCS 1, EFCS 2 AFS |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | FAULT | |
|---|--|----------|---|--------|---|---------------------------|--|
| | WARNINGS/MALFORCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 | |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: 6 | EFCS 1 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 | |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: | EFCS 1 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 | |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: 6 | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 | |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: E | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 | |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: E | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 | |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: I | EFCS 2 | | | | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | FAULT ISOLATION |
|---|--|----------|---|--------|---|---------------------------------|
| | WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | |
| | | IDENT: I | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | |
| | | IDENT: I | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 010 |
| | | IDENT: I | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | |
| | | IDENT: I | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL | 279434 | 2 | |
| | | IDENT: I | EFCS 1 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 010 |
| | | IDENT: I | EFCS 1 | | | L |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|--|---------------------|---|---------|---|---------------------------|
| | WARNINGS/ HALF ONC FISHS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | | IDENT: | EFCS 1 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | | IDENT: E | EFCS 1 | <u></u> | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 610 616 |
| | | IDENT: E | EFCS 1 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | | IDENT: E | EFCS 1 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | | IDENT: | EFCS 1 | · | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 010 |
| | | IDENT: | EFCS 1 | | | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | 3 | | FAULT ISOLATION | |
|---|--|----------|---|--------|---|---------------------------|--|
| | WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU associated with | 324557 | 1 | 324200 P 240 T 810 822 | |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 022 | |
| | | IDENT: | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU associated with | 324557 | 1 | 324200 P 240 T 810 822 | |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 610 622 | |
| | | IDENT: E | EFCS 1 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU associated with | 324557 | 1 | 324200 P 240 T 810 822 | |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 022 | |
| | | IDENT: 6 | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU associated with | 324557 | 1 | 324200 P 240 T 810 822 | |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 022 | |
| | | IDENT: E | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU | 324557 | 1 | 324200 P 240 T 810 822 | |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 022 | |
| | | IDENT: | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU associated with | 324557 | 1 | 324200 P 240 T 810 822 | |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 610 622 | |
| | | IDENT: I | EFCS 2 | | | <u> </u> | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | 3 | | FAULT ISOLATION |
|---|--|----------|---|--------|---|---------------------------|
| | WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU associated with | 324557 | 1 | 324200 P 240 T 810 822 |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 1 010 022 |
| | | IDENT: | EFCS 1 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU associated with | 324557 | 1 | 324200 P 240 T 810 822 |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 022 |
| | | IDENT: | EFCS 1 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU associated with | 324557 | 1 | 324200 P 240 T 810 822 |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 022 |
| | | IDENT: | EFCS 1 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 20GG OR BSCU associated with | 324557 | 1 | 324200 P 240 T 810 822 |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 022 |
| | | IDENT: E | EFCS 1 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 1 810 820 |
| | | IDENT: | EFCS 2 | · | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 020 |
| | | IDENT: | EFCS 1 | | | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | FAULT ISOLATION | |
|---|--|----------|---|--------|--------------------|---------------------------|
| | WARNINGS/MALFORCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 020 |
| | | IDENT: | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 810 820 |
| | | IDENT: E | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 810 820 |
| | | IDENT: 6 | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 020 |
| | | IDENT: E | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 610 820 |
| | | IDENT: E | EFCS 1 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 1 0 10 020 |
| | | IDENT: | EFCS 1 | | | <u> </u> |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | 3 | | FAULT ISOLATION | |
|---|--|----------|---|----------|---|---------------------------|--|
| | WARNINGS/MALFORCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 | |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 020 | |
| | | IDENT: | EFCS 1 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 21GG OR BSCU associated with | 324257 | 1 | 324200 P 237 T 810 820 | |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 010 020 | |
| | | IDENT: | EFCS 1 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: 6 | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: 6 | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: E | EFCS 1 | <u> </u> | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: I | EFCS 1 | | | L | |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|--|---------------------|---|----------|---|---------------------------|
| | WARNINGS/ HALF ONC FISHS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | | IDENT: E | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | | IDENT: E | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 810 816 |
| | | IDENT: E | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | | IDENT: E | EFCS 2 | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | | IDENT: | EFCS 2 | L | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 1 0 10 0 10 |
| | | IDENT: | EFCS 2 | | | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION | |
|---|--|----------|---|--------|---|---------------------------|--|
| | WARNINGS/MALFORCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 810 816 | |
| | | IDENT: 6 | EFCS 2 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: 6 | EFCS 1 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: E | EFCS 1 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: E | EFCS 1 | | | | |
| R | F/CTL associated with | BSCU 1 | TACHOMETER 22GG OR BSCU associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| | Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | | IDENT: I | EFCS 1 | | | L | |

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| | WARNINGS/MALFUNCTIONS | | | FAULT ISOLATION | | |
|---|--|------------------|---|--------------------|---|---------------------------|
| | WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 1 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | | IDENT: I | EFCS 1 | <u> </u> | | |
| R | F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 1 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | | IDENT: I | EFCS 1 | | | |
| R | F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 1 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | | IDENT: I | EFCS 1 | | | |
| R | F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 1 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | | IDENT: I | EFCS 1 | <u></u> | | |
| R | F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | | IDENT: I | EFCS 2 | L | | |
| R | F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | | IDENT: I | EFCS 2 | | | <u> </u> |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | :S | | FAULT ISOLATION |
|---|------------------|---|------------------|-----------|---------------------------|
| WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 1 EFCS 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | LEFCS 1 | <u>.i</u> | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC3 OR INPUT OF WHEEL | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | TACHOMETER EFCS 1 | <u> </u> | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 2 | - L | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | i EFCS 2 | <u>.i.</u> | Ĺ | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 2 | <u>.L.</u> | L | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | S | | FAULT ISOLATION |
|---|--------|---|------------------|----------|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | LEFCS 2 | _ii | <u> </u> | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| BRAKES SYS 1 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with | BSCU 1 | TACHOMETER1(19GG)/BSCU | 324257 | 1 | 324200 P 234 T 810 818 |
| Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 2 | associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER1(19GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | <u> </u> |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | S | | FAULT ISOLATION |
|--|--------|---|------------------|----------|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 1 | TACHOMETER2(21GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | LEFCS 2 | _i | L | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER2(21GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| BRAKES AUTO BRK FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER2(21GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| BRAKES SYS 1 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | EFCS 2 | | L | |
| F/CTL associated with | BSCU 1 | TACHOMETER2(21GG)/BSCU | 324257 | 1 | 324200 P 237 T 810 820 |
| Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 1 | associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER2(21GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 237 T 810 820 |
| BRAKES SYS 1 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | <u> </u> |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | §\$ | | FAULT ISOLATION |
|---|------------------|---|------------------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 1 EFCS 2 | TACHOMETER2(21GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | TACHOMETER EFCS 1 | | L | |
| F/CTL associated with | BSCU 1 | TACHOMETER3(20GG)/BSCU | 324257 | 1 | 324200 P 240 T 810 822 |
| Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 1 | associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER3(20GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 240 T 810 822 |
| BRAKES AUTO BRK FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with | BSCU 1 | TACHOMETER3(20GG)/BSCU | 324257 | 1 | 324200 P 240 T 810 822 |
| Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER3(20GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 240 T 810 822 |
| BRAKES SYS 2 FAULT | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | | | |
|---|--------|---|------------------|---|---------------------------|--|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 1 | TACHOMETER3(20GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL | 324257 279434 | | 324200 P 240 T 810 822 | | |
| | | TACHOMETER | <u> </u> | | | | |
| | IDENT: | EFCS 1 | | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER3(20GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 240 T 810 822 | | |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | | |
| | IDENT: | EFCS 1 | | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | | |
| BRAKES AUTO BRK FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | | | |
| | IDENT: | IDENT: EFCS 2 | | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | | |
| BRAKES AUTO BRK FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | | |
| | IDENT: | IDENT: EFCS 2 | | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | | |
| BRAKES AUTO BRK FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | | | |
| | IDENT: | EFCS 1 | | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | :S | | FAULT ISOLATION | | |
|---|------------------|---|------------------|--------|---------------------------|--|--|
| WARRINGS/ HALF ORCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 1 EFCS 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 | | |
| | IDENT: | LEFCS 1 | | L | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with SEC2 OR INPUT OF WHEEL | 324257 279434 | | 324200 P 231 T 810 816 | | |
| | | TACHOMETER | | _ L | • | | |
| | IDENT: | EFCS 2 | | | <u> </u> | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | | |
| BRAKES SYS 2 FAULT | EFCS 1 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | | |
| | IDENT: | EFCS 2 | | • | | | |
| F/CTL associated with | BSCU 1 | TACHOMETER4(22GG)/BSCU | 324257 | 1 | 324200 P 231 T 810 816 | | |
| Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | | |
| | IDENT: | IDENT: EFCS 2 | | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | | |
| BRAKES SYS 2 FAULT | EFCS 1 | ! | 279434 | 2 | | | |
| | IDENT: | EFCS 2 | | | | | |

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| HADNINGS /MALEUNGTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|--|---------------------|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| BRAKES SYS 1 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| BRAKES SYS 1 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 1 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | • | | |
| F/CTL associated with | BSCU 2 | TACHOMETER 19GG OR BSCU associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 1 | ! | 279434 | 2 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with | BSCU 2 | TACHOMETER 19GG OR BSCU | 324257 | 1 | 324200 P 234 T 810 818 |
| Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 1 | ! | 279434 | 2 | |
| | IDENT: | EFCS 2 | | | <u> </u> |

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|--|------------------|--|------------------|----------|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 2 | TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 2 | TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | L EFCS 1 | <u> </u> | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 | TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 | TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 2 | - | - | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 EFCS 1 | TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | L | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 | TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | İ | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 2 | •• | | [|

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|--|------------------|--|------------------|---|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 EFCS 1 | TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 | TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | L EFCS 2 | L | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 | TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 EFCS 1 | TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 1 | | | <u> </u> |

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|---|------------------|--|------------------|---|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 19GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| BRAKES STO E TAGET | IDENT: | L | <u> </u> | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 | TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 | TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 1 | L | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 19GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | EFCS 1 | | | [|

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|--|------------------|--|------------------|---|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 1 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | İ | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 2 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 EFCS 1 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 2 | L | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | T | FAULT ISOLATION | | | |
|--|------------------|--|------------------|----------|---------------------------|
| WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | İ | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 1 | • | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 20GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 240 T 810 822 |
| | IDENT: | EFCS 1 | <u></u> | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | EFCS 2 | L | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 2 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | EFCS 1 | <u> </u> | | |

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|--|------------------|--|------------------|---|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 EFCS 1 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | EFCS 2 | L | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 EFCS 1 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | İ | 324200 P 237 T 810 820 |
| | IDENT: | EFCS 1 | | | [|

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|--|------------------|--|------------------|---|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 21GG OR BSCU associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | L EFCS 1 | <u> </u> | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 1 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 1 | | | [|

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|--|------------------|--|------------------|----------|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 EFCS 1 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 2 | <u> </u> | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | İ | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 2 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 EFCS 1 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 2 | <u></u> | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 EFCS 1 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 2 | •• | | [|

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| WARNINGS/MALFUNCTIONS | T | CFDS FAULT MESSAGE | CFDS FAULT MESSAGES | | | | |
|--|------------------|--|---------------------|----------|---------------------------|--|--|
| WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 | | |
| | IDENT: | EFCS 2 | • | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 | | |
| | IDENT: | EFCS 1 | | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 | | |
| | IDENT: | EFCS 1 | <u></u> | L | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 | | |
| | IDENT: | EFCS 1 | L | L | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | İ | 324200 P 231 T 810 816 | | |
| | IDENT: | EFCS 1 | | | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|--|---------------------|---|------------------|--------------------|---------------------------|
| WARRINGS/ PIALF UNC LIUNS | SOURCE | MESSAGE | АТА | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | İ | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | EFCS 1 | <u> </u> | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES BSCU CH2 FAULT | BSCU 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | L | <u> </u> | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 EFCS 2 | TACHOMETER 22GG OR BSCU associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 |
| | IDENT: | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: EFCS 2 | | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | | |
|--|---------------------|---|------------------|--------------------|---------------------------|--|
| WARRINGS, HALL ONC LIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 | |
| | IDENT: | L | <u>.i</u> | Ĺ | | |
| F/CTL | BSCU 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 234 T 810 818 | |
| BRAKES AUTO BRK FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | IDENT: | IDENT: EFCS 1 | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 234 T 810 818 | |
| BRAKES SYS 1 FAULT | EFCS 1 | ! | 279434 | 2 | | |
| | IDENT: | | | | | |
| F/CTL associated with | BSCU 2 | TACHOMETER1(19GG)/BSCU | 324257 | 1 | 324200 P 234 T 810 818 | |
| Upper ECAM DU Warnings BRAKES SYS 2 FAULT | EFCS 1 | associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | IDENT: EFCS 2 | | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 234 T 810 818 | |
| BRAKES SYS 1 FAULT | EFCS 1 | ! | 279434 | 2 | | |
| | IDENT: EFCS 2 | | | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|---------------------|---|------------------|--------------------|---------------------------|
| WARRINGS, HALL ONC LIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 234 T 810 818 |
| | IDENT: | i EFCS 2 | _i | Ĺ | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| BRAKES SYS 1 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | | | | |
| F/CTL associated with | BSCU 2 | TACHOMETER1(19GG)/BSCU | 324257 | 1 | 324200 P 234 T 810 818 |
| Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 2 | associated with SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: EFCS 1 | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER1(19GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 234 T 810 818 |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: EFCS 1 | | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|--|---------------------|---|------------------|--------------------|---------------------------|
| WARRINGS, HALL ONC LIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 | TACHOMETER2(21GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | EFCS 2 | - L | L | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 2 | TACHOMETER2(21GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: | TACHOMETER | <u> </u> | Ĺ <u>.</u> | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 | TACHOMETER2(21GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| | IDENT: EFCS 2 | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 | TACHOMETER2(21GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 Р 237 Т 810 820 |
| | IDENT: EFCS 2 | | | | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 | TACHOMETER2(21GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 |
| IDENT: EFCS 1 | | | | L | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | | |
|---|---------------------|---|------------------|--------------------|---------------------------|--|
| WARRINGS, HALL ONC LIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 2 FAULT | BSCU 2 | TACHOMETER2(21GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 237 T 810 820 | |
| | IDENT: | L | <u>i</u> | Ĺ | | |
| F/CTL | BSCU 2 | TACHOMETER3(20GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 240 T 810 822 | |
| BRAKES AUTO BRK FAULT | EFCS 1 | 1 | 279434 | 2 | | |
| | IDENT: | IDENT: EFCS 2 | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER3(20GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 240 T 810 822 | |
| BRAKES AUTO BRK FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL | 279434 | 2 | | |
| | IDENT: | | | | | |
| F/CTL associated with | BSCU 2 | TACHOMETER3(20GG)/BSCU | 324257 | 1 | 324200 P 240 T 810 822 | |
| Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | IDENT: EFCS 2 | | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER3(20GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 240 T 810 822 | |
| BRAKES SYS 2 FAULT | EFCS 1 | ! | 279434 | 2 | | |
| | IDENT: EFCS 2 | | | | | |

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| CFDS FAULT MESSAGES WARNINGS/MALFUNCTIONS | | | | | FAULT - ISOLATION | |
|---|--------|---|------------------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES SYS 1 FAULT | BSCU 2 | TACHOMETER3(20GG)/BSCU (10GG) associated with SEC1 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 240 T 810 822 | |
| | IDENT: | L | <u>i</u> | Ĺ | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER3(20GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 240 T 810 822 | |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | IDENT: | EFCS 1 | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| BRAKES AUTO BRK FAULT | EFCS 1 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | | |
| | IDENT: | IDENT: EFCS 2 | | | | |
| F/CTL associated with | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) | 324257 | 1 | 324200 P 231 T 810 816 | |
| Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | EFCS 1 | associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | IDENT: | | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| BRAKES AUTO BRK FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | IDENT: | EFCS 1 | | | | |

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | | |
|--|------------------|---|------------------|---|---------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !! | |
| F/CTL associated with Upper ECAM DU Warnings BRAKES AUTO BRK FAULT | BSCU 2 EFCS 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 324257 279434 | | 324200 P 231 T 810 816 | |
| | IDENT: | LEFCS 1 | _ i i | Ĺ | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| BRAKES SYS 1 FAULT | EFCS 1 | 1 | 279434 | 2 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| BRAKES SYS 2 FAULT | EFCS 1 | 1 | 279434 | 2 | | |
| | IDENT: | IDENT: EFCS 2 | | | | |
| F/CTL associated with | BSCU 2 | TACHOMETER4(22GG)/BSCU | 324257 | 1 | 324200 P 231 T 810 816 | |
| Upper ECAM DU Warnings BRAKES SYS 1 FAULT | EFCS 1 | associated with SEC2 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | | |
| | IDENT: | | | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 | |
| BRAKES SYS 2 FAULT | EFCS 1 | ! | 279434 | 2 | | |
| | IDENT: | EFCS 2 | | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|--|---------------------|---|--------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| BRAKES SYS 1 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| BRAKES SYS 1 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL associated with Upper ECAM DU Warnings | BSCU 2 | TACHOMETER4(22GG)/BSCU (10GG) associated with | 324257 | 1 | 324200 P 231 T 810 816 |
| BRAKES SYS 2 FAULT | EFCS 2 | SEC2 OR INPUT OF WHEEL | 279434 | 2 | |
| | IDENT: | EFCS 1 | | | |
| F/CTL | EFCS 1 | ACCLRM 1 12CE1 | 279216 | 2 | 279200 P 201 T 810 803 |
| | IDENT: | 010 005 | | | |
| F/CTL | EFCS 1 | ACCLRM 2 12CE2 | 279216 | 2 | 279200 P 202 T 810 804 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ACCLRM 3 12CE3 | 279216 | 2 | 279200 P 203 T 810 805 |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|----------------------------|--------|-------------------------|--------|---|---------------------------|
| | SOURCE | MESSAGE | ATA | С | !! |
| F/CTL | EFCS 1 | ACCLRM 4 12CE4 | 279216 | 2 | 279200 P 204 T 810 806 |
| | IDENT: | EFCS 2 | | | 010 000 |
| F/CTL | EFCS 1 | ADR1 | 341234 | | 341381 P 213 T 810 812 |
| | IDENT: | AFS, EFCS 1, EFCS 2 | | | |
| F/CTL associated with | EFCS 1 | ADR1 associated with | 341234 | 2 | 341381 P 230 T 810 823 |
| STS-Inop System | EFCS 1 | ! | 279434 | 2 | 010 023 |
| TOAL S POAL | EFCS 1 | 1 | 279434 | 2 | |
| | IDENT: | AFS | | | |
| F/CTL | EFCS 1 | ADR1 BUS 2 | 341234 | | 341381 P 201 T 810 801 |
| | IDENT: | AFS, EFCS 1, EFCS 2 | | | |
| F/CTL associated with | EFCS 1 | ADR2 associated with | 341234 | 2 | 341381 P 231 T 810 824 |
| STS-Inop System | EFCS 1 | ! | 279434 | 2 | 010 024 |
| TOAT 3 POAL | EFCS 1 | 1 | 279434 | 2 | |
| | IDENT: | AFS | | | |
| F/CTL | EFCS 1 | ADR2 OR BUS 3 TO ELAC1 | 341234 | | 279300 P 298 T 810 848 |
| | IDENT: | EFCS 2 | | | 1 010 040 |
| F/CTL | EFCS 1 | ADR3 | 341234 | | 341381 P 214 T 810 813 |
| | IDENT: | | | | |
| F/CTL associated with | EFCS 1 | ADR3 associated with | 341234 | 2 | 341381 P 232 T 810 825 |
| STS-Inop System CAT 3 DUAL | EFCS 1 | SEC1 OR BUS 3 FROM ADR1 | 279434 | 2 | |
| J POAL | EFCS 2 | SEC3 OR BUS 2 FROM ADR2 | 279434 | 2 | |
| | IDENT: | AFS | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|-----------------------|---------------------|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | |
| F/CTL | EFCS 1 | ADR3 BUS 2 | 341234 | 2 | 341381 P 209 T 810 808 |
| | IDENT: | AFS, ATC 2, EFCS 1 | | | 1 0 10 000 |
| F/CTL | EFCS 1 | B HYD PRESS SW1 | 279218 | 2 | 279200 P 207 T 810 821 |
| | IDENT: | EFCS 2 | | | 1 610 621 |
| F/CTL | EFCS 1 | B HYD PRESS SW1 | 293200 | 2 | 279200 P 207 T 810 821 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | B HYD PRESS SW2 | 279218 | 2 | 279200 P 209 T 810 822 |
| | IDENT: | EFCS 2 | | | 1 010 022 |
| F/CTL | EFCS 1 | B HYD PRESS SW2 | 293200 | 2 | 279200 P 209 T 810 822 |
| | IDENT: | EFCS 2 | | | 1 010 022 |
| F/CTL | EFCS 1 | B HYD PRESS XMTR 2065GN associated with | 293200 | 2 | 279200 P 211 T 810 823 |
| | ECAM 1 | SDAC1 : B HYD PRESS XMTR 2065GN | 293211 | 1 | 010 023 |
| | ECAM 1 | and SDAC2 : B HYD PRESS XMTR 2065GN | 293211 | 1 | |
| | IDENT: | | | | |
| F/CTL | EFCS 1 | B HYD PRESS XMTR 2065GN associated with | 293200 | 2 | 279200 P 211 T 810 823 |
| | ECAM 2 | SDAC1 : B HYD PRESS XMTR | 293211 | 1 | |
| | ECAM 2 | and SDAC2 : B HYD PRESS XMTR 2065GN | 293211 | 1 | |
| | IDENT: | | | | |
| F/CTL | EFCS 1 | CHECK L AIL CHANGE OVER | 279334 | 2 | 279300 P 259 T 810 831 |
| | IDENT: | EFCS 2 | | | 1 0 10 03 1 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT | | |
|---|---------------------|------------------------------------|---------|-----------------|---------------------------------|--|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ISOLATION PROCEDURE | | |
| F/CTL | EFCS 1 | CHECK LGCIU1 DISC INPUTS | 323171 | 2 | 279300 PB244 T 810 921 | | |
| | IDENT: | EFCS 2 | | 1 6 10 72 1 | | | |
| F/CTL | EFCS 1 | CHECK LGCIU2 DISC INPUTS | 323171 | 2 | 279300 PB247 T 810 922 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | CHECK PITCH CHANGE OVER OF SEC1 | 279334 | 2 | 279300 PB235 T 810 917 | | |
| | IDENT: | EFCS 2 | <u></u> | | | | |
| F/CTL | EFCS 1 | CHECK PITCH CHANGE OVER OF SEC2 | 279334 | 2 | 279300 PB237 T 810 918 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL associated with | EFCS 1 | CHECK PRIORITY WIRING | 279334 | 1 | 279200 P 225 T 810 830 | | |
| Upper ECAM DU Warnings F/CTL SIDESTICK PRIORITY | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | CHECK PRIORITY WIRING | 279334 | 2 | 279400 PA256 T 810 895 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | CHECK R AIL CHANGE OVER | 279334 | 2 | 279300 P 261 T 810 832 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC1 COM BUS 1 | 279334 | 2 | 279400 PA238 T 810 884 | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC1 COM BUS 2 | 279334 | | 279300 PB225 T 810 905 | | |
| | IDENT: EFCS 2 | | | | | | |
| F/CTL | EFCS 1 | ELAC1 COM OR BUS FROM FMGC1 | 279334 | 2 | 279300 PA291 T 810 888 | | |
| | IDENT: | EFCS 2 | | | | | |

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|-----------------------|---------------|--|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL | EFCS 1 | ELAC1 COM OR BUS FROM FMGC2 | 279334 | 2 | 279300 PA293 T 810 890 |
| | IDENT: | EFCS 2 | · | | |
| F/CTL | EFCS 1 | ELAC1 COM OR BUS3 FROM | 279334 | 2 | 279300 P 294 T 810 846 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC1 COM OR BUS3 FROM ADR3 | 279334 | 2 | 279300 PA202 T 810 850 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC1 COM OR BUS3 FROM FCDC1 | 279334 | 2 | 279300 PB234 T 810 916 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC1 COM OR BUS3 FROM | 279334 | 2 | 279300 PA206 T 810 852 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC1 COM OR BUS3 FROM | 279334 | 2 | 279300 PA211 T 810 856 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC1 COM OR WIRING FROM ACCLRM 1 12CE1 | 279334 | 2 | 279300 P 227 T 810 815 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC1 COM OR WIRING FROM ACCLRM 2 12CE2 | 279334 | 2 | 279300 P 229 T 810 816 |
| | IDENT: | | | | |
| F/CTL | EFCS 1 | ELAC1 MON BUS 1 | 279334 | 2 | 279400 PA240 T 810 885 |
| | IDENT: EFCS 2 | | | | |

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| LIADNINGS (MALIFUNGTIONS | | FAULT | | | | |
|--------------------------|---------------|--|--------|-------------------------------|--|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | - ISOLATION C PROCEDURE | | |
| F/CTL | EFCS 1 | ELAC1 MON BUS 2 | 279334 | 2 279300 PB225 | | |
| | IDENT: | EFCS 2 | · | — т 810 905 | | |
| F/CTL | EFCS 1 | ELAC1 MON OR BUS FROM FMGC1 | 279334 | 2 279300 PA291 T 810 888 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | ELAC1 MON OR BUS FROM FMGC2 | 279334 | 2 279300 PA293 T 810 890 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | ELAC1 MON OR BUS 3 FROM ADR1 | 279334 | 2 279300 P 294 T 810 846 | | |
| | IDENT: | EFCS 2 | · | | | |
| F/CTL | EFCS 1 | ELAC1 MON OR BUS 3 FROM | 279334 | 2 279300 PA206 T 810 852 | | |
| | IDENT: | EFCS 2 | · | | | |
| F/CTL | EFCS 1 | ELAC1 MON OR BUS 4 FROM FCDC2 | 279334 | 2 279300 PB231 T 810 913 | | |
| | IDENT: | EFCS 2 | · | | | |
| F/CTL | EFCS 1 | ELAC1 MON OR WIRING FROM ACCLRM 1 12CE1 | 279334 | 2 279300 P 227 T 810 815 | | |
| | IDENT: | EFCS 2 | · | | | |
| F/CTL | EFCS 1 | ELAC1 MON OR WIRING FROM ACCLRM 2 12CE2 | 279334 | 2 279300 P 229 T 810 816 | | |
| | IDENT: | EFCS 2 | · | | | |
| F/CTL | EFCS 1 | ELAC1 OR BUS FROM SEC1 | 279334 | 2 279300 PB229 - T 810 911 | | |
| | IDENT: EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC1 OR BUS FROM SEC2 | 279334 | 2 279300 PB227 T 810 909 | | |
| | IDENT: | IDENT: EFCS 2 | | | | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | |
|---|---------------------------|--------|---|-------------|---|---------------------------|
| | WARNINGS/ MALI ONC I TONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| R | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM | 279334 | 2 | 275100 P 288 T 810 839 |
| | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM | 279334 | 2 | 279300 PA297 T 810 893 |
| | | IDENT: | EFCS 2 | | | |
| R | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM | 279334 | 2 | 275100 P 288 T 810 839 |
| | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM | 279334 | 2 | 279300 PB201 T 810 895 |
| | | IDENT: | EFCS 2 | | | |
| | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM B | 279334 | 2 | 279300 P 235 T 810 819 |
| | | IDENT: | EFCS 2 | | | |
| | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM B HYD PRESS SW2 | 279334 | 2 | 279300 P 235 T 810 819 |
| | | IDENT: | EFCS 2 | | | |
| | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM B HYD PRESS XMTR 2065GN | 279334 | 2 | 279300 P 239 T 810 821 |
| | | IDENT: | EFCS 2 | | | |
| | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM G HYD PRESS SW1 | 279334 | 2 | 279300 P 243 T 810 823 |
| | | IDENT: | EFCS 2 | | | |
| | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM G HYD PRESS SW2 | 279334 | 2 | 279300 P 243 T 810 823 |
| | | IDENT: | EFCS 2 | | | |
| | F/CTL | EFCS 1 | ELAC1 OR WIRING FROM G HYD PRESS XMTR 1065GN | 279334 | 2 | 279300 P 247 T 810 825 |
| | | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | FAULT - ISOLATION | | |
|------------------------|--------|---|--------|-------------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | C PROCEDURE |
| F/CTL | EFCS 1 | ELAC1 OR WIRING FROM Y HYD PRESS SW1 | 279334 | 2 279300 P 251 T 810 827 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | ELAC1 OR WIRING FROM Y HYD PRESS SW2 | 279334 | 2 279300 P 251 T 810 827 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | ELAC1 OR WIRING FROM Y HYD PRESS XMTR 3065GN | 279334 | 2 279300 P 255 T 810 829 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | ELAC2 COM BUS 1 | 279334 | 2 279400 PA242 - T 810 886 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | ELAC2 COM BUS 2 | 279334 | 2 279300 PB226 - T 810 907 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | ELAC2 COM OR BUS FROM FMGC1 | 279334 | 2 279300 PA292 T 810 889 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | ELAC2 COM OR BUS FROM FMGC2 | 279334 | 2 279300 PA294 T 810 891 |
| | IDENT: | | | |
| F/CTL | EFCS 1 | ELAC2 COM OR BUS 2 FROM ADR1 | 279334 | 2 279300 P 296 T 810 847 |
| | IDENT: | | | |
| F/CTL | EFCS 1 | ELAC2 COM OR BUS 2 FROM ADR3 | 279334 | 2 279300 PA204 T 810 851 |
| | IDENT: | EFCS 2 | | 7 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|------------------------|---------------------|--|--------|--------------------|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL | EFCS 1 | ELAC2 COM OR BUS 2 FROM | 279334 | 2 | 279300 PA207 T 810 853 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC2 COM OR BUS 2 FROM IR3 | 279334 | 2 | 279300 PA212 T 810 857 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC2 COM OR BUS 5 FROM FCDC2 | 279334 | 2 | 279300 PB233 T 810 915 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC2 COM OR WIRING FROM ACCLRM 3 12CE3 | 279334 | 2 | 279300 P 231 T 810 817 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC2 COM OR WIRING FROM ACCLRM 4 12CE4 | 279334 | 2 | 279300 P 233 T 810 818 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC2 MON BUS 1 | 279334 | 2 | 279400 PA244 T 810 887 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | ELAC2 MON BUS 2 | 279334 | 2 | 279300 PB226 T 810 907 |
| | IDENT: EFCS 2 | | | | 1 6 10 70 |
| F/CTL | EFCS 1 | ELAC2 MON OR BUS FROM FMGC1 | 279334 | 2 | 279300 PA292 T 810 889 |
| | IDENT: | | | | |
| F/CTL | EFCS 1 | ELAC2 MON OR BUS FROM FMGC2 | 279334 | 2 | 279300 PA294 T 810 891 |
| | IDENT: | EFCS 2 | | | |

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| LIADNINGS / MAI FUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---------------------------|---------------------|--|----------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL | EFCS 1 | ELAC2 MON OR BUS 2 FROM ADR2 | 279334 | 2 | 279300 PA200 T 810 849 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL | EFCS 1 | ELAC2 MON OR BUS 2 FROM ADR3 | 279334 | 2 | 279300 PA204 T 810 851 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC2 MON OR BUS 2 FROM IR2 | 279334 | 2 | 279300 PA210 T 810 855 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC2 MON OR BUS 2 FROM IR3 | 279334 | 2 | 279300 PA212 T 810 857 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC2 MON OR BUS 6 FROM FCDC1 | 279334 | 2 | 279300 PB232 T 810 914 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL | EFCS 1 | ELAC2 MON OR WIRING FROM ACCLRM 3 12CE3 | 279334 | 2 | 279300 P 231 T 810 817 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL | EFCS 1 | ELAC2 MON OR WIRING FROM ACCLRM 4 12CE4 | 279334 | 2 | 279300 P 233 T 810 818 |
| | IDENT: | EFCS 2 | <u> </u> | | |
| F/CTL | EFCS 1 | ELAC2 OR BUS FROM SEC1 | 279334 | | 279300 PB230 T 810 912 |
| | IDENT: | EFCS 2 | | | 1 010 712 |
| F/CTL | EFCS 1 | ELAC2 OR BUS FROM SEC2 | 279334 | | 279300 PB228 T 810 910 |
| | IDENT: | EFCS 2 | | | . 0.0 7.0 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | T T∩N | | |
|------------------------|---------------------|---|--------|---------------------|--------------|--|--|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | - ISOLAT | | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM | 279334 | 2 279300 T 810 8 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM | 279334 | 2 279300 T 810 89 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM B | 279334 | 2 279300 T 810 8 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM B | 279334 | 2 279300 T 810 8 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM B HYD PRESS XMTR 2065GN | 279334 | 2 279300 T 810 8 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM G | 279334 | 2 279300 T 810 8 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM G | 279334 | 2 279300 T 810 8 | | | |
| | IDENT: | EFCS 2 | | | _ | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM G HYD PRESS XMTR 1065GN | 279334 | 2 279300 T 810 8 | | | |
| | IDENT: | EFCS 2 | | | | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM Y | 279334 | 2 279300 T 810 8 | | | |
| | IDENT: | DENT: EFCS 2 | | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | |
|-----------------------|--------|---|--------|-------------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | ISOLATION C PROCEDURE | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM Y HYD PRESS SW2 | 279334 | 2 279300 P 253 T 810 828 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | ELAC2 OR WIRING FROM Y HYD PRESS XMTR 3065GN | 279334 | 2 279300 P 257 T 810 830 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | EMER DISCRETE DISAGREE | 279334 | 2 279300 PB241 - T 810 920 | |
| | IDENT: | EFCS 2 | | 010 720 | |
| F/CTL | EFCS 1 | FCDC1 BUS 3 | 279534 | 2 279500 P 219 - T 810 819 | |
| | IDENT: | EFCS 2 | | 010 017 | |
| F/CTL | EFCS 1 | FCDC1 BUS 5 | 279534 | 2 279500 P 217 - T 810 817 | |
| | IDENT: | EFCS 2 | | 010 011 | |
| F/CTL | EFCS 1 | FCDC1 OR BUS FROM SEC1 | 279534 | 2 279500 P 210 T 810 810 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | FCDC1 OR BUS FROM SEC1 | 279534 | 2 279500 P 210 T 810 810 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | FCDC1 OR BUS FROM SEC2 | 279534 | 2 279500 P 208 T 810 808 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | FCDC1 OR BUS FROM SEC2 | 279534 | 2 279500 P 208 T 810 808 | |
| | IDENT: | EFCS 2 | • | | |
| F/CTL | EFCS 1 | FCDC1 OR BUS FROM SEC3 | 279534 | 2 279500 P 212 T 810 812 | |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|------------------------|---------------------|----------------------------------|-------------|---|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL | EFCS 1 | FCDC1 OR BUS FROM SEC3 | 279534 | 2 | 279500 P 212 T 810 812 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | FCDC1 OR BUS 2 FROM ELAC1 COM | 279534 | 2 | 279500 P 204 T 810 804 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | FCDC1 OR BUS 2 FROM ELAC1 MON | 279534 | 2 | 279500 P 204 T 810 804 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | FCDC1 OR BUS 2 FROM ELAC2 COM | 279534 | 2 | 279500 P 206 T 810 806 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | FCDC1 OR BUS 2 FROM ELAC2 MON | 279534 | 2 | 279500 P 206 T 810 806 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | FCDC1 OR BUS 3 FROM FCDC2 | 279534 | 2 | 279500 P 215 T 810 815 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | FCDC2 BUS 3 | 279534 | 2 | 279500 P 218 |
| | IDENT: | EFCS 2 | | | Т 810 818 |
| F/CTL | EFCS 1 | FCDC2 BUS 6 | 279534 | | 279500 P 216 |
| | IDENT: | EFCS 2 | | | T 810 816 |
| F/CTL | EFCS 1 | FCDC2 OR BUS FROM SEC1 | 279534 | 2 | 279500 P 211 T 810 811 |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | | FAULT - ISOLATION | | |
|------------------------|--------|----------------------------------|--------|-----------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | PROCEDURE |
| F/CTL | EFCS 1 | FCDC2 OR BUS FROM SEC1 | 279534 | 2 279500 P 211 T 810 811 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | FCDC2 OR BUS FROM SEC2 | 279534 | 2 279500 P 209 T 810 809 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | FCDC2 OR BUS FROM SEC2 | 279534 | 2 279500 P 209 T 810 809 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | FCDC2 OR BUS FROM SEC3 | 279534 | 2 279500 P 213 T 810 813 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | FCDC2 OR BUS FROM SEC3 | 279534 | 2 279500 P 213 T 810 813 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | FCDC2 OR BUS 2 FROM ELAC1 COM | 279534 | 2 279500 P 205 T 810 805 |
| | IDENT: | EFCS 2 | | -1 |
| F/CTL | EFCS 1 | FCDC2 OR BUS 2 FROM ELAC1 MON | 279534 | 2 279500 P 205 T 810 805 |
| | IDENT: | EFCS 2 | | -1 |
| F/CTL | EFCS 1 | FCDC2 OR BUS 2 FROM ELAC2 COM | 279534 | 2 279500 P 207 T 810 807 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | FCDC2 OR BUS 2 FROM ELAC2 MON | 279534 | 2 279500 P 207 T 810 807 |
| | IDENT: | EFCS 2 | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|-----------------------|---------------------|---|----------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL | EFCS 1 | FCDC2 OR BUS 3 FROM FCDC1 | 279534 | 2 | 279500 P 214 T 810 814 | |
| | IDENT: | EFCS 2 | - | | | |
| F/CTL | EFCS 1 | FMGC1 | 228334 | | 228300 P 294 T 810 859 | |
| | IDENT: | EFCS 1, EFCS 2 | | | 1 610 637 | |
| F/CTL | EFCS 1 | FMGC2 | 228334 | | 228300 P 295 | |
| | IDENT: | EFCS 1, EFCS 2 | | | Т 810 860 | |
| F/CTL | EFCS 1 | G HYD PRESS SW1 | 279218 | | 279200 P 213 T 810 824 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | G HYD PRESS SW1 | 293200 | | 279200 P 213 T 810 824 | |
| | IDENT: | EFCS 2 | | | 1 010 024 | |
| F/CTL | EFCS 1 | G HYD PRESS SW2 | 279218 | | 279200 P 215 T 810 825 | |
| | IDENT: | EFCS 2 | | | 010 025 | |
| F/CTL | EFCS 1 | G HYD PRESS SW2 | 293200 | | 279200 P 215 T 810 825 | |
| | IDENT: | EFCS 2 | | | 010 025 | |
| F/CTL | EFCS 1 | G HYD PRESS XMTR 1065GN associated with | 293200 | 2 | 279200 P 217 T 810 826 | |
| | ECAM 1 | ! | 293211 | 1 | | |
| | ECAM 1 | SDAC2 : G HYD PRESS XMTR | 293211 | 1 | | |
| | IDENT: | ECAM 2, EFCS 2 | | | | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|--|--|---|----------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | |
| F/CTL | EFCS 1 | G HYD PRESS XMTR 1065GN associated with | 293200 | 2 | 279200 P 217 T 810 826 |
| | ECAM 2 | SDAC1 : G HYD PRESS XMTR | 293211 | 1 | |
| | ECAM 2 | and SDAC2 : G HYD PRESS XMTR 1065GN | 293211 | 1 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | IR1 | 341234 | | 341400 PA271 T 810 963 |
| | ! | AFS, CFDS, EFCS 1, EFCS 2, GPWC, RADAR 1, TCAS | , EIS 3, | | 7010 703 |
| F/CTL | EFCS 1 | IR1 - BUS 2 | 341234 | | 341400 P 214 T 810 810 |
| | IDENT: | AFS, EFCS 1, EFCS 2 | | | 1 010 010 |
| F/CTL associated with | EFCS 1 | IR1 - BUS 3 | 341234 | | 341400 P 219 T 810 814 |
| PFD Flag(s) ADIRS-Red HDG flag in view on CAPT PFD | IDENT: AFS, CFDS, EFCS 1, EFCS 2, EIS 3, GPWC, RADAR 1, TCAS | | | | 1 010 014 |
| F/CTL | EFCS 1 | IR2 | 341234 | | 341400 PA273 T 810 964 |
| | IDENT: | AFS, CFDS, EFCS 1, EFCS 2 | , EIS 3 | | |
| F/CTL associated with | EFCS 1 | IR2 - BUS 2 | 341234 | | 341400 P 244 T 810 835 |
| STS-Inop System CAT 3 DUAL | IDENT: | AFS, EFCS 1, EFCS 2, RADAI | R 2 | | |
| F/CTL | EFCS 1 | IR2 - BUS 2 | 341234 | 2 | 341400 P 244 T 810 835 |
| | IDENT: | AFS, EFCS 1, EFCS 2, RADAI | R 2 | | |
| F/CTL associated with | EFCS 1 | IR2 OR BUS 3 TO ELAC1 | 341234 | 1 | 341400 P 248 T 810 839 |
| PFD Flag(s) ADIRS-Red HDG flag in view on CAPT PFD | IDENT: | AFS, CFDS, EFCS 1, EFCS 2 | , EIS 3 | | . 3.3 337 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|--|---------------------|---|----------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| F/CTL | EFCS 1 | IR2 OR BUS 3 TO ELAC1 | 341234 | 2 | 279300 PA208 T 810 854 |
| | IDENT: | EFCS 2 | | | 1 6 10 6 5 4 |
| F/CTL | EFCS 1 | IR3 | 341234 | 2 | 341400 PA275 T 810 965 |
| | | AFS, CFDS, EFCS 1, EFCS 2, EIS 3 | , EIS 2, | • | |
| F/CTL associated with | EFCS 1 | IR3 - BUS 2 | 341234 | 1 | 341400 P 269 T 810 855 |
| PFD Flag(s) ADIRS-Red HDG flag in view on CAPT PFD | ! | AFS, EFCS 1, EFCS 2, EIS 2 RADAR 2 | 2, | | |
| F/CTL associated with | EFCS 1 | IR3 - BUS 2 | 341234 | 1 | 341400 P 269 T 810 855 |
| PFD Flag(s) ADIRS-Red HDG flag in view on F/O PFD | ! | AFS, EFCS 1, EFCS 2, EIS 2 RADAR 2 | 2, | | |
| F/CTL associated with | EFCS 1 | IR3 - BUS 3 | 341234 | 1 | 341400 P 274 T 810 859 |
| PFD Flag(s) ADIRS-Red HDG flag in view on CAPT PFD | ! | AFS, CFDS, EFCS 1, EFCS 2, RADAR 1 | , EIS 1, | • | |
| F/CTL associated with | EFCS 1 | IR3 - BUS 3 | 341234 | 1 | 341400 P 274 T 810 859 |
| PFD Flag(s) ADIRS-Red HDG flag in view on F/O PFD | ! | AFS, CFDS, EFCS 1, EFCS 2, RADAR 1 | , EIS 1, | • | |
| F/CTL | EFCS 1 | L B AIL MODE XDCR 33CE3 OR INPUT OF ELAC1 | 271451 | 2 | 271000 P 212 T 810 808 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | L B AIL MODE XDCR 33CE3 OR INPUT OF ELAC1 associated with | 271451 | 2 | 279000 P 218 T 810 809 |
| | EFCS 1 | R G AIL MODE XDCR 33CE2 | 271451 | 2 | |
| | IDENT: | EFCS 2 | | | <u> </u> |

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| HADNINGS / MALEUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|---------------------|---|--------|--------------------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | |
| F/CTL associated with | EFCS 1 | L B ELEV MODE XDCR 34CE3 associated with | 273451 | 1 | 279000 P 248 T 810 824 |
| Upper ECAM DU Warnings F/CTL ELAC 1 PITCH FAULT and | | L ELEV POS MON XDCR OF ELAC2/SEC2 | 273451 | 1 | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | R B ELEV MODE XDCR 34CE4 and | 273451 | 1 | |
| | EFCS 1 | R ELEV POS MON XDCR OF ELAC2 / SEC2 and | 273451 | 1 | |
| | EFCS 1 | ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE and | 279334 | 1 | |
| | EFCS 1 | SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE | 279434 | 2 | |
| F/CTL associated with | EFCS 1 | L B ELEV MODE XDCR 34CE3 | 273451 | 1 | 279000 P 248 T 810 824 |
| Upper ECAM DU Warnings F/CTL ELAC 1 PITCH FAULT | | | 273451 | 1 | |
| F/CTL ELAC 2 PITCH FAULT | EFCS 1 | R B ELEV MODE XDCR 34CE4 | 273451 | 1 | |
| | EFCS 1 | R ELEV POS MON XDCR OF ELAC2 / SEC2 and | 273451 | 1 | |
| | EFCS 1 | ELAC2 MON OR INPUT OF THS ACTR XDCR 1 9CE | 279334 | 1 | |
| | EFCS 1 | SEC2 MON OR INPUT OF THS | 279434 | 2 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | L G AIL MODE XDCR 33CE1 OR INPUT OF ELAC2 | 271451 | 2 | 271000 P 229 T 810 816 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | L G AIL MODE XDCR 33CE1 OR INPUT OF ELAC2 associated with | 271451 | 2 | 279000 P 220 T 810 810 |
| | EFCS 1 | R B AIL MODE XDCR 33CE4 OR INPUT OF ELAC2 | 271451 | 2 | |
| | IDENT: | EFCS 2 | | | <u> </u> |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|--|----------|---|--------|---|---------------------------|--|
| | WARRINGS/ HALF GROTTERS | SOURCE | MESSAGE | ATA | С | | |
| | F/CTL associated with Upper ECAM DU Warnings | EFCS 1 | L G ELEV POS XDCR 34CE1 COM E2/S2:USE STBY XDCR associated with | 273451 | 1 | 279000 P 246 T 810 823 | |
| | F/CTL ELAC 1 PITCH FAULT and F/CTL ELAC 2 PITCH FAULT | EFCS 1 | R Y ELEV POS XDCR 34CE2 COM E2/S2:USE STBY XDCR and | 273451 | 1 | | |
| | | EFCS 1 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE and | 279334 | 1 | | |
| | | EFCS 1 | SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE | 279434 | 2 | | |
| | | IDENT: I | EFCS 2 | | | | |
| | F/CTL | EFCS 1 | LGCIU BUS DISAGREE | 323171 | 2 | 279400 PA252 T 810 894 | |
| | | IDENT: I | EFCS 2 | | | | |
| R | F/CTL associated with Upper ECAM DU Warnings L/G LGCIU 1 FAULT | EFCS 1 | LGCIU1 | 323171 | 2 | 323100 PB200 T 810 881 | |
| | F/CTL | EFCS 1 | LGCIU1 OR BUS 1 TO SEC1 | 323171 | 2 | 279400 PA248 T 810 890 | |
| | | IDENT: I | EFCS 2 | | | | |
| | F/CTL | EFCS 1 | LGCIU1 OR BUS 2 TO SEC2 | 323171 | 2 | 279400 PA247 T 810 889 | |
| | | IDENT: I | EFCS 2 | | | 1 010 007 | |
| | F/CTL | EFCS 1 | LGCIU1 OR BUS 2 TO SEC3 | 323171 | 2 | 279400 PA246 T 810 888 | |
| | | IDENT: I | EFCS 2 | | | 1 010 000 | |
| | F/CTL | EFCS 1 | LGCIU1-BUS 2 | 323171 | 2 | 323100 PA205 T 810 843 | |
| R | F/CTL associated with Upper ECAM DU Warnings L/G LGCIU 2 FAULT | EFCS 1 | LGCIU2 | 323171 | 2 | 323100 PB200 T 810 881 | |
| | F/CTL | EFCS 1 | LGCIU2 OR BUS 1 TO SEC2 | 323171 | 2 | 279400 PA250 T 810 892 | |
| | | IDENT: I | EFCS 2 | | | 1 010 072 | |

| EFF : | ALL |
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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | |
|-----------------------|----------------------------|--|---------|---|---------------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL | EFCS 1 | LGCIU2 OR BUS 1 TO SEC3 | 323171 | 2 | 279400 PA249 |
| | IDENT: | EFCS 2 | <u></u> | | T 810 891 |
| F/CTL | EFCS 1 | LGCIU2 OR BUS 2 TO SEC1 | 323171 | 2 | 279400 PA251 T 810 893 |
| | IDENT: | EFCS 2 | | | 1 610 673 |
| F/CTL | EFCS 1 | LGCIU2-BUS 2 | 323171 | 2 | 323100 PA209 T 810 845 |
| F/CTL | EFCS 1 | R B AIL MODE XDCR 33CE4 OR INPUT OF ELAC2 | 271451 | 2 | 271000 P 255 T 810 829 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | R G AIL MODE XDCR 33CE2 OR INPUT OF ELAC1 | 271451 | 2 | 271000 P 241 T 810 822 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | RA1 | 344233 | 2 | 344200 P 207 T 810 803 |
| | IDENT: | AFS, EFCS 1, EFCS 2 | | | |
| F/CTL | EFCS 1 | RA1 OR BUS TO ELAC1 | 344233 | 2 | 279300 PA288 T 810 885 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | RA1 OR BUS TO ELAC2 | 344233 | 2 | 279300 PA287 T 810 884 |
| | IDENT: | EFCS 2 | | | 010 004 |
| F/CTL | EFCS 1 | RA2 | 344233 | 2 | 344200 P 211 T 810 805 |
| | IDENT: AFS, EFCS 1, EFCS 2 | | | | |
| F/CTL | EFCS 1 | RA2 OR BUS TO ELAC1 | 344233 | 2 | 279300 PA290 T 810 887 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | RA2 OR BUS TO ELAC2 | 344233 | 2 | 279300 PA289 T 810 886 |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|-----------------------|---------------------|---|--------|-----------|---------------------------|
| | SOURCE | MESSAGE | АТА | С | PROCEDURE |
| F/CTL | EFCS 1 | SEC1 COM BUS 1 | 279434 | 2 | 279400 PA228 T 810 876 |
| | IDENT: | EFCS 2 | | | 1 810 876 |
| F/CTL | EFCS 1 | SEC1 COM OR BUS 3 FROM FCDC2 | 279434 | 2 | 279400 PA233 T 810 879 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 COM OR WIRING FROM THS ACTR XDCR 2 9CE | 279434 | 2 | 279400 P 268 T 810 836 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 COM OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279434 | 2 | 273000 P 211 T 810 807 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 COM OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279434 | 2 | 273000 P 254 T 810 829 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 MON BUS 1 | 279434 | 2 | 279400 PA228 T 810 876 |
| | IDENT: EFCS 2 | | | 1 010 070 | |
| F/CTL | EFCS 1 | SEC1 MON OR BUS 4 FROM FCDC1 | 279434 | 2 | 279400 PA232 T 810 878 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 MON OR WIRING FROM THS ACTR XDCR 2 9CE | 279434 | 2 | 279400 P 270 T 810 837 |
| | IDENT: | EFCS 2 | • | | |
| F/CTL | EFCS 1 | SEC1 MON OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279434 | 2 | 273000 P 213 T 810 808 |
| | IDENT: | EFCS 2 | - | | |

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| WARNINGS/MALFUNCTIONS | S | FAULT ISOLATIO | | | |
|---------------------------|--------|---|--------|---------------------------|--|
| WARNINGS/ MALI ONC I TONS | SOURCE | MESSAGE | ATA | C PROCEDURI | |
| F/CTL | EFCS 1 | SEC1 MON OR WIRING TO L G ELEV SOL VLV 34CE1 | 279434 | 2 273000 P 2 T 810 822 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 MON OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279434 | 2 273000 P 2 T 810 830 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 MON OR WIRING TO R Y ELEV SOL VLV 34CE2 | 279434 | 2 273000 P 2 T 810 844 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 OR BUS 1 FROM ELAC1 | 279434 | 2 279400 PA2 T 810 884 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 OR BUS 1 FROM ELAC2 | 279434 | 2 279400 PA2 T 810 887 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 OR BUS 3 FROM ADR1 | 279434 | 2 279400 P 2 T 810 842 | |
| | IDENT: | EFCS 2 | | 1 010 042 | |
| F/CTL | EFCS 1 | SEC1 OR BUS 3 FROM ADR3 | 279434 | 2 279400 P 2 T 810 846 | |
| | IDENT: | EFCS 2 | | 1 010 040 | |
| F/CTL | EFCS 1 | SEC1 OR BUS 3 FROM IR1 | 279434 | 2 279400 P 2 T 810 848 | |
| | IDENT: | EFCS 2 | | 1 010 040 | |
| F/CTL | EFCS 1 | SEC1 OR BUS 3 FROM IR3 | 279434 | 2 279400 P 2 T 810 852 | |
| | IDENT: | EFCS 2 | | 1 010 032 | |
| F/CTL | EFCS 1 | SEC1 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279434 | 2 279400 P 2 T 810 803 | |
| | IDENT: | EFCS 2 | | | |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|-----------------------|---------------|---|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ISOLATION PROCEDURE | |
| F/CTL | EFCS 1 | SEC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 2 | 279400 P 201 T 810 801 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279434 | 2 | 279400 P 207 T 810 804 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 2 | 279400 P 203 T 810 802 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 279400 P 241 T 810 821 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM ACCLRM 1 12CE1 | 279434 | 2 | 279400 P 245 T 810 823 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM ACCLRM 2 12CE2 | 279434 | 2 | 279400 P 247 T 810 824 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM | 279434 | 2 | 275100 P 288 T 810 839 | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM SFCC1 | 279434 | 2 | 279400 PA203 T 810 856 | |
| | IDENT: | | | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM SFCC2 | 279434 | 2 | 275100 P 288 T 810 839 | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM SFCC2 | 279434 | 2 | 279400 PA209 T 810 859 | |
| | IDENT: EFCS 2 | | | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|-----------------------|---------------------|---|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM B | 279434 | 2 | 279400 P 250 T 810 827 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM G | 279434 | 2 | 279400 P 256 T 810 830 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM L ELEV POS MON XDCR | 279434 | 2 | 273000 P 208 т 810 805 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM L ELEV POS MON XDCR associated with | 279434 | 2 | 279000 P 236 T 810 818 | |
| | EFCS 1 | ! | 279434 | 2 | | |
| | EFCS 1 | SEC1 OR WIRING FROM R ELEV POS MON XDCR and | 279434 | 2 | | |
| | EFCS 1 | SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 and | 279434 | 2 | | |
| | EFCS 1 | SEC1 MON OR WIRING FROM THS ACTR XDCR 2 9CE | 279434 | 2 | | |
| | IDENT: EFCS 2 | | | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 | 279434 | 2 | 273000 P 203 T 810 802 | |
| | IDENT: EFCS 2 | | | | | |

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| LIADNINGS (MALEUNGITONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|----------------------------------|---------------------|---|---------|----------|---------------------------|
| WARNINGS/MALFUNCTIONS - | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 associated with | 279434 | | 279000 P 234 T 810 817 |
| | EFCS 1 | ! | 279434 | 2 | |
| | EFCS 1 | 1 | 279434 | 2 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279434 | | 273000 P 238 T 810 821 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM R ELEV POS MON XDCR | 279434 | | 273000 P 251 T 810 827 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 | 279434 | | 273000 P 246 T 810 824 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279434 | | 273000 P 281 T 810 843 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING FROM Y HYD PRESS SW1 | 279434 | | 279400 P 262 T 810 833 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC1 OR WIRING TO THS ACTR SERVO MOT 2 9CE | 279434 | | 279400 P 273 T 810 838 |
| | IDENT: | EFCS 2 | <u></u> | 1 | |
| F/CTL | EFCS 1 | SEC1 PERMANENT IDLE OF L THROTTLE CTL UNIT 8KS1 | 279434 | | 279400 P 227 T 810 814 |
| | IDENT: | EFCS 2 | | | |

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| LIADNINGS / MALEUNGITONS | CFDS FAULT MESSAGES | | | | FAULT | |
|--------------------------------|---------------------|--|---------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| F/CTL | EFCS 1 | SEC1 PERMANENT IDLE OF R THROTTLE CTL UNIT 8KS2 | 279434 | 2 | 279400 P 233 Т 810 817 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 COM BUS 1 | 279434 | 2 | 279400 PA226 T 810 875 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 COM OR BUS 5 FROM FCDC1 | 279434 | 2 | 279400 PA234 T 810 880 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE | 279434 | 2 | 279400 P 275 T 810 839 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 COM OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279434 | 2 | 273000 P 232 T 810 818 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 COM OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279434 | 2 | 273000 P 275 T 810 840 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 MON BUS 1 | 279434 | 2 | 279400 PA226 T 810 875 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 MON OR BUS 6 FROM FCDC2 | 279434 | 2 | 279400 PA236 T 810 882 | |
| | IDENT: EFCS 2 | | | | | |
| F/CTL | EFCS 1 | SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE | 279434 | 2 | 279400 P 277 T 810 840 | |
| | IDENT: | EFCS 2 | <u></u> | | | |

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| LIADNINGS /MALEUNCTIONS | T | FAULT ISOLATION | | |
|-------------------------|--------|---|--------|-------------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | C PROCEDURE |
| F/CTL | EFCS 1 | SEC2 MON OR WIRING TO L B ELEV SOL VLV 34CE3 | 279434 | 2 273000 P 219 T 810 811 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | SEC2 MON OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279434 | 2 273000 P 234 T 810 819 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | SEC2 MON OR WIRING TO R B ELEV SOL VLV 34CE4 | 279434 | 2 273000 P 262 T 810 833 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | SEC2 MON OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279434 | 2 273000 P 277 T 810 841 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | SEC2 OR BUS 1 FROM ELAC1 | 279434 | 2 279400 PA258 T 810 896 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | SEC2 OR BUS 1 FROM ELAC2 | 279434 | 2 279400 PA262 T 810 898 |
| | IDENT: | EFCS 2 | | |
| F/CTL | EFCS 1 | SEC2 OR BUS 2 FROM ADR1 | 279434 | 2 279400 P 283 T 810 843 |
| | IDENT: | 1 010 043 | | |
| F/CTL | EFCS 1 | SEC2 OR BUS 2 FROM ADR2 | 279434 | 2 279400 P 285 - T 810 844 |
| | IDENT: | | | |
| F/CTL | EFCS 1 | SEC2 OR BUS 2 FROM IR1 | 279434 | 2 279400 P 294 - T 810 849 |
| | IDENT: | EFCS 2 | | 1 010 047 |
| F/CTL | EFCS 1 | SEC2 OR BUS 2 FROM IR2 | 279434 | 2 279400 P 295 T 810 850 |
| | IDENT: | EFCS 2 | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|------------------------|---------------------|--|---------|---|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | |
| F/CTL | EFCS 1 | SEC2 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279434 | 2 | 279400 P 213 T 810 807 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC2 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 2 | 279400 P 209 T 810 805 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC2 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279434 | 2 | 279400 P 215 T 810 808 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC2 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 2 | 279400 P 211 T 810 806 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC2 OR INPUT OF L THROTTLE CTL UNIT 8KS1 | 279434 | 2 | 279400 P 223 T 810 812 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC2 OR INPUT OF R THROTTLE CTL UNIT 8KS2 | 279434 | 2 | 279400 P 225 T 810 813 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL | EFCS 1 | SEC2 OR INPUT OF SPBK | 279434 | 2 | 279400 P 221 T 810 811 |
| | IDENT: | EFCS 2 | <u></u> | | |
| F/CTL | EFCS 1 | SEC2 OR INPUT OF WHEEL | 279434 | 2 | 279400 P 239 T 810 820 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC2 OR OUTPUT TO THS ACTR SERVO MOT3 9CE | 279434 | 2 | 279400 P 279 T 810 841 |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|-----------------------|---------------------|--|--------|----------|---------------------------|
| | SOURCE | MESSAGE | ATA | С | ! |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM ACCLRM 3 12CE3 | 279434 | 2 | 279400 P 248 T 810 825 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM ACCLRM 4 12CE4 | 279434 | 2 | 279400 P 249 T 810 826 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM | 279434 | 2 | 279400 P 299 T 810 854 |
| | IDENT: | EFCS 2 | • | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM SFCC2 | 279434 | 2 | 279400 PA205 T 810 857 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM B HYD PRESS SW2 | 279434 | 2 | 279400 P 252 T 810 828 |
| | IDENT: | EFCS 2 | • | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM G HYD PRESS SW2 | 279434 | 2 | 279400 P 258 T 810 831 |
| | IDENT: | EFCS 2 | • | L | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM L ELEV POS MON XDCR | 279434 | 2 | 273000 P 229 T 810 816 |
| | IDENT: | EFCS 2 | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|-------------------------|---------------------|--|--------|---|---------------------------|--|
| WARRENGO, HALF OROTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM L ELEV POS MON XDCR associated with | 279434 | 2 | 279000 P 244 T 810 822 | |
| | EFCS 1 | _ | 279434 | 2 | | |
| | EFCS 1 | =: =: | 279434 | 2 | | |
| | EFCS 1 | =: =: | 279434 | 2 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 | 279434 | 2 | 273000 P 217 T 810 810 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 associated with | 279434 | 2 | 279000 P 244 T 810 822 | |
| | EFCS 1 | _ | 279434 | 2 | | |
| | EFCS 1 | | 279434 | 2 | | |
| | EFCS 1 | | 279434 | 2 | | |
| | EFCS 1 | SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE | 279434 | 2 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 | 279434 | 2 | 273000 P 225 T 810 813 | |
| | IDENT: EFCS 2 | | | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|------------------------|---------------------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 associated with | 279434 | | 279000 P 242 T 810 821 | |
| | EFCS 1 | ! | 279434 | 2 | | |
| | EFCS 1 | SEC2 COM OR INPUT OF THS | 279434 | 2 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM R ELEV POS MON XDCR | 279434 | | 273000 P 272 T 810 838 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279434 | | 273000 P 260 T 810 832 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 | 279434 | | 273000 P 268 T 810 835 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 OR WIRING FROM Y HYD PRESS SW2 | 279434 | | 279400 P 264 T 810 834 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 PERMANENT IDLE OF L THROTTLE CTL UNIT 8KS1 | 279434 | | 279400 P 229 T 810 815 | |
| | IDENT: | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC2 PERMANENT IDLE OF R THROTTLE CTL UNIT 8KS2 | 279434 | | 279400 P 235 T 810 818 | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 COM BUS 1 | 279434 | | 279400 PA230 T 810 877 | |
| | IDENT: | EFCS 2 | | | . 0.0 011 | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT |
|-----------------------|---------------------|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ISOLATION PROCEDURE |
| F/CTL | EFCS 1 | SEC3 COM OR BUS 5 FROM FCDC1 | 279434 | 2 | 279400 PA235 T 810 881 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 MON BUS 1 | 279434 | 2 | 279400 PA230 T 810 877 |
| | IDENT: | IDENT: EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC3 MON OR BUS 6 FROM FCDC2 | 279434 | 2 | 279400 PA237 T 810 883 |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 1 | SEC3 OR BUS 1 FROM ELAC1 | 279434 | 2 | 279400 PA260 T 810 897 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 OR BUS 1 FROM ELAC2 | 279434 | 2 | 279400 PA264 T 810 899 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 2 | 279400 P 217 T 810 809 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 2 | 279400 P 219 T 810 810 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 279400 P 243 T 810 822 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 OR WIRING FROM | 279434 | 2 | 279400 PA201 T 810 855 |
| | IDENT: EFCS 2 | | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|------------------------|-------------------------------------|--|--------|---------------------------|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| F/CTL | EFCS 1 SEC3 OR WIRING FROM 279434 2 | | 2 | 279400 PA207 T 810 858 | |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 OR WIRING FROM B | 279434 | 2 | 279400 P 254 T 810 829 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 OR WIRING FROM G HYD PRESS SW2 | 279434 | 2 | 279400 P 260 T 810 832 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 OR WIRING FROM Y HYD PRESS SW2 | 279434 | 2 | 279400 P 266 T 810 835 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 PERMANENT IDLE OF L THROTTLE CTL UNIT 8KS1 | 279434 | 2 | 279400 P 231 T 810 816 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SEC3 PERMANENT IDLE OF R THROTTLE CTL UNIT 8KS2 | 279434 | 2 | 279400 P 237 T 810 819 |
| | IDENT: EFCS 2 | | | | |
| F/CTL | EFCS 1 | SFCC1 | 275134 | 2 | 275100 P 288 T 810 839 |
| F/CTL | EFCS 1 | SFCC1 - FLAP | 275134 | 2 | 275100 P 288 T 810 839 |
| F/CTL | EFCS 1 | SFCC1 - SLAT 275134 2 | | 2 | 278100 P 269 T 810 828 |
| F/CTL | EFCS 1 | SFCC2 | 275134 | 2 | 275100 P 288 T 810 839 |
| F/CTL | EFCS 1 | SFCC2 - FLAP | 275134 | 2 | 275100 P 288 T 810 839 |

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | | |
|--|---------------|-------------------------------------|--------|-------------------------------|--|--|
| WARNINGS/ MALI UNCTIONS | SOURCE | MESSAGE | ATA | C PROCEDURE | | |
| F/CTL | EFCS 1 | SFCC2 SLAT | 275134 | 2 278100 P 269 T 810 828 | | |
| F/CTL associated with | EFCS 1 | SPBK CTL XDCR UNIT 7CE | 279213 | 1 276000 P 205 - T 810 803 | | |
| Upper ECAM DU Warnings F/CTL SPD BRK 3+4 FAULT | IDENT: | | | | | |
| F/CTL associated with | EFCS 1 | SPBK CTL XDCR UNIT 7CE | 279213 | 1 276000 P 205 - T 810 803 | | |
| Upper ECAM DU Warnings F/CTL SPD BRK 2 FAULT | IDENT: | | | | | |
| F/CTL | EFCS 1 | SPBK CTL XDCR UNIT 7CE | 279213 | 2 276000 P 205 - T 810 803 | | |
| | IDENT: | EFCS 2 | | 1 810 803 | | |
| F/CTL | EFCS 1 | THS ACTR OVRD SW 1 9CE | 274451 | 2 274000 P 203 - T 810 802 | | |
| | IDENT: | | | | | |
| F/CTL | EFCS 1 | THS ACTR OVRD SW 2 9CE OF ELAC1 | 274451 | 2 274000 P 208 T 810 804 | | |
| | IDENT: EFCS 2 | | | | | |
| F/CTL | EFCS 1 | THS ACTR OVRD SW 3 9CE | 274451 | 2 274000 P 213 | | |
| | IDENT: EFCS 2 | | | ⊣⊤ 810 806 │ | | |
| F/CTL | EFCS 1 | THS ACTR POS ERROR 9CE OF SEC1 | 274451 | 2 274000 P 205 T 810 803 | | |
| | IDENT: | _ | | | | |
| F/CTL | EFCS 1 | THS ACTR POS ERROR 9CE OF SEC2 | 274451 | 2 274000 P 210 T 810 805 | | |
| | IDENT: | EFCS 2 | | | | |
| F/CTL | EFCS 1 | THS ACTR SERVO MOT 3 9CE OF SEC2 | 274451 | 2 274000 P 201 T 810 801 | | |
| | IDENT: | EFCS 2 | | | | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | |
|------------------------|---------------------|---|----------|---|----------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL | EFCS 1 | Y HYD PRESS SW1 | 279218 | 2 | 279200 P 219 T 810 827A |
| | IDENT: | EFCS 2 | | | 1 010 027A |
| F/CTL | EFCS 1 | Y HYD PRESS SW1 | 293200 | 2 | 279200 P 219 T 810 827A |
| | IDENT: | EFCS 2 | | | 1 010 027A |
| F/CTL | EFCS 1 | Y HYD PRESS SW2 | 279218 | 2 | 279200 P 221 T 810 828A |
| | IDENT: | EFCS 2 | | | 1 010 020A |
| F/CTL | EFCS 1 | Y HYD PRESS SW2 | 293200 | 2 | 279200 P 221 T 810 828A |
| | IDENT: | EFCS 2 | | | 1 010 020A |
| F/CTL | EFCS 1 | Y HYD PRESS XMTR 3065GN associated with | 293200 | 2 | 279200 P 223 T 810 829 |
| | ECAM 1 | SDAC1: Y HYD PRESS XMTR 3065GN | 293211 | 1 | 010 027 |
| | ECAM 1 | SDAC2 : Y HYD PRESS XMTR | 293211 | 1 | |
| | IDENT: | ECAM 2, EFCS 2 | - | | |
| F/CTL | EFCS 1 | Y HYD PRESS XMTR 3065GN associated with | 293200 | 2 | 279200 P 223 T 810 829 |
| | ECAM 2 | SDAC1: Y HYD PRESS XMTR 3065GN | 293211 | 1 | 010 027 |
| | ECAM 2 | SDAC2 : Y HYD PRESS XMTR 3065GN | 293211 | 1 | |
| | IDENT: | EFCS 2 | | | |
| F/CTL | EFCS 2 | ACCLRM 1 12CE1 | 279216 | 2 | 279200 P 201 T 810 803 |
| F/CTL | EFCS 2 | ACCLRM 2 12CE2 | 279216 | 2 | 279200 P 202 T 810 804 |
| F/CTL | EFCS 2 | ACCLRM 3 12CE3 | 279216 | 2 | 279200 P 203 T 810 805 |

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| CFDS FAULT MESSAGES | | | | | FAULT ISOLATION |
|--|--------|---|--------------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | PROCEDURE |
| F/CTL | EFCS 2 | ACCLRM 4 12CE4 | 279216 | 2 | 279200 P 204 T 810 806 |
| F/CTL | EFCS 2 | ADR1 | 341234 | | 341381 P 215 T 810 814 |
| | IDENT: | AFS, EFCS 1, EFCS 2 | | | 010 014 |
| F/CTL | EFCS 2 | ADR1 | 341234 | 2 | 341381 P 230 T 810 823 |
| associated with STS-Inop System CAT 3 DUAL | EFCS 2 | ! | 279434 | 2 | 1 610 623 |
| CAT 5 DUAL | EFCS 2 | and SEC2 OR BUS 2 FROM ADR2 | 279434 | 2 | |
| | IDENT: | AFS | <u></u> | | |
| F/CTL | EFCS 2 | ADR1 BUS 2 | 341234 | | 341381 P 203 |
| | IDENT: | AFS, EFCS 1, EFCS 2 | <u> </u> | | Т 810 803 |
| F/CTL | EFCS 2 | ADR2 | 341234 | 2 | 341381 P 231 |
| associated with STS-Inop System | EFCS 2 | associated with SEC2 OR BUS 2 FROM ADR1 | 279434 | 2 | Т 810 824 |
| CAT 3 DUAL | EFCS 2 | sec3 or bus 2 from ADR3 | 279434 | 2 | |
| | IDENT: | AFS | · | | |
| F/CTL | EFCS 2 | ADR2 OR BUS 3 TO ELAC1 | 341234 | 2 | 279300 P 298 T 810 848 |
| F/CTL | EFCS 2 | ADR3 | 341234 | | 341381 P 216 T 810 815 |
| | IDENT: | AFS, ATC 2, EFCS 1, EFCS 2 | 2 | | כוס טוס ון |
| F/CTL | EFCS 2 | ADR3 | 341234 | 2 | 341381 P 232 |
| associated with STS-Inop System | EFCS 2 | associated with SEC1 OR BUS 3 FROM ADR1 | 279434 | 2 | Т 810 825 |
| CAT 3 DUAL | EFCS 2 | and SEC3 OR BUS 2 FROM ADR3 | 279434 | 2 | |
| | IDENT: | AFS | - | | |
| F/CTL | EFCS 2 | ADR3 BUS 2 | 341234 | | 341381 P 211 |
| | IDENT: | AFS, ATC 2, EFCS 1 | - | | T 810 810 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|------------------------|---------------------|---|--------|---|---------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL | EFCS 2 | B HYD PRESS SW1 | 279218 | 2 | 279200 P 207 T 810 821 | |
| F/CTL | EFCS 2 | B HYD PRESS SW1 | 293200 | 2 | 279200 P 207 T 810 821 | |
| F/CTL | EFCS 2 | B HYD PRESS SW2 | 279218 | 2 | 279200 P 209 T 810 822 | |
| F/CTL | EFCS 2 | B HYD PRESS SW2 | 293200 | 2 | 279200 P 209 T 810 822 | |
| F/CTL | EFCS 2 | B HYD PRESS XMTR 2065GN associated with | 293200 | 2 | 279200 P 211 T 810 823 | |
| | ECAM 2 | SDAC1 : B HYD PRESS XMTR 2065GN | 293211 | 1 | | |
| | ECAM 2 | SDAC2 : B HYD PRESS XMTR 2065GN | 293211 | 1 | | |
| F/CTL | EFCS 2 | B HYD PRESS XMTR 2065GN associated with | 293200 | 2 | 279200 P 211 T 810 823 | |
| | ECAM 1 | SDAC1 : B HYD PRESS XMTR 2065GN | 293211 | 1 | | |
| | ECAM 1 | and SDAC2 : B HYD PRESS XMTR 2065GN | 293211 | 1 | | |
| | IDENT: | ECAM 2 | | | <u> </u> | |
| F/CTL | EFCS 2 | CHECK L AIL CHANGE OVER | 279334 | 2 | 279300 P 259 T 810 831 | |
| F/CTL | EFCS 2 | CHECK LGCIU1 DISC INPUTS | 323171 | 2 | 279300 PB244 T 810 921 | |
| F/CTL | EFCS 2 | CHECK LGCIU2 DISC INPUTS | 323171 | 2 | 279300 PB247 T 810 922 | |
| F/CTL | EFCS 2 | CHECK PITCH CHANGE OVER OF SEC1 | 279334 | 2 | 279300 PB235 T 810 917 | |
| F/CTL | EFCS 2 | CHECK PITCH CHANGE OVER OF SEC2 | 279334 | 2 | 279300 PB237 T 810 918 | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT - ISOLATION |
|---|---------------------|--|--------|-----------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | C PROCEDURE |
| F/CTL associated with Upper ECAM DU Warnings F/CTL SIDESTICK PRIORITY | EFCS 2 | CHECK PRIORITY WIRING | 279334 | 1 279200 P 225 T 810 830 |
| F/CTL | EFCS 2 | CHECK PRIORITY WIRING | 279334 | 2 279400 PA256 T 810 895 |
| F/CTL | EFCS 2 | CHECK R AIL CHANGE OVER | 279334 | 2 279300 P 261 T 810 832 |
| F/CTL | EFCS 2 | ELAC1 COM BUS 1 | 279334 | 2 279400 PA238 T 810 884 |
| F/CTL | EFCS 2 | ELAC1 COM BUS 2 | 279334 | 2 279300 PB225 T 810 905 |
| F/CTL | EFCS 2 | ELAC1 COM OR BUS FROM FMGC1 | 279334 | 2 279300 PA291 T 810 888 |
| F/CTL | EFCS 2 | ELAC1 COM OR BUS FROM FMGC2 | 279334 | 2 279300 PA293 T 810 890 |
| F/CTL | EFCS 2 | ELAC1 COM OR BUS 3 FROM ADR1 | 279334 | 2 279300 P 294 T 810 846 |
| F/CTL | EFCS 2 | ELAC1 COM OR BUS 3 FROM ADR3 | 279334 | 2 279300 PA202 T 810 850 |
| F/CTL | EFCS 2 | ELAC1 COM OR BUS 3 FROM FCDC1 | 279334 | 2 279300 PB234 T 810 916 |
| F/CTL | EFCS 2 | ELAC1 COM OR BUS 3 FROM IR1 | 279334 | 2 279300 PA206 T 810 852 |
| F/CTL | EFCS 2 | ELAC1 COM OR BUS 3 FROM IR3 | 279334 | 2 279300 PA211 T 810 856 |
| F/CTL | EFCS 2 | ELAC1 COM OR WIRING FROM ACCLRM 1 12CE1 | 279334 | 2 279300 P 227 T 810 815 |
| F/CTL | EFCS 2 | ELAC1 COM OR WIRING FROM ACCLRM 2 12CE2 | 279334 | 2 279300 P 229 T 810 816 |
| F/CTL | EFCS 2 | ELAC1 MON BUS 1 | 279334 | 2 279400 PA240 T 810 885 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT - ISOLATION |
|-----------------------|---------------------|---|--------|-----------------------------|
| WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | C PROCEDURE |
| F/CTL | EFCS 2 | ELAC1 MON BUS 2 | 279334 | 2 279300 PB225 T 810 905 |
| F/CTL | EFCS 2 | ELAC1 MON OR BUS FROM FMGC1 | 279334 | 2 279300 PA291 T 810 888 |
| F/CTL | EFCS 2 | ELAC1 MON OR BUS FROM FMGC2 | 279334 | 2 279300 PA293 T 810 890 |
| F/CTL | EFCS 2 | ELAC1 MON OR BUS 3 FROM ADR1 | 279334 | 2 279300 P 294 T 810 846 |
| F/CTL | EFCS 2 | ELAC1 MON OR BUS 3 FROM | 279334 | 2 279300 PA206 T 810 852 |
| F/CTL | EFCS 2 | ELAC1 MON OR BUS 4 FROM FCDC2 | 279334 | 2 279300 PB231 T 810 913 |
| F/CTL | EFCS 2 | ELAC1 MON OR WIRING FROM ACCLRM 1 12CE1 | 279334 | 2 279300 P 227 T 810 815 |
| F/CTL | EFCS 2 | ELAC1 MON OR WIRING FROM ACCLRM 2 12CE2 | 279334 | 2 279300 P 229 T 810 816 |
| F/CTL | EFCS 2 | ELAC1 OR BUS FROM SEC1 | 279334 | 2 279300 PB229 T 810 911 |
| F/CTL | EFCS 2 | ELAC1 OR BUS FROM SEC2 | 279334 | 2 279300 PB227 T 810 909 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM SFCC1 | 279334 | 2 279300 PA297 T 810 893 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM SFCC2 | 279334 | 2 279300 PB201 T 810 895 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM B HYD PRESS SW1 | 279334 | 2 279300 P 235 T 810 819 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM B HYD PRESS SW2 | 279334 | 2 279300 P 235 T 810 819 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM B HYD PRESS XMTR 2065GN | 279334 | 2 279300 P 239 T 810 821 |

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| LIADNINGS / MALEUNGTIONS | CFDS FAULT MESSAGES | | | FAULT - ISOLATION |
|--------------------------------|---------------------|---|--------|-----------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | PROCEDURE |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM G HYD PRESS SW1 | 279334 | 2 279300 P 243 T 810 823 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM G HYD PRESS SW2 | 279334 | 2 279300 P 243 T 810 823 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM G HYD PRESS XMTR 1065GN | 279334 | 2 279300 P 247 T 810 825 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM Y HYD PRESS SW1 | 279334 | 2 279300 P 251 T 810 827 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM Y HYD PRESS SW2 | 279334 | 2 279300 P 251 T 810 827 |
| F/CTL | EFCS 2 | ELAC1 OR WIRING FROM Y HYD PRESS XMTR 3065GN | 279334 | 2 279300 P 255 T 810 829 |
| F/CTL | EFCS 2 | ELAC2 COM BUS 1 | 279334 | 2 279400 PA242 T 810 886 |
| F/CTL | EFCS 2 | ELAC2 COM BUS 2 | 279334 | 2 279300 PB226 T 810 907 |
| F/CTL | EFCS 2 | ELAC2 COM OR BUS FROM FMGC1 | 279334 | 2 279300 PA292 T 810 889 |
| F/CTL | EFCS 2 | ELAC2 COM OR BUS FROM FMGC2 | 279334 | 2 279300 PA294 T 810 891 |
| F/CTL | EFCS 2 | ELAC2 COM OR BUS 2 FROM ADR1 | 279334 | 2 279300 P 296 T 810 847 |
| F/CTL | EFCS 2 | ELAC2 COM OR BUS 2 FROM ADR3 | 279334 | 2 279300 PA204 T 810 851 |
| F/CTL | EFCS 2 | ELAC2 COM OR BUS 2 FROM IR1 | 279334 | 2 279300 PA207 T 810 853 |
| F/CTL | EFCS 2 | ELAC2 COM OR BUS 2 FROM IR3 | 279334 | 2 279300 PA212 T 810 857 |
| F/CTL | EFCS 2 | ELAC2 COM OR BUS 5 FROM FCDC2 | 279334 | 2 279300 PB233 T 810 915 |

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| WARNINGS/MALFUNCTIONS | | FAULT - ISOLATION | | |
|------------------------|--------|--|--------|-----------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | C PROCEDURE |
| F/CTL | EFCS 2 | ELAC2 COM OR WIRING FROM ACCLRM 3 12CE3 | 279334 | 2 279300 P 231 T 810 817 |
| F/CTL | EFCS 2 | ELAC2 COM OR WIRING FROM ACCLRM 4 12CE4 | 279334 | 2 279300 P 233 T 810 818 |
| F/CTL | EFCS 2 | ELAC2 MON BUS 1 | 279334 | 2 279400 PA244 T 810 887 |
| F/CTL | EFCS 2 | ELAC2 MON BUS 2 | 279334 | 2 279300 PB226 T 810 907 |
| F/CTL | EFCS 2 | ELAC2 MON OR BUS FROM FMGC1 | 279334 | 2 279300 PA292 T 810 889 |
| F/CTL | EFCS 2 | ELAC2 MON OR BUS FROM FMGC2 | 279334 | 2 279300 PA294 T 810 891 |
| F/CTL | EFCS 2 | ELAC2 MON OR BUS 2 FROM ADR2 | 279334 | 2 279300 PA200 T 810 849 |
| F/CTL | EFCS 2 | ELAC2 MON OR BUS 2 FROM ADR3 | 279334 | 2 279300 PA204 T 810 851 |
| F/CTL | EFCS 2 | ELAC2 MON OR BUS 2 FROM IR2 | 279334 | 2 279300 PA210 T 810 855 |
| F/CTL | EFCS 2 | ELAC2 MON OR BUS 2 FROM IR3 | 279334 | 2 279300 PA212 T 810 857 |
| F/CTL | EFCS 2 | ELAC2 MON OR BUS 6 FROM FCDC1 | 279334 | 2 279300 PB232 T 810 914 |
| F/CTL | EFCS 2 | ELAC2 MON OR WIRING FROM ACCLRM 3 12CE3 | 279334 | 2 279300 P 231 T 810 817 |
| F/CTL | EFCS 2 | ELAC2 MON OR WIRING FROM ACCLRM 4 12CE4 | 279334 | 2 279300 P 233 T 810 818 |
| F/CTL | EFCS 2 | ELAC2 OR BUS FROM SEC1 | 279334 | 2 279300 PB230 T 810 912 |
| F/CTL | EFCS 2 | ELAC2 OR BUS FROM SEC2 | 279334 | 2 279300 PB228 T 810 910 |

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| LIADNINGS (MALEUNGITONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|-------------------------|---------------------|---|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM | 279334 | 2 | 279300 PA295 T 810 892 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM | 279334 | 2 | 279300 PA299 T 810 894 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM B | 279334 | 2 | 279300 P 237 T 810 820 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM B | 279334 | 2 | 279300 P 237 T 810 820 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM B HYD PRESS XMTR 2065GN | 279334 | 2 | 279300 P 241 T 810 822 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM G | 279334 | 2 | 279300 P 245 T 810 824 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM G HYD PRESS SW2 | 279334 | 2 | 279300 P 245 T 810 824 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM G HYD PRESS XMTR 1065GN | 279334 | 2 | 279300 P 249 T 810 826 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM Y HYD PRESS SW1 | 279334 | 2 | 279300 P 253 T 810 828 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM Y HYD PRESS SW2 | 279334 | 2 | 279300 P 253 T 810 828 | |
| F/CTL | EFCS 2 | ELAC2 OR WIRING FROM Y HYD PRESS XMTR 3065GN | 279334 | 2 | 279300 P 257 T 810 830 | |
| F/CTL | EFCS 2 | EMER DISCRETE DISAGREE | 279334 | 2 | 279300 PB241 T 810 920 | |
| F/CTL | EFCS 2 | FCDC1 BUS 3 | 279534 | 2 | 279500 P 219 T 810 819 | |
| F/CTL | EFCS 2 | FCDC1 BUS 5 | 279534 | 2 | 279500 P 217 T 810 817 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS FROM SEC1 | 279534 | 2 | 279500 P 210 T 810 810 | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|------------------------|---------------------|----------------------------------|----------|---------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA C | 1 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS FROM SEC1 | 279534 2 | 279500 P 210 T 810 810 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS FROM SEC2 | 279534 2 | 279500 P 208 T 810 808 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS FROM SEC2 MON | 279534 2 | 279500 P 208 T 810 808 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS FROM SEC3 | 279534 2 | 279500 P 212 T 810 812 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS FROM SEC3 | 279534 2 | 279500 P 212 T 810 812 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS 2 FROM ELAC1 COM | 279534 2 | 279500 P 204 T 810 804 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS 2 FROM ELAC1 MON | 279534 2 | 279500 P 204 T 810 804 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS 2 FROM ELAC2 COM | 279534 2 | 279500 P 206 T 810 806 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS 2 FROM ELAC2 MON | 279534 2 | 279500 P 206 T 810 806 | |
| F/CTL | EFCS 2 | FCDC1 OR BUS 3 FROM FCDC2 | 279534 2 | 279500 P 215 T 810 815 | |
| F/CTL | EFCS 2 | FCDC2 BUS 3 | 279534 2 | 279500 P 218 T 810 818 | |
| F/CTL | EFCS 2 | FCDC2 BUS 6 | 279534 2 | 279500 P 216 T 810 816 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS FROM SEC1 | 279534 2 | 279500 P 211 T 810 811 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS FROM SEC1 | 279534 2 | 279500 P 211 T 810 811 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS FROM SEC2 | 279534 2 | 279500 P 209 T 810 809 | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|------------------------|---------------------|----------------------------------|----------|-----------------------------|--|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA (| PROCEDURE | |
| F/CTL | EFCS 2 | FCDC2 OR BUS FROM SEC2 Mon | 279534 2 | 2 279500 P 209 T 810 809 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS FROM SEC3 | 279534 2 | 2 279500 P 213 T 810 813 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS FROM SEC3 | 279534 2 | 2 279500 P 213 T 810 813 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS 2 FROM ELAC1 COM | 279534 2 | 2 279500 P 205 T 810 805 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS 2 FROM ELAC1 MON | 279534 2 | 2 279500 P 205 T 810 805 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS 2 FROM ELAC2 COM | 279534 2 | 2 279500 P 207 T 810 807 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS 2 FROM ELAC2 MON | 279534 2 | 2 279500 P 207 T 810 807 | |
| F/CTL | EFCS 2 | FCDC2 OR BUS 3 FROM FCDC1 | 279534 2 | 2 279500 P 214 T 810 814 | |
| F/CTL | EFCS 2 | FMGC1 | 228334 2 | 2 228300 P 294 T 810 859 | |
| F/CTL | EFCS 2 | FMGC2 | 228334 2 | 2 228300 P 295 T 810 860 | |
| F/CTL | EFCS 2 | G HYD PRESS SW1 | 279218 | 2 279200 P 213 T 810 824 | |
| F/CTL | EFCS 2 | G HYD PRESS SW1 | 293200 2 | 2 279200 P 213 T 810 824 | |
| F/CTL | EFCS 2 | G HYD PRESS SW2 | 279218 2 | 2 279200 P 215 T 810 825 | |
| F/CTL | EFCS 2 | G HYD PRESS SW2 | 293200 2 | 2 279200 P 215 T 810 825 | |

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| LIADNITNES (MALIFILINETTONS | CFDS FAULT MESSAGES | | | | FAULT | |
|--|--|---|----------------------------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ISOLATION PROCEDURE | |
| F/CTL | EFCS 2 | G HYD PRESS XMTR 1065GN | 293200 | 2 | 279200 P 217 T 810 826 | |
| | ECAM 2 | SDAC1 : G HYD PRESS XMTR 1065GN | 293211 | 1 | | |
| | ECAM 2 | SDAC2 : G HYD PRESS XMTR 1065GN | 293211 | 1 | | |
| F/CTL | EFCS 2 | G HYD PRESS XMTR 1065GN associated with | 293200 | 2 | 279200 P 217 T 810 826 | |
| | ECAM 1 | ! | 293211 | 1 | | |
| | ECAM 1 | 1 | 293211 | 1 | | |
| | IDENT: | ECAM 2 | | | | |
| F/CTL | EFCS 2 | IR1 | 341234 | | 341400 PA277 T 810 966 | |
| | | AFS, CFDS, EFCS 1, EFCS 2, GPWC, RADAR 1, TCAS | DS, EFCS 1, EFCS 2, EIS 3, | | | |
| F/CTL | EFCS 2 | IR1 - BUS 2 | 341234 | | 341400 P 215 T 810 811 | |
| | IDENT: | AFS, EFCS 1, EFCS 2 | | | | |
| F/CTL associated with | EFCS 2 | IR1 - BUS 3 | 341234 | | 341400 P 220 T 810 815 | |
| PFD Flag(s) ADIRS-Red HDG flag in view on CAPT PFD | IDENT: AFS, CFDS, EFCS 1, EFCS 2, EIS 3, GPWC, RADAR 1, TCAS | | | | | |
| F/CTL | EFCS 2 | IR2 | 341234 | | 341400 PA279 | |
| | IDENT: | AFS, CFDS, EFCS 1, EFCS 2, | , EIS 3 | | - т 810 967 | |
| F/CTL | EFCS 2 | IR2 - BUS 2 | 341234 | | 341400 P 245 T 810 836 | |
| | IDENT: | AFS, EFCS 1, EFCS 2, RADA | R 2 | | 1 610 650 | |
| F/CTL associated with | EFCS 2 | IR2 OR BUS 3 TO ELAC1 | 341234 | | 341400 P 249 T 810 840 | |
| PFD Flag(s) ADIRS-Red HDG flag in view on CAPT PFD | IDENT: | AFS, CFDS, EFCS 1, EFCS 2, | , EIS 3 | | 1 010 040 | |

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| LIADNINGS /MALEUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|--|---------------------|--|----------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! | |
| F/CTL | EFCS 2 | IR2 OR BUS 3 TO ELAC1 | 341234 | 2 | 279300 PA208 T 810 854 | |
| F/CTL | EFCS 2 | IR3 | 341234 | | 341400 PA281 T 810 968 | |
| | ! | AFS, CFDS, EFCS 1, EFCS 2, EIS 3 | , EIS 2 | | 810 708 | |
| F/CTL associated with | EFCS 2 | IR3 - BUS 2 | 341234 | 1 | 341400 P 270 T 810 856 | |
| PFD Flag(s) ADIRS-Red HDG flag in view on CAPT PFD | | AFS, EFCS 1, EFCS 2, EIS 2 RADAR 2 | 2, | | | |
| F/CTL associated with | EFCS 2 | IR3 - BUS 2 | 341234 | 1 | 341400 P 270 T 810 856 | |
| PFD Flag(s) ADIRS-Red HDG flag in view on F/O PFD | IDENT: | | | | | |
| F/CTL associated with | EFCS 2 | IR3 - BUS 3 | 341234 | | 341400 P 275 T 810 860 | |
| PFD Flag(s) ADIRS-Red HDG flag in view on CAPT PFD | | AFS, CFDS, EFCS 1, EFCS 2, RADAR 1 | , EIS 1, | | | |
| F/CTL associated with | EFCS 2 | IR3 - BUS 3 | 341234 | | 341400 P 275 T 810 860 | |
| PFD Flag(s) ADIRS-Red HDG flag in view on F/O PFD | IDENT: | 1 810 860 | | | | |
| F/CTL | EFCS 2 | L B AIL MODE XDCR 33CE3 OR INPUT OF ELAC1 | 271451 | 2 | 271000 P 212 T 810 808 | |
| F/CTL | EFCS 2 | OR INPUT OF ELAC1 associated with | | | Т 810 809 | |
| F/CTL | EFCS 2 | L G AIL MODE XDCR 33CE1 OR INPUT FROM ELAC2 | 271451 | 2 | 271000 P 229 T 810 816 | |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT - ISOLATION | |
|---|--|---------------------|---|--------|-------------|---------------------------|--|
| | WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | !! | |
| | F/CTL | EFCS 2 | L G AIL MODE XDCR 33CE1 OR INPUT FROM ELAC2 associated with | 271451 | 2 | 279000 P 220 T 810 810 | |
| | | EFCS 2 | R B AIL MODE XDCR 33CE4 OR INPUT OF ELAC2 | 271451 | 2 | | |
| | F/CTL associated with Upper ECAM DU Warnings | EFCS 2 | L G ELEV POS XDCR 34CE1 COM E2/S2:USE STBY XDCR associated with | 273451 | 1 | 279000 P 246 T 810 823 | |
| | F/CTL ELAC 1 PITCH FAULT and F/CTL ELAC 2 PITCH FAULT | EFCS 2 | R Y ELEV POS XDCR 34CE2 COM E2/S2:USE STBY XDCR and | 273451 | 1 | | |
| | 1701L LEAC Z FITCH TAGET | EFCS 2 | ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE and | 279334 | 1 | | |
| | | EFCS 2 | SEC2 COM OR INPUT OF THS ACT XDCR3 9CE | 279434 | 2 | | |
| | F/CTL | EFCS 2 | LGCIU BUS DISAGREE | 323171 | 2 | 279400 PA252 T 810 894 | |
| R | F/CTL associated with Upper ECAM DU Warnings L/G LGCIU 1 FAULT | EFCS 2 | LGCIU1 | 323171 | 2 | 323100 PB200 T 810 881 | |
| | F/CTL | EFCS 2 | LGCIU1 BUS 2 | 323171 | 2 | 323100 PA205 T 810 843 | |
| | F/CTL | EFCS 2 | LGCIU1 OR BUS 1 TO SEC1 | 323171 | 2 | 279400 PA248 T 810 890 | |
| | F/CTL | EFCS 2 | LGCIU1 OR BUS 2 TO SEC2 | 323171 | 2 | 279400 PA247 T 810 889 | |
| | F/CTL | EFCS 2 | LGCIU1 OR BUS 2 TO SEC3 | 323171 | 2 | 279400 PA246 T 810 888 | |
| R | F/CTL associated with Upper ECAM DU Warnings L/G LGCIU 2 FAULT | EFCS 2 | LGCIU2 | 323171 | 2 | 323100 PB200 T 810 881 | |
| | F/CTL | EFCS 2 | LGCIU2 BUS 2 | 323171 | 2 | 323100 PA209 T 810 845 | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|------------------------|---------------------|---|--------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| F/CTL | EFCS 2 | LGCIU2 OR BUS 1 TO SEC2 | 323171 | 2 | 279400 PA250 T 810 892 |
| F/CTL | EFCS 2 | LGCIU2 OR BUS 1 TO SEC3 | 323171 | 2 | 279400 PA249 T 810 891 |
| F/CTL | EFCS 2 | LGCIU2 OR BUS 2 TO SEC1 | 323171 | 2 | 279400 PA251 T 810 893 |
| F/CTL | EFCS 2 | R B AIL MODE XDCR 33CE4 OR INPUT OF ELAC2 | 271451 | 2 | 271000 P 255 T 810 829 |
| F/CTL | EFCS 2 | R G AIL MODE XDCR 33CE2 OR INPUT OF ELAC1 | 271451 | 2 | 271000 P 241 T 810 822 |
| F/CTL | EFCS 2 | RA1 | 344233 | | 344200 P 207 T 810 803 |
| | IDENT: | IDENT: AFS, EFCS 1, EFCS 2 | | | |
| F/CTL | EFCS 2 | RA1 OR BUS TO ELAC1 | 344233 | 2 | 279300 PA288 T 810 885 |
| F/CTL | EFCS 2 | RA1 OR BUS TO ELAC2 | 344233 | 2 | 279300 PA287 T 810 884 |
| F/CTL | EFCS 2 | RA2 | 344233 | | 344200 P 211 T 810 805 |
| | IDENT: | AFS, EFCS 1, EFCS 2 | | | כטס טוס ו |
| F/CTL | EFCS 2 | RA2 OR BUS TO ELAC1 | 344233 | 2 | 279300 PA290 T 810 887 |
| F/CTL | EFCS 2 | RA2 OR BUS TO ELAC2 | 344233 | 2 | 279300 PA289 T 810 886 |
| F/CTL | EFCS 2 | SEC1 COM BUS 1 | 279434 | 2 | 279400 PA228 T 810 876 |
| F/CTL | EFCS 2 | SEC1 COM OR BUS 3 FROM FCDC2 | 279434 | 2 | 279400 PA233 T 810 879 |
| F/CTL | EFCS 2 | SEC1 COM OR WIRING FROM THS ACTR XDCR 2 9CE | 279434 | 2 | 279400 P 268 T 810 836 |
| F/CTL | EFCS 2 | SEC1 COM OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279434 | 2 | 273000 P 211 T 810 807 |

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TROUBLE SHOOTING MANUAL

| LIADNINGS /MALEUNGTIONS | | FAULT - ISOLATION | | |
|----------------------------------|--------|---|--------|-----------------------------|
| WARNINGS/MALFUNCTIONS - | SOURCE | MESSAGE | ATA | PROCEDURE |
| F/CTL | EFCS 2 | SEC1 COM OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279434 | 2 273000 P 254 T 810 829 |
| F/CTL | EFCS 2 | SEC1 MON BUS 1 | 279434 | 2 279400 PA228 T 810 876 |
| F/CTL | EFCS 2 | SEC1 MON OR BUS 4 FROM FCDC1 | 279434 | 2 279400 PA232 T 810 878 |
| F/CTL | EFCS 2 | SEC1 MON OR WIRING FROM THS ACTR XDCR 2 9CE | 279434 | 2 279400 P 270 T 810 837 |
| F/CTL | EFCS 2 | SEC1 MON OR WIRING TO L B ELEV SERVO VLV 34CE3 | 279434 | 2 273000 P 213 T 810 808 |
| F/CTL | EFCS 2 | SEC1 MON OR WIRING TO L G ELEV SOL VLV 34CE1 | 279434 | 2 273000 P 240 T 810 822 |
| F/CTL | EFCS 2 | SEC1 MON OR WIRING TO R B ELEV SERVO VLV 34CE4 | 279434 | 2 273000 P 256 T 810 830 |
| F/CTL | EFCS 2 | SEC1 MON OR WIRING TO R Y ELEV SOL VLV 34CE2 | 279434 | 2 273000 P 283 T 810 844 |
| F/CTL | EFCS 2 | SEC1 OR BUS 1 FROM ELAC1 | 279434 | 2 279400 PA238 T 810 884 |
| F/CTL | EFCS 2 | SEC1 OR BUS 1 FROM ELAC2 | 279434 | 2 279400 PA244 T 810 887 |
| F/CTL | EFCS 2 | SEC1 OR BUS 3 FROM ADR1 | 279434 | 2 279400 P 281 T 810 842 |
| F/CTL | EFCS 2 | SEC1 OR BUS 3 FROM ADR3 | 279434 | 2 279400 P 289 T 810 846 |
| F/CTL | EFCS 2 | SEC1 OR BUS 3 FROM IR1 | 279434 | 2 279400 P 293 T 810 848 |
| F/CTL | EFCS 2 | SEC1 OR BUS 3 FROM IR3 | 279434 | 2 279400 P 297 T 810 852 |
| F/CTL | EFCS 2 | SEC1 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279434 | 2 279400 P 205 T 810 803 |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---------------------------|---------------------|---|--------|---|---------------------------|
| WARNINGS/ MALI ONC I TONS | SOURCE | MESSAGE | ATA | С | !!! |
| F/CTL | EFCS 2 | SEC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 2 | 279400 P 201 T 810 801 |
| F/CTL | EFCS 2 | SEC1 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279434 | 2 | 279400 P 207 T 810 804 |
| F/CTL | EFCS 2 | SEC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 2 | 279400 P 203 T 810 802 |
| F/CTL | EFCS 2 | SEC1 OR INPUT OF WHEEL TACHOMETER | 279434 | 2 | 279400 P 241 T 810 821 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM ACCLRM 1 12CE1 | 279434 | 2 | 279400 P 245 T 810 823 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM ACCLRM 2 12CE2 | 279434 | 2 | 279400 P 247 T 810 824 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM | 279434 | 2 | 279400 PA203 T 810 856 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM | 279434 | 2 | 279400 PA209 T 810 859 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM B | 279434 | 2 | 279400 P 250 T 810 827 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM G | 279434 | 2 | 279400 P 256 T 810 830 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM L ELEV POS MON XDCR | 279434 | 2 | 273000 P 208 T 810 805 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|------------------------|---------------------|---|--------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM L ELEV POS MON XDCR associated with | 279434 | 2 | 279000 P 236 T 810 818 |
| | EFCS 2 | SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279434 | 2 | |
| | EFCS 2 | SEC1 OR WIRING FROM R ELEV POS MON XDCR | 279434 | 2 | |
| | EFCS 2 | SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279434 | 2 | |
| | EFCS 2 | SEC1 MON OR WIRING FROM THS ACTR XDCR 2 9CE | 279434 | 2 | |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 | 279434 | 2 | 273000 P 203 T 810 802 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 associated with | 279434 | 2 | 279000 P 234 T 810 817 |
| | EFCS 2 | SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 | 279434 | 2 | |
| | EFCS 2 | SEC1 COM OR WIRING FROM THS ACTR XDCR 2 9CE | 279434 | 2 | |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 | 279434 | 2 | 273000 P 238 T 810 821 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM R ELEV POS MON XDCR | 279434 | 2 | 273000 P 251 T 810 827 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 | 279434 | 2 | 273000 P 246 T 810 824 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 | 279434 | 2 | 273000 P 281 T 810 843 |
| F/CTL | EFCS 2 | SEC1 OR WIRING FROM Y HYD PRESS SW1 | 279434 | 2 | 279400 P 262 T 810 833 |
| F/CTL | EFCS 2 | SEC1 OR WIRING TO THS ACTR SERVO MOT 2 9CE | 279434 | 2 | 279400 P 273 T 810 838 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|-----------------------|---------------------|--|--------|---|---------------------------|
| WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL | EFCS 2 | SEC1 PERMANENT IDLE OF L THROTTLE CTL UNIT 8KS1 | 279434 | 2 | 279400 P 227 T 810 814 |
| F/CTL | EFCS 2 | SEC1 PERMANENT IDLE OF R THROTTLE CTL UNIT 8KS2 | 279434 | 2 | 279400 P 233 T 810 817 |
| F/CTL | EFCS 2 | SEC2 COM BUS 1 | 279434 | 2 | 279400 PA226 T 810 875 |
| F/CTL | EFCS 2 | SEC2 COM OR BUS 5 FROM FCDC1 | 279434 | 2 | 279400 PA234 T 810 880 |
| F/CTL | EFCS 2 | SEC2 COM OR INPUT OF THS ACT XDCR3 9CE | 279434 | 2 | 279400 P 275 T 810 839 |
| F/CTL | EFCS 2 | SEC2 COM OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279434 | 2 | 273000 P 232 T 810 818 |
| F/CTL | EFCS 2 | SEC2 COM OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279434 | 2 | 273000 P 275 T 810 840 |
| F/CTL | EFCS 2 | SEC2 MON BUS 1 | 279434 | 2 | 279400 PA226 T 810 875 |
| F/CTL | EFCS 2 | SEC2 MON OR BUS 6 FROM FCDC2 | 279434 | 2 | 279400 PA236 T 810 882 |
| F/CTL | EFCS 2 | SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE | 279434 | 2 | 279400 P 277 T 810 840 |
| F/CTL | EFCS 2 | SEC2 MON OR WIRING TO L B ELEV SOL VLV 34CE3 | 279434 | 2 | 273000 P 219 T 810 811 |
| F/CTL | EFCS 2 | SEC2 MON OR WIRING TO L G ELEV SERVO VLV 34CE1 | 279434 | 2 | 273000 P 234 T 810 819 |
| F/CTL | EFCS 2 | SEC2 MON OR WIRING TO R B ELEV SOL VLV 34CE4 | 279434 | 2 | 273000 P 262 T 810 833 |
| F/CTL | EFCS 2 | SEC2 MON OR WIRING TO R Y ELEV SERVO VLV 34CE2 | 279434 | 2 | 273000 P 277 T 810 841 |
| F/CTL | EFCS 2 | SEC2 OR BUS 1 FROM ELAC1 | 279434 | 2 | 279400 PA258 T 810 896 |

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| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|------------------------|--------|--|----------|-----------------------------|--|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA (| PROCEDURE | |
| F/CTL | EFCS 2 | SEC2 OR BUS 1 FROM ELAC2 | 279434 | 2 279400 PA262 T 810 898 | |
| F/CTL | EFCS 2 | SEC2 OR BUS 2 FROM ADR1 | 279434 | 2 279400 P 283 T 810 843 | |
| F/CTL | EFCS 2 | SEC2 OR BUS 2 FROM ADR2 | 279434 | 2 279400 P 285 T 810 844 | |
| F/CTL | EFCS 2 | SEC2 OR BUS 2 FROM IR1 | 279434 | 2 279400 P 294 T 810 849 | |
| F/CTL | EFCS 2 | SEC2 OR BUS 2 FROM IR2 | 279434 | 2 279400 P 295 T 810 850 | |
| F/CTL | EFCS 2 | SEC2 OR INPUT OF CAPT PITCH CTL SSTU 4CE3 | 279434 | 2 279400 P 213 T 810 807 | |
| F/CTL | EFCS 2 | SEC2 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 2 279400 P 209 T 810 805 | |
| F/CTL | EFCS 2 | SEC2 OR INPUT OF F/O PITCH CTL SSTU 4CE4 | 279434 | 2 279400 P 215 T 810 808 | |
| F/CTL | EFCS 2 | SEC2 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 2 279400 P 211 T 810 806 | |
| F/CTL | EFCS 2 | SEC2 OR INPUT OF L THROTTLE CTL UNIT 8KS1 | 279434 | 2 279400 P 223 T 810 812 | |
| F/CTL | EFCS 2 | SEC2 OR INPUT OF R THROTTLE CTL UNIT 8KS2 | 279434 2 | 2 279400 P 225 T 810 813 | |
| F/CTL | EFCS 2 | SEC2 OR INPUT OF SPBK CTL XDCR UNIT 7CE | 279434 | 2 279400 P 221 T 810 811 | |
| F/CTL | EFCS 2 | SEC2 OR INPUT OF WHEEL | 279434 | 2 279400 P 239 T 810 820 | |
| F/CTL | EFCS 2 | SEC2 OR OUTPUT TO THS ACTR SERVO MOT3 9CE | 279434 | 2 279400 P 279 T 810 841 | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM ACCLRM 3 12CE3 | 279434 | 2 279400 P 248 T 810 825 | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|-----------------------|---------------------|---|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM ACCLRM 4 12CE4 | 279434 | 2 | 279400 P 249 T 810 826 | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM SFCC1 | 279434 | 2 | 279400 P 299 T 810 854 | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM SFCC2 | 279434 | 2 | 279400 PA205 T 810 857 | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM B HYD PRESS SW2 | 279434 | 2 | 279400 P 252 T 810 828 | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM G HYD PRESS SW2 | 279434 | 2 | 279400 P 258 T 810 831 | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM L ELEV POS MON XDCR | 279434 | 2 | 273000 P 229 T 810 816 | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM L ELEV POS MON XDCR associated with | 279434 | 2 | 279000 P 244 T 810 822 | |
| | EFCS 2 | SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279434 | 2 | | |
| | EFCS 2 | SEC2 OR WIRING FROM R ELEV POS MON XDCR | 279434 | 2 | | |
| | EFCS 2 | SEC2 MON OR INPUT OF THS | 279434 | 2 | | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 | 279434 | 2 | 273000 P 217 T 810 810 | |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|------------------------|---------------------|---|--------|---|---------------------------|
| WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM L B | 279434 | | 279000 P 244 T 810 822 |
| | EFCS 2 | associated with SEC2 OR WIRING FROM L ELEV POS MON XDCR | 279434 | 2 | |
| | EFCS 2 | SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279434 | 2 | |
| | EFCS 2 | SEC2 OR WIRING FROM R ELEV POS MON XDCR and | 279434 | 2 | |
| | EFCS 2 | SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE | 279434 | 2 | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 | 279434 | | 273000 P 225 T 810 813 |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 associated with | 279434 | | 279000 P 242 T 810 821 |
| | EFCS 2 | ! | 279434 | 2 | |
| | EFCS 2 | SEC2 COM OR INPUT OF THS | 279434 | 2 | |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM R ELEV POS MON XDCR | 279434 | | 273000 Р 272 Т 810 838 |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 | 279434 | | 273000 Р 260 Т 810 832 |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 | 279434 | | 273000 Р 268 Т 810 835 |
| F/CTL | EFCS 2 | SEC2 OR WIRING FROM Y HYD PRESS SW2 | 279434 | | 279400 Р 264 Т 810 834 |
| F/CTL | EFCS 2 | SEC2 PERMANENT IDLE OF L THROTTLE CTL UNIT 8KS1 | 279434 | | 279400 Р 229 Т 810 815 |
| F/CTL | EFCS 2 | SEC2 PERMANENT IDLE OF R THROTTLE CTL UNIT 8KS2 | 279434 | | 279400 P 235 T 810 818 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|-----------------------|---------------------|--|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| F/CTL | EFCS 2 | SEC3 COM BUS 1 | 279434 | 2 | 279400 PA230 T 810 877 |
| F/CTL | EFCS 2 | SEC3 COM OR BUS 5 FROM FCDC1 | 279434 | 2 | 279400 PA235 T 810 881 |
| F/CTL | EFCS 2 | SEC3 MON BUS 1 | 279434 | 2 | 279400 PA230 T 810 877 |
| F/CTL | EFCS 2 | SEC3 MON OR BUS 6 FROM FCDC2 | 279434 | 2 | 279400 PA237 T 810 883 |
| F/CTL | EFCS 2 | SEC3 OR BUS 1 FROM ELAC1 | 279434 | 2 | 279400 PA260 T 810 897 |
| F/CTL | EFCS 2 | SEC3 OR BUS 1 FROM ELAC2 | 279434 | 2 | 279400 PA264 T 810 899 |
| F/CTL | EFCS 2 | SEC3 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279434 | 2 | 279400 P 217 T 810 809 |
| F/CTL | EFCS 2 | SEC3 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279434 | 2 | 279400 P 219 T 810 810 |
| F/CTL | EFCS 2 | SEC3 OR INPUT OF WHEEL | 279434 | 2 | 279400 P 243 T 810 822 |
| F/CTL | EFCS 2 | SEC3 OR WIRING FROM SFCC1 | 279434 | 2 | 279400 PA201 T 810 855 |
| F/CTL | EFCS 2 | SEC3 OR WIRING FROM SFCC2 | 279434 | 2 | 279400 PA207 T 810 858 |
| | IDENT: | IDENT: EFCS 2 | | | |
| F/CTL | EFCS 2 | SEC3 OR WIRING FROM B HYD PRESS SW2 | 279434 | 2 | 279400 P 254 T 810 829 |
| F/CTL | EFCS 2 | SEC3 OR WIRING FROM G HYD PRESS SW2 | 279434 | 2 | 279400 P 260 T 810 832 |
| F/CTL | EFCS 2 | SEC3 OR WIRING FROM Y HYD PRESS SW2 | 279434 | 2 | 279400 P 266 T 810 835 |
| F/CTL | EFCS 2 | SEC3 PERMANENT IDLE OF L THROTTLE CTL UNIT 8KS1 | 279434 | 2 | 279400 P 231 T 810 816 |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | |
|---|-----------------------|--------|--|--------|---|----------------------------|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| | F/CTL | EFCS 2 | SEC3 PERMANENT IDLE OF R THROTTLE CTL UNIT 8KS2 | 279434 | 2 | 279400 P 237 T 810 819 |
| R | F/CTL | EFCS 2 | SFCC1 | 275134 | 2 | 275100 P 288 T 810 839 |
| R | F/CTL | EFCS 2 | SFCC1 - FLAP | 275134 | 2 | 275100 P 288 T 810 839 |
| | F/CTL | EFCS 2 | SFCC1 - SLAT | 275134 | 2 | 278100 P 269 T 810 828 |
| R | F/CTL | EFCS 2 | SFCC2 | 275134 | 2 | 275100 P 288 T 810 839 |
| R | F/CTL | EFCS 2 | SFCC2 - FLAP | 275134 | 2 | 275100 P 288 T 810 839 |
| | F/CTL | EFCS 2 | SFCC2 - SLAT | 275134 | 2 | 278100 P 269 T 810 828 |
| | F/CTL | EFCS 2 | SPBK CTL XDCR UNIT 7CE | 279213 | 2 | 276000 P 205 T 810 803 |
| | F/CTL | EFCS 2 | THS ACTR OVRD SW 1 9CE | 274451 | 2 | 274000 P 203 T 810 802 |
| | F/CTL | EFCS 2 | THS ACTR OVRD SW 2 9CE OF ELAC1 | 274451 | 2 | 274000 P 208 T 810 804 |
| | F/CTL | EFCS 2 | THS ACTR OVRD SW 3 9CE | 274451 | 2 | 274000 P 213 T 810 806 |
| | F/CTL | EFCS 2 | THS ACTR POS ERROR 9CE OF SEC1 | 274451 | 2 | 274000 P 205 T 810 803 |
| | F/CTL | EFCS 2 | THS ACTR POS ERROR 9CE OF SEC2 | 274451 | 2 | 274000 P 210 T 810 805 |
| | F/CTL | EFCS 2 | THS ACTR SERVO MOT 3 9CE OF SEC2 | 274451 | 2 | 274000 P 201 T 810 801 |
| | F/CTL | EFCS 2 | Y HYD PRESS SW1 | 279218 | 2 | 279200 P 219 T 810 827A |

| EFF : | ALL | | |
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| WARNINGS/MALFUNCTIONS | | | FAULT | | |
|-----------------------|----------|---|--------|---|----------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| F/CTL | EFCS 2 | Y HYD PRESS SW1 | 293200 | 2 | 279200 P 219 T 810 827A |
| F/CTL | EFCS 2 | Y HYD PRESS SW2 | 279218 | 2 | 279200 P 221 T 810 828A |
| F/CTL | EFCS 2 | Y HYD PRESS SW2 | 293200 | 2 | 279200 P 221 T 810 828A |
| F/CTL | EFCS 2 | Y HYD PRESS XMTR 3065GN associated with | 293200 | 2 | 279200 P 223 T 810 829 |
| | ECAM 2 | SDAC1: Y HYD PRESS XMTR 3065GN | 293211 | 1 | |
| | ECAM 2 | SDAC2 : Y HYD PRESS XMTR 3065GN | 293211 | 1 | |
| F/CTL | EFCS 2 | Y HYD PRESS XMTR 3065GN associated with | 293200 | 2 | 279200 P 223 T 810 829 |
| | ECAM 1 | SDAC1 : Y HYD PRESS XMTR 3065GN and | 293211 | 1 | |
| | ECAM 1 | SDAC2 : Y HYD PRESS XMTR 3065GN | 293211 | 1 | |
| | IDENT: I | ECAM 2 | | | |
| F/CTL | LGCIU 1 | L L/G EXT PROX SNSR 21GA | 323173 | 1 | 323100 PA226 T 810 854 |
| F/CTL | LGCIU 1 | L L/G EXT PROX SNSR 21GA TGT POS | 323173 | 1 | 323100 PA226 T 810 854 |
| F/CTL | LGCIU 1 | N L/G EXT PROX SNSR 24GA | 323173 | 1 | 323100 PA226 T 810 854 |
| F/CTL | LGCIU 1 | N L/G EXT PROX SNSR 24GA TGT POS | 323173 | 1 | 323100 PA226 T 810 854 |
| F/CTL | LGCIU 1 | N L/G UPLK PROX SNSR 12GA | 323173 | 1 | 323100 PA226 T 810 854 |
| F/CTL | LGCIU 1 | N L/G UPLK PROX SNSR 12GA TGT POS | 323173 | 1 | 323100 PA226 T 810 854 |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | |
|-----------------------|---------------------|--|--------|-----------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | - ISOLATION C PROCEDURE | |
| F/CTL | LGCIU 1 | R L/G EXT PROX SNSR 20GA | 323173 | 1 323100 PA226 T 810 854 | |
| F/CTL | LGCIU 1 | R L/G EXT PROX SNSR 20GA TGT POS | 323173 | 1 323100 PA226 T 810 854 | |
| F/CTL | LGCIU 2 | L L/G EXT PROX SNSR 23GA | 323173 | 1 323100 PA226 T 810 854 | |
| F/CTL | LGCIU 2 | L L/G EXT PROX SNSR 23GA TGT POS | 323173 | 1 323100 PA226 T 810 854 | |
| F/CTL | LGCIU 2 | N L/G EXT PROX SNSR 25GA | 323173 | 1 323100 PA226 T 810 854 | |
| F/CTL | LGCIU 2 | N L/G EXT PROX SNSR 25GA TGT POS | 323173 | 1 323100 PA226 T 810 854 | |
| F/CTL | LGCIU 2 | N L/G UPLK PROX SNSR 13GA | 323173 | 1 323100 PA226 T 810 854 | |
| F/CTL | LGCIU 2 | N L/G UPLK PROX SNSR 13GA TGT POS | 323173 | 1 323100 PA226 T 810 854 | |
| F/CTL | LGCIU 2 | R L/G EXT PROX SNSR 22GA | 323173 | 1 323100 PA226 T 810 854 | |
| F/CTL | LGCIU 2 | R L/G EXT PROX SNSR 22GA TGT POS | 323173 | 1 323100 PA226 T 810 854 | |
| SFCS | | | | 275100 P 296 T 810 842 | |
| SFCS | SFCC 1 | FLP LH PROX SNSR 1 37CV MISADJUSTMENT | 275115 | 2 275100 P 267 T 810 830 | |
| SFCS | SFCC 1 | FLP LH PROX SNSR 1 37CV OR LGCIU 1 | 275115 | 2 275100 P 243 T 810 817 | |
| SFCS | SFCC 1 | FLP RH PROX SNSR 1 38CV MISADJUSTMENT | 275115 | 2 275100 P 267 T 810 830 | |
| SFCS | SFCC 1 | FLP RH PROX SNSR 1 38CV OR LGCIU 1 | 275115 | 2 275100 P 256 T 810 821 | |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|---|--------|--|--------|---|---------------------------|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| | SFCS | SFCC 1 | FLP 1 FAULTY FLP 2 DATA | 275134 | 2 | 275100 P 214 T 810 806 |
| R | SFCS | SFCC 1 | FLP 1 NO ADIRU 1 DATA | 341234 | 2 | 275100 P 272 T 810 832 |
| | SFCS | SFCC 1 | FLP 1 NO SFCC 2 DATA | 275134 | 2 | 275100 P 214 T 810 806 |
| | SFCS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and FLAPS SLOW shown in green on STATUS page | SFCC 1 | FLP 1 PIN PROG DISAGREE CONFIGURATION | 275134 | 1 | 275100 P 216 T 810 807 |
| | SFCS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and FLAPS SLOW shown in green on STATUS page | SFCC 1 | FLP 1 PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 275100 Р 216 Т 810 807 |
| | SFCS | SFCC 1 | SLT 1 FAULTY SLT 2 DATA | 275134 | 2 | 278100 P 265 T 810 826 |
| | SFCS | SFCC 1 | SLT 1 NO ADIRU 2 DATA | 341234 | 2 | 278100 P 263 T 810 825 |
| | SFCS | SFCC 1 | SLT 1 NO SFCC 2 DATA | 275134 | 2 | 278100 P 265 T 810 826 |
| R | SFCS | SFCC 2 | FLP LH PROX SNSR 2 39CV MISADJUSTMENT | 275115 | 2 | 275100 P 267 T 810 830 |
| | SFCS | SFCC 2 | FLP LH PROX SNSR 2 39CV OR LGCIU 2 | 275115 | 2 | 275100 P 243 T 810 817 |
| R | SFCS | SFCC 2 | FLP RH PROX SNSR 2 40CV MISADJUSTMENT | 275115 | 2 | 275100 P 267 T 810 830 |
| R | SFCS | SFCC 2 | FLP RH PROX SNSR 2 40CV OR LGCIU 2 | 275115 | 2 | 275100 P 256 T 810 821 |

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TROUBLE SHOOTING MANUAL

| | | | CFDS FAULT MESSAGES | | | |
|---|---|--------|---------------------------------------|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| | SFCS | SFCC 2 | FLP 2 FAULTY FLP 1 DATA | 275134 | 2 | 275100 P 214 T 810 806 |
| R | SFCS | SFCC 2 | FLP 2 NO ADIRU 1 DATA | 341234 | 2 | 275100 P 272 T 810 832 |
| | SFCS | SFCC 2 | FLP 2 NO SFCC 1 DATA | 275134 | 2 | 275100 P 214 T 810 806 |
| | SFCS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and FLAPS SLOW shown in green on STATUS page | SFCC 2 | FLP 2 PIN PROG DISAGREE CONFIGURATION | 275134 | 1 | 275100 P 216 T 810 807 |
| | SFCS associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and FLAPS SLOW shown in green on STATUS page | SFCC 2 | FLP 2 PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 275100 P 216 T 810 807 |
| | SFCS | SFCC 2 | SLT 2 FAULTY SLT 1 DATA | 275134 | 2 | 278100 P 265 T 810 826 |
| | SFCS | SFCC 2 | SLT 2 NO ADIRU 2 DATA | 341234 | 2 | 278100 P 263 T 810 825 |
| | SFCS | SFCC 2 | SLT 2 NO SFCC 1 DATA | 275134 | 2 | 278100 P 265 T 810 826 |

Upper ECAM DU Flags

| F/CTL - FLAPS - FLAP is shown in amber | !!! | 275100 P 241 T 810 815 |
|--|-----|---------------------------|
| associated with | | |
| Upper ECAM DU Warnings | | |
| F/CTL FLAP SYS 1 FAULT | | |
| F/CTL FLAP SYS 2 FAULT | | |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | 5 | | FAULT ISOLATION |
|---|---|--------|---|--------|--------------------------|---------------------------|
| | WARNINGS/ MALI ONCITONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | F/CTL - FLAPS - FLAP is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and STS-Inop System FLAPS | SFCC 1 | FLP 1 NO LGCIU 1 DATA | 323171 | 1 | 275100 P 269 T 810 831 |
| | F/CTL - FLAPS - FLAP is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and FLAPS SLOW shown in green on STATUS page | SFCC 1 | FLP 1 PCU VALVEBLOCK 23CV | 275453 | | 275100 P 201 T 810 802 |
| R | F/CTL - FLAPS - FLAP is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and STS-Inop System FLAPS | SFCC 1 | FLP1 NO CFDIU DATA | 313234 | 1 | 275100 P 276 T 810 834 |
| R | F/CTL - FLAPS - FLAP is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and STS-Inop System FLAPS and FLAPS SLOW shown in green on STATUS page | SFCC 1 | SFCC 1 FLP HALF SPEED CHECK PCU 6201CM | 275451 | 1 | 275100 P 260 T 810 826 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | FAULT ISOLATION | |
|---|---|--------|---|--------|--------------------|---------------------------|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | C | PROCEDURE |
| R | F/CTL - FLAPS - FLAP is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and STS-Inop System FLAPS | SFCC 2 | FLP 2 NO LGCIU 2 DATA | 323171 | 1 | 275100 P 269 T 810 831 |
| | F/CTL - FLAPS - FLAP is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and FLAPS SLOW shown in green on STATUS page | SFCC 2 | FLP 2 PCU VALVEBLOCK 24CV | 275453 | 1 | 275100 P 201 T 810 802 |
| R | F/CTL - FLAPS - FLAP is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and STS-Inop System FLAPS | SFCC 2 | FLP2 NO CFDIU DATA | 313234 | 1 | 275100 P 276 T 810 834 |
| R | F/CTL - FLAPS - FLAP is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and STS-Inop System FLAPS and FLAPS SLOW shown in green on STATUS page | SFCC 2 | SFCC 2 FLP HALF SPEED CHECK PCU 6201CM | 275451 | 1 | 275100 P 260 T 810 826 |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | S | | FAULT ISOLATION |
|--|--------|--|--------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL - FLAPS - FLAPS LOCKED is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT TIP BRK FAULT and STS-Inop System SLATS | | SLT LH WTB BLU SOLENOID 35CV OR WIRING TO SLT 1 | 278151 | 1 | 278100 P 251 T 810 822 |
| F/CTL - FLAPS - FLAPS LOCKED is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT TIP BRK FAULT and STS-Inop System SLATS | | SLT RH WTB BLU SOLENOID 36CV OR WIRING TO SLT 1 | 278151 | 1 | 278100 P 255 T 810 823 |
| F/CTL - FLAPS - FLAPS LOCKED is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT TIP BRK FAULT and STS-Inop System SLATS | | SLT LH WTB GRN SOLENOID 35CV OR WIRING TO SLT 2 | 278151 | 1 | 278100 P 251 T 810 822 |
| F/CTL - FLAPS - FLAPS LOCKED is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT TIP BRK FAULT and STS-Inop System SLATS | SFCC 2 | SLT RH WTB GRN SOLENOID 36CV OR WIRING TO SLT 2 | 278151 | 1 | 278100 P 255 T 810 823 |
| F/CTL - SLATS - A-LOCK flashes in cyan on EWD associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | | | | | 278100 P 285 T 810 839 |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION | |
|--|---------------------|--------------------|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! : | |
| F/CTL - SLATS - A-LOCK flashes in cyan on EWD associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | | | | | 278100 P 285 T 810 839 | |
| S-LOCKED indication is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT and F/CTL SLAT TIP BRK FAULT and STS-Inop System SLATS and Upper ECAM DU Flags SLAT indication is shown in amber | SFCC 1 | SLT 1 WTB C/B 9CV | 278100 | 1 | 278100 P 249 T 810 821 | |
| S-LOCKED indication is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAPS FAULT and F/CTL SLAT TIP BRK FAULT and STS-Inop System SLATS and Upper ECAM DU Flags SLAT indication is shown in amber | SFCC 2 | SLT 2 WTB C/B 11CV | 278100 | 1 | 278100 P 249 T 810 821 | |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | S | | FAULT ISOLATION |
|--|--------|---|--------|---|---------------------------|
| WARNINGS/ MALI ONC LIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| SLAT indication is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT and STS-Inop System SLATS and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SFCC 1 SLT HALF SPEED CHECK PCU 6001CM | 278451 | 1 | 278100 P 259 T 810 824 |
| SLAT indication is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 1 | SLT 1 PCU VALVEBLOCK 25CV | 278453 | 1 | 278100 P 201 T 810 801 |
| SLAT indication is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT and F/CTL SLAT TIP BRK FAULT and STS-Inop System SLATS and Upper ECAM DU Flags S-LOCKED indication is shown in amber | SFCC 1 | SLT 1 WTB C/B 9CV | 278100 | 1 | 278100 P 249 T 810 821 |

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TROUBLE SHOOTING MANUAL

| HADNINGS (MALEUNCTIONS | | CFDS FAULT MESSAGES | MESSAGES | | FAULT |
|---|--------|---|----------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ISOLATION PROCEDURE |
| SLAT indication is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT and STS-Inop System SLATS and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SFCC 2 SLT HALF SPEED CHECK PCU 6001CM | 278451 | 1 | 278100 P 259 T 810 824 |
| SLAT indication is shown in amber associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT and F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SLT 2 PCU VALVEBLOCK 26CV | 278453 | 1 | 278100 P 201 T 810 801 |
| SLAT indication is shown in amber associated with Upper ECAM DU Warnings F/CTL FLAPS FAULT and F/CTL SLAT TIP BRK FAULT and STS-Inop System SLATS and Upper ECAM DU Flags S-LOCKED indication is shown in amber | SFCC 2 | SLT 2 WTB C/B 11CV | 278100 | 1 | 278100 P 249 T 810 821 |

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TROUBLE SHOOTING MANUAL

| | LIADNINGS/MALEUNGITONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|-----------------------|------------------------|---------|---------------------|-------|-----------|--------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |

<u>Lower ECAM DU Flags-</u> F/CTL

| ELEVATOR - Elevator position indications oscillate associated with F/CTL - Vibrations felt along the cabin and in the cockpit | 273000 P 294 T 810 849 |
|--|---------------------------|
| ELEVATOR - Elevator position indications oscillate associated with VIBRATIONS - Vibrations felt along the cabin and in the cockpit | 273000 P 294 T 810 849 |
| F/CTL - Loss of page automatic call during Check List | 279500 P 233 T 810 839 |

Lower ECAM DU Advisories
F/CTL

| F/CTL-RUDDER-RUD position indicator | | 272000 P 219 T 810 806 |
|-------------------------------------|--|---------------------------|
| pointer fluctuation | | |

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TROUBLE SHOOTING MANUAL

FLIGHT CONTROLS - FAULT SYMPTOMS

| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|--|---------------------|---------|-----|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | C | PROCEDURE |
| GSHLD-CAPT panel (131VU) | | | | | |
| SIDE STICK PRIORITY ANN light(s) failed | | | | T | 279500 P 224 T 810 834 |
| GSHLD-F/O panel (130VU) | | | | | |
| SIDE STICK PRIORITY ANN light(s) failed | | | | | 279500 P 224 T 810 834 |

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TROUBLE SHOOTING MANUAL

FLIGHT CONTROLS - FAULT SYMPTOMS

| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|-------------|--|---------------------|---------|-----|----------------|---------------------------|
| | WARNINGS/ MALI ONC 110NS | SOURCE | MESSAGE | ATA | С | !! |
| | F/CTL - Alternating Current Supply (ACS) - Short Circuit | | | | | 279000 P 201 T 810 801 |
| | F/CTL - AMM Task 279600710018 Results not Satisfactory | | | | | 279600 P 201 T 810 801 |
| | F/CTL - AMM Task 279600710022 Test not OK | | | | T | 279600 P 209 T 810 802 |
| R | F/CTL - AMM 272300710001 Operational test not possible | | | | T | 272000 P 218 T 810 805 |
| R | F/CTL - AMM 272300720001 Functional test not possible | | | | T | 272000 P 218 T 810 805 |
| | F/CTL - AMM 279600710007 Aileron damping test result not OK | | | | T | 271000 P 268 T 810 838 |
| | F/CTL - AMM 279600710008 Elevator damping test result not OK | | | | | 273000 P 299 T 810 852 |
| | F/CTL - Disagree between RUD indicator and rudder trim index | | | | | 272000 P 214 T 810 803 |
| | F/CTL - Disagree of the THS position indication | | | | † | 274000 P 227 T 810 809 |
| R R R | F/CTL - ELAC1 FAULT at ENGINE start with ELAC1 P/B SW FAULT legend off | | | | | 279300 PB289 T 810 951 |
| R R R | F/CTL - ELAC1 FAULT at ENGINE stop with ELAC1 P/B SW FAULT legend off | | | | † | 279300 PB291 T 810 952 |

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| SROS | | | |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|---|--------|---------------------|-------|---------------------|---------------------------|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| | F/CTL - ELAC2 FAULT at ENGINE start with ELAC2 P/B SW FAULT legend off | | | | | 279300 PB293 T 810 953 |
| | F/CTL - ELEVATOR - A/C pitch up or down more than 2.5 deg per minute | | | | | 273000 PA200 T 810 853 |
| R | F/CTL - FLAPS - Flags do not agree with flap position | | | | | 275100 P 297 T 810 843 |
| R | F/CTL - FLAPS - Flap menu not available on CFDIU | | | | | 275100 P 298 T 810 844 |
| R | F/CTL - FLAPS - Flaps not in TO configuration associated with Upper ECAM DU Warnings CONFIG | | | | | 275100 P 274 T 810 833 |
| R | F/CTL - FLAPS - Torque limiter tripped | | | | | 275100 PA207 T 810 848 |
| R | F/CTL - FLAPS - WTB applied during APU start on batteries associated with Upper ECAM DU Warnings F/CTL FLAPS LOCKED | | | | | 275100 PA208 T 810 849 |
| | F/CTL - Loss of page automatic call during Check List | | | | | 279500 P 233 T 810 839 |
| | F/CTL - Pitch trim control wheel stiffness | | | | | 274000 P 222 T 810 808 |
| | F/CTL - Rudder pedals not locked in AP mode | | | | | 279300 PB271 T 810 941 |
| | F/CTL - Rudder trim out of the Limits | | | | | 272000 P 215 T 810 804 |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|--|-----------|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! ! |
| F/CTL - Side stick not locked in AP mode | | | | | 279300 PB274 T 810 942 |
| F/CTL - SLATS - Flags do not agree with slat position | | | | | 278100 P 270 T 810 830 |
| F/CTL - SLATS - SFCC test gives message PERFORMED WITH FAULT | | | | | 278100 P 284 T 810 838 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT associated with F/CTL - SLATS - SFCC test gives OTHER SFCC ARM SIGNAL NOT TESTED | | | | | 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | FLP1 PCU VALVEBLOCK 23CV VALVE SENSOR 27-54-53 | 275453 | S | 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT FPPU FAULT | 278119 | S | 278100 Р 278 Т 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT LH APPU FAULT | 278118 | S | 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT LH WTB SOLENOID O/C | 278151 | | 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT LH WTB SOLENOID S/C | 278151 | S | 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT NO WTB POWER | 278151 | S | 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT RH APPU FAULT | 275118 | S | 278100 P 278 T 810 835 |

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TROUBLE SHOOTING MANUAL

| HADNINGS /MALEUNGTIONS | <u> </u> | CFDS FAULT MESSAGES | S | FAULT - ISOLATION |
|---|----------|--------------------------------------|--------|-----------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | C PROCEDURE |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT RH WTB SOLENOID O/C | 278151 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT RH WTB SOLENOID S/C | 278151 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT WTB SET | 278151 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT FPPU FAULT | 278119 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT LH APPU FAULT | 278118 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT LH WTB SOLENOID O/C | 278151 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT LH WTB SOLENOID S/C | 278151 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT NO WTB POWER | 278151 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT RH APPU FAULT | 278118 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT RH WTB SOLENOID O/C | 278151 | S 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT RH WTB SOLENOID S/C | 278151 | S 278100 P 278 T 810 835 |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|--|--------|--|--------|---|---------------------------|
| WARNINGS/ MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT WTB SET | 278151 | S | 278100 P 278 T 810 835 |
| F/CTL - SLATS - SFCC test gives OTHER SFCC ARM SIGNAL NOT TESTED associated with F/CTL - SLATS - SFCC test gives message NO FAULTS BUT | | | | | 278100 P 278 T 810 835 |
| F/CTL - SLATS - Slat flap menu is shown when slat menu is selected | | | | | 278100 P 271 T 810 831 |
| F/CTL - SLATS - Slat menu not available | | | | | 278100 P 236 T 810 812 |
| F/CTL - SLATS - SLAT WTB/POB test does not complete | | | | | 278100 P 287 T 810 840 |
| F/CTL - SLATS - Slats not in TO configuration associated with Upper ECAM DU Warnings CONFIG | | | | | 278100 P 267 T 810 827 |
| F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | LH SLT APPU 31CV OR WIRING TO SLT 1 | 278118 | 1 | 278100 P 220 T 810 807 |
| F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | RH SLT APPU 32CV OR WIRING TO SLT 1 | 278118 | 1 | 278100 P 220 T 810 807 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|--|--------|--|--------|---|---------------------------|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | !! |
| R | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT and STS-Inop System SLATS and Upper ECAM DU Flags SLAT indication is shown in amber | SFCC 1 | SFCC 1 SLT HALF SPEED CHECK PCU 6001CM | 278451 | 1 | 278100 P 259 T 810 824 |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SFCC1 OR SLAT PCU VALVEBLOCK AFS, CFDS | 278100 | 1 | 278100 P 201 T 810 801 |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SFCC1 OR SLT FPPU | 278100 | 1 | 278100 P 209 T 810 803 |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SFCC1 OR SLT LH APPU | 278100 | 1 | 278100 P 205 T 810 802 |
| R | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SFCC1 OR SLT PPU POWER | 278100 | 1 | 278100 P 222 T 810 808 |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | S | | FAULT ISOLATION |
|--|-----------|--|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SFCC1 OR SLT RH APPU | 278100 | 1 | 278100 P 205 T 810 802 |
| F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SFCC1 21CV | 275134 | 1 | 278100 P 273 T 810 832 |
| F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SLT FPPU 28CV OR WIRING TO SLT 1 | 278119 | 1 | 278100 P 218 T 810 806 |
| F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT and Upper ECAM DU Flags SLAT indication is shown in amber | SFCC 1 | SLT 1 PCU VALVEBLOCK 25CV | 278453 | 1 | 278100 P 201 T 810 801 |
| F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SLT 1 PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 278100 Р 215 Т 810 805 |
| F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SLT 1 PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 278100 Р 215 Т 810 805 |

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27-OBSV

Aug 01/07

TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|--|----------|---|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT | SFCC 1 | SLT/FLP CSU 51CV OR WIRING TO SLT 1 | 275117 | 1 | 278100 P 212 T 810 804 |
| R | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | LH SLT APPU 31CV OR WIRING TO SLT 2 | 278118 | 1 | 278100 P 220 T 810 807 |
| R | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | RH SLT APPU 32CV OR WIRING TO SLT 2 | 278118 | 1 | 278100 P 220 T 810 807 |
| R | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 1 FAULT and STS-Inop System SLATS and Upper ECAM DU Flags SLAT indication is shown in amber | SFCC 2 | SFCC 2 SLT HALF SPEED CHECK PCU 6001CM | 278451 | 1 | 278100 P 259 T 810 824 |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page | SFCC 2 | SFCC2 OR SLAT PCU VALVEBLOCK | 278100 | 1 | 278100 P 201 T 810 801 |
| | associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | IDENT: / | AFS, CFDS | | | |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|--|--------|-------------------------------------|--------|---|---------------------------|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | SFCC2 OR SLT FPPU | 278100 | 1 | 278100 P 209 T 810 803 |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | SFCC2 OR SLT LH APPU | 278100 | 1 | 278100 P 205 T 810 802 |
| R | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | SFCC2 OR SLT PPU POWER | 278100 | 1 | 278100 P 222 T 810 808 |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | SFCC2 OR SLT RH APPU | 278100 | 1 | 278100 P 205 T 810 802 |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | SFCC2 22CV | 275134 | 1 | 278100 Р 273 Т 810 832 |
| R | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | SLT FPPU 28CV OR WIRING TO SLT 2 | 278119 | 1 | 278100 P 218 T 810 806 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|--|--------|--|--------|----------------------|---------------------------|
| | WARNINGS/ MALFORCTIONS | SOURCE | MESSAGE | ATA | С | !! |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT and Upper ECAM DU Flags SLAT indication is shown in amber | SFCC 2 | SLT 2 PCU VALVEBLOCK 26CV | 278453 | 1 | 278100 P 201 T 810 801 |
| R | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | SLT 2 PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 278100 P 215 T 810 805 |
| R | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | SLT 2 PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 278100 P 215 T 810 805 |
| | F/CTL - SLATS - SLATS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL SLAT SYS 2 FAULT | SFCC 2 | SLT/FLP CSU 51CV OR WIRING TO SLT 2 | 275117 | 1 | 278100 P 212 T 810 804 |
| | F/CTL - SLATS - WTB comes on during APU start with batteries associated with Upper ECAM DU Warnings F/CTL SLATS LOCKED | | | | | 278100 P 277 T 810 834 |
| | F/CTL - Speedbrakes not retracted associated with Upper ECAM DU Warnings CONFIG | | | | | 270000 P 201 T 810 801 |

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| | | Printed in France |

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TROUBLE SHOOTING MANUAL

| LIADNINGS /MALEUNGTIONS | Ţ | CFDS FAULT MESSAG | ES | | FAULT ISOLATION |
|---|--------|-------------------|-----|----------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | C | ! ! |
| F/CTL - Spurious Side Stick Indication on Primary Flight Display | | | | T | 279200 P 229 T 810 834 |
| F/CTL - Vibrations felt along the cabin and in the cockpit associated with Lower ECAM DU Flags-F/CTL ELEVATOR - Elevator position indications oscillate | | | | | 273000 P 294 T 810 849 |
| F/CTL - Vibrations felt in the cabin and along the fuselage | | | | † | 272000 P 210 T 810 802 |
| F/CTL - Vibrations felt in the rear cabin | | | | T | 273000 P 295 T 810 850 |
| F/CTL - Yaw and/or roll jerk very hard | | | | T | 272600 P 201 T 810 801 |
| F/CTL - Yaw and/or roll jerk very hard associated with Upper ECAM DU Warnings AUTO FLT YAW DAMPER 1 | | | | | 272600 P 201 T 810 801 |
| F/CTL - Yaw and/or roll jerk very hard associated with Upper ECAM DU Warnings AUTO FLT YAW DAMPER 2 | | | | | 272600 P 201 T 810 801 |
| F/CTL - Yaw and/or roll jerk very hard associated with Upper ECAM DU Warnings AUTO FLT YAW DAMPER SYS | | | | | 272600 P 201 T 810 801 |
| F/CTL Aileron Oscillation | | | | | 271000 P 269 T 810 840 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|---|-------------------|--|----------|----------------|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !! |
| | F/CTL Aileron damping test not possible (LH and RH) | | | | | 271000 P 270 T 810 841 |
| R | F/CTL AMM TASK 272400 710002 Results not satisfactory | | | | | 272000 P 223 T 810 807 |
| | F/CTL CAPT and F/O pedals stiffness | | | | | 272000 P 201 T 810 801 |
| | F/CTL Elevator damping test not possible | | | | | 273000 P 290 T 810 848 |
| | F/CTL Elevator damping test not possible (decoding) | | | | | 273000 P 296 T 810 851 |
| | F/CTL Roll jerk | | | | | 271000 P 273 T 810 842 |
| | F/CTL Roll jerk associated with | EFCS 1 | ELAC1 | 279334 | 1 | 279300 PB270 T 810 939 |
| | Upper ECAM DU Warnings F/CTL ELAC 1 FAULT | IDENT: | AFS, EFCS 2 | | | 010 /3/ |
| | F/CTL Roll jerk associated with | EFCS 1 | ELAC1 AIL ORDER DISAGREE | 279334 | 1 | 279300 PB287 T 810 950 |
| | Upper ECAM DU Warnings F/CTL AIL SERVO FAULT | IDENT: | EFCS 2 | | | |
| | F/CTL Roll jerk associated with | EFCS 1 | ELAC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279334 | 1 | 279300 P 201 T 810 801 |
| | Upper ECAM DU Warnings F/CTL ELAC 1 FAULT | IDENT: | EFCS 2 | - | - | |
| | F/CTL Roll jerk associated with | EFCS 1 | ELAC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279334 | 1 | 279300 P 203 T 810 802 |
| | Upper ECAM DU Warnings F/CTL ELAC 1 FAULT | IDENT: | EFCS 2 | | | |
| | F/CTL Roll jerk associated with | EFCS 1 | ELAC2 AIL ORDER DISAGREE | 279334 | 1 | 271000 P 225 T 810 814 |
| | Upper ECAM DU Warnings F/CTL AIL SERVO FAULT | IDENT: | EFCS 2 | | | 1 0 1 0 0 1 4 |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | JLT MESSAGES | | |
|--|--------|---|--------------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | ISOLATION PROCEDURE |
| F/CTL Roll jerk associated with | EFCS 2 | ELAC1 | 279334 | 1 | 279300 PB270 T 810 939 |
| Upper ECAM DU Warnings F/CTL ELAC 1 FAULT | IDENT: | AFS | | | 010 737 |
| F/CTL Roll jerk associated with Upper ECAM DU Warnings F/CTL AIL SERVO FAULT | EFCS 2 | ELAC1 AIL ORDER DISAGREE | 279334 | 1 | 279300 PB287 T 810 950 |
| F/CTL Roll jerk associated with Upper ECAM DU Warnings F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1 | 279334 | 1 | 279300 P 201 T 810 801 |
| F/CTL Roll jerk associated with Upper ECAM DU Warnings F/CTL ELAC 1 FAULT | EFCS 2 | ELAC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2 | 279334 | 1 | 279300 P 203 T 810 802 |
| F/CTL Roll jerk associated with Upper ECAM DU Warnings F/CTL AIL SERVO FAULT | EFCS 2 | ELAC2 AIL ORDER DISAGREE | 279334 | 1 | 271000 P 225 T 810 814 |
| F/CTL Wrong Aileron Position Indication | | | | | 271000 P 265 T 810 836 |
| F/CTL Wrong Spoiler Position Indication | | | | | 276000 P 296 T 810 851 |
| F/CTL- ELAC2 FAULT at ENGINE stop with ELAC2 P/B SW FAULT legend off | | | | | 279300 PB295 T 810 954 |
| FLAP SFCC TEST gives message NO FAULTS BUT associated with FLAP SFCC TEST gives message OTHER SFCC ARM SIGNAL NOT TESTED | | | | | 275100 PA209 T 810 850 |
| FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | FLP1 PCU VALVEBLOCK 23CV VALVE SENSOR 27-54-53 | 275453 | S | 275100 PA209 T 810 850 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|---|--------|--------------------------------------|--------|---|---------------------------|
| | WARNINGS/MALFORCTIONS | SOURCE | MESSAGE | ATA | С | !! |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT FPPU FAULT | 275119 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT LH APPU FAULT | 275118 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT LH WTB SOLENOID O/C | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT LH WTB SOLENOID S/C | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT NO WTB POWER | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT RH APPU FAULT | 275118 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT RH WTB SOLENOID O/C | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT RH WTB SOLENOID S/C | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 1 | NO FAULTS BUT WTB SET | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT FPPU FAULT | 275119 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT LH APPU FAULT | 275118 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT LH WTB SOLENOID O/C | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT LH WTB SOLENOID S/C | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT NO WTB POWER | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT RH APPU FAULT | 275118 | S | 275100 PA209 T 810 850 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|--|---------------------|--------------------------------------|--------|---|---------------------------|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT RH WTB SOLENOID O/C | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT RH WTB SOLENOID S/C | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message NO FAULTS BUT | SFCC 2 | NO FAULTS BUT WTB SET | 275151 | S | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message OTHER SFCC ARM SIGNAL NOT TESTED associated with FLAP SFCC TEST gives message NO FAULTS BUT | | | | | 275100 PA209 T 810 850 |
| R | FLAP SFCC TEST gives message PERFORMED WITH FAULT | | | | | 275100 PA217 T 810 854 |
| R | FLAP WTB/POB TEST does not complete | | | | | 275100 PA218 T 810 855 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | | | | | 275100 P 233 T 810 814 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | | | | | 275100 P 233 T 810 814 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | FLP FPPU 27CV OR WIRING TO FLP 1 | 275119 | 1 | 275100 P 218 T 810 808 |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|---------------------|--|--------|--------------------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 1 | FLP 1 PCU VALVEBLOCK 23CV | 275453 | 1 | 275100 P 201 T 810 802 |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | FLP 1 PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 275100 P 216 T 810 807 |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and STS-Maintenance SFCS | SFCC 1 | FLP 1 PIN PROG DISAGREE CONFIGURATION | 275134 | 1 | 275100 P 216 T 810 807 |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and STS-Maintenance SFCS | SFCC 1 | FLP 1 PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 275100 P 216 T 810 807 |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | LH FLP APPU 29CV OR WIRING TO FLP 1 | 275118 | 1 | 275100 P 221 T 810 809 |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | RH FLP APPU 30CV OR WIRING TO FLP 1 | 275118 | 1 | 275100 Р 221 Т 810 809 |

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| | LIADNINGS / MALEUNGTIONS | | CFDS FAULT MESSAGES | S | | FAULT |
|---|---|----------|---|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE |
| R | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT and STS-Inop System FLAPS and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 1 | SFCC 1 FLP HALF SPEED CHECK PCU 6201CM | 275451 | 1 | 275100 P 260 T 810 826 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | SFCC1 OR FLP FPPU | 275100 | 1 | 275100 P 207 T 810 804 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | SFCC1 OR FLP LH APPU | 275100 | 1 | 275100 P 205 T 810 803 |
| | FLAPS SLOW shown in green on STATUS page | SFCC 1 | SFCC1 OR FLP PCU VALVEBLOCK | 275100 | 1 | 275100 P 201 T 810 802 |
| | associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | IDENT: / | AFS, CFDS | | | |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 1 | SFCC1 OR FLP PPU POWER | 275100 | 1 | 275100 P 231 T 810 812 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | SFCC1 OR FLP RH APPU | 275100 | 1 | 275100 P 205 T 810 803 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | S | | FAULT ISOLATION |
|---|---|--------|--|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | SFCC1 21CV | 275134 | 1 | 275100 PA200 T 810 845 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | SLT/FLP CSU 51CV | 275117 | 1 | 275100 P 228 T 810 811 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 1 FAULT | SFCC 1 | SLT/FLP CSU 51CV OR WIRING TO FLP 1 | 275117 | 1 | 275100 P 211 T 810 805 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | FLP FPPU 27CV OR WIRING TO FLP 2 | 275119 | 1 | 275100 P 218 T 810 808 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 2 | FLP 2 PCU VALVEBLOCK 24CV | 275453 | 1 | 275100 P 201 T 810 802 |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | FLP 2 PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 275100 P 216 T 810 807 |

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| HADNINGS /MALEUNGTIONS | | | FAULT | | | |
|---|--------|---|--------|--------------------------|----------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | - ISOLATION PROCEDURE | |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and STS-Maintenance SFCS | SFCC 2 | FLP 2 PIN PROG DISAGREE CONFIGURATION | 275134 | 1 | 275100 P 216 T 810 807 | |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and STS-Maintenance SFCS | SFCC 2 | FLP 2 PIN PROG DISAGREE FUNCTIONAL | 275134 | | 275100 P 216 T 810 807 | |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | LH FLP APPU 29CV OR WIRING TO FLP 2 | 275118 | 1 | 275100 P 221 T 810 809 | |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | RH FLP APPU 30CV OR WIRING TO FLP 2 | 275118 | 1 | 275100 P 221 T 810 809 | |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT and STS-Inop System FLAPS and Upper ECAM DU Flags F/CTL - FLAPS - FLAP is shown in amber | SFCC 2 | SFCC 2 FLP HALF SPEED CHECK PCU 6201CM | 275451 | 1 | 275100 P 260 T 810 826 | |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGE | :S | | FAULT ISOLATION |
|--|--------|--------------------------------|--------|---|---------------------------|
| WARNINGS/ MALFORCTIONS | SOURCE | MESSAGE | ATA | С | : |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | SFCC2 OR FLP FPPU | 275100 | 1 | 275100 P 207 T 810 804 |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | SFCC2 OR FLP LH APPU | 275100 | 1 | 275100 P 205 T 810 803 |
| FLAPS SLOW shown in green on STATUS page associated with | SFCC 2 | SFCC2 OR FLP PCU VALVEBLOCK | 275100 | 1 | 275100 P 201 T 810 802 |
| Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | IDENT: | AFS, CFDS | | | |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | SFCC2 OR FLP PPU POWER | 275100 | 1 | 275100 P 231 T 810 812 |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | SFCC2 OR FLP RH APPU | 275100 | 1 | 275100 P 205 T 810 803 |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | SFCC2 22CV | 275134 | 1 | 275100 PA200 T 810 845 |
| FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | SLT/FLP CSU 51CV | 275117 | 1 | 275100 P 228 T 810 811 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|---|--------|--|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !! |
| | FLAPS SLOW shown in green on STATUS page associated with Upper ECAM DU Warnings F/CTL FLAP SYS 2 FAULT | SFCC 2 | SLT/FLP CSU 51CV OR WIRING TO FLP 2 | 275117 | 1 | 275100 P 211 T 810 805 |
| | Flaps-Vibration during approach | | | | | 275400 P 201 T 810 801 |
| R | MAINT STATUS F/CTL without associated fault message during GND SCAN associated with STS-Maintenance F/CTL | | | | | 271000 P 241 T 810 822 |
| | Vibration-FLaps vibration during approach | | | | | 275400 P 201 T 810 801 |
| | VIBRATIONS - Vibrations felt along the cabin and in the cockpit associated with Lower ECAM DU Flags- F/CTL ELEVATOR - Elevator position indications oscillate | | | | | 273000 P 294 T 810 849 |
| | VIBRATIONS - Vibrations felt in the cabin and along the fuselage | | | | | 272000 P 210 T 810 802 |
| R | VIBRATIONS - Vibrations felt in the FWD cabin and in the cockpit associated with Upper ECAM DU Warnings F/CTL AIL SERVO FAULT | | | | | 271000 P 264 T 810 835 |
| | VIBRATIONS - Vibrations felt in the rear cabin | | | | | 273000 P 295 T 810 850 |

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TROUBLE SHOOTING MANUAL

FLIGHT CONTROLS - FAULT SYMPTOMS

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|----------------|-----------------------|--------|--|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | | ADR 1 | SFCC1(21CV)/SFCC2(22CV)/ ADIRU1 (1FP1) | 275134 | 3 | 341300 PA257 T 810 927 |
| R | | ADR 1 | SFCC1/2 (21CV/22CV)/ ADIRU1(1FP1) AOA INPUT A | 275134 | 3 | 341300 PA253 T 810 925 |
| R | | ADR 1 | SFCC1/2 (21CV/22CV)/ ADIRU1(1FP1) AOA INPUT B | 275134 | 3 | 341300 PA255 T 810 926 |
| R | | ADR 2 | SFCC1(21CV)/SFCC2(22CV)/ ADIRU2(1FP2) | 275134 | 2 | 341300 PA263 T 810 930 |
| R | | ADR 2 | SFCC1/2 (21CV/22CV)/ ADIRU2(1FP2) AOA INPUT A | 275134 | 2 | 341300 PA259 T 810 928 |
| R | | ADR 2 | SFCC1/2 (21CV/22CV)/ ADIRU2(1FP2) AOA INPUT B | 275134 | 2 | 341300 PA261 T 810 929 |
| R | | ADR 3 | SFCC1(21CV)/SFCC2(22CV)/ ADIRU3 (1FP3) | 275134 | 2 | 341300 PA269 T 810 933 |
| R | | ADR 3 | SFCC1/2 (21CV/22CV)/ ADIRU3(1FP3) AOA INPUT A | 275134 | 2 | 341300 PA265 T 810 931 |
| R | | ADR 3 | SFCC1/2 (21CV/22CV)/ ADIRU3(1FP3) AOA INPUT B | 275134 | 2 | 341300 PA267 T 810 932 |
| | | AFS | AFS: ELAC1 | 279334 | 1 | 226600 P 263 T 810 850 |
| | | AFS | AFS: ELAC1 associated with | 279334 | 1 | 226600 PA231 T 810 895 |
| | | AFS | AFS: ELAC2 | 279334 | 1 | |
| | | AFS | AFS: ELAC1/BUS WIRG/FAC1 | 279334 | 1 | 226600 P 259 T 810 846 |
| | | AFS | AFS: ELAC1/BUS WIRG/FAC2 | 279334 | 1 | 226600 P 262 T 810 849 |
| | | AFS | AFS: ELAC2 | 279334 | 1 | 226600 P 265 T 810 851 |

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| LIADNINGS (MALEUNGTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|-------------------------|--------|-----------------------------------|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | |
| | AFS | AFS: ELAC2 associated with | 279334 | 1 | 226600 PA231 T 810 895 |
| | AFS | AFS: ELAC1 | 279334 | 1 | 010 075 |
| | AFS | AFS: ELAC2/BUS WIRG/FAC1 | 279334 | 1 | 226600 P 260 T 810 847 |
| | AFS | AFS: ELAC2/BUS WIRG/FAC2 | 279334 | 1 | 226600 P 261 T 810 848 |
| | AFS | AFS: SFCC1 | 275134 | 1 | 226600 P 267 T 810 852 |
| | AFS | AFS: SFCC1-FAC1 CKT | 275134 | 1 | 226600 P 269 T 810 854 |
| | AFS | AFS: SFCC2 | 275134 | 1 | 226600 P 268 T 810 853 |
| | AFS | AFS: SFCC2-FAC2 CKT | 275134 | 1 | 226600 P 271 T 810 855 |
| | BSCU 1 | BSCU : NO DATA FROM ELAC1 | 279334 | 3 | 325100 P 215 T 810 807 |
| | BSCU 1 | BSCU : NO DATA FROM ELAC1 & 2 | 279334 | 1 | 325100 P 235 T 810 816 |
| | BSCU 1 | BSCU : NO DATA FROM ELAC2 | 279334 | 3 | 325100 P 217 T 810 809 |
| | BSCU 1 | ELAC 1(2CE1)/ BSCU (10GG) | 279334 | ! | 325100 PA262 T 810 839 |
| | BSCU 1 | ELAC 2(2CE2)/ BSCU (10GG) | 279334 | 3 | 325100 PA266 T 810 841 |
| | BSCU 2 | BSCU : NO DATA FROM ELAC1 | 279334 | 3 | 325100 P 216 T 810 808 |
| | BSCU 2 | BSCU : NO DATA FROM ELAC1 & 2 | 279334 | 1 | 325100 P 237 T 810 817 |
| | BSCU 2 | BSCU : NO DATA FROM ELAC2 | 279334 | 3 | 325100 P 218 T 810 810 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|------------------------|--------|--------------------------------|--------|---|---------------------------|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| R | | BSCU 2 | ELAC 1(2CE1)/ BSCU (10GG) | 279334 | 3 | 325100 PA264 T 810 840 |
| R | | BSCU 2 | ELAC 2(2CE2)/ BSCU (10GG) | 279334 | 3 | 325100 PA268 T 810 842 |
| | | CFDS | NO FCDC1 DATA | 279534 | 2 | 313200 P 218 T 810 818 |
| | | CFDS | NO FCDC2 DATA | 279534 | 2 | 313200 P 220 T 810 820 |
| | | CFDS | NO SFCC1 DATA | 275134 | 2 | 313200 P 217 T 810 817 |
| | | CFDS | NO SFCC2 DATA | 275134 | 2 | 313200 P 219 T 810 819 |
| | | DMU | FCDC1 (3CE1) / DMU (1TV) | 279534 | 3 | 313600 P 222 T 810 824 |
| | | DMU | FCDC1 (3CE1) / FDIMU (10TV) | 279534 | 3 | 313600 Р 278 Т 810 905 |
| | | DMU | FCDC2 (3CE2) / DMU (1TV) | 279534 | 3 | 313600 P 222 T 810 824 |
| | | DMU | FCDC2 (3CE2) / FDIMU (10TV) | 279634 | 3 | 313600 Р 278 Т 810 905 |
| | | DMU | SFCC1 (21CV) / DMU (1TV) | 275134 | 3 | 313600 P 240 T 810 833 |
| | | DMU | SFCC1 (21CV) / FDIMU (10TV) | 275134 | 3 | 313600 P 296 T 810 914 |
| | | DMU | SFCC2 (22CV) / DMU (1TV) | 275134 | 3 | 313600 P 240 T 810 833 |
| | | DMU | SFCC2 (22CV) / FDIMU (10TV) | 275134 | 3 | 313600 P 296 T 810 914 |
| | | ECAM 1 | FWC1 : LH FLP SYNC 3CNA | 275511 | 2 | 315300 P 282 T 810 882 |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|------------------------|----------|------------------------------|--------|---|---------------------------|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| R | | ECAM 1 | FWC1 : LH FLP SYNC 3CNA | 275511 | 2 | 315300 P 286 T 810 886 |
| | | IDENT: | ECAM 2 | | | |
| R | | ECAM 1 | FWC1 : LH FLP SYNC 3CNA | 275511 | 3 | 315300 P 282 T 810 882 |
| R | | ECAM 1 | FWC1 : LH SLT SYNC 4CNA | 278511 | 2 | 315300 P 276 T 810 876 |
| R | | ECAM 1 | FWC1 : LH SLT SYNC 4CNA | 278511 | 2 | 315300 P 280 T 810 880 |
| | | IDENT: | ECAM 2 | | | |
| R | | ECAM 1 | FWC1 : LH SLT SYNC 4CNA | 278511 | 3 | 315300 P 276 T 810 876 |
| R | | ECAM 1 | FWC1 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 248 T 810 840 |
| R | | ECAM 1 | FWC1 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 250 T 810 842 |
| R | | ECAM 1 | FWC1 : RH FLP SYNC 3CNB | 275511 | 2 | 315300 P 284 T 810 884 |
| R | | ECAM 1 | FWC1 : RH FLP SYNC 3CNB | 275511 | 2 | 315300 P 287 T 810 887 |
| | | IDENT: | ECAM 2 | | | |
| R | | ECAM 1 | FWC1 : RH FLP SYNC 3CNB | 275511 | 3 | 315300 P 284 T 810 884 |
| R | | ECAM 1 | FWC1 : RH SLT SYNC 4CNB | 278511 | 2 | 315300 P 278 T 810 878 |
| R | | ECAM 1 | FWC1 : RH SLT SYNC 4CNB | 278511 | 2 | 315300 P 281 T 810 881 |
| | | IDENT: 6 | ECAM 2 | | | 010 001 |
| R | | ECAM 1 | FWC1 : RH SLT SYNC 4CNB | 278511 | 3 | 315300 P 278 T 810 878 |
| R | | ECAM 1 | FWC2 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 249 T 810 841 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | L | CFDS FAULT MESSAGES | S | | FAULT ISOLATION |
|---|-----------------------|----------|-------------------------------|----------------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| | | ECAM 1 | FWC2: NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 251 T 810 843 |
| R | | ECAM 1 | FWC2: LH FLP SYNC 3CNA | 275511 | 2 | 315300 PA238 T 810 940 |
| | | ECAM 1 | FWC2: LH FLP SYNC 3CNA | 275511 | 2 | 315300 P 283 T 810 883 |
| | | IDENT: E | ECAM 2 | | | |
| R | | ECAM 1 | FWC2: LH FLP SYNC 3CNA | 275511 | 3 | 315300 PA238 T 810 940 |
| R | | ECAM 1 | FWC2: LH SLT SYNC 4CNA | 278511 | 2 | 315300 PA239 T 810 941 |
| | | ECAM 1 | FWC2: LH SLT SYNC 4CNA | 278511 | 2 | 315300 P 277 T 810 877 |
| | | IDENT: 6 | ECAM 2 | r ₁ | | |
| R | | ECAM 1 | FWC2: LH SLT SYNC 4CNA | 278511 | 3 | 315300 PA239 T 810 941 |
| R | | ECAM 1 | FWC2: RH FLP SYNC 3CNB | 275511 | 2 | 315300 PA240 T 810 942 |
| | | ECAM 1 | FWC2: RH FLP SYNC 3CNB | 275511 | 2 | 315300 P 285 T 810 885 |
| | | IDENT: E | ECAM 2 | | | |
| R | | ECAM 1 | FWC2: RH FLP SYNC 3CNB | 275511 | 3 | 315300 PA240 T 810 942 |
| R | | ECAM 1 | FWC2: RH SLT SYNC 4CNB | 278511 | 2 | 315300 PA241 T 810 943 |
| | | ECAM 1 | FWC2: RH SLT SYNC 4CNB | 278511 | 2 | 315300 P 279 T 810 879 |
| | | IDENT: | ECAM 2 | | | |
| R | | ECAM 1 | FWC2: RH SLT SYNC 4CNB | 278511 | 3 | 315300 PA241 T 810 943 |
| | | ECAM 1 | SDAC1 : NO DATA FROM SFCC1 | 275134 | 3 | 315400 Р 269 Т 810 865 |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | | |
|---|-----------------------|----------|---------------------------------|----------|---|---------------------------|--|--|
| | WARNINGS/MALFORCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | | |
| R | | ECAM 1 | SDAC1 : NO DATA FROM SFCC1+2 | 275134 | 1 | 315400 PA255 T 810 938 | | |
| | | IDENT: I | ECAM 2 | | | | | |
| R | | ECAM 1 | SDAC1 : NO DATA FROM SFCC2 | 275134 | 3 | 315400 P 271 T 810 867 | | |
| R | | ECAM 1 | SDAC1 : RUDDER POS XDCR 42wv | 273115 | 1 | 315400 PA217 T 810 911 | | |
| | | IDENT: I | ECAM 2 | | | | | |
| R | | ECAM 1 | SDAC2 : NO DATA FROM SFCC1 | 275134 | 3 | 315400 P 270 T 810 866 | | |
| R | | ECAM 1 | SDAC2 : NO DATA FROM SFCC1+2 | 275134 | 1 | 315400 PA257 T 810 939 | | |
| | | IDENT: I | ECAM 2 | <u> </u> | | | | |
| R | | ECAM 1 | SDAC2 : NO DATA FROM SFCC2 | 275134 | 3 | 315400 P 272 T 810 868 | | |
| R | | ECAM 1 | SDAC2 : RUDDER POS XDCR 42WV | 273115 | 1 | 315400 PA218 T 810 912 | | |
| | | IDENT: I | ECAM 2 | ' | | | | |
| R | | ECAM 2 | FWC1 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 248 T 810 840 | | |
| R | | ECAM 2 | FWC1 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 250 T 810 842 | | |
| R | | ECAM 2 | FWC1: LH FLP SYNC 3CNA | 275511 | 2 | 315300 P 282 T 810 882 | | |
| R | | ECAM 2 | FWC1: LH FLP SYNC 3CNA | 275511 | 2 | 315300 P 286 T 810 886 | | |
| | | IDENT: I | DENT: ECAM 1 | | | | | |
| R | | ECAM 2 | FWC1: LH FLP SYNC 3CNA | 275511 | 3 | 315300 P 282 T 810 882 | | |

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TROUBLE SHOOTING MANUAL

| WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | | |
|-----------------------|----------|-------------------------|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE | |
| | ECAM 2 | FWC1: LH SLT SYNC 4CNA | 278511 | 2 | 315300 P 276 T 810 876 | |
| | ECAM 2 | FWC1: LH SLT SYNC 4CNA | 278511 | | 315300 P 280 T 810 880 | |
| | IDENT: I | ECAM 1 | | | L | |
| | ECAM 2 | FWC1: LH SLT SYNC 4CNA | 278511 | 3 | 315300 P 276 T 810 876 | |
| | ECAM 2 | FWC1: RH FLP SYNC 3CNB | 275511 | 2 | 315300 P 284 T 810 884 | |
| | ECAM 2 | FWC1: RH FLP SYNC 3CNB | 275511 | | 315300 P 287 T 810 887 | |
| | IDENT: I | IDENT: ECAM 1 | | | | |
| | ECAM 2 | FWC1: RH FLP SYNC 3CNB | 275511 | 3 | 315300 P 284 T 810 884 | |
| | ECAM 2 | FWC1: RH SLT SYNC 4CNB | 278511 | 2 | 315300 P 278 T 810 878 | |
| | ECAM 2 | FWC1: RH SLT SYNC 4CNB | 278511 | | 315300 P 281 T 810 881 | |
| | IDENT: | ECAM 1 | | | 1 0 10 00 1 | |
| | ECAM 2 | FWC1: RH SLT SYNC 4CNB | 278511 | 3 | 315300 P 278 T 810 878 | |
| | ECAM 2 | FWC2 : LH FLP SYNC 3CNA | 275511 | 2 | 315300 PA238 T 810 940 | |
| | ECAM 2 | FWC2 : LH FLP SYNC 3CNA | 275511 | | 315300 P 283 T 810 883 | |
| | IDENT: I | | | | | |
| | ECAM 2 | FWC2 : LH FLP SYNC 3CNA | 275511 | 3 | 315300 PA238 T 810 940 | |
| | ECAM 2 | FWC2 : LH SLT SYNC 4CNA | 278511 | 2 | 315300 PA239 T 810 941 | |
| | ECAM 2 | FWC2 : LH SLT SYNC 4CNA | 278511 | | 315300 P 277 T 810 877 | |
| | IDENT: I | ECAM 1 | | | 010 011 | |

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TROUBLE SHOOTING MANUAL

| | WARNINGS/MALFUNCTIONS | | FAULT ISOLATION | | | |
|---|-----------------------|----------|---------------------------------|---------|---|---------------------------|
| | WARNINGS/MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| | | ECAM 2 | FWC2 : NO DATA FROM FCDC1 | 279534 | 1 | 315300 P 249 T 810 841 |
| | | ECAM 2 | FWC2 : NO DATA FROM FCDC2 | 279534 | 1 | 315300 P 251 T 810 843 |
| R | | ECAM 2 | FWC2 : RH FLP SYNC 3CNB | 275511 | 2 | 315300 PA240 T 810 942 |
| | | ECAM 2 | FWC2 : RH FLP SYNC 3CNB | 275511 | 2 | 315300 P 285 T 810 885 |
| | | IDENT: I | ECAM 1 | | | |
| R | | ECAM 2 | FWC2 : RH SLT SYNC 4CNB | 278511 | 2 | 315300 PA241 T 810 943 |
| | | ECAM 2 | FWC2 : RH SLT SYNC 4CNB | 278511 | 2 | 315300 P 279 T 810 879 |
| | | IDENT: I | ECAM 1 | | | |
| R | | ECAM 2 | FWC2: LH SLT SYNC 4CNA | 278511 | 3 | 315300 PA239 T 810 941 |
| R | | ECAM 2 | FWC2: RH FLP SYNC 3CNB | 275511 | 3 | 315300 PA240 T 810 942 |
| R | | ECAM 2 | FWC2: RH SLT SYNC 4CNB | 278511 | 3 | 315300 PA241 T 810 943 |
| | | ECAM 2 | SDAC1 : NO DATA FROM SFCC1 | 275134 | 3 | 315400 P 269 T 810 865 |
| | | ECAM 2 | SDAC1 : NO DATA FROM SFCC1+2 | 275134 | 1 | 315400 PA255 T 810 938 |
| | | ECAM 2 | SDAC1 : NO DATA FROM SFCC1+2 | 275134 | 1 | 315400 PA255 T 810 938 |
| | | IDENT: I | | | | |
| | | ECAM 2 | SDAC1 : NO DATA FROM SFCC2 | 275134 | 3 | 315400 P 271 T 810 867 |
| | | ECAM 2 | SDAC1 : RUDDER POS XDCR 42wv | 273115 | 1 | 315400 PA217 T 810 911 |

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TROUBLE SHOOTING MANUAL

| LIADNINGS / MALEUNGTIONS | | FAULT ISOLATION | | | | |
|----------------------------------|--------|---------------------------------|--------|---|---------------------------|--|
| WARNINGS/MALFUNCTIONS - | SOURCE | MESSAGE | АТА | С | PROCEDURE | |
| | ECAM 2 | SDAC2 : NO DATA FROM | 275134 | 3 | 315400 P 270 T 810 866 | |
| | ECAM 2 | SDAC2 : NO DATA FROM SFCC1+2 | 275134 | 1 | 315400 PA257 T 810 939 | |
| | ECAM 2 | SDAC2 : NO DATA FROM SFCC1+2 | 275134 | 1 | 315400 PA257 T 810 939 | |
| | IDENT: | ECAM 1 | | | | |
| | ECAM 2 | SDAC2 : NO DATA FROM | 275134 | 3 | 315400 P 272 T 810 868 | |
| | ECAM 2 | SDAC2 : RUDDER POS XDCR 42WV | 273115 | 1 | 315400 PA218 T 810 912 | |
| | EFCS 1 | ELAC1 ADR DATA DISAGREE | 279334 | 2 | 279300 PB251 T 810 929 | |
| | EFCS 1 | ELAC1 IR DATA DISAGREE | 279334 | 1 | 279300 PB250 T 810 928 | |
| | EFCS 1 | ELAC2 ADR DATA DISAGREE | 279334 | 2 | 279300 PB251 T 810 929 | |
| | EFCS 1 | ELAC2 IR DATA DISAGREE | 279334 | 1 | 279300 PB250 T 810 928 | |
| | EFCS 1 | OP FCDC FAIL DISCR | 279534 | 1 | 279500 P 201 T 810 801 | |
| | EFCS 1 | SEC3 OR BUS 2 FROM ADR2 | 279434 | | 279400 P 287 T 810 845 | |
| | IDENT: | 1 0 10 04) | | | | |
| | EFCS 1 | SEC3 OR BUS 2 FROM ADR3 | 279434 | | 279400 P 291 T 810 847 | |
| | IDENT: | IDENT: EFCS 2 | | | | |
| | EFCS 1 | SEC3 OR BUS 2 FROM IR2 | 279434 | | 279400 P 296 T 810 851 | |
| | IDENT: | EFCS 2 | | | | |

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| | WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | | | |
|---|------------------------|--------|------------------------------|--------|---|---------------------------|--|
| | WARNINGS/ MALFONCTIONS | SOURCE | MESSAGE | ATA | С | ISOLATION PROCEDURE | |
| R | | EFCS 1 | SEC3 OR BUS 2 FROM IR3 | 279434 | 2 | 279400 P 298 T 810 853 | |
| | | IDENT: | EFCS 2 | | | | |
| R | | EFCS 1 | SEC3 OR WIRING FROM | 279434 | 2 | 279400 PA201 T 810 855 | |
| | | IDENT: | EFCS 2 | | | | |
| R | | EFCS 1 | SEC3 OR WIRING FROM | 279434 | 2 | 279400 PA207 T 810 858 | |
| | | IDENT: | EFCS 2 | | | | |
| | | EFCS 2 | ELAC1 ADR DATA DISAGREE | 279334 | 2 | 279300 PB251 T 810 929 | |
| | | EFCS 2 | ELAC1 IR DATA DISAGREE | 279334 | 1 | 279300 PB250 T 810 928 | |
| | | EFCS 2 | ELAC2 ADR DATA DISAGREE | 279334 | 2 | 279300 PB251 T 810 929 | |
| | | EFCS 2 | ELAC2 IR DATA DISAGREE | 279334 | 1 | 279300 PB250 T 810 928 | |
| | | EFCS 2 | OP FCDC FAIL DISCR | 279534 | 1 | 279500 P 223 T 810 833 | |
| R | | EFCS 2 | SEC3 OR BUS 2 FROM ADR2 | 279434 | 2 | 279400 P 287 T 810 845 | |
| R | | EFCS 2 | SEC3 OR BUS 2 FROM ADR3 | 279434 | 2 | 279400 P 291 T 810 847 | |
| R | | EFCS 2 | SEC3 OR BUS 2 FROM IR2 | 279434 | 2 | 279400 P 296 T 810 851 | |
| R | | EFCS 2 | SEC3 OR BUS 2 FROM IR3 | 279434 | 2 | 279400 P 298 T 810 853 | |
| R | | EFCS 2 | SEC3 OR WIRING FROM SFCC1 | 279434 | 2 | 279400 PA201 T 810 855 | |
| R | | EFCS 2 | SEC3 OR WIRING FROM SFCC2 | 279434 | 2 | 279400 PA207 T 810 858 | |

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| LIADNINGS (MALIFUNGTIONS | | FAULT ISOLATION | | | |
|--------------------------|---------|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | ! |
| | EIS 1 | DMC1 : NO FCDC1 DATA | 279534 | 1 | 316300 PA275 T 810 936 |
| | EIS 1 | DMC1 : NO FCDC2 DATA | 279534 | 1 | 316300 PA276 T 810 937 |
| | EIS 2 | DMC2 : NO FCDC1 DATA | 279534 | 1 | 316300 PA284 T 810 942 |
| | EIS 2 | DMC2 : NO FCDC2 DATA | 279534 | 1 | 316300 PA285 T 810 943 |
| | EIS 3 | DMC3 : NO FCDC1 DATA | 279534 | 1 | 316300 PA254 T 810 924 |
| | EIS 3 | DMC3 : NO FCDC2 DATA | 279534 | 1 | 316300 PA255 T 810 925 |
| | EIU1FAD | RLY (27KS1/28KS1) | 279200 | 1 | 732000 PB248 T 810 980 |
| | EIU1FAD | RLY (27KS1/28KS1) ENG1A | 279200 | 2 | 732000 PB254 T 810 982 |
| | EIU1FAD | RLY (27KS1/28KS1) ENG1B | 279200 | 2 | 732000 PB254 T 810 982 |
| | EIU2FAD | RLY (27KS2/28KS2) | 279200 | 1 | 732000 PB251 T 810 981 |
| | EIU2FAD | RLY (27KS2/28KS2) ENG2A | 279200 | 2 | 732000 PB256 T 810 983 |
| | EIU2FAD | RLY (27KS2/28KS2) ENG2B | 279200 | 2 | 732000 PB256 T 810 983 |
| | GPWC | SFCC1(21CV)/GPWC(100SG) | 275134 | 1 | 344300 PA217 T 810 852 |
| | GPWC | SFCC1(21CV)/GPWC(100SG) | 275134 | 3 | 344300 PA217 T 810 852 |
| | GPWC | SFCC1(21CV)/GPWS FLP MOD SW(7WZ)/GPWC(100SG) | 275134 | 1 | 344300 PA212 T 810 849 |

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| LIADNINGS / MALIFILING TIONS | | FAULT ISOLATION | | | |
|------------------------------|--------|---|--------|---|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | АТА | С | PROCEDURE |
| | SFCC 1 | CHECK CSU LEVER MECHANIC associated with | 275143 | 1 | 278100 P 248 T 810 820 |
| | SFCC 2 | CHECK CSU LEVER MECHANIC | 275143 | 1 | 1 610 620 |
| | SFCC 1 | CSU SENSOR MISADJUST 51 CV | 275117 | 1 | 275100 P 228 T 810 811 |
| | SFCC 1 | CSU 51 CV OR WIRING TO FLP 1 | 275117 | 1 | 275100 P 211 T 810 805 |
| | SFCC 1 | CSU 51 CV OR WIRING TO SLT 1 | 275117 | 1 | 278100 P 212 T 810 804 |
| | SFCC 1 | DC POWER BELOW 16 V | 275100 | 3 | 275100 P 233 T 810 814 |
| | SFCC 1 | DC POWER BELOW 16 V | 278100 | 3 | 278100 P 229 T 810 811 |
| | SFCC 1 | DC POWER INTERRUPT | 275100 | 3 | 275100 P 233 T 810 814 |
| | SFCC 1 | DC POWER INTERRUPT | 278100 | 3 | 278100 P 229 T 810 811 |
| | SFCC 1 | FLP ASYMMETRY LH CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 250 T 810 819 |
| | SFCC 1 | FLP ASYMMETRY RH CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 250 T 810 819 |
| | SFCC 1 | FLP FPPU 27 CV OR WIRING TO SFCC | 275119 | 1 | 275100 P 218 T 810 808 |
| | SFCC 1 | FLP HALF SPEED-CHK PCU | 275451 | 2 | 275100 P 260 T 810 826 |
| | SFCC 1 | FLP LH APPU 29 CV OR WIRING TO SFCC | 275118 | 1 | 275100 P 221 T 810 809 |
| | SFCC 1 | FLP LH WTB BLU SOLENOID 33 CV OR WIRING TO SFCC | 275151 | 1 | 275100 P 281 T 810 836 |
| | SFCC 1 | FLP OVERSPEED CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 290 T 810 840 |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|---|--------------------------|---------------------|--|--------|--------------------|---------------------------|
| | WARRINGS/ HALF ONC LIONS | SOURCE | MESSAGE | ATA | C | |
| R | | SFCC 1 | FLP OVERSPEED LH CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 290 T 810 840 |
| R | | SFCC 1 | FLP OVERSPEED RH CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 290 T 810 840 |
| | | SFCC 1 | FLP PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 275100 P 216 T 810 807 |
| | | SFCC 1 | FLP PIN PROG DISAGREE CONFIGURATION | 275134 | 1 | 275100 P 216 T 810 807 |
| | | SFCC 1 | FLP PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 275100 P 216 T 810 807 |
| | | SFCC 1 | FLP RH APPU 30 CV OR WIRING TO SFCC | 275118 | 1 | 275100 P 221 T 810 809 |
| R | | SFCC 1 | FLP RH PROX SNSR 1 38CV OR LGCIU 1 | 275115 | 2 | 275100 P 256 T 810 821 |
| R | | SFCC 1 | FLP RH WTB BLU SOLENOID 34 CV OR WIRING TO SFCC | 275151 | 1 | 275100 P 284 T 810 837 |
| R | | SFCC 1 | FLP RUNAWAY CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 254 T 810 820 |
| | | SFCC 1 | FLP SYSTEM JAM CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 224 T 810 810 |
| R | | SFCC 1 | FLP UNCOMMANDED MOVEMENT CHECK FLP PCU | 275451 | 1 | 275100 P 258 T 810 825 |
| | | SFCC 1 | FLP 1 CHECK LH DRIVE INTEGRITY | 275100 | 1 | 275100 P 245 T 810 818 |
| | | SFCC 1 | FLP 1 CHECK RH DRIVE INTEGRITY | 275100 | 1 | 275100 P 245 T 810 818 |
| | | SFCC 1 | FLP 1 FAULTY FLP 2 DATA CHECK SFCC 1 AND/OR 2 | 275134 | 2 | 275100 P 214 T 810 806 |
| | | SFCC 1 | FLP 1 NO SFCC 2 DATA CHECK WIRING & SFCC 2 | 275134 | 2 | 275100 P 214 T 810 806 |

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| | HADNINGS /MALEUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|------------------------|---------------------|---|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| R | | SFCC 1 | FLP1 PCU VALVEBLOCK 23CV VALVE SENSOR 27-54-53 | 275453 | S | 275100 PA213 T 810 852 |
| | | SFCC 1 | INHIBIT SIGNAL FROM CARGO DOOR YELLOW SYSTEM | | 3 | 275100 P 233 T 810 814 |
| | | SFCC 1 | INHIBIT SIGNAL FROM CARGO DOOR YELLOW SYSTEM | | 3 | 278100 P 229 T 810 811 |
| | | SFCC 1 | LEVER OUT OF DETENT FOR MORE THAN 10 SEC | 275100 | 3 | 275100 P 233 T 810 814 |
| | | SFCC 1 | LEVER OUT OF DETENT FOR MORE THAN 10 SEC | 278100 | 3 | 278100 P 229 T 810 811 |
| R | | SFCC 1 | PIN PROG DISAGREE | 275134 | 3 | 275100 PA202 T 810 846 |
| R | | SFCC 1 | PIN PROG DISAGREE FLP | 275134 | 3 | 275100 PA202 T 810 846 |
| | | SFCC 1 | PIN PROG DISAGREE SLT | 275134 | 3 | 278100 P 275 T 810 833 |
| R | | SFCC 1 | PIN PROGAM DISAGREE INSTALLATION | 275134 | 3 | 275100 PA202 T 810 846 |
| | | SFCC 1 | PIN PROGAM DISAGREE INSTALLATION | 275134 | 3 | 278100 P 275 T 810 833 |
| | | SFCC 1 | SFCC1 OR FLP PPU POWER | 275100 | 1 | 275100 P 231 T 810 812 |
| | | SFCC 1 | SINGLE MOTOR OPERATION | 275100 | 3 | 275100 P 233 T 810 814 |
| | | SFCC 1 | SINGLE MOTOR OPERATION | 278100 | 3 | 278100 P 229 T 810 811 |
| | | SFCC 1 | SLT ASYMMETRY LH CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 238 T 810 813 |
| | | SFCC 1 | SLT ASYMMETRY RH CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 238 T 810 813 |

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| LIADNINGS / MALEUNGITONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|--------------------------|---------------------|--|--------|--------------------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| | SFCC 1 | SLT FPPU 28 CV OR WIRING TO SFCC | 278119 | 1 | 278100 P 218 T 810 806 |
| | SFCC 1 | SLT HALF SPEED-CHK PCU | 278451 | 2 | 278100 P 259 T 810 824 |
| | SFCC 1 | SLT LH APPU 31 CV OR WIRING TO SFCC | 278118 | 1 | 278100 P 220 T 810 807 |
| | SFCC 1 | SLT LH WTB BLU SOLENOID 35 CV OR WIRING TO SFCC | 278151 | 1 | 278100 P 251 T 810 822 |
| | SFCC 1 | SLT OVERSPEED CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 243 T 810 815 |
| | SFCC 1 | SLT OVERSPEED LH CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 243 T 810 815 |
| | SFCC 1 | SLT OVERSPEED RH CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 243 T 810 815 |
| | SFCC 1 | SLT PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 278100 P 215 T 810 805 |
| | SFCC 1 | SLT PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 278100 P 215 T 810 805 |
| | SFCC 1 | SLT RH APPU 32 CV OR WIRING TO SFCC | 278118 | 1 | 278100 P 220 T 810 807 |
| | SFCC 1 | SLT RH WTB BLU SOLENOID 36 CV OR WIRING TO SFCC | 278151 | 1 | 278100 P 255 T 810 823 |
| | SFCC 1 | SLT RUNAWAY CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 241 T 810 814 |
| | SFCC 1 | SLT SYSTEM JAM CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 224 T 810 810 |
| | SFCC 1 | SLT UNCOMMANDED MOVEMENT CHECK SLT PCU | 278451 | 1 | 278100 P 245 T 810 817 |
| | SFCC 1 | SLT 1 FAULTY SLT 2 DATA CHECK SFCC 1 AND/OR 2 | 275134 | 2 | 278100 P 265 T 810 826 |

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| LIADNINGS / MALEUNGITONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|--------------------------|---------------------|---|--------|--------------------|---------------------------|
| WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| | SFCC 1 | SLT 1 NO SFCC 2 DATA CHECK WIRING & SFCC 2 | 275134 | 2 | 278100 P 265 T 810 826 |
| | SFCC 1 | SLT1 PCU VALVEBLOCK 25CV VALVE SENSOR 27-84-53 | 278453 | S | 278100 P 282 T 810 837 |
| | SFCC 1 | SYSTEM STOP DUE TO LOW PRESSURE | 275100 | 3 | 275100 P 233 T 810 814 |
| | SFCC 1 | SYSTEM STOP DUE TO LOW PRESSURE | 278100 | 3 | 278100 P 229 T 810 811 |
| | SFCC 2 | CHECK CSU LEVER MECHANIC associated with CHECK CSU LEVER MECHANIC | | İ | 278100 P 248 T 810 820 |
| | SFCC 2 | CSU SENSOR MISADJUST 51 | | ├ | 275100 P 228 T 810 811 |
| | SFCC 2 | CSU 51 CV OR WIRING TO FLP 2 | 275117 | 1 | 275100 P 211 T 810 805 |
| | SFCC 2 | CSU 51 CV OR WIRING TO SLT 2 | 275117 | 1 | 278100 P 212 T 810 804 |
| | SFCC 2 | DC POWER BELOW 16 V | 275100 | 3 | 275100 P 233 T 810 814 |
| | SFCC 2 | DC POWER BELOW 16 V | 278100 | 3 | 278100 P 229 T 810 811 |
| | SFCC 2 | DC POWER INTERRUPT | 275100 | 3 | 275100 P 233 T 810 814 |
| | SFCC 2 | DC POWER INTERRUPT | 278100 | 3 | 278100 P 229 T 810 811 |
| | SFCC 2 | FLP ASYMMETRY LH CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 250 T 810 819 |
| | SFCC 2 | FLP ASYMMETRY RH CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 250 T 810 819 |
| | SFCC 2 | FLP FPPU 27 CV OR WIRING TO SFCC | 275119 | 1 | 275100 P 218 T 810 808 |

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| | WARNINGS/MALFUNCTIONS | | | FAULT ISOLATION | | |
|---|-----------------------|--------|--|--------------------|---|---------------------------|
| | WARNINGS/MALFORCTIONS | SOURCE | MESSAGE | ATA | C | PROCEDURE |
| R | | SFCC 2 | FLP HALF SPEED-CHK PCU | 275451 | 2 | 275100 P 260 T 810 826 |
| | | SFCC 2 | FLP LH APPU 29 CV OR WIRING TO SFCC | 275118 | 1 | 275100 P 221 T 810 809 |
| R | | SFCC 2 | FLP LH WTB YEL SOLENOID 33 CV OR WIRING TO SFCC | 275151 | 1 | 275100 P 281 T 810 836 |
| R | | SFCC 2 | FLP OVERSPEED CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 290 T 810 840 |
| R | | SFCC 2 | FLP OVERSPEED LH CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 290 T 810 840 |
| R | | SFCC 2 | FLP OVERSPEED RH CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 290 T 810 840 |
| | | SFCC 2 | FLP PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 275100 P 216 T 810 807 |
| | | SFCC 2 | FLP PIN PROG DISAGREE CONFIGURATION | 275134 | 1 | 275100 P 216 T 810 807 |
| | | SFCC 2 | FLP PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 275100 P 216 T 810 807 |
| | | SFCC 2 | FLP RH APPU 30 CV OR WIRING TO SFCC | 275118 | 1 | 275100 P 221 T 810 809 |
| R | | SFCC 2 | FLP RH PROX SNSR 2 40CV OR LGCIU 2 | 275115 | 2 | 275100 P 256 T 810 821 |
| R | | SFCC 2 | FLP RH WTB GRN SOLENOID 34 CV OR WIRING TO SFCC | 275151 | 1 | 275100 P 284 T 810 837 |
| R | | SFCC 2 | FLP RUNAWAY CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 254 T 810 820 |
| | | SFCC 2 | FLP SYSTEM JAM CHECK FLP MECH DRIVE | 275000 | 1 | 275100 P 224 T 810 810 |
| R | | SFCC 2 | FLP UNCOMMANDED MOVEMENT CHECK FLP PCU | 275451 | 1 | 275100 P 258 T 810 825 |

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| | WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | | FAULT ISOLATION |
|---|-----------------------|---------------------|---|--------|---|---------------------------|
| | WARNINGS/MALFUNCTIONS | SOURCE | MESSAGE | ATA | С | !!! |
| | | SFCC 2 | FLP 2 CHECK LH DRIVE INTEGRITY | 275100 | 1 | 275100 P 245 T 810 818 |
| | | SFCC 2 | FLP 2 CHECK RH DRIVE INTEGRITY | 275100 | 1 | 275100 P 245 T 810 818 |
| | | SFCC 2 | FLP 2 FAULTY FLP 1 DATA CHECK SFCC 1 AND/OR 2 | 275134 | 2 | 275100 P 214 T 810 806 |
| | | SFCC 2 | FLP 2 NO SFCC 1 DATA CHECK WIRING & SFCC 1 | 275134 | 2 | 275100 P 214 T 810 806 |
| R | | SFCC 2 | FLP2 PCU VALVEBLOCK 24CV VALVE SENSOR 27-54-53 | 275453 | S | 275100 PA213 T 810 852 |
| | | SFCC 2 | INHIBIT SIGNAL FROM CARGO DOOR YELLOW SYSTEM | | 3 | 275100 P 233 T 810 814 |
| | | SFCC 2 | INHIBIT SIGNAL FROM CARGO DOOR YELLOW SYSTEM | | 3 | 278100 P 229 T 810 811 |
| | | SFCC 2 | LEVER OUT OF DETENT FOR MORE THAN 10 SEC | 275100 | 3 | 275100 P 233 T 810 814 |
| | | SFCC 2 | LEVER OUT OF DETENT FOR MORE THAN 10 SEC | 278100 | 3 | 278100 P 229 T 810 811 |
| R | | SFCC 2 | PIN PROG DISAGREE | 275134 | 3 | 275100 PA202 T 810 846 |
| R | | SFCC 2 | PIN PROG DISAGREE FLP | 275134 | 3 | 275100 PA202 T 810 846 |
| | | SFCC 2 | PIN PROG DISAGREE SLT | 275134 | 3 | 278100 P 275 T 810 833 |
| R | | SFCC 2 | PIN PROGAM DISAGREE INSTALLATION | 275134 | 3 | 275100 PA202 T 810 846 |
| | | SFCC 2 | PIN PROGAM DISAGREE INSTALLATION | 275134 | 3 | 278100 P 275 T 810 833 |
| | | SFCC 2 | SFCC2 OR FLP PPU POWER | 275100 | 1 | 275100 P 231 T 810 812 |

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| WARNINGS/MALFUNCTIONS | | CFDS FAULT MESSAGES | | FAULT ISOLATION | |
|-------------------------|--------|--|--------|--------------------|---------------------------|
| WARNINGS, MALI GROTTONS | SOURCE | MESSAGE | ATA | С | |
| | SFCC 2 | SINGLE MOTOR OPERATION | 275100 | 3 | 275100 P 233 T 810 814 |
| | SFCC 2 | SINGLE MOTOR OPERATION | 278100 | 3 | 278100 P 229 T 810 811 |
| | SFCC 2 | SLT ASYMMETRY LH CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 238 T 810 813 |
| | SFCC 2 | SLT ASYMMETRY RH CHECK SLT MECH DRIVE | 278000 | 1 1 | 278100 P 238 T 810 813 |
| | SFCC 2 | SLT FPPU 28 CV OR WIRING TO SFCC | 278119 | 1 | 278100 P 218 T 810 806 |
| | SFCC 2 | SLT HALF SPEED-CHK PCU | 278451 | 2 | 278100 P 259 T 810 824 |
| | SFCC 2 | SLT LH APPU 31 CV OR WIRING TO SFCC | 278118 | 1 | 278100 P 220 T 810 807 |
| | SFCC 2 | SLT LH WTB GRN SOLENOID 35 CV OR WIRING TO SFCC | 278151 | 1 | 278100 P 251 T 810 822 |
| | SFCC 2 | SLT OVERSPEED CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 243 T 810 815 |
| | SFCC 2 | SLT OVERSPEED LH CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 243 T 810 815 |
| | SFCC 2 | SLT OVERSPEED RH CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 243 T 810 815 |
| | SFCC 2 | SLT PIN PROG DISAGREE AIRCRAFT TYPE | 275134 | 1 | 278100 P 215 T 810 805 |
| | SFCC 2 | SLT PIN PROG DISAGREE FUNCTIONAL | 275134 | 1 | 278100 P 215 T 810 805 |
| | SFCC 2 | SLT RH APPU 32 CV OR WIRING TO SFCC | 278118 | 1 | 278100 P 220 T 810 807 |
| | SFCC 2 | SLT RH WTB GRN SOLENOID 36 CV OR WIRING TO SFCC | 278151 | 1 | 278100 P 255 T 810 823 |

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| WARNINGS/MALFUNCTIONS | CFDS FAULT MESSAGES | | | FAULT ISOLATION | |
|-----------------------|---------------------|---|--------|--------------------|---------------------------|
| | SOURCE | MESSAGE | ATA | С | PROCEDURE |
| | SFCC 2 | SLT RUNAWAY CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 241 T 810 814 |
| | SFCC 2 | SLT SYSTEM JAM CHECK SLT MECH DRIVE | 278000 | 1 | 278100 P 224 T 810 810 |
| | SFCC 2 | SLT UNCOMMANDED MOVEMENT CHECK SLT PCU | 278451 | 1 | 278100 P 245 T 810 817 |
| | SFCC 2 | SLT 2 FAULTY SLT 1 DATA CHECK SFCC 1 AND/OR 2 | 275134 | 2 | 278100 P 265 T 810 826 |
| | SFCC 2 | SLT 2 NO SFCC 1 DATA CHECK WIRING & SFCC 1 | 275134 | 2 | 278100 P 265 T 810 826 |
| | SFCC 2 | SLT2 PCU VALVEBLOCK 26CV VALVE SENSOR 27-84-53 | 278453 | S | 278100 P 282 T 810 837 |
| | SFCC 2 | SYSTEM STOP DUE TO LOW PRESSSURE | 275100 | 3 | 275100 P 233 T 810 814 |
| | SFCC 2 | SYSTEM STOP DUE TO LOW PRESSURE | 278100 | 3 | 278100 P 229 T 810 811 |

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@A319/A320/A321

TROUBLE SHOOTING MANUAL

FLIGHT CONTROLS - GENERAL - FAULT ISOLATION PROCEDURES

TASK 27-00-00-810-801

Display of an Operational Warning on the Upper ECAM DU

- 1. Possible Causes
- R maintenance message on the Post Flight Report (PFR)
 - 2. Job Set-up Information

Not Applicable

- 3. Fault Confirmation
 - A. Test
 Not applicable, no confirmation test is necessary.
- 4. Fault Isolation
- R A. Do a check for a maintenance message on the Post Flight Report (PFR). If there is no message, no action is necessary. If there is a message, do the trouble shooting procedure related to the maintenance message.

NOTE: Some operational Warnings are not printed on the PFR.

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AILERON - FAULT ISOLATION PROCEDURES

TASK 27-10-00-810-801

Loss of Signal on the Left Pedals for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - XDCR UNIT-PEDAL POS, L (25CE1)
 - wiring from the ELAC 1 (2CE1) to the transducer unit (25CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | | |
|---|-----------|------------------|---|--|--|
| | AMM | 27-24-00-710-001 | Operational Test of the Rudder Hydraulic Actuation | | |
| | AMM | 27-92-15-000-001 | Removal of the Pedal Position Transducer Unit (25CE1,25CE2) | | |
| | AMM | 27-92-15-400-001 | <pre>Installation of the Pedal Position Transducer Unit (25CE1,25CE2)</pre> | | |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | | |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | | |
| ₹ | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | | |
| | ASM | 27-92/23 | | | |

3. Fault Confirmation

A. Test

R

- (1) Do the operational test of the rudder hydraulic actuation (Ref. AMM TASK 27-24-00-710-001).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR INPUT OF L PEDALS XDCR UNIT 25CE1
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the XDCR UNIT-PEDAL POS, L (25CE1), (Ref. AMM TASK 27-92-15-000-001) and (Ref. AMM TASK 27-92-15-400-001).

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- (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 1 (2CE1) to the transducer unit (25CE1) (Ref. ASM 27-92/23).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-10-00-810-802

Loss of Signal on the Right Pedals for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - XDCR UNIT-PEDAL POS, R (25CE2)
 - wiring from the ELAC 1 (2CE1) to the transducer unit (25CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | | |
|-----------|------------------------------|---|--|--|
| AMM | 27-24-00-710-001 | Operational Test of the Rudder Hydraulic Actuation | | |
| AMM | 27-92-15-000-001 | Removal of the Pedal Position Transducer Unit (25CE1,25CE2) | | |
| AMM | 27-92-15-400-001 | <pre>Installation of the Pedal Position Transducer Unit (25CE1,25CE2)</pre> | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | | |
| | 27-96-00-740-001 27-92/23 | BITE Test of the EFCS (Ground Scanning) | | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the rudder hydraulic actuation (Ref. AMM TASK 27-24-00-710-001).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR INPUT OF R PEDALS XDCR UNIT 25CE2
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the XDCR UNIT-PEDAL POS, R (25CE2), (Ref. AMM TASK 27-92-15-000-001) and (Ref. AMM TASK 27-92-15-400-001).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 1 (2CE1) to the transducer unit (25CE2) (Ref. ASM 27-92/23).

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

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TASK 27-10-00-810-803

Failure of the Left or Right Pedal Position Transducer Unit

1. Possible Causes

- R ELAC-2 (2CE2)
 - XDCR UNIT-PEDAL POS, L (25CE1)
 - XDCR UNIT-PEDAL POS, R (25CE2)
- R wiring from the ELAC-2 (2CE2) to the XDCR UNIT-PEDAL POS, L (25CE1)
- R wiring from the ELAC-2 (2CE2) to the XDCR UNIT-PEDAL POS, R (25CE2)

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | | |
|---|-----------|------------------|---|--|--|
| | AMM | 27-24-00-710-001 | Operational Test of the Rudder Hydraulic Actuation | | |
| | AMM | 27-92-15-000-001 | Removal of the Pedal Position Transducer Unit (25CE1,25CE2) | | |
| | AMM | 27-92-15-400-001 | <pre>Installation of the Pedal Position Transducer Unit (25CE1,25CE2)</pre> | | |
| R | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | | |
| R | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | | |
| R | ASM | 27-92/23 | _ | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the rudder hydraulic actuation (Ref. AMM TASK 27-24-00-710-001).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

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- A. If the BITE test gives the maintenance message L or R PEDALS XDCR UNIT:
- R (1) Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - Do a check of the wiring from the ELAC-2 (2CE2) to the XDCR UNIT-PEDAL POS, L (25CE1) (Ref. ASM 27-92/23).
 - (a) If the fault continues:
 - Do a check of the wiring from the ELAC-2 (2CE2) to the XDCR UNIT-PEDAL POS, R (25CE2) (Ref. ASM 27-92/23).
 - (3) If the fault continues:
 - replace the XDCR UNIT-PEDAL POS, L (25CE1), (Ref. AMM TASK 27-92-15-000-001) and (Ref. AMM TASK 27-92-15-400-001).
 - (a) If the fault continues:
 - replace the XDCR UNIT-PEDAL POS, R (25CE2), (Ref. AMM TASK 27-92-15-000-001) and (Ref. AMM TASK 27-92-15-400-001).
 - B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-10-00-810-804

Failure of the Left Blue Aileron Servo Control Position Transducer

1. Possible Causes

- SERVO CTL-L AILERON, OUTBD B (33CE3)
- wiring of the POS XDCR signal from the servo control (33CE3) to the first terminal block
- wiring of the POS XDCR, V11, V12, V21, V22 signal from the servo control (33CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION | | | |
|------|------------------------------|--|--|--|--|
| 27-9 | 0-00-810-807 | Loss of the ACS2 Signal of the ELAC1 COM Side | | | |
| | 27-14-51-000-001 | Removal of the Aileron Servo Control | | | |
| AMM | 27-14-51-400-001 | Installation of the Aileron Servo Control | | | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | | | |
| | 27-96-00-740-001 27-93/02 | BITE Test of the EFCS (Ground Scanning) | | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

<u>NOTE</u>: If the POST FLIGHT REPORT (PFR) gives also the maintenance message:

R G AIL POS XDCR 33CE2

do this procedure (Ref. TASK 27-90-00-810-807).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - L B AIL POS XDCR 33CE3
 - replace the SERVO CTL-L AILERON, OUTBD B (33CE3), (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).

 ${\color{red} {\tt NOTE}}$: The resistance of primary (pins A/B and A/C) and secondary (pins A/A and A/P, pins A/R and A/D) windings of the transducer must be

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R R between 30 ohms and 500 ohms. The insulation must be more than 10 Mohms.

These values are given for information only. You can use these values to do checks of the component electrical part or of the wiring before you replace the component. But by this procedure, the check of the component mechanical part is not done. For primary winding (power supply):

- if you do the resistance check from the avionics compartment, you must disconnect the transducer of the Right Green Aileron Servo Control.
- (1) If the fault continues:
 - (a) Do a check of the wiring of the POS XDCR signal from the servo control (33CE3) to the first terminal block, (Ref. ASM 27-93/02):
 - if there is no continuity, repair the wiring
 - if there is continuity, see Para. (b).
 - (b) Do a check and repair the wiring of the POS XDCR, V11, V12, V21, V22 signal from the servo control (33CE3) to the first terminal block, (Ref. ASM 27-93/02).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-805

Loss of the Left Blue Aileron Position Transducer Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the ANI 2-5, POS SV L AIL signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|--|---|
| | 27-93-34-000-001 27-93-34-400-001 27-96-00-710-020 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | 27-96-00-740-001 27-93/02 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the test gives the maintenance message: ELAC1 COM OR WIRING FROM L B AIL POS XDCR 33CE3

ELAC1 MON OR WIRING FROM L B AIL POS XDCR 33CE3

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - (a) do a check and repair the wiring of the ANI 2-5, POS SV L AIL signal from the ELAC 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-93/02).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-807

Loss of the Servovalve Signal for the Left Blue Aileron Servo Control

1. Possible Causes

- ELAC-1 (2CE1)
- servovalve of the servo control (33CE3)
- wiring of the SV signal from the servo control (33CE3) to the ELAC1 (2CE1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | | |
|-----------|--------------------------------------|--|--|--|
| | 27-14-51-000-003 27-14-51-400-003 | Removal of the Aileron Servo-Control Servovalve Installation of the Aileron Servo-Control Servovalve | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | | |
| | 27-96-00-740-001 27-93/02 | BITE Test of the EFCS (Ground Scanning) | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - L B AIL SERVO VLV 33CE3 OR OUTPUT FROM ELAC1
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues
 - replace the servovalve of the servo control (33CE3), (Ref. AMM TASK 27-14-51-000-003) and (Ref. AMM TASK 27-14-51-400-003).

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- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (33CE3) to the ELAC1 (2CE1), (Ref. ASM 27-93/02).
- B. Do the test given in Para. 3.

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SROS

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TASK 27-10-00-810-808

R Loss of the Mode Transducer Signal for the Left Blue Aileron Servo Control

1. Possible Causes

- ELAC-1 (2CE1)
- MODE XDCR of the servo control (33CE3)
- wiring of the MODE XDCR signal from the servo control (33CE3) to the first terminal block
- wiring of the MODE XDCR VS1, VS2 signal from the servo control (33CE3) to the ELAC 1 (2CE1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|--|
| | |
| 27-90-00-810-809 | Loss of the ACS2 Signal of the ELAC1 MON Side |
| AMM 27-14-51-000-005 | Removal of the Linear Variable-Differential |
| | Transformer (LVDT) of the Aileron- Servo Control |
| AMM 27-14-51-400-005 | Installation of the Linear Variable-Differential |
| | Transformer (LVDT) of the Aileron Servo-Control |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/02 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE : If the POST FLIGHT REPORT (PFR) gives also the maintenance message:
R G AIL MODE XDCR 33CE2 OR INPUT OF ELAC 1

R G AIL MODE XDCR 33CE2 OR INPUT OF ELAC 1 do this procedure (Ref. TASK 27-90-00-810-809).

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4. Fault Isolation

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- A. If the test gives the maintenance message:
 - L B AIL MODE XDCR 33CE3 OR INPUT OF ELAC 1
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the MODE XDCR of the servo control (33CE3), (Ref. AMM TASK 27-14-51-000-005) and (Ref. AMM TASK 27-14-51-400-005).
 - NOTE: The resistance of primary (pins A/K and A/L) and secondary (pins A/J and A/U) windings of the transducer must be between 30 ohms and 500 ohms. The insulation must be more than 10 Mohms.

These values are given for information only. You can use these values to do checks of the component electrical part or of the wiring before you replace the component. But by this procedure, the check of the component mechanical part is not done.

For primary winding (power supply):

- if you do the resistance check from the avionics compartment, you must disconnect the transducer of the Right Green Aileron Servo Control.
- (2) If the fault continues:
 - (a) Do a check of the wiring of the MODE XDCR signal from the servo control (33CE3) to the first terminal block, (Ref. ASM 27-93/02):
 - if there is no continuity, repair the wiring
 - if there is continuity, see Para. (b).
 - (b) Do a check and repair the wiring of the MODE XDCR VS1, VS2 signal from the servo control (33CE3) to the ELAC 1 (2CE1), (Ref. ASM 27-93/02).
- B. Do the test given in Para. 3.

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EFF: ALL

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TASK 27-10-00-810-809

Failure of the Left Blue Aileron Servo Control Servovalve

1. Possible Causes

- ELAC-1 (2CE1)
- SERVO CTL-L AILERON, OUTBD B (33CE3)
- servovalve of the servo control 33CE3
- wiring POS XDCR signal from the servocontrol (33CE3) to the ELAC 1 (2CE1) COM and MON side

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| AMM | 27-14-51-000-001 | Removal of the Aileron Servo Control |
| AMM | 27-14-51-000-003 | Removal of the Aileron Servo-Control Servovalve |
| AMM | 27-14-51-400-001 | Installation of the Aileron Servo Control |
| AMM | 27-14-51-400-003 | Installation of the Aileron Servo-Control Servovalve |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | | (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-93/02 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

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- A. If the test gives the maintenance message:
 - L B AIL SERVO VLV 33CE3
 - replace the servovalve of the servo control 33CE3, (Ref. AMM TASK 27-14-51-000-003) and (Ref. AMM TASK 27-14-51-400-003).
 - At the 33CE3 receptacle, do a check of the resistance between pin E and pin F (Ref. ASM 27-93/02).

NOTE: The resistance must be 500 ohms +/- 10 %.

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- (1) If the fault continues:
 - do a check of the wiring POS XDCR signal from the servocontrol (33CE3) to the ELAC 1 (2CE1) COM and MON side, (Ref. ASM 27-93/02).
- (2) If the fault continues:
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (3) If the fault continues:
 - replace the SERVO CTL-L AILERON, OUTBD B (33CE3), (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-810

Failure of the Left Blue Aileron Servo Control Solenoid Valve

CAUTION : DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-L AILERON, OUTBD B (33CE3)
- ELAC-1 (2CE1)
- solenoid valve of the servo control (33CE3)
- wiring of the SOL VLV signal from the servo control (33CE3) to the ELAC1 (2CE1)

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|--------|------------|------------------------------|---|--|
| | | | | |
| | AMM | 27-14-51-000-001 | Removal of the Aileron Servo Control | |
| | AMM | 27-14-51-000-004 | Removal of the Aileron Servo-Control Solenoid Valve | |
| | AMM | 27-14-51-400-001 | Installation of the Aileron Servo Control | |
| | AMM | 27-14-51-400-004 | Installation of the Aileron Servo-Control Solenoid Valve | |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| R R | AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground Power Supply | |
| | AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| | AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump | |
| | AMM | 29-23-00-864-001 | Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU | |
| | AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the Electric Pump | |
| | AMM ASM | 29-24-00-864-001 27-93/02 | Depressurize the Yellow Hydraulic System | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-863-003), (Ref. AMM TASK 29-23-00-863-001), (Ref. AMM TASK 29-24-00-863-001).

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B. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: Before you push the line key adjacent to the START GROUND SCAN indication, release the FLT CTL/ELAC 1 pushbutton switch on the overhead panel 23VU (on this pushbutton switch the OFF legend comes on) and wait for 30 s.

- C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-864-003), (Ref. AMM TASK 29-23-00-864-001), (Ref. AMM TASK 29-24-00-864-001).
 - (2) On the overhead panel 23VU:
 - push the FLT CTL/ELAC 1 pushbutton switch (on this pushbutton switch, the OFF legend goes off).

4. Fault Isolation

- A. If the test gives the maintenance message: L B AIL MODE VLV 33CE3
 - (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001).
 - (2) At the ELAC1 receptacle, do a check of the resistance between pin AA/7G and pin AD/10C (Ref. ASM 27-93/02).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the outboard aileron servocontrol (33CE3), do a check of the resistance of the solenoid valve between pin A/H and pin A/T (Ref. ASM 27-93/02).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - a Replace the solenoid valve of the servo control (33CE3), (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between pin A/H and pin A/T of the outboard aileron servocontrol (33CE3) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L AILERON, OUTBD B (33CE3) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).

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- . Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).
- If the resistance values are in the specified limits:
 Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV signal from the servo control (33CE3) to the ELAC1 (2CE1), (Ref. ASM 27-93/02).
 - <u>b</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is more than 100 Ohms:
 - at the outboard aileron servocontrol (33CE3), do a check of the resistance of the solenoid valve between pin A/H and pin A/T (Ref. ASM 27-93/02).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servo control (33CE3) (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between pin A/H and pin A/T of the outboard aileron servocontrol (33CE3) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L AILERON, OUTBD B (33CE3) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - . Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - <u>a</u> Repair the wiring of the SOL VLV signal from the servo control (33CE3) to the ELAC1 (2CE1) (Ref. ASM 27-93/02).
 - b Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- (c) If the resistance values are in the specified limits:

R - see para. (3)

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| R R | (3) | At the ELAC1 receptacle, do a check of the insulation between pin AA/7G (pin AD/10C) and the ground. |
|-----------------------|-------|--|
| R | | NOTE: The resistance must be more than 100 Megohms. |
| R R R | | (a) If the resistance is more than 100 Megohms:replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001). |
| R R R | | 1 If the fault continues: - replace the solenoid valve (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004). |
| R R R | | <pre> 2 If the fault continues: - replace the SERVO CTL-L AILERON, OUTBD B (33CE3) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001). </pre> |
| R R R R | | If the fault continues: do a check of the wiring from the ELAC-1 (2CE1) MON part from pin AE/14G to the first terminal block. do a check and repair the wiring from the ELAC-1 (2CE1) COM part from pin AA/6G to the ground. |
| R R R | | (b) If the resistance is less than 100 Megohms:- at the SERVO CTL-L AILERON, OUTBD B (33CE3), do a check of the insulation of the solenoid valve between pin A/H (pin A/T) and the ground. |
| R R R | | 1 If the resistance is less than 100 Megohms: - replace the solenoid valve (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004). |
| R R R R R | | Do again a check of the insulation of the solenoid valve between pin A/H (pin A/T) and the ground. If the resistance is less than 100 Megohms: Replace the SERVO CTL-L AILERON, OUTBD B (33CE3) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001) Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001). |
| R | | $\underline{2}$ If the resistance is more than 100 Megohms: |
| R R | | <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-L AILERON, OUTBD B (33CE3) to the ELAC-1 (2CE1). |
| R R | | <u>b</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001). |
| | B. Do | the test given in Para. 3. |

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TASK 27-10-00-810-811

Loss of the Left Aileron Changeover Signal for the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring between the COM part and the MON part of the ELAC 1, from DSO 2 (COM) to DSI 33 (MON) and from DSO 2 (MON) to DSI 33 (COM)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|------------------------------|---|
| | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground Power Supply |
| AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System |
| AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump |
| AMM | 29-23-00-864-001 | <pre>Pepressurize the Green and Yellow Hydraulic Systems after Operation of the PTU</pre> |
| AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the Electric Pump |
| AMM ASM | 29-24-00-864-001 27-92/36 | Depressurize the Yellow Hydraulic System |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-863-003), (Ref. AMM TASK 29-23-00-863-001), (Ref. AMM TASK 29-24-00-863-001).
- B. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-864-003), (Ref. AMM TASK 29-23-00-864-001), (Ref. AMM TASK 29-24-00-864-001).

EFF: ALL

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4. Fault Isolation

- A. If the test gives the maintenance message: CHECK L AIL CHANGE OVER OF ELAC 1
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring between the COM part and the MON part of the ELAC 1, from DSO 2 (COM) to DSI 33 (MON) and from DSO 2 (MON) to DSI 33 (COM), (Ref. ASM 27-92/36).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-812

Failure of the Left Green Aileron Servo Control Position Transducer

1. Possible Causes

- SERVO CTL-L AILERON, INBD G (33CE1)
- wiring of the POS XDCR SPLY signal from the servo control (33CE1) to the first terminal block
- wiring of the POS XDCR, V11, V12, V21, V22 signal from the servo control (33CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| DESIGNATION |
|---|
| lace of the ACCO Circulat the FLACO COM Cide |
| Loss of the ACS2 Signal of the ELAC2 COM Side |
| Removal of the Aileron Servo Control |
| Installation of the Aileron Servo Control |
| Operational Test of the Side Stick Assembly |
| (Activation for the BITE Test) |
| BITE Test of the EFCS (Ground Scanning) |
| C |
| |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: L G AIL POS XDCR 33CE1
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: L G AIL POS XDCR 33CE1 R B AIL POS XDCR 33CE4 - refer to this procedure (Ref. TASK 27-90-00-810-808).

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4. Fault Isolation

R

R

- A. If the test gives the maintenance message:
 - L G AIL POS XDCR 33CE1
 - replace the SERVO CTL-L AILERON, INBD G (33CE1), (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).

NOTE: The resistance of primary (pins A/B and A/C) and secondary (pins A/A and A/P, pins A/R and A/D) windings of the transducer must be between 30 ohms and 500 ohms. The insulation must be more than 10 Mohms.

These values are given for information only. You can use these values to do checks of the component electrical part or of the wiring before you replace the component. But by this procedure, the check of the component mechanical part is not done. For primary winding (power supply):

 if you do the resistance check from the avionics compartment, you must disconnect the transducer of the Right Blue Aileron Servo Control.

(1) If the fault continues:

- (a) Do a check of the wiring of the POS XDCR SPLY signal from the servo control (33CE1) to the first terminal block, (Ref. ASM 27-93/03):
 - if there is no continuity, repair the wiring
 - if there is continuity, see Para. (b).
- (b) Do a check and repair the wiring of the POS XDCR, V11, V12, V21, V22 signal from the servo control (33CE1) to the first terminal block, (Ref. ASM 27-93/03).
- B. Do the test given in Para. 3.

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EFF: ALL

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TASK 27-10-00-810-813

Loss of the Left Green Aileron Position Transducer Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the ANI 2-5, POS SV L AIL signal from the ELAC 2 (2CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|--|---|
| AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-710-020 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-93/03 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the test gives the maintenance message: ELAC 2 COM OR WIRING FROM L G AIL POS XDCR 33CE1 or

ELAC 2 MON OR WIRING FROM L G AIL POS XDCR 33CE1

- replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - (a) Do a check and repair the wiring of the ANI 2-5, POS SV L AIL signal from the ELAC 2 (2CE2) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-93/03).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-814

Disagree between COM & MON Aileron Order Signal in the ELAC 2

1. Possible Causes

R

- ELAC-2 (2CE2)
- R SSTU-ROLL CTL, CAPT (4CE1)
- R SSTU-ROLL CTL, F/O (4CE2)
- R ANI 1-3 of ELAC-1 and ELAC-2 (COM and MON part)
- R ANI 1-4 of ELAC-1 and ELAC-2 (COM and MON part)
 - 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|--|--|--|
| | | 27-92-41-000-002 27-92-41-400-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| R | AMM | 27-93-34-000-001 27-93-34-400-001 27-92/12 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Not applicable, you cannot confirm this fault on the ground.
- 4. Fault Isolation
 - A. If the post flight report gives the maintenance message: ELAC 2 AIL ORDER DISAGREE
- R (1) Replace the ELAC-2 (2CE2) ,(Ref. AMM TASK 27-93-34-000-001) and (Ref. R AMM TASK 27-93-34-400-001).

R

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| ₹ | (3) During the subsequent flight, if the fault occurs again: |
|---|---|
| ₹ | - Do a visual inspection for quality of the contacts related to these |
| ₹ | wirings: |
| ₹ | ANI 1-3 of ELAC-1 and ELAC-2 (COM and MON part), |
| ₹ | ANI 1-4 of ELAC-1 and ELAC-2 (COM and MON part) (Ref. ASM 27- |
| ₹ | 92/12). |

EFF: ALL
SROS

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TASK 27-10-00-810-815

Loss of the Servovalve Signal for the Left Green Aileron Servo Control

1. Possible Causes

- ELAC-2 (2CE2)
- servovalve of the servo control (33CE1)
- wiring of the SV signal from the servo control (33CE1) to the ELAC 2
 (2CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-14-51-000-003 | Removal of the Aileron Servo-Control Servovalve |
| AMM 27-14-51-400-003 AMM 27-93-34-000-001 | Installation of the Aileron Servo-Control Servovalve Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 AMM 27-96-00-710-020 | Installation of the ELAC (2CE1,2CE2) Operational Test of the Side Stick Assembly |
| AMM 27-96-00-740-001 ASM 27-93/03 | (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - L G AIL SERVO VLV 33CE1 OR OUTPUT FROM ELAC 2
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the servovalve of the servo control (33CE1), (Ref. AMM TASK 27-14-51-000-003) and (Ref. AMM TASK 27-14-51-400-003).
 - (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (33CE1) to the ELAC 2 (2CE2), (Ref. ASM 27-93/03).

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B. Do the test given in Para. 3.

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SROS

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TASK 27-10-00-810-816

Loss of the Mode Transducer Signal for the Left Green Aileron Servo Control

1. Possible Causes

- ELAC-2 (2CE2)
- MODE XDCR of the servo control (33CE1)
- wiring of the MODE XDCR SPLY signal from the servo control (33CE1) to the first terminal block
- wiring of the MODE XDCR VS1, VS2 signal from the servo control (33CE1) to the ELAC 2 (2CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|--|
| | |
| 27-90-00-810-810 | Loss of the ACS2 Signal of the ELAC2 MON Side |
| AMM 27-14-51-000-005 | Removal of the Linear Variable-Differential |
| | Transformer (LVDT) of the Aileron- Servo Control |
| AMM 27-14-51-400-005 | Installation of the Linear Variable-Differential |
| | Transformer (LVDT) of the Aileron Servo-Control |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/03 | · |
| | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: L G AIL MODE XDCR 33CE1 OR INPUT OF ELAC 2 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: L G AIL MODE XDCR 33CE1 OR INPUT OF ELAC 2 R B AIL MODE XDCR 33CE4 OR INPUT OF ELAC 2

- refer to this procedure (Ref. TASK 27-90-00-810-810).

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4. Fault Isolation

R

- A. If the test gives the maintenance message:
 - L G AIL MODE XDCR 33CE1 OR INPUT OF ELAC 2
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the MODE XDCR of the servo control (33CE1), (Ref. AMM TASK 27-14-51-000-005) and (Ref. AMM TASK 27-14-51-400-005).
 - NOTE: The resistance of primary (pins A/K and A/L) and secondary (pins A/J and A/U) windings of the transducer must be between 30 ohms and 500 ohms. The insulation must be more than 10 Mohms.

These values are given for information only. You can use these values to do checks of the component electrical part or of the wiring before you replace the component. But by this procedure, the check of the component mechanical part is not done.

For primary winding (power supply):

- if you do the resistance check from the avionics compartment, you must disconnect the transducer of the Right Blue Aileron Servo Control.
- (2) If the fault continues:
 - (a) Do a check of the wiring of the MODE XDCR SPLY signal from the servo control (33CE1) to the first terminal block, (Ref. ASM 27-93/03):
 - if there is no continuity, repair the wiring
 - if there is continuity, see Para. (b).
 - (b) Do a check and repair the wiring of the MODE XDCR VS1, VS2 signal from the servo control (33CE1) to the ELAC 2 (2CE2), (Ref. ASM 27-93/03).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-817

Failure of the Left Green Aileron Servo Control Servovalve

1. Possible Causes

- ELAC-2 (2CE2)
- SERVO CTL-L AILERON, INBD G (33CE1)
- servovalve of the servo control 33CE1
- wiring POS XDCR signal from the servocontrol (33CE1) to the ELAC 2 (2CE2)
 COM and MON side

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|------------------------------|--|
| | | |
| AMM | 27-14-51-000-001 | Removal of the Aileron Servo Control |
| AMM | 27-14-51-000-003 | Removal of the Aileron Servo-Control Servovalve |
| AMM | 27-14-51-400-001 | Installation of the Aileron Servo Control |
| AMM | 27-14-51-400-003 | Installation of the Aileron Servo-Control Servovalve |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-93/03 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - L G AIL SERVO VLV 33CE1
 - replace the servovalve of the servo control 33CE1, (Ref. AMM TASK 27- 14-51-000-003) and (Ref. AMM TASK 27-14-51-400-003).
 - At the 33CE1 receptacle, do a check of the resistance between pin E and pin F (Ref. ASM 27-93/03).

NOTE: The resistance must be 500 ohms +/- 10 %.

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- (1) If the fault continues:
 - do a check of the wiring POS XDCR signal from the servocontrol (33CE1) to the ELAC 2 (2CE2) COM and MON side, (Ref. ASM 27-93/03).
- (2) If the fault continues:
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (3) If the fault continues:
 - replace the SERVO CTL-L AILERON, INBD G (33CE1), (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-818

Failure of the Left Green Aileron Servo Control Solenoid Valve

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-L AILERON, INBD G (33CE1)
- ELAC-2 (2CE2)
- solenoid valve of the servo control (33CE1)
- wiring of the SOL VLV signal from the servo control (33CE1) to the ELAC2 (2CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|------------|------------------------------|---|--|
| | | | |
| AMM | 27-14-51-000-001 | Removal of the Aileron Servo Control | |
| AMM | 27-14-51-000-004 | Removal of the Aileron Servo-Control Solenoid Valve | |
| AMM | 27-14-51-400-001 | Installation of the Aileron Servo Control | |
| AMM | 27-14-51-400-004 | Installation of the Aileron Servo-Control Solenoid Valve | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground Power Supply | |
| AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump | |
| AMM | 29-23-00-864-001 | <pre>Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU</pre> | |
| AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the Electric Pump | |
| AMM ASM | 29-24-00-864-001 27-93/03 | Depressurize the Yellow Hydraulic System | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-863-003), (Ref. AMM TASK 29-23-00-863-001), (Ref. AMM TASK 29-24-00-863-001).

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B. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: Before you push the line key adjacent to the START GROUND SCAN indication, release the FLT CTL/ELAC 2 pushbutton switch on the overhead panel 24VU (on this pushbutton switch the OFF legend comes on) and wait for 30 s.

- C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-864-003), (Ref. AMM TASK 29-23-00-864-001), (Ref. AMM TASK 29-24-00-864-001).
 - (2) On the overhead panel 24VU:
 - push the FLT CTL/ELAC 2 pushbutton switch (on this pushbutton switch, the OFF legend goes off).

4. Fault Isolation

- A. If the test gives the maintenance message: L G AIL MODE VLV 33CE1
 - (1) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001).
 - (2) At the ELAC2 receptacle, do a check of the resistance between pin AA/7G and pin AD/10C (Ref. ASM 27-93/03).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 0hms:
 - at the inboard aileron servocontrol (33CE1), do a check of the resistance of the solenoid valve between pin A/H and pin A/T (Ref. ASM 27-93/03).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - a Replace the solenoid valve of the servo control (33CE1), (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between pin A/H and pin A/T of the inboard aileron servocontrol (33CE1) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L AILERON, INBD G (33CE1) (Ref. AMM TASK 27-14-51-400-001).

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- . Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).
- If the resistance values are in the specified limits:
 Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV signal from the servo control (33CE1) to the ELAC2 (2CE2), (Ref. ASM 27-93/03).
 - <u>b</u> Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is more than 100 Ohms:
 - at the inboard aileron servocontrol (33CE1), do a check of the resistance of the solenoid valve between pin A/H and pin A/T (Ref. ASM 27-93/03).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - a Replace the solenoid valve of the servo control (33CE1) (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between pin A/H and pin A/T of the intboard aileron servocontrol (33CE1) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L AILERON, INBD G (33CE1) (Ref. AMM TASK 27-14-51-400-001).
 - . Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV signal from the servo control (33CE1) to the ELAC2 (2CE2) (Ref. ASM 27-93/03).
 - b Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- (3) At the ELAC2 receptacle, do a check of the insulation between pin AA/7G (pin AD/10C) and the ground.

NOTE: The resistance must be more than 100 Megohms.

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- (a) If the resistance is more than 100 Megohms:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 1 If the fault continues:
 - replace the solenoid valve (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - 2 If the fault continues:
 - replace the SERVO CTL-L AILERON, INBD G (33CE1) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - 3 If the fault continues:
 - do a check of the wiring from the ELAC-2 (2CE2) MON part from pin AE/14G to the first terminal block
 - do a check and repair the wiring from the ELAC-2 (2CE2) COM part from pin AA/6G to the ground.
- (b) If the resistance is less than 100 Megohms:
 - at the SERVO CTL-L AILERON, INBD G (33CE1), do a check of the insulation of the solenoid valve between pin A/H (pin A/T) and the ground.
 - 1 If the resistance is less than 100 Megohms:
 - replace the solenoid valve (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - <u>a</u> Do again a check of the insulation of the solenoid valve between pinA/H (pin A/T) and the ground.
 - If the resistance is less than 100 Megohms:
 - . Replace the SERVO CTL-L AILERON, INBD G (33CE1) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001)
 - . Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the resistance is more than 100 Megohms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-L AILERON, INBD G (33CE1) to the ELAC-2 (2CE2)
 - <u>b</u> Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-819

Failure of the Right Green Aileron Servo Control Position Transducer

1. Possible Causes

- SERVO CTL-R AILERON, INBD G (33CE2)
- wiring of the LVDT POS SPLY signal from the servo control (33CE2) to the first terminal block
- wiring of the POS XDCR, V11, V12, V21, V22 signal from the servo control (33CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

REFERENCE

DESIGNATION

27-90-00-810-807 Loss of the ACS2 Signal of the ELAC1 COM Side AMM 27-14-51-000-001 Removal of the Aileron Servo Control ASM 27-93/02

3. Fault Confirmation

A. Test

Not applicable, you cannot confirm this fault on the ground.

4. Fault Isolation

- A. Do a check for maintenance messages on the POST FLIGHT REPORT (PFR)
 - (1) If there are these maintenance messages:

R G AIL POS XDCR 33CE2

L B AIL POS XDCR 33CE3

- do this procedure (Ref. TASK 27-90-00-810-807).

- (2) If there is only this maintenance message: R G AIL POS XDCR 33CE2
 - (a) Replace the SERVO CTL-R AILERON, INBD G (33CE2), (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).

NOTE: The resistance of primary (pins A/B and A/C) and secondary (pins A/A and A/P, pins A/R and A/D) windings of the transducer must be between 30 ohms and 500 ohms. The insulation must be more than 10 Mohms.

These values are given for information only. You can use these values to do checks of the component electrical part

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or of the wiring before you replace the component. But by this procedure, the check of the component mechanical part is not done.

For primary winding (power supply):

- if you do the resistance check from the avionics compartment, you must disconnect the transducer of the Left Blue Aileron Servo Control.
- (b) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
- (c) On the EWD, if the F/CTL AIL SERVO FAULT warning stays in view:
 - Do a check of the wiring of the LVDT POS SPLY signal from the servo control (33CE2) to the first terminal block, (Ref. ASM 27-93/02):
 - if there is no continuity, repair the wiring
 - if there is continuity, see Para. 2.
 - Do a check and repair the wiring of the POS XDCR, V11, V12, V21, V22 signal from the servo control (33CE2) to the first terminal block, (Ref. ASM 27-93/02).

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TASK 27-10-00-810-820

Loss of the Right Green Aileron Position Transducer Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the ANI 2-4, POS SV R AIL signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE DESIGNATION

ASM 27-93/02

AMM 27-93-34-000-001 Removal of the ELAC (2CE1,2CE2)
AMM 27-93-34-400-001 Installation of the ELAC (2CE1,2CE2)

- 3. Fault Confirmation
 - A. Test

Not applicable, you cannot confirm this fault on the ground.

- 4. Fault Isolation
 - A. Replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
 - (2) On the EWD, if the F/CTL AIL SERVO FAULT warning stays in view: - do a check and repair the wiring of the ANI 2-4, POS SV R AIL signal from the ELAC 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-93/02).

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TASK 27-10-00-810-821

Loss of the Servovalve Signal for the Right Green Aileron Servo Control

1. Possible Causes

- ELAC-1 (2CE1)
- servovalve of the servocontrol (33CE2)
- wiring of the SV signal from the servo control (33CE2) to the ELAC 1
 (2CE1)

Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| | | |
| AMM | 27-14-51-000-003 | Removal of the Aileron Servo-Control Servovalve |
| AMM | 27-14-51-400-003 | Installation of the Aileron Servo-Control Servovalve |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| ASM | 27-93/02 | |

3. Fault Confirmation

A. Test

Not applicable, you cannot confirm this fault on the ground.

4. Fault Isolation

- A. Replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
 - (2) On the EWD, if the F/CTL AIL SERVO FAULT warning stays in view:
 replace the servovalve of the servocontrol (33CE2), (Ref. AMM TASK 27-14-51-000-003) and (Ref. AMM TASK 27-14-51-400-003).
 - (3) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
 - (4) On the EWD, if the F/CTL AIL SERVO FAULT warning stays in view:

 do a check and repair the wiring of the SV signal from the servo control (33CE2) to the ELAC 1 (2CE1), (Ref. ASM 27-93/02).

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TASK 27-10-00-810-822

Loss of the Mode Transducer Signal for the Right Green Aileron Servo Control

1. Possible Causes

- ELAC-1 (2CE1)
- MODE XDCR of the servo control (33CE2)
- wiring of the MODE XDCR SPLY signal from the servo control (33CE2) to the first terminal block
- wiring of the MODE XDCR VS1, VS2 signal from the servo control (33CE2) to the ELAC 1 (2CE1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|--------------------------------------|--|--|
| | | |
| 27-90-00-810-809 | Loss of the ACS2 Signal of the ELAC1 MON Side | |
| AMM 27-14-51-000-005 | Removal of the Linear Variable-Differential Transformer (LVDT) of the Aileron- Servo Control | |
| AMM 27-14-51-400-005 | Installation of the Linear Variable-Differential Transformer (LVDT) of the Aileron Servo-Control | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 ASM 27-93/02 | Installation of the ELAC (2CE1,2CE2) | |

3. Fault Confirmation

A. Test

Not applicable, you cannot confirm this fault on the ground.

4. Fault Isolation

A. Do a check for maintenance messages on the POST FLIGHT REPORT (PFR)

<u>NOTE</u>: On ground, during a GROUND SCANNING, if a F/CTL maintenance status is shown without related associated maintenance messages, start the procedure at step A.(2)(a).

(1) If there are these maintenance messages:

R G AIL MODE XDCR 33CE2 OR INPUT OF ELAC1

L B AIL MODE XDCR 33CE3 OR INPUT OF ELAC1

- do this procedure (Ref. TASK 27-90-00-810-809).

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- (2) If there is only this maintenance message: R G AIL MODE XDCR 33CE2 OR INPUT OF ELAC1
 - (a) Replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (b) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
 - (c) On the EWD, if the F/CTL AIL SERVO FAULT warning stays in view: - replace the MODE XDCR of the servo control (33CE2), (Ref. AMM TASK 27-14-51-400-005).

NOTE: The resistance of the primary (pins A/K and A/L) and secondary (pins A/J and A/U) windings of the transducer must be between 30 ohms and 500 ohms. The insulation must be more than 10 Mohms.

These values are given for information only. You can use these values to do checks of the component electrical part or of the wiring before you replace the component. This procedure does not do a check of the component mechanical part.

For the primary winding (power supply):

- if you do the resistance check from the avionics compartment, you must disconnect the transducer of the left Blue aileron servo control.
- (d) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
- (e) On the EWD, if the F/CTL AIL SERVO FAULT warning stays in view:
 - Do a check of the wiring of the MODE XDCR SPLY signal from the servo control (33CE2) to the first terminal block, (Ref. ASM 27-93/02):
 - if there is no continuity, repair the wiring
 - if there is continuity, see Para. 2_.
 - Do a check and repair the wiring of the MODE XDCR VS1, VS2 signal from the servo control (33CE2) to the ELAC 1 (2CE1), (Ref. ASM 27-93/02).
- (3) If you have other maintenance messages than those above, do the troubleshooting procedure related to this maintenance message.

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TASK 27-10-00-810-823

Failure of the Right Green Aileron Servo Control Servovalve

1. Possible Causes

- ELAC-1 (2CE1)
- SERVO CTL-R AILERON, INBD G (33CE2)
- servovalve of the servo control 33CE2
- wiring POS XDCR signal from the servocontrol (33CE2) to the ELAC 1 (2CE1)
 COM and MON side

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| | 27 4/ 54 000 004 | Para al of the Ailman Court of | |
| | 27-14-51-000-001 | Removal of the Aileron Servo Control | |
| AMM | 27-14-51-000-003 | Removal of the Aileron Servo-Control Servovalve | |
| AMM | 27-14-51-400-001 | Installation of the Aileron Servo Control | |
| AMM | 27-14-51-400-003 | Installation of the Aileron Servo-Control Servovalve | |
| | 27-93-34-400-001 27-93/02 | Installation of the ELAC (2CE1,2CE2) | |

3. Fault Confirmation

- A. Test
 - (1) Not applicable, you cannot confirm this fault on the ground.

4. Fault Isolation

- A. Replace the servovalve of the servo control 33CE2, (Ref. AMM TASK 27-14-51-000-003) and (Ref. AMM TASK 27-14-51-400-003).
 - At the 33CE2 receptacle, do a check of the resistance between pin E and pin F (Ref. ASM 27-93/02).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (1) If the fault continues:
 - do a check of the wiring POS XDCR signal from the servocontrol (33CE2) to the ELAC 1 (2CE1) COM and MON side, (Ref. ASM 27-93/02).
- (2) If the fault continues:
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-400-001) and (Ref. AMM TASK 27-93-34-400-001).

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- (3) If the fault continues:
 - replace the SERVO CTL-R AILERON, INBD G (33CE2), (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).

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TASK 27-10-00-810-824

Failure of the Right Green Aileron Servo Control Solenoid Valve

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-R AILERON, INBD G (33CE2)
- ELAC-1 (2CE1)
- solenoid valve of the servo control (33CE2)
- wiring of the SOL VLV signal from the servo control (33CE2) to the ELAC1 (2CE1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 27-14-51-000-001 | Removal of the Aileron Servo Control | |
| AMM | 27-14-51-000-004 | Removal of the Aileron Servo-Control Solenoid Valve | |
| AMM | 27-14-51-400-001 | Installation of the Aileron Servo Control | |
| AMM | 27-14-51-400-004 | <pre>Installation of the Aileron Servo-Control Solenoid Valve</pre> | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| ASM | 27-93/02 | | |

3. Fault Confirmation

A. Test

Not applicable, you cannot confirm this fault on the ground.

4. Fault Isolation

- A. Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001).
 - (1) At the ELAC1 receptacle, do a check of the resistance between pin AA/7J and pin AD/10A (Ref. ASM 27-93/02).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the inboard aileron servocontrol (33CE2), do a check of the resistance of the solenoid valve between pin A/H and pin A/T (Ref. ASM 27-93/02).

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NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - <u>a</u> Replace the solenoid valve of the servo control (33CE2), (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - Do again a check of the resistance of the solenoid valve between pin A/H and pin A/T of the inboard aileron servocontrol (33CE2) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R AILERON, INBD G (33CE2) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits:
 Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV signal from the servo control (33CE2) to the ELAC1 (2CE1) (Ref. ASM 27-93/02).
 - <u>b</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is more than 100 Ohms:
 - at the inboard aileron servocontrol (33CE2), do a check of the resistance of the solenoid valve between pin A/H and pin A/T (Ref. ASM 27-93/02).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - <u>a</u> Replace the solenoid valve of the servo control (33CE2) (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between pin A/H and pin A/T of the inboard aileron servocontrol (33CE2) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R AILERON, INBD G (33CE2) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - . Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).

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- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV signal from the servo control (33CE2) to the ELAC1 (2CE1) (Ref. ASM 27-93/02).
 - b Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- (c) If the resistance values are in the specified limits:See para. (2).
- (2) At the ELAC1 receptacle, do a check of the insulation between pin AA/7J (pin AD/10A) and the ground.

NOTE: The resistance must be more than 100 Megohms

- (a) If the resistance is more than 100 Megohms:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 1 If the fault continues:
 - replace the solenoid valve (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - 2 If the fault continues:
 - replace the SERVO CTL-R AILERON, INBD G (33CE2) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - 3 If the fault continues:
 - Do a check of the wiring from the ELAC-1 (2CE1) MON part from pin AE/14E to the first terminal block.
 - Do a check and repair the wiring from the ELAC-1 (2CE1) COM part from pin AA/6J to the ground.
- (b) If the resistance is less than 100 Megohms:
 - at the SERVO CTL-R AILERON, INBD G (33CE2), do a check of the insulation of the solenoid valve between pin A/H (pin A/T) and the ground.
 - 1 If the resistance is less than 100 Megohms:
 - replace the solenoid valve (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - <u>a</u> do again a check of the insulation of the solenoid valve between pin A/H (pin A/T) and the ground.
 - If the resistance is less than 100 Megohms:
 - . Replace the SERVO CTL-R AILERON, INBD G (33CE2) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - . Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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- 2 If the resistance is more tahn 100 Megohms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-R AILERON, INBD G (33CE2) to the ELAC-1 (2CE1).
 - \underline{b} Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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TASK 27-10-00-810-825

Loss of the Right Aileron Changeover Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring between the COM part and the MON part of the ELAC 1, from DS 03 (COM) to DSI 34 (MON) and from DS 03 (MON) to DSI 34 (COM)
- Job Set-up Information
 - A. Referenced Information

REFERENCE **DESIGNATION** AMM 27-93-34-000-001 Removal of the ELAC (2CE1,2CE2)
AMM 27-93-34-400-001 Installation of the ELAC (2CE1,2CE2)

- 3. Fault Confirmation
 - A. Test

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Not applicable, you cannot confirm this fault on the ground.

- 4. Fault Isolation
 - A. Replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
 - (2) On the EWD, if the F/CTL AIL SERVO FAULT warning stays in view: - do a check and repair the wiring between the COM part and the MON part of the ELAC 1, from DS 03 (COM) to DSI 34 (MON) and from DS 03 (MON) to DSI 34 (COM), (Ref. ASM 27-92/36).

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TASK 27-10-00-810-826

Failure of the Right Blue Aileron Servo Control Position Transducer

1. Possible Causes

- SERVO CTL-R AILERON, OUTBD B (33CE4)
- wiring of the POS XDCR SPLY signal from the servo control (33CE4) to the first terminal block
- wiring of the POS XDCR, V11, V12, V21, V22 signal from the servo control (33CE4) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 27-90-00-810-808 | Loss of the ACS2 Signal of the ELAC2 COM Side |
| AMM 27-14-51-000-001 | Removal of the Aileron Servo Control |
| AMM 27-14-51-400-001 | Installation of the Aileron Servo Control |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/03 | ==-= ·································· |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R B AIL POS XDCR 33CE4
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: R B AIL POS XDCR 33CE4 L G AIL POS XDCR 33CE1
 - refer to this procedure (Ref. TASK 27-90-00-810-808).

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4. Fault Isolation

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- A. If the test gives the maintenance message: R B AIL POS XDCR 33CE4
 - replace the SERVO CTL-R AILERON, OUTBD B (33CE4), (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).

NOTE: The resistance of primary (pins A/B and A/C) and secondary (pins A/A and A/P, pins A/R and A/D) windings of the transducer must be between 30 ohms and 500 ohms. The insulation must be more than 10 Mohms.

These values are given for information only. You can use these values to do checks of the component electrical part or of the wiring before you replace the component. But by this procedure, the check of the component mechanical part is not done. For primary winding (power supply):

 if you do the resistance check from the avionics compartment, you must disconnect the transducer of the Left Green Aileron Servo Control.

- (1) If the fault continues:
 - (a) Do a check of the wiring of the POS XDCR SPLY signal from the servo control (33CE4) to the first terminal block, (Ref. ASM 27-93/03):
 - if there is no continuity, repair the wiring
 - if there is continuity, see Para. (b).
 - (b) Do a check and repair the wiring of the POS XDCR, V11, V12, V21, V22 signal from the servo control (33CE4) to the first terminal block, (Ref. ASM 27-93/03).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-827

Loss of the Right Blue Aileron Position Transducer Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the ANI 2-4, POS SV R AIL signal from the ELAC 2 (2CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|--------------------------------------|--|
| | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| | 27-93-34-400-001 27-96-00-710-020 | <pre>Installation of the ELAC (2CE1,2CE2) Operational Test of the Side Stick Assembly (Activation for the BITE Test)</pre> |
| | 27-96-00-740-001 27-93/03 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the test gives the maintenance message: ELAC 2 COM OR WIRING FROM R B AIL POS XDCR 33CE4 or

ELAC 2 MON OR WIRING FROM R B AIL POS XDCR 33CE4

- replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - (a) Do a check and repair the wiring of the ANI 2-4, POS SV R AIL signal from the ELAC 2 (2CE2) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-93/03).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-828

Loss of the Servovalve Signal for the Right Blue Aileron Servo Control

1. Possible Causes

- ELAC-2 (2CE2)
- servovalve of the servo control (33CE4)
- wiring of the SV signal from the servo control (33CE4) to the ELAC 2
 (2CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE DESIGNATION | | DESIGNATION |
|-----------------------|------------------------------|--|
| | | |
| AMM | 27-14-51-000-003 | Removal of the Aileron Servo-Control Servovalve |
| AMM | 27-14-51-400-003 | Installation of the Aileron Servo-Control Servovalve |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-93/03 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - R B AIL SERVO VLV 33CE4 OR OUTPUT FROM ELAC 2
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the servovalve of the servo control (33CE4), (Ref. AMM TASK 27-14-51-000-003) and (Ref. AMM TASK 27-14-51-400-003).
 - At the 33CE4 receptacle, do a check of the resistance between pin E and pin F (Ref. ASM 27-93/03).

 $\underline{\text{NOTE}}$: The resistance must be 500 ohms +/- 10 %.

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- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (33CE4) to the ELAC 2 (2CE2), (Ref. ASM 27-93/03).
- B. Do the test given in Para. 3.

EFF: ALL
SROS

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TASK 27-10-00-810-829

Loss of the Mode Transducer Signal for the Right Blue Aileron Servo Control

1. Possible Causes

- ELAC-2 (2CE2)
- MODE XDCR of the servo control (33CE4)
- wiring of the MODE XDCR SPLY signal from the servo control (33CE4) to the first terminal block
- wiring of the MODE XDCR VS1, VS2 signal from the servo control (33CE4) to the ELAC 2 (2CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|--|--|
| | | |
| 27-90-00-810-810 | Loss of the ACS2 Signal of the ELAC2 MON Side | |
| AMM 27-14-51-000-005 | Removal of the Linear Variable-Differential | |
| | Transformer (LVDT) of the Aileron- Servo Control | |
| AMM 27-14-51-400-005 | Installation of the Linear Variable-Differential | |
| | Transformer (LVDT) of the Aileron Servo-Control | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | (Activation for the BITE Test) | |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM 27-93/03 | · · | |
| ASIT ET 75/05 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R B AIL MODE XDCR 33CE4 OR INPUT OF ELAC 2 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: R B AIL MODE XDCR 33CE4 OR INPUT OF ELAC 2 L G AIL MODE XDCR 33CE1 OR INPUT OF ELAC 2 - refer to this procedure (Ref. TASK 27-90-00-810-810).

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EFF:

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4. Fault Isolation

R

- A. If the test gives the maintenance message:
 - R B AIL MODE XDCR 33CE4 OR INPUT OF ELAC 2
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the MODE XDCR of the servo control (33CE4), (Ref. AMM TASK 27-14-51-000-005) and (Ref. AMM TASK 27-14-51-400-005).
 - NOTE: The resistance of primary (pins A/K and A/L) and secondary (pins A/J and A/U) windings of the transducer must be between 30 ohms and 500 ohms. The insulation must be more than 10 Mohms.

These values are given for information only. You can use these values to do checks of the component electrical part or of the wiring before you replace the component. But by this procedure, the check of the component mechanical part is not done.

For primary winding (power supply):

- if you do the resistance check from the avionics compartment, you must disconnect the transducer of the Left Green Aileron Servo Control.
- (2) If the fault continues:
 - (a) Do a check of the wiring of the MODE XDCR SPLY signal from the servo control (33CE4) to the first terminal block, (Ref. ASM 27-93/03):
 - if there is no continuity, repair the wiring
 - if there is continuity, see Para. (b).
 - (b) Do a check and repair the wiring of the MODE XDCR VS1, VS2 signal from the servo control (33CE4) to the ELAC 2 (2CE2), (Ref. ASM 27-93/03).
- B. Do the test given in Para. 3.

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EFF: ALL

SROS

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TASK 27-10-00-810-830

Failure of the Right Blue Aileron Servo Control Servovalve

1. Possible Causes

- ELAC-2 (2CE2)
- SERVO CTL-R AILERON, OUTBD B (33CE4)
- servovalve of the servo control 33CE4
- wiring POS XDCR signal from the servocontrol (33CE4) to the ELAC 2 (2CE2)
 COM and MON side

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| | | | |
| AMM | 27-14-51-000-001 | Removal of the Aileron Servo Control | |
| AMM | 27-14-51-000-003 | Removal of the Aileron Servo-Control Servovalve | |
| AMM | 27-14-51-400-001 | Installation of the Aileron Servo Control | |
| AMM | 27-14-51-400-003 | Installation of the Aileron Servo-Control Servovalve | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | | (Activation for the BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-93/03 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the test gives the maintenance message:

R B AIL SERVO VLV 33CE4

- replace the servovalve of the servo control 33CE4, (Ref. AMM TASK 27-14-51-000-003) and (Ref. AMM TASK 27-14-51-400-003).
- At the 33CE4 receptacle, do a check of the resistance between pin E and pin F (Ref. ASM 27-93/03).

NOTE: The resistance must be 500 ohms +/- 10 %.

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- (1) If the fault continues:
 - do a check of the wiring POS XDCR signal from the servocontrol (33CE4) to the ELAC 2 (2CE2) COM and MON side, (Ref. ASM 27-93/03).
- (2) If the fault continues:
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (3) If the fault continues:
 - replace the SERVO CTL-R AILERON, OUTBD B (33CE4), (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
- B. Do the test given in Para. 3.

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TASK 27-10-00-810-831

Failure of the Right Blue Aileron Servo Control Solenoid Valve

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-R AILERON, OUTBD B (33CE4)
- ELAC-2 (2CE2)
- solenoid valve of the servo control (33CE4)
- wiring of the SOL VLV signal from the servo control (33CE4) to the ELAC2 (2CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | | |
|------------|------------------------------|---|--|--|
| | 27 47 54 000 004 | | | |
| AMM | 27-14-51-000-001 | Removal of the Aileron Servo Control | | |
| AMM | 27-14-51-000-004 | Removal of the Aileron Servo-Control Solenoid Valve | | |
| AMM | 27-14-51-400-001 | Installation of the Aileron Servo Control | | |
| AMM | 27-14-51-400-004 | Installation of the Aileron Servo-Control Solenoid Valve | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | | |
| AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground Power Supply | | |
| AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | | |
| AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump | | |
| AMM | 29-23-00-864-001 | Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU | | |
| AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the Electric Pump | | |
| AMM ASM | 29-24-00-864-001 27-93/03 | Depressurize the Yellow Hydraulic System | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-863-003), (Ref. AMM TASK 29-23-00-863-001), (Ref. AMM TASK 29-24-00-863-001).

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B. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: Before you push the line key adjacent to the START GROUND SCAN indication, release the FLT CTL/ELAC 2 pushbutton switch on the overhead panel 24VU (on this pushbutton switch the OFF legend comes on) and wait for 30 s.

- C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-864-003), (Ref. AMM TASK 29-23-00-864-001), (Ref. AMM TASK 29-24-00-864-001).
 - (2) On the overhead panel 24VU:
 - push the FLT CTL/ELAC 2 pushbutton switch (on this pushbutton switch, the OFF legend goes off).

4. Fault Isolation

- A. If the test gives the maintenance message: R B AIL MODE VLV 33CE4
 - (1) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001).
 - (2) At the ELAC2 receptacle, do a check of the resistance between pin AA/7J and pin AD/10A (Ref. ASM 27-93/03).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 0hms:
 - at the outboard aileron servocontrol (33CE4), do a check of the resistance of the solenoid valve between pin A/H and pin A/T (Ref. ASM 27-93/03).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - a Replace the solenoid valve of the servo control (33CE4), (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between pin A/H and A/T of the outboard aileron servocontrol (33CE4) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R AILERON, OUTBD B (33CE4) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).

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- . Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).
- If the resistance values are in the specified limits: Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV signal from the servo control (33CE4) to the ELAC2 (2CE2), (Ref. ASM 27-93/03).
 - <u>b</u> Replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is more than 100 Ohms:
 - at the outboard aileron servocontrol (33CE4), do a check of the resistance of the solenoid valve between pin A/H and pin A/T (Ref. ASM 27-93/03).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - a Replace the solenoid valve of the servo control (33CE4), (Ref. AMM TASK 27-14-51-000-004) and (Ref. AMM TASK 27-14-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between pin A/H and A/T of the outboard aileron servocontrol (33CE4) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R AILERON, OUTBD B (33CE4) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - . Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - <u>a</u> Repair the wiring of the SOL VLV signal from the servo control (33CE4) to the ELAC2 (2CE2), (Ref. ASM 27-93/03).
 - b Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- B. Do the test given in Para. 3.

EFF: ALL

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TASK 27-10-00-810-833

Loss of the two Aileron Servocontrols on the Left Aileron

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE **DESIGNATION** ______

AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

- 3. Fault Confirmation
 - A. Test Not applicable.
- 4. Fault Isolation
 - A. This warning is shown after the failure of the two aileron servocontrols. To do the trouble shooting, refer to the POST FLIGHT REPORT and start the trouble shooting from the first F/CTL AIL SERVO FAULT warning and its related maintenance message.

After this step, on the upper ECAM DU the F/CTL L AIL FAULT warning will go out of view and be replaced by the F/CTL AIL SERVO FAULT warning with a related maintenance message. Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001), to know the related maintenance message.

Do the trouble shooting related to this message.

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TASK 27-10-00-810-834

Loss of the two Aileron Servocontrols on the Right Aileron

- 1. Possible Causes
- 2. Job Set-up Information

| _ | | | | |
|----|-------|-------|-------|--------|
| Α_ | Reter | enced | Infor | mation |

REFERENCE **DESIGNATION** ______

AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

- 3. Fault Confirmation
 - A. Test Not applicable.
- 4. Fault Isolation
 - A. This warning is shown after the failure of the two aileron servocontrols. To do the trouble shooting, refer to the POST FLIGHT REPORT and start the trouble shooting from the first F/CTL AIL SERVO FAULT warning and its related maintenance message.

After this step, on the upper ECAM DU the F/CTL R AIL FAULT warning will go out of view and be replaced by the F/CTL AIL SERVO FAULT warning with a related maintenance message. Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001), to know the related maintenance message.

Do the trouble shooting related to this message.

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TASK 27-10-00-810-835

Vibrations Felt in the Forward Cabin and Cockpit

1. Possible Causes

- aileron servo controls and hinge bearings

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| 05-50-00-810-801 | Identification of the Cause of In-Flight Airframe |
| AMM 27-14-00-220-001 | Vibrations and/or Noises Check of the Aileron Servo Controls and Hinge Bearings for too much Play and Condition |

3. Fault Confirmation

A. Test

Make sure that the identification of the cause of the vibrations is correct (Ref. TASK 05-50-00-810-801).

4. Fault Isolation

- A. If you feel vibrations in the forward cabin and cockpit:
 - do a check of the aileron servo controls and hinge bearings for too much play and condition (Ref. AMM TASK 27-14-00-220-001).
 - (1) If the play is more than the limits:
 - do the corrective actions as per: (Ref. SB 27-1057).

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TASK 27-10-00-810-836

Wrong Aileron Position Indication

1. Possible Causes

- ELAC-1 (2CE1)
- SERVO CTL-L AILERON, INBD G (33CE1)
- SERVO CTL-R AILERON, OUTBD B (33CE4)
- wiring of the LVDT POS Signal

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|--------------------------------------|---|
| AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power |
| AMM AMM | 27-14-51-000-001 27-14-51-400-001 | Removal of the Aileron Servo Control Installation of the Aileron Servo Control |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | | Installation of the ELAC (2CE1,2CE2) |
| AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground Power Supply |
| AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System |
| AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump |
| AMM | 29-23-00-864-001 | Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU |
| AMM | 31-60-00-860-001 | EIS Start Procedure |
| AMM ASM | 31-60-00-860-002 27-93/03 | EIS Stop Procedure |

3. Fault Confirmation

- A. Job Set-up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the panel 23VU, make sure that the FLT CTL/ELAC 1 pushbutton switch is pushed (on this pushbutton switch, the OFF and FAULT legends are off).
 - (3) On the panel 24VU, make sure that the FLT CTL/ELAC 2 pushbutton switch is pushed (on this pushbutton switch, the OFF and FAULT legends are off).

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- (4) On the center pedestal, make sure that the slats and flaps control lever is in the O position.
- (5) Make sure that the two side stick controllers are in the neutral position
- (6) Do the EIS start procedure (Upper ECAM DU and lower ECAM DU only) (Ref. AMM TASK 31-60-00-860-001).
- (7) Pressurize the Green and Blue hydraulic systems (Ref. AMM TASK 29-23-00-863-001) and (Ref. AMM TASK 29-10-00-863-003).
- B. Test

ACTION RESULT

1. On the center pedestal, on the ECAM control panel:

 push the F/CTL pushbutton switch On the lower ECAM display unit:

- the F/CTL page comes into view.
- on the L/AIL position indicator, the index does't show the neutral position
- on the R/AIL position indicator, the index does't show the neutral position.

- C. Close-up
 - (1) Depressurize the green and blue hydraulic systems (Ref. AMM TASK 29-23-00-864-001) and (Ref. AMM TASK 29-10-00-864-003).
 - (2) Do the EIS stop procedure (Ref. AMM TASK 31-60-00-860-002).

4. Fault Isolation

- A. If the test confirms the fault for the left aileron:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SERVO CTL-L AILERON, INBD G (33CE1) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - (2) If the fault continues:
 - do a check and repair the wiring of the LVDT POS Signal from the servocontrol (33CE1) to the ELAC 2 (2CE2) COM and MON parts (Ref. ASM 27-93/03).

EFF: ALL

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- B. If the test confirms the fault for the right aileron:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SERVO CTL-R AILERON, OUTBD B (33CE4) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - (2) If the fault continues:
 - do a check and repair the wiring of the LVDT POS Signal from the servocontrol (33CE4) to the ELAC 2 (2CE2) COM and MON parts (Ref. ASM 27-93/03).

5. Close-up

A. Do the test given in Para.3.

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EFF:

TROUBLE SHOOTING MANUAL

TASK 27-10-00-810-838

Operational Test of the Damping Measurement (Aileron) not OK

- 1. Possible Causes
 - aileron servocontrol
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-14-51-000-001 AMM 27-14-51-400-001 AMM 27-96-00-710-007 | Removal of the Aileron Servo Control Installation of the Aileron Servo Control Operational Test of the Damping Measurement (Aileron) |

3. Fault Confirmation

A. Test

Do the operational test of the damping measurement (aileron) (Ref. AMM TASK 27-96-00-710-007).

4. Fault Isolation

- A. If the damping factor in the down or in the up position is less than 0.60:
 - replace the related aileron servocontrol (33CE1 or 33CE2 or 33CE3 or 33CE4) (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001) .
- B. Do the test given in Para. 3.A.

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TASK 27-10-00-810-840

Aileron Oscillations

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | | |
|---|-----------|--------------------------------------|--|--|--|
| R | | 27-14-00-200-001 27-14-00-220-001 | Check of the Aileron Servo Control Oscillations Check of the Aileron Servo Controls and Hinge Bearings for too much Play and Condition | | |

- 3. Fault Confirmation
 - A. Do a check of the aileron servocontrol oscillations (Ref. AMM TASK 27-14-00-200-001).
- 4. Fault Isolation
 - A. Do a check of the aileron servocontrols and hinge bearings for too much play and condition (Ref. AMM TASK 27-14-00-220-001).

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TASK 27-10-00-810-841

Aileron Damping Test Not Possible (Decoding) for both LH and RH Ailerons

- 1. Possible Causes
 - SSTU-ROLL CTL, CAPT (4CE1)
 - SSTU-ROLL CTL, F/O (4CE2)
- 2. Job Set-up Information
 - A. Referenced Information

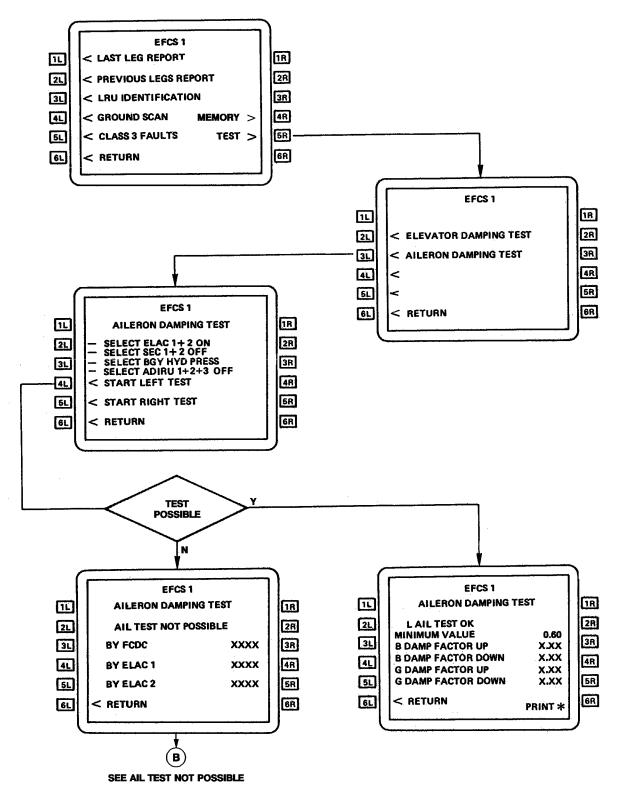
| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-92-41-000-002 AMM 27-92-41-400-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) Installation of the Transducer Units |
| AMM 27-72-41-400-002 | (4CE1,4CE2,4CE3,4CE4) |
| AMM 27-96-00-710-007 27-10-00-991-001 27-10-00-991-002 | Operational Test of the Damping Measurement (Aileron) Fig. 201 Fig. 202 |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the damping measurement (aileron) (Ref. AMM TASK 27-96-00-710-007). (Ref. Fig. 201/TASK 27-10-00-991-001)
- 4. Fault Isolation
 - A. If the message AIL TEST NOT POSSIBLE is shown on the MCDU for both LH and RH ailerons:
 - do the decoding procedure
 (Ref. Fig. 202/TASK 27-10-00-991-002)
 - B. If the message AIL TEST NOT POSSIBLE and BITE code 3F3F for ELAC1 and/or ELAC2 are shown on the MCDU:
 - replace the SSTU-ROLL CTL, CAPT (4CE1), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, F/O (4CE2), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - C. Do the test given in para. 3.

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MCDU Procedure of the Aileron Damping Test Figure 201/TASK 27-10-00-991-001

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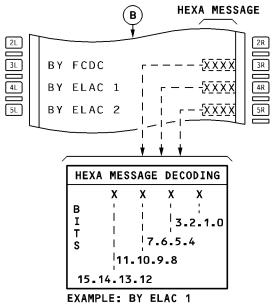
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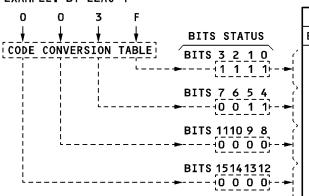
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| | BY FCDC |
|---------------------|--|
| BIT | PARAMETER |
| 0123456789101123115 | LEFT AIL TEST RIGHT AIL TEST AIRCRAFT IN FLT ENG 1 OIL HIPR ENG 2 OIL HIPR WHEEL SPEED GT. 66KTS ON GROUND AND WHEEL SPEED LT. 6KTS HYD GREEN PRESS HYD BLUE PRESS HYD YELLOW PRESS OPPOSITE ELAC TEST FCDC CONFIG S 1 PUSHBUTTON SWITCH OFF S 2 PUSHBUTTON SWITCH OFF E 1 FAULT E 2 FAULT |

NORMALY: 3.F.8



| | | BY ELAC 1 |
|----|------------------|--|
| | BIT | PARAMETER |
| `~ | 0128456789012845 | A/C ON GROUND E1C A/C ON GROUND E1M L AIL E1C AVAIL L AIL E1M AVAIL R AIL E1M AVAIL R AIL E1M AVAIL FCDC E1C FAIL FCDC E1M FAIL IR1 E1C FAIL IR2 E1M FAIL IR3 E1C FAIL ADR1 E1C FAIL ADR2 E1M FAIL ADR3 E1C FAIL |

NORMALY: 3F3F

| CODE CONV | ERSION T | ABLE_ |
|------------------|--|------------------|
| (X) HEXADECIMAL | BINARY | DECIMAL |
| 0123456789ABCDEF | 0000 0001 0010 0011 0100 0111 0111 1000 1001 1010 1100 1101 1110 | 0123456789012345 |

| | BY ELAC 2 |
|------------------------------|--|
| BIT | PARAMETER |
| 01234567890112345 1112345 | A/C ON GROUND E2C A/C ON GROUND E2M L AIL E2C AVAIL L AIL E2C AVAIL R AIL E2M AVAIL R AIL E2M AVAIL FCDC E2C FAIL FCDC E2C FAIL IR1 E2C FAIL IR2 E2M FAIL IR3 E2C FAIL ADR1 E2C FAIL ADR3 E2C FAIL ADR3 E2C FAIL |

NORMALY: 3F3F

Decoding Table of the Aileron Damping Test Not Possible Figure 202/TASK 27-10-00-991-002

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TASK 27-10-00-810-842

Roll Jerk

1. Possible Causes

- ELAC-1 (2CE1)
- SERVO CTL-R AILERON, INBD G (33CE2)
- SERVO CTL-L AILERON, OUTBD B (33CE3)
- wiring SOL VLV signal from SERVO CTL-R AILERON, INBD G and SERVO CTL-L AILERON, OUTBD B to the ELAC1
- wiring POS XDCR signal from SERVO CTL-R AILERON, INBD G and SERVO CTL-L AILERON, OUTBD B to the ELAC1

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|------------|--|---|--|
| AMM AMM | 27-14-51-000-001 27-14-51-400-001 27-93-34-000-001 27-93-34-400-001 27-93/02 | Removal of the Aileron Servo Control Installation of the Aileron Servo Control Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) | |

3. Fault Confirmation

A. Test

Not applicable, you cannot confirm this fault on ground.

4. Fault Isolation

- A. If the fault symptom is identified by the crew observation F/CTL Roll Jerk
 - (1) Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) Replace SERVO CTL-R AILERON, INBD G (33CE2) and SERVO CTL-L AILERON, OUTBD B (33CE3), (Ref. AMM TASK 27-14-51-000-001) and (Ref. AMM TASK 27-14-51-400-001).
 - (3) Do a check of the wiring SOL VLV signal from SERVO CTL-R AILERON, INBD G and SERVO CTL-L AILERON, OUTBD B to the ELAC1 COM and MON side (Ref. ASM 27-93/02).
 - (4) Do a check of the wiring POS XDCR signal from SERVO CTL-R AILERON, INBD G and SERVO CTL-L AILERON, OUTBD B to the ELAC1 COM and MON side (Ref. ASM 27-93/02).

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RUDDER - FAULT ISOLATION PROCEDURES

TASK 27-20-00-810-801

CAPT and F/O Pedals Stiffness

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

WARNING: MAKE SURE THAT THE CONTROLS AGREE WITH THE POSITION OF THE ITEMS THEY

OPERATE BEFORE YOU PRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

1. Possible Causes

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| AMM | 27-21-00-210-002 | Detailed Visual Inspection of the Rudder Mechanical Control Cables |
| AMM | 27-21-00-210-003 | Detailed Visual Inspection of the Rudder Mechanical Control-Linkage in the Vertical Stabilizer |
| AMM | 27-21-00-710-001 | Operational Test of the Centering Spring Rod |
| AMM | 27-21-00-820-002 | Adjustment of the Rudder Control-Cables Length |
| AMM | 27-21-42-000-001 | Removal of the CAPT Pedals |
| AMM | 27-21-42-000-002 | Removal of the F/O Pedals |
| AMM | 27-21-42-400-001 | Installation of the CAPT Pedals |
| AMM | 27-21-42-400-002 | Installation of the F/O Pedals |
| AMM | 27-21-48-000-001 | Removal of the Centering Rod of the Rudder Control |
| AMM | 27-21-48-400-001 | Installation of the Centering Rod of the Rudder Control |
| AMM | 27-23-00-710-001 | Operational Test of the Rudder Artificial-Feel Loads with Tool (355M03200001) |
| AMM | 27-23-41-000-001 | Removal of the Artificial Feel and Trim Unit |
| AMM | 27-23-41-400-001 | Installation of the Artificial Feel and Trim Unit |
| AMM | 27-23-51-000-001 | Removal of the Rudder Travel Limitation Unit 4CC |
| AMM | 27-23-51-400-001 | Installation of the Rudder Travel-Limitation Unit 4CC |

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| REFERENCE | DESIGNATION |
|-----------------------|---|
| AMM 27-26-17-000-001 | Removal of the Yaw Damper Position Transducer Unit |
| AIII 21 20 11 000 001 | 2CC |
| AMM 27-26-17-400-001 | <pre>Installation of the Yaw Damper Position Transducer Unit 2CC</pre> |
| AMM 27-26-41-000-001 | Removal of the Centering Spring Rod for the Actuator of the Yaw Damper Servo |
| AMM 27-26-41-400-001 | Installation of the Centering Spring Rod for the Actuator of the Yaw Damper Servo |
| AMM 27-26-51-000-001 | Removal of the Yaw Damper Servo Actuator (3CC1) and (3CC2) |
| AMM 27-26-51-400-001 | <pre>Installation of the Yaw Damper Servo Actuator (3CC1) and (3CC2)</pre> |
| AMM 53-59-00-210-001 | Operational Check of Single Drain Pipe Aft of FR70 from Outside |
| 27-20-00-991-001 | Fig. 201 |
| 27-20-00-991-002 | Fig. 202 |
| 27-20-00-991-003 | Fig. 203 |

3. Fault Confirmation

A. Test

(1) Do the operational test of the rudder artificial-feel loads (Ref. AMM TASK 27-23-00-710-001).

4. Fault Isolation

WARNING: MAKE SURE THAT THE FAC'S ARE ELECTRICALLY ISOLATED DURING WORK ON THE MECANICAL CONTROL SYSTEM OF THE RUDDER.

IF NOT, PARTS CAN MOVE AND CAUSE INJURY AND/OR DAMAGE.

A. Make sure that this(these) circuit breaker(s) is(are) open, safetied and tagged

| PANEL | DESIGNATION | IDENT. | LOCATION |
|--------|---------------------|--------|----------|
| 49VU | AUTO FLT/FAC1/28VDC | 5CC1 | B04 |
| 49VU | AUTO FLT/FAC1/26VAC | 14001 | B03 |
| 12 1VU | AUTO FLT/FAC2/28VDC | 5002 | M19 |
| 121VU | AUTO FLT/FAC2/26VAC | 14002 | M18 |

- B. If you find a hard spot:
 - make sure that there is no water or ice in the lower area of the tail cone.

if you find water or ice, remove it and check that the drain tube is not clogged (Ref. AMM TASK 53-59-00-210-001).

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(1) If you find a hard spot:

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- do a check of the pedals and cable linkage. (Ref. Fig. 201/TASK 27-20-00-991-001)
- disconnect the lower point of the rod (3) between the cable quadrant and the differential mechanism.
- move the rudder pedals.
- (2) If you find a hard spot:
 - disconnect the ajustable bellcrank rod (2)
 - move the rudder pedals.
 - (a) If you do not find a hard spot:
 - connect the rod (2) and see Para. (c)
 - (b) If you find a hard spot:
 - disconnect the link rod (1) between the CAPT and F/O pedals
 - 1 move the CAPT pedals:
 - a If you do not find a hard spot: . do a check to find the mechanical part failure at the F/O pedals and do the corrective action (Ref. AMM TASK 27-21-42-000-002) and (Ref. AMM TASK 27-21-42-400-002).
 - b If you find a hard spot: . do a check to find the mechanical part failure at the CAPT pedals and do the corrective action (Ref. AMM TASK 27-21-42-000-001) and (Ref. AMM TASK 27-21-42-400-001).
 - 2 Connect the rod (3).
 - (c) If the fault continues:
 - do a visual inspection of the tension regulator, rudder control cables and pulleys (5)
 - make sure for each equipment that the cables are correctly installed in the pulley grooves and on the tension regulator.
 - make sure that the position indicator is in the correct adjustment range on the tension regulator. Refer to the Adjustment Graph (Ref. fig. 508) in the adjustment of the linkage assembly procedure (Ref. AMM TASK 27-21-00-820-002).
 - If the position indicator is in the correct adjustment range on the tension regulator:
 - connect the rod (3) and see Para. (d)
 - 2 If the position indication is not in the correct adjustment range on the tension regulator:
 - make an adjustment of the linkage assembly (Ref. AMM TASK 27-21-00-820-002).

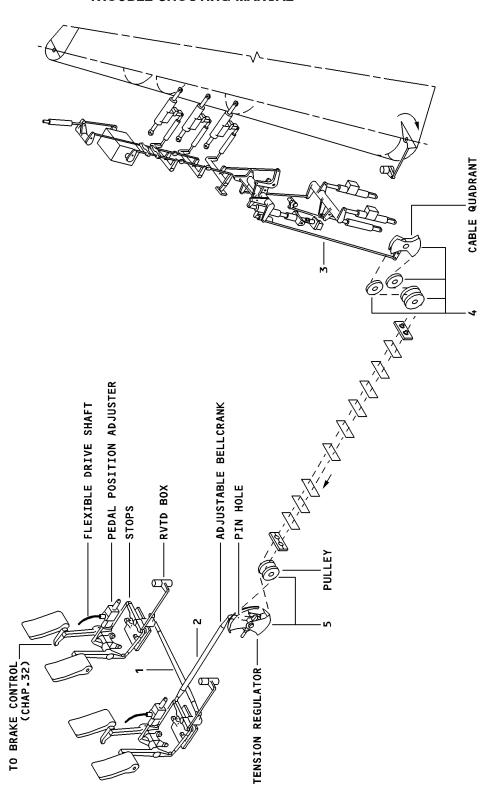
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Pedals and Cables Linkage Figure 201/TASK 27-20-00-991-001

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- (d) If the fault continues:
 - do a visual inspection of the cable quadrant and pulleys (4)
 - make sure for each equipment that the cables are correctly installed in the pulley grooves and on the cable quadrant.
 - make sure that the rigging and the dimension are corrects. Refer to the Detail C of the component location (Ref. fig. 507) in the adjustment of the linkage assembly procedure (Ref. AMM TASK 27-21-00-820-002).
 - 1 If the rigging and the dimension are corrects on the cable quadrant:
 - do a visual inspection of the rudder mechanical control, (Ref. AMM TASK 27-21-00-210-002)
 - connect the rod (3).
 - If the rigging and the dimension are corrects on the cable quadrant:
 - do a check of the mechanical part failure and do the corrective action.
 - do the ajustment of the cable linkage assembly (Ref. AMM TASK 27-21-00-820-002).
 - connect the rod (3).
- (3) If you do not find a hard spot:
 - connect the rod (3)

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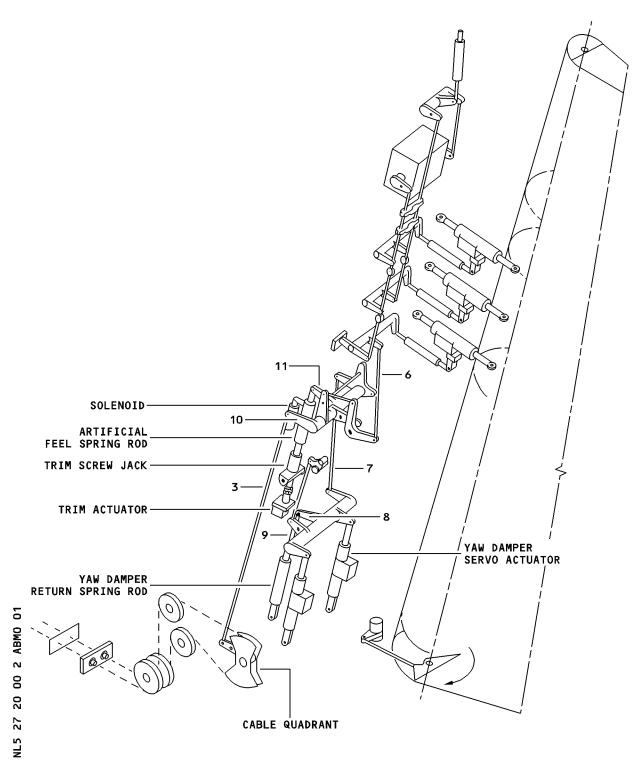
- (Ref. Fig. 202/TASK 27-20-00-991-002)
- do the check of the linkage of the trim actuator, yaw damper servo actuator, solenoid
- disconnect the rod (6) between the control channel (trim actuator, yaw damper servo actuator) and the transmission linkage (servocontrols)
- move the rudder pedals.
- (a) If you find a hard spot:
 - disconnect the rod (7)
 - move the rudder pedals:
 - 1 If you do not find a hard spot:
 - disconnect the yaw-damper return spring rod (9) (Ref. AMM TASK 27-26-41-000-001)
 - manually make sure that there is no jamming of the bellcrank
 (8).
 - a If you do not find a hard spot:
 - change the yaw-damper return spring rod, (Ref. AMM TASK 27-26-41-400-001) and connect the rod (7) and the rod (6).

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Linkage of Trim Actuator, Yaw Damper, Servo Actuator, Solenoid Figure 202/TASK 27-20-00-991-002

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- \underline{b} If you find a hard spot:
 - disconnect and do a check of the yaw damper servo actuator, (Ref. AMM TASK 27-26-51-000-001) and (Ref. AMM TASK 27-26-51-400-001) or of the rod (4) of the transducer, (Ref. AMM TASK 27-26-17-000-001). Do a corrective action and connect the rod (Ref. AMM TASK 27-26-17-400-001).
- 2 If you find a hard spot:
- connect the rod (7)

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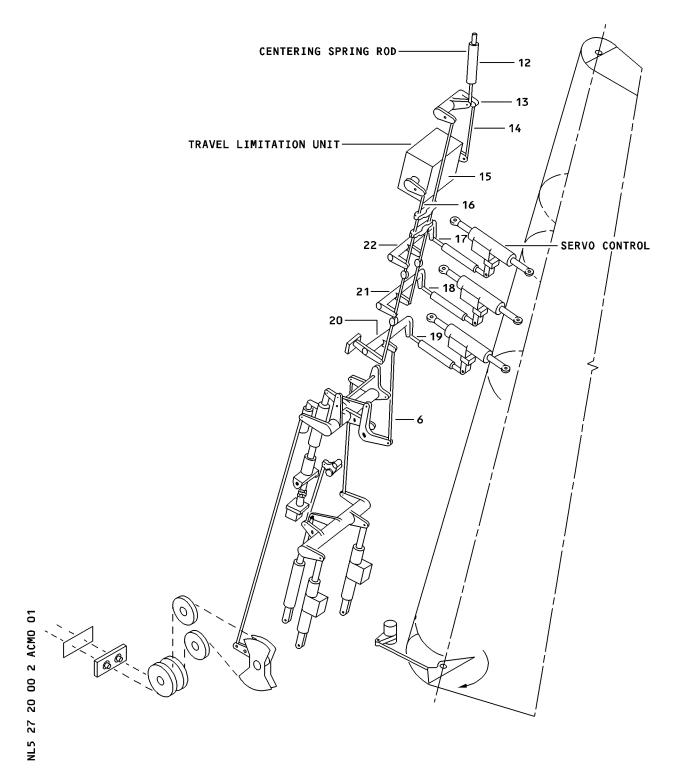
- disconnect the rod (3) and make sure that the bellcrank (10) moves manually.
- a If you do not find a hard spot:
 - do a check of the rod (3) and do the corrective action.
- b If you find a hard spot:
 - disconnect the artificial-feel spring rod (Ref. AMM TASK 27-23-41-000-001)
 - make sure that the bellcrank (11) moves manually
 - do a trouble shooting of the assembly, artificial spring rod, solenoid, trim screwjack, and trim actuator. Do the corrective action or replace the defective system and connect the rods (Ref. AMM TASK 27-23-41-400-001).
- (b) If you do not find a hard spot:
 - do a check of the linkage of the centering spring rod, travel limitation unit, servocontrols (Ref. Fig. 203/TASK 27-20-00-991-003)
 - do an operational test of the centering spring rod (12), (Ref. AMM TASK 27-21-00-710-001).
 - 1 If you do not find a hard spot:
 - do a detailed visual inspection of the rudder mechanical control linkage in the vertical stabilizer, (Ref. AMM TASK 27-21-00-210-003) and do the corrective action if necessary.
 - do the check of the rod (6) and its attachment, connect the rod (6).
 - 2 If you find a hard spot:
 - disconnect the centering spring rod (12) from the bellcrank (13) and examine the rod, (Ref. AMM TASK 27-21-48-000-001)
 - from the rod (6) move the linkage.
 - a If you do not find a hard spot:
 - replace the centering spring rod (12), (Ref. AMM TASK 27-21-48-400-001) and connect the rod (6).
 - b If you find a hard spot:
 - connect the centering spring rod (12), disconnect the rods (14) and (15). Make sure that the bellcrank (13) is correct and connect the rod (14) only.

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Linkage of the Centering Spring Rod, TLU, Servo Controls Figure 203/TASK 27-20-00-991-003

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(c) If the fault continues:

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- do a mechanical test of the travel limitation unit
- make sure that the rods (15) and (6) are disconnected
- disconnect the rod (16) from the travel limitation unit
- manually pull the lever of the travel limitation unit and make sure that the travel limitation unit moves correctly under the centering rod action.
- 1 If you find a hard spot:
 - examine the travel limitation unit and replace it if necessary, (Ref. AMM TASK 27-23-51-000-001) (Ref. AMM TASK 27-23-51-400-001) and connect all the rods (15), (16) and (6).
- 2 If you do not find a hard spot:
 - do a mechanical test of the linkage
 - make sure that the rods (15), (16) and (6) are disconnected
 - disconnect the actuating spring rod of the servocontrols
 (17), (18) and (19)
 - manually make sure that the linkage bellcranks (20), (21), (22) and rods move easily.
 - a If you do not find a hard spot:
 - examine each actuating spring rod and attachment. Do the corrective action if necessary and connect all the items and rods.
 - b If you find a hard spot:
 - do a check of the defective items, do the corrective action and connect all the items and rods.
- C. Do the test given in Para.3.

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TASK 27-20-00-810-802

Airframe Vibration due to the Rudder

1. Possible Causes

- rudder servo controls
- hinge bearings
- rudder fitting attachments N°1/2/3/4/5 and 7
- servo control bearings
- servo control attachments
- eye-end of servo control

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| 05-5 | 0-00-810-801 | Identification of the Cause of In-Flight Airframe Vibrations and/or Noises |
| AMM | 27-24-00-200-001 | Check of the Rudder Servo Controls and Hinge Bearings for too much Play and Condition |
| AMM | 27-24-00-200-002 | Check of the Rudder Trailing Edge Play |
| AMM | 27-24-51-000-001 | Removal of the Rudder Servo Control |
| | | 1025GM/2025GM/3025GM |
| AMM | 27-24-51-000-003 | Removal of the Rudder Servo Control Eye End |
| AMM | 27-24-51-200-001 | Check of the Rudder Servo Control Attachments |
| AMM | 27-24-51-400-001 | Installation of the Rudder Servo Control |
| | | 1025GM/2025GM/3025GM |
| AMM | 27-24-51-400-003 | Installation of the Rudder Servo Control Eye End |
| AMM | 27-24-51-960-001 | Replacement of the Rudder Servo-Control Bearings |
| AMM | 55-46-00-200-001 | Inspection of the Rudder Hinge Bearings 1 thru 7 for Axial or Radial Movement |

3. Fault Confirmation

A. Test

Make sure that the identification of the cause of the vibrations is correct (Ref. TASK 05-50-00-810-801).

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4. Fault Isolation

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- A. If the source of aiframe vibrations is the rudder:
 - Do a check of the rudder trailing-edge play (Ref. AMM TASK 27-24-00-200-002), refer to the play values recorded and do the applicable steps that follow:
 - (1) If the measured play value is more than 16 mm (0.6299 in.) for at least one of the servo controls:
 - (a) Do a check of the rudder servo controls and hinge bearings for too much play and condition (Ref. AMM TASK 27-24-00-200-001)

NOTE : If the fault occurs during the subsequent flights, do the step 4.A. again.

- (2) If the measured play value is less than 10 mm (0.3937 in.) for the three servo controls, do a check of the rudder fitting attachments $N^{\circ}1/2/3/4/5$ and 7 (Ref. AMM TASK 55-46-00-200-001).
 - NOTE: Do not check the rudder fitting attachment N°6.
- (3) For all the other cases, do one of the alternative procedures that follow only for the servo control(s) with a trailing edge play of more than 10 mm (0.3937 in.).
 - <u>NOTE</u>: For procedure A or B, tooling and spare parts must be available.
 - NOTE: Procedure A removes play at all servo control location in one step. Procedure B removes play at each servo control location in several steps.
 - (a) Procedure A:
 - 1 Remove the servo control (Ref. AMM TASK 27-24-51-000-001).
 - $\underline{2}$ Replace the two servo control bearings (Ref. AMM TASK 27-24-51-960-001).
 - <u>NOTE</u>: If the swaging tool or servo control bearings are not available, replace the servo control.
 - $\underline{3}$ Do a check of the servo control attachments (Ref. AMM TASK 27-24-51-200-001).
 - $\underline{4}$ Install the repaired (or new) servo control (Ref. AMM TASK 27-24-51-400-001).
 - 5 Do again the check of the rudder trailing-edge play (Ref. AMM TASK 27-24-00-200-002):

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- if the new measured play values are equal to the values recorded before (+ or - 1 mm (0.0393 in.)) for the three servo controls or
- if the fault occurs during the subsequent flights, do a check of the rudder fitting attachments $N^{\circ}1/2/3/4/5$ and 7 (Ref. AMM TASK 55-46-00-200-001).

NOTE: Do not check the rudder fitting attachment N°6.

(b) Procedure B:

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- 1 Replace the eye-end of servo control (Ref. AMM TASK 27-24-51-000-003), (Ref. AMM TASK 27-24-51-400-003).
- Do again the check of the rudder trailing-edge play (Ref. AMM TASK 27-24-00-200-002):
 - if the new measured play values are less than the values recorded before for one servo control minimun, no other maintenance action is necessary.
 - if the new measured play values are equal to the values recorded before (+ or - 1 mm (0.0393 in.)) for the three servo controls or
 - if the fault occurs during the subsequent flights, do these steps:
 - \underline{a} Replace the servo control bearing (body side) (Ref. AMM TASK 27-24-51-960-001).
 - NOTE: If the swaging tool or servo control bearing is not available, replace the servo control.
 - <u>b</u> Do again the check of the rudder trailing-edge play (Ref. AMM TASK 27-24-00-200-002):
 - if the new measured play values are less than the values recorded before for one servo control minimum, no other maintenance action is necessary.
 - if the new measured play values are equal to the values recorded before (+ or - 1 mm (0.0393 in.)) for the three servo controls or
 - if the fault occurs during the subsequent flights, do the step 1_ again.
 - \underline{c} Do a check of the servo control attachments (Ref. AMM TASK 27-24-51-200-001).
 - <u>d</u> Do again the check of the rudder trailing-edge play (Ref. AMM TASK 27-24-00-200-002):
 - if the new measured play values are equal to the values recorded before (+ or - 1 mm (0.0393 in.)) for the three servo controls or

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representation in the fault occurs during the subsequent flights, do a check of the rudder fitting attachments N $^{\circ}$ 1/2/3/4/5 and 7 (Ref. AMM TASK 55-46-00-200-001).

<u>NOTE</u>: Do not check the rudder fitting attachment $N^{\circ}6$.

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TASK 27-20-00-810-803

Disagree between the RUD Indicator and the Rudder Trim Index

- 1. Possible Causes
 - CREW OBSERVATION NO FURTHER ACTION REQUIRED
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE DESIGNATION

Operational Test of the Reset Function

3. Fault Confirmation

AMM 27-22-00-710-001

- A. Test
 - (1) Do the operational test of the rudder trim (Ref. AMM TASK 27-22-00-710-001).
- 4. Fault Isolation
 - A. If the test is OK:
 - CREW OBSERVATION NO FURTHER ACTION REQUIRED.

NOTE : In some cases, the needle of the RUD indicator is not in line with the rudder trim index.

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TASK 27-20-00-810-804

Rudder Trim out of the Limits

1. Possible Causes

- FAC-1 (1CC1)

R

- adjustment of the rudder neutral position

R - adjustment of the ailerons

- adjustment of the spoilers

R

R

R

- flap rigged position

R - aileron servo controls and hinge bearings

? - rudder servo controls and hinge bearings

spoilers servo controls and hinge bearings

2. Job Set-up Information

R A. Fixtures, Tools, Test and Support Equipment

R ------R REFERENCE QTY DESIGNATION

98027203001000

2 TOOL-RUDDER NEUTRAL ADJUSTMENT

B. Referenced Information

AMM 27-64-00-820-001

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | // -/ | |
| AMM | 22-66-34-000-002 | Removal of the FAC (1CC1,1CC2) |
| AMM | 22-66-34-400-002 | Installation of the FAC (1CC1,1CC2) |
| AMM | 27-14-00-220-001 | Check of the Aileron Servo Controls and Hinge |
| | | Bearings for too much Play and Condition |
| AMM | 27-14-00-820-001 | Adjustment of the Aileron |
| AMM | 27-24-00-200-001 | Check of the Rudder Servo Controls and Hinge Bearings |
| | | for too much Play and Condition |
| AMM | 27-24-00-820-001 | Adjustment of the Rudder Neutral Position |
| AMM | 27-25-00-820-001 | Adjustment of the Rudder Position Indicating |
| AMM | 27-51-00-820-003 | To do a Check of the Flap Rigged Position (with the |
| | | Sharks Fin) |
| AMM | 27-51-00-820-007 | To do a Check of the Flap Rigged Position (with the |
| | | Rigging Boards) |
| AMM | 27-64-00-200-001 | Check of the Spoilers Servo Controls and Hinge |
| | | Bearings for Excessive Play and Condition |

Adjustment of the Spoilers

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3. Fault Confirmation

| - | _ | | | |
|-----|-----|---|---|---|
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R R Not applicable, you cannot confirm this fault on ground.

<u>NOTE</u>: When the aircraft heading is stable with the AP engaged, the rudder trim limits on the RUD TRIM indicator are 1 deg.R and 2.3 deg.L. A rudder trim indication of more than 1 deg.R and 2.3 deg.L is permitted if you have confirmation that the physical position of the rudder is in the limits 1.5 deg.L and 1.5 deg.R.

4. Fault Isolation

- A. With the QAR or DMU or DAR or DFDR, record the rudder position when the aircraft is in these conditions:
 - normal cruise range,
 - straight flight,
 - AP engaged more than 10 min in the HEADING mode,
 - symmetrical fuel in the wing tanks,
 - symmetrical engine thrust.

NOTE: The recorded rudder position (PARAM ALPHA code: RUDD) must be the average value of the rudder position during the above conditions.

(1) If the rudder position value is in the + or - 1.5 deg. range in the L and R directions, no further action is necessary.

NOTE: To prevent the same fault reports during the subsequent flights, you can do the steps (2) (a) and (c).

(2) If the rudder position value is out of the + or - 1.5 deg. range in the L and R directions, do these checks:

- (a) Check of the rudder position indication
 - Do the adjustment of the rudder position indicating (Ref. AMM TASK 27-25-00-820-001).
- (b) Check of the surface adjustment
 - Do a check of the adjustment of the rudder neutral position (Ref. AMM TASK 27-24-00-820-001).

 $\underline{\text{NOTE}}$: Use the TOOL-RUDDER NEUTRAL ADJUSTMENT (98D27203001000) to do a check of the position of the triangle.

- Do a check of the adjustment of the ailerons (Ref. AMM TASK 27-14-00-820-001).
- Do a check of the adjustment of the spoilers (Ref. AMM TASK 27-64-00-820-001).
- Do a check of the flap rigged position (with the sharks fin (Ref. AMM TASK 27-51-00-820-003), or with the rigging boards (Ref. AMM TASK 27-51-00-820-007)).

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| R | (c) Check of the surface play |
|---|--|
| R | - Do a check of the aileron servo controls and hinge bearings for |
| R | too much play and condition (Ref. AMM TASK 27-14-00-220-001). |
| R | - Do a check of the rudder servo controls and hinge bearings for |
| R | too much play and condition (Ref. AMM TASK 27-24-00-200-001). |
| R | Do a check of the spoilers servo controls and hinge bearings |
| R | for too much play and condition (Ref. AMM TASK 27-64-00-200-001). |
| R | (d) If the fault continues, replace the FAC-1 (1CC1) (Ref. AMM TASK |
| R | 22-66-34-000-002) (Ref. AMM TASK 22-66-34-400-002). |

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TASK 27-20-00-810-805

Results of the Operational Test of the Rudder Artificial - Feel Loads not Satisfactory

1. Possible Causes

- SOLENOID-RUDDER ARTF FEEL (16CA)
- artificial feel and trim unit

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|------------|--------------------------------------|---|--|
| | | | |
| AMM | 27-23-00-710-001 | Operational Test of the Rudder Artificial-Feel Loads with Tool (355M03200001) | |
| AMM | 27-23-17-000-001 | Removal of the Artificial Feel Unlocking Solenoid 16CA | |
| AMM | 27-23-17-400-001 | Installation of the Artificial Feel Unlocking Solenoid 16CA | |
| AMM AMM | 27-23-41-000-001 27-23-41-400-001 | Removal of the Artificial Feel and Trim Unit Installation of the Artificial Feel and Trim Unit | |

3. Fault Confirmation

A. Test

Do the operational test of the rudder artificial-feel loads (Ref. AMM TASK 27-23-00-710-001).

4. Fault Isolation

- A. If during the test, after activation of the rudder artificial-feel solenoid, the force to move the rudder pedals does not increase.
 - (1) Replace the SOLENOID-RUDDER ARTF FEEL (16CA) (Ref. AMM TASK 27-23-17-000-001) and (Ref. AMM TASK 27-23-17-400-001).
 - (2) If the fault continues:
 - replace the artificial feel and trim unit (Ref. AMM TASK 27-23-41-000-001) (Ref. AMM TASK 27-23-41-400-001).
- B. Do the test given in para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-20-00-810-806

Fluctuation of the Pointer of the RUD Indicator on the lower ECAM DU.

1. Possible Causes

- SDAC-1 (1WV1)
- SDAC-2 (1WV2)
- XDCR UNIT-RUDDER POS (42WV)
- DMC-2 (1WT2)
- DMC-1 (1WT1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|---|--|
| | | |
| 31-32-00-810-933 | Failure of the Analog Links | |
| AMM 27-25-17-000-001 | Removal of the Rudder Position Transducer Unit 42WV | |
| AMM 27-25-17-400-001 | Installation of the Rudder Position Transducer Unit | |
| | 42WV | |
| AMM 31-55-34-000-001 | Removal of the SDAC (1WV1,1WV2) | |
| AMM 31-55-34-400-001 | Installation of the SDAC (1WV1,1WV2) | |
| AMM 31-63-34-000-001 | Removal of the DMC (1WT1,1WT2,1WT3) | |
| AMM 31-63-34-400-001 | <pre>Installation of the DMC (1WT1,1WT2,1WT3)</pre> | |
| ASM 31-54/04 | | |
| ASM 31-54/08 | | |

3. Fault Confirmation

A. Not applicable, the fault is evident on the F/CTL page of the lower ECAM DU.

4. Fault Isolation

A. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|----------|-------------------------------|--------|-------------|
| 49VU | SDAC/1/SPLY | 3WV | F04 |
| 49VU | SDAC/2/26VAC SYNC/AC ESS BUS | 6WV | F03 |
| 12 1VU | EIS/SDAC1 AND 2/BUS2/28VDC | 44WV | P03 |
| 12 1VU | EIS/SDAC/2/SPLY | 2WV | Q06 |
| 12 1VU | EIS/SDAC/1/BUS2/26VAC SYNC AC | 7WV | Q03 |
| 12 1 V U | EIS/SDAC/2/BUS2/26VAC SYNC AC | 8WV | Q 02 |

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R **ON A/C 201-225, 227-227, 229-299, 426-455, 476-499, 503-549, 551-599, R 701-749,

- B. If there are fluctuations of the pointer of the RUD indicator on the F/CTL page:
 - (1) Open the circuit breakers 3WV, 7WV and 44WV.
 - (a) If the fluctuations of the pointer continue: - see para.(2).
 - (b) If the fluctuations of the pointer stop:
 - replace the SDAC-1 (1WV1) (Ref. AMM TASK 31-55-34-000-001) and (Ref. AMM TASK 31-55-34-400-001).
 - do a check of the wiring from the SDAC 1 to the first terminal block (Ref. ASM 31-54/08) (RUD POS XDCR unit side).
 - do a check of the wiring from the SDAC 1 to the first terminal block (Ref. ASM 31-54/04) (DMC side).
 - (2) Close the circuit breakers 3WV, 7WV and 44WV.
 - (3) Open the circuit breakers 2WV, 6WV, 8WV and 44WV.
 - (a) If the fluctuations of the pointer continue: see para.(5).
 - (b) If the fluctuations of the pointer stop:
 - replace the SDAC-2 (1WV2) (Ref. AMM TASK 31-55-34-000-001) and (Ref. AMM TASK 31-55-34-400-001).
 - do a check of the wiring from the SDAC 2 to the first terminal block (Ref. ASM 31-54/04) (RUD POS XDCR unit side).
 - do a check of the wiring from the SDAC 2 to the first terminal block (Ref. ASM 31-54/04) (DMC side).
 - (4) Close the circuit breakers 2WV, 6WV, 8WV and 44WV.
 - (5) On the center pedestal, on the switching panel, set the EIS DMC switch to F/0/3.
 - (a) If the fluctuations of the pointer continue:
 - replace the XDCR UNIT-RUDDER POS (42WV) (Ref. AMM TASK 27-25-17-000-001) and (Ref. AMM TASK 27-25-17-400-001).
 - do a check of the wiring between the circuit breaker 5WV and the RUD POS XDCR unit 42WV (Ref. ASM 31-54/08).
 - do a check of the wiring from the RUD POS XDCR unit to the first terminal block (Ref. ASM 31-54/08).
 - do the trouble shooting (Ref. TASK 31-32-00-810-933) related to the ANI signal of the SDACs.

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- (b) If the fluctuations of the pointer stop:
 - replace the DMC-2 (1WT2) (Ref. AMM TASK 31-63-34-000-001) and (Ref. AMM TASK 31-63-34-400-001).
 - do a check of the wiring from the DMC 2 to the first terminal block (Ref. ASM 31-54/04) (SDAC 1 side).
 - do a check and repair the wiring from the DMC 2 to the first terminal block (Ref. ASM 31-54/04) (SDAC 2 side).

**ON A/C 456-475,

- B. If there are fluctuations of the pointer of the RUD indicator on the F/CTL page:
 - (1) Open the circuit breakers 3WV, 7WV and 44WV.
 - (a) If the fluctuations of the pointer continue:see para.(2).
 - (b) If the fluctuations of the pointer stop:
 - replace the SDAC-1 (1WV1) (Ref. AMM TASK 31-55-34-000-001) and (Ref. AMM TASK 31-55-34-400-001).
 - do a check of the wiring from the SDAC 1 to the first terminal block (Ref. ASM 31-54/08) (RUD POS XDCR unit side).
 - do a check of the wiring from the SDAC 1 to the first terminal block (Ref. ASM 31-54/04) (DMC side).
 - (2) Close the circuit breakers 3WV, 7WV and 44WV.
 - (3) Open the circuit breakers 2WV, 6WV, 8WV and 44WV.
 - (a) If the fluctuations of the pointer continue:see para.(5).
 - (b) If the fluctuations of the pointer stop:
 - replace the SDAC-2 (1WV2) (Ref. AMM TASK 31-55-34-000-001) and (Ref. AMM TASK 31-55-34-400-001).
 - do a check of the wiring from the SDAC 2 to the first terminal block (Ref. ASM 31-54/04) (RUD POS XDCR unit side).
 - do a check of the wiring from the SDAC 2 to the first terminal block (Ref. ASM 31-54/04) (DMC side).
 - (4) Close the circuit breakers 2WV, 6WV, 8WV and 44WV.
 - (5) On the center pedestal, on the switching panel, set the EIS DMC switch to F/0/3.
 - (a) If the fluctuations of the pointer continue:
 - replace the XDCR UNIT-RUDDER POS (42WV) (Ref. AMM TASK 27-25-17-000-001) and (Ref. AMM TASK 27-25-17-400-001).
 - do a check of the wiring between circuit breaker 5WV and the RUD POS XDCR unit 42WV (Ref. ASM 31-54/08).

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- do a check of the wiring from the RUD POS XDCR unit to the first terminal block (Ref. ASM 31-54/08).
- do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI signal of the SDACs.
- (b) If the fluctuations of the pointer stop:
 - replace the DMC-1 (1WT1) (Ref. AMM TASK 31-63-34-000-001) and (Ref. AMM TASK 31-63-34-400-001).
 - do a check of the wiring from the DMC 1 to the first terminal block (Ref. ASM 31-54/04) (SDAC 1 side).
 - do a check and repair the wiring from the DMC 1 to the first terminal block (Ref. ASM 31-54/04) (SDAC 2 side).

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TASK 27-20-00-810-807

Results of the Operational Test of the Rudder Servocontrols with Individual Hydraulic System not Satisfactory

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATI |)N |
|----------------|-----------|--|
| AMM 27-24-00-7 | | al Test of the Rudder Servocontrols with . Hydraulic System |
| AMM 27-24-00-8 | | t of the Rudder Neutral Position |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the rudder servocontrols with individual hydraulic system (Ref. AMM TASK 27-24-00-710-002).
- 4. Fault Isolation
 - A. On the lower ECAM display unit, on the F/CTL page:
 - (1) if the pointer of the RUD indicator does not go back to the neutral position:
 - do the adjustment of the rudder actuating spring rod (Ref. AMM TASK 27-24-00-820-001).
 - (2) if the pointer of the RUD indicator does not move to the mark (left or right):
 - make sure that there is no warning related to rudder travel limitation.
 - B. Do the test given in para. 3.

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YAW DAMPER ACTUATION - FAULT ISOLATION PROCEDURES

TASK 27-26-00-810-801

Failure of the Yaw Damper System

- 1. Possible Causes
 - FAC-1 (1CC1)
 - SERVO ACTR-YAW DAMPER, 1 (3CC1)
 - wiring
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| _ | | 205552 | | |
| R | ESPM | 205550 | | |
| | AMM | 22-66-34-000-002 | Removal of the FAC (1CC1,1CC2) | |
| | AMM | 22-66-34-400-002 | Installation of the FAC (1CC1,1CC2) | |
| | AMM | 27-24-00-710-002 | Operational Test of the Rudder Servocontrols with Individual Hydraulic System | |
| | AMM | 27-26-51-000-001 | Removal of the Yaw Damper Servo Actuator (3CC1) and (3CC2) | |
| | AMM | 27-26-51-400-001 | <pre>Installation of the Yaw Damper Servo Actuator (3CC1) and (3CC2)</pre> | |
| | ASM | 22-68/04 | | |

3. Fault Confirmation

R

A. Test not applicable, you cannot confirm this fault on the ground.

- 4. Fault Isolation
 - A. If the fault symptom is identified by the crew observation F/CTL Yaw and roll jerk very hard:
 - (1) Remove the FAC related to the system which was active at the time of the event (Ref. AMM TASK 22-66-34-000-002).

NOTE : In normal configuration, the FAC-1 (1CC1) servoes the Green yaw damper servo actuator (3CC1).

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- (2) At the FAC receptacle, do a check of the resistance and insulation of the LVDT of SERVO ACTR-YAW DAMPER, 1 (3CC1)(COM) between pins AB/2E and AB/2F, and between pins AB/3E and AB/3F (Ref. ASM 22-68/04).
 - NOTE: The resistance of the two secondary windings must be between 30 Ohms and 500 Ohms.

 The insulation must be more than 100 Megohms.
 - (a) If the check is correct:
 - Replace the FAC-1 (1CC1) (Ref. AMM TASK 22-66-34-000-002) and (Ref. AMM TASK 22-66-34-400-002).
 - Do a check of the wiring between the LVDT and the FAC (Ref. ASM 22-68/04) for correct connections.
 - <u>3</u> replace the SERVO ACTR-YAW DAMPER, 1 (3CC1) (Ref. AMM TASK 27-26-51-000-001) and (Ref. AMM TASK 27-26-51-400-001).
 - 4 Do the Operational test of the rudder servocontrols with individual hydraulic system (Ref. AMM TASK 27-24-00-710-002).
 - (b) If the check is not correct:
 - Clean the connector A of the SERVO ACTR-YAW DAMPER, 1 (3CC1) (Ref. ESPM 205550).
 - At the FAC receptacle, do again a check of the resistance and insulation of the LVDT.
 - <u>a</u> If the check is correct, no further maintenance action is necessary.
 - NOTE: After the subsequent flight, if the fault continues, replace the SERVO ACTR-YAW DAMPER, 1 (3CC1) (Ref. AMM TASK 27-26-51-400-001).
 - b If the check is not correct, see Para. (3).
- (3) At the yaw damper, do a check of the resistance and insulation between pins A/C and A/B, and between pins A/K and A/J (Ref. ASM 22-68/04).
 - (a) If the check is not correct, replace the SERVO ACTR-YAW DAMPER, 1 (3CC1) (Ref. AMM TASK 27-26-51-000-001) and (Ref. AMM TASK 27-26-51-400-001)
 - (b) If the check is correct, repair the wiring (Ref. ASM 22-68/04).

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ELEVATOR - FAULT ISOLATION PROCEDURES

TASK 27-30-00-810-801

Failure of the Left Blue Elevator-Servocontrol Position-Transducer

1. Possible Causes

- SERVO CTL-L ELEVATOR, OUTBD B (34CE3)
- wiring of the POS XDCR COM SPLY signal from the servocontrol (34CE3) to the first terminal block
- wiring of the POS XDCR COM V1, V2 signals from the servocontrol (34CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | | |
|---|--------------|------------------|--|--|--|
| | 27-9 | 0-00-810-819 | Loss of the ACS1 Signal of the ELAC1 COM Side and | | |
| | L 1 / | 0 00 010 017 | SEC1 COM Side | | |
| | 31-3 | 2-00-810-933 | Failure of the Analog Links | | |
| | AMM | 27-34-00-040-001 | Elevator Servocontrol Position-Transducer - Connection of the Spare Transducer | | |
| | AMM | 27-34-00-440-001 | Reactivation of Elevator Servocontrol Position-Transducer | | |
| R | AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control | | |
| R | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control | | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | | |
| | ASM | 27-93/07 | · | | |
| | ASM | 27-94/07 | | | |
| | | | | | |

3. Fault Confirmation

A. Test

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- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: L B ELEV POS XDCR 34CE3 COM E1/S1 : USE STBY XDCR - refer to Para. Fault Isolation.

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(b) If the ground scanning gives at least two maintenance messages of the list below:

L B ELEV POS XDCR 34CE3 COM E1/S1 : USE STBY XDCR R B ELEV POS XDCR 34CE4 COM E1/S1 : USE STBY XDCR THS ACTR XDCR2 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-819).

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4. Fault Isolation

- A. If the test gives the maintenance message:
 - L B ELEV POS XDCR 34CE3 COM E1/S1 : USE STBY XDCR
 - deactivate the defective RVDT and connect the spare RVDT (Ref. AMM TASK 27-34-00-040-001) and (Ref. AMM TASK 27-34-00-440-001).
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933)
 related to the ANI 2-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (2) If the fault continues:
 - replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.

- (3) If the fault continues:
 - (a) Do a check of the wiring of the POS XDCR COM SPLY signal from the servocontrol (34CE3) to the first terminal block (Ref. ASM 27-93/07):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the POS XDCR COM V1, V2 signals from the servocontrol (34CE3) to the first terminal block (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-802

Loss of the Signal of the Left Blue Elevator-Servocontrol Position-Transducer by the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the POS XDCR COM (ANI 2-1) signal from the SEC 1 (1CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|--------------------------------------|---|--|
| | | 0-00-810-817 27-94-34-000-001 | Loss of the ACS1 Signal of the SEC1 COM Side Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 27-96-00-710-020 | Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| R | | 27-96-00-740-001 27-94/07 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 pushbutton switch (on this pushbutton switch the OFF legend comes on).

- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC1 COM OR WIRING FROM THS ACTR XDCR2 9CE SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-817).

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4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR COM (ANI 2-1) signal from the SEC 1 (1CE1) to the first terminal block (Ref. ASM 27-94/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-803

Failure of the Left Elevator Position MON Transducer

1. Possible Causes

- XDCR UNIT-ELEV POS, L (49CE1)
- wiring of the POS RVDT MON SPLY signal
- wiring of the POS RVDT MON V1, V2 signals

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|--------|------|--|--|
| | 27-9 | 0-00-810-820 | Loss of the ACS1 Signal of the ELAC1 MON Side and SEC1 MON Side |
| | 31-3 | 2-00-810-933 | Failure of the Analog Links |
| R R | AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| R R | AMM | 27-92-13-400-001 | Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | | 27-96-00-740-001 27-93/07 27-94/07 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message:
 - L ELEV POS MON XDCR OF ELAC1/SEC1
 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

L ELEV POS MON XDCR OF ELAC1/SEC1

L G ELEV MODE XDCR 34CE1

R ELEV POS MON XDCR OF ELAC1/SEC1

R Y ELEV MODE XDCR 34CE2

THS ACTR XDCR2 MON 9CE

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- do this trouble shooting procedure (Ref. TASK 27-90-00-810-820).

4. Fault Isolation

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- R A. If the test gives the maintenance message L ELEV POS MON XDCR OF R ELAC1/SEC1
 - disconnect and cross the electrical connectors of the elevator position transducer unit (49CE1) (Ref. ASM 27-93/07) and do the test given in Para. 3.
 - NOTE: After the test connect the electrical connectors on their initial plugs.
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 2-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (2) If the test gives the maintenance message L ELEV POS MON XDCR OF ELAC2/SEC2:
 - replace the XDCR UNIT-ELEV POS, L (49CE1) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - NOTE : The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (3) If the test gives the maintenance message L ELEV POS MON XDCR OF ELAC1/SEC1
 - (a) Do a check of the wiring of the POS RVDT MON SPLY signal from the transducer unit (49CE1) plug B to the first terminal block (Ref. ASM 27-93/07):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the POS RVDT MON V1, V2 signals from the transducer unit (49CE1), plug B to the first terminal block (Ref. ASM 27-93/07).
 - B. Do the test given in Para. 3.

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TASK 27-30-00-810-804

Loss of the Left Elevator because of its Two Servocontrols

- 1. Possible Causes
 - SERVO CTL-L ELEVATOR, INBD G (34CE1)
 - SERVO CTL-L ELEVATOR, OUTBD B (34CE3)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|--|
| | AMM | 27-34-00-200-001 | Check of the Elevator Servo Controls and Hinge Bearings for too much Play and Condition |
| | AMM | 27-34-00-710-001 | Operational Test of the Elevator and Hydraulic Actuation |
| R | AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| R | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| | AMM | 27-96-00-710-008 | Operational Test of the Damping Measurement (Elevator) |

- 3. Fault Confirmation
 - A. Test
 - (1) Not applicable, you cannot confirm this fault on the ground.
- 4. Fault Isolation
 - A. Do a check of the left elevator servocontrols and hinge bearings for too much play and condition (Ref. AMM TASK 27-34-00-200-001).
 - (1) Do an operational test of the damping measurement (Elevator) (Ref. AMM TASK 27-96-00-710-008):
 - if the result of the test is not in the tolerances, see Para. (a)
 - if the result of the test is in the tolerances, see Para. (b).
 - (a) Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) and the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) of the left elevator (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

NOTE : The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.

(b) Do the operational test of the elevator and hydraulic actuation (Ref. AMM TASK 27-34-00-710-001).

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TASK 27-30-00-810-805

Loss of the Signal of the Left Elevator Position Transducer (MON) by the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the POS XDCR MON (ANI 2-1) signal from the SEC 1 (1CE1) MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------------------|--|
| | | 0-00-810-818 | Loss of the ACS1 Signal of the SEC1 MON Side |
| | | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| R | | 27-96-00-740-001 27-94/07 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC1 OR WIRING FROM L ELEV POS MON XDCR - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC1 OR WIRING FROM L ELEV POS MON XDCR
SEC1 OR WIRING FROM R ELEV POS MON XDCR
SEC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2

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R - do this trouble shooting procedure (Ref. TASK 27-90-00-810-R 818).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 OR WIRING FROM L ELEV POS MON XDCR
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR MON (ANI 2-1) signal from the SEC 1 (1CE1) MON part to the first terminal block (Ref. ASM 27-94/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-806

Failure of the Left Blue Elevator-Servocontrol Servovalve

1. Possible Causes

- servovalve of the servocontrol 34CE3
- wiring of the SV signal from the servocontrol (34CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------------|------------------------------|--|
| | AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve |
| | AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| 2 | AMM ASM | 27-96-00-740-001 27-93/07 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

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- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - L B ELEV SERVO VLV 34CE3
 - replace the servovalve of the servocontrol 34CE3 (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (1) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servocontrol (34CE3) to the first terminal block (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-807

Loss of the Signal of the Left Blue Elevator-Servocontrol Servovalve by the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- R SERVO CTL-L ELEVATOR, OUTBD B (34CE3)
- R servovalve
 - wiring of L ELEV SV (ANO 1) signal from the SEC 1 (1CE1) COM part to the MON part
 - wiring from the SEC 1 (1CE1) MON part, pins AD/1F, 1G to the first terminal block
- R wiring of the LVDT SV SPLY signal
- R wiring of the LVDT POS (ANI 3-1) signal

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|--------|------|--------------------------------------|---|
| R R | | 27-34-51-000-001 27-34-51-000-008 | Removal of the Elevator Servo Control Removal of the Elevator Servo Control Actuator Servo |
| R | | | Valve |
| R | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| R R | AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-94/07 | _ |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the test gives the maintenance message:
 SEC1 COM OR WIRING TO L B ELEV SERVO VLV 34CE3
 replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- R (1) If the fault continues:
 R replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref.
 R AMM TASK 27-34-51-400-003).
- R (2) If the fault continues:
 - (a) Do a check of the wiring of L ELEV SV (ANO 1) signal from the SEC 1 (1CE1) COM part to the MON part, from pins AA/1A, 1B to pins AD/1J, 1K (Ref. ASM 27-94/07):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring from the SEC 1 (1CE1) MON part, pins AD/1F, 1G to the first terminal block (Ref. ASM 27-94/07):
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Do a check of the wiring of the LVDT SV SPLY signal, from the servocontrol (34CE3) to the first terminal block (Ref. ASM 27-94/07):
 - if there is continuity, see Para. (d)
 - if there is no continuity, repair the above wiring.
 - (d) Do a check of the wiring of the LVDT POS (ANI 3-1) signal, from the SEC 1 (1CE1) MON part to the servocontrol (34CE3) (Ref. ASM 27-94/07):
 - if there is continuity, see Para. (3)
 - if there is no continuity, repair the above wiring.
 - (3) If the fault continues:
 - replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - B. Do the tests given in Para. 3.

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TASK 27-30-00-810-808

Loss of the Signal of the Left Blue Elevator-Servocontrol Servovalve by the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- XDCR UNIT-ELEV POS, L (49CE1)
- SERVO CTL-L ELEVATOR, OUTBD B (34CE3)
- servovalve of the servocontrol 34CE3
- wiring of SV XDCR V1 signal from the servocontrol (34CE3) to the SEC 1 (1CE1)
- wiring of the SV XDCR SPLY signal from the servocontrol (34CE3) to the first terminal block
- wiring of the POS XDCR MON signal from the transducer unit (49CE1) to the SEC 1 (1CE1)

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|------------------------------|--|
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| AMM | 27-92-13-400-001 | Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-94/07 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE : Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton

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switches (on these pushbutton switches the OFF legends come on).

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 MON OR WIRING TO L B ELEV SERVO VLV 34CE3
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) replace the XDCR UNIT-ELEV POS, L (49CE1) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - (2) If the fault continues:
 - replace the servovalve of the servocontrol 34CE3 (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
 - (3) If the fault continues:
 - (a) Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - (4) If the fault continues:
 - (a) Do a check of the wiring of SV XDCR V1 signal from the servocontrol (34CE3) to the SEC 1 (1CE1) (Ref. ASM 27-94/07):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring of the SV XDCR SPLY signal from the servocontrol (34CE3) to the first terminal block (Ref. ASM 27-94/07):
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Check and repair the wiring of the POS XDCR MON signal from the transducer unit (49CE1) to the SEC 1 (1CE1) (Ref. ASM 27-94/07):
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-809

Failure of the Left Blue Elevator-Servocontrol Mode-Transducer

1. Possible Causes

- mode selector valve transducer of the servocontrol (34CE3)
- wiring of the MODE XDCR SPLY signal from the servocontrol (34CE3) to the first terminal block
- wiring of the MODE XDCR V1 signal from the servocontrol (34CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| 27-90-00-810-824 | Loss of the ACS1 Signal of the ELAC2 MON Side and SEC2 MON Side |
| 31-32-00-810-933 | Failure of the Analog Links |
| AMM 27-34-51-000-006 | Removal of the Elevator Servo Control Actuator Mode Selector Valve Transducer MSVT |
| AMM 27-34-51-400-005 | Installation of the Elevator Servo Control Actuator Mode Selector Valve Transducer MSVT |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/08 | |
| ASM 27-94/08 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE Test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message:
 L B ELEV MODE XDCR 34CE3
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

L B ELEV MODE XDCR 34CE3

L ELEV POS MON XDCR OF ELAC2/SEC2

R B ELEV MODE XDCR 34CE4

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R Y ELEV POS MON XDCR OF ELAC2/SEC2 ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

 do this trouble shooting procedure (Ref. TASK 27-90-00-810-824).

4. Fault Isolation

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- A. If the test gives the maintenance message:
 - L B ELEV MODE XDCR 34CE3
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 7-X analog input signal of the ELAC MON and SEC MON (Ref. ASM 27-93/08) and (Ref. ASM 27-94/08).
 - (1) If the fault continues:
 - replace the mode selector valve transducer of the servocontrol (34CE3) (Ref. AMM TASK 27-34-51-000-006) and (Ref. AMM TASK 27-34-51-400-005).

NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.

- (2) If the fault continues:
 - (a) Do a check of the wiring of the MODE XDCR SPLY signal from the servocontrol (34CE3) to the first terminal block (Ref. ASM 27-93/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Repair the wiring of the MODE XDCR V1 signal from the servocontrol (34CE3) to the first terminal block (Ref. ASM 27-93/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-810

Loss of the Left Blue Elevator-Servocontrol Mode-Transducer by the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the L B SERVO CTL MODE POS (ANI 7-1) from the SEC 2 (1CE2) MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|--------------------------------------|--|
| | | 0-00-810-822 27-94-34-000-001 | Loss of the ACS1 Signal of the SEC2 MON Side Removal of the SEC (1CE1,1CE2,1CE3) |
| | | 27-94-34-400-001 27-96-00-710-020 | <pre>Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test)</pre> |
| R | | 27-96-00-740-001 27-94/08 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE Test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
SEC2 OR WIRING FROM L ELEV POS MON XDCR
SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4
SEC2 OR WIRING FROM R ELEV POS MON XDCR
SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

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R - do this trouble shooting procedure (Ref. TASK 27-90-00-810-R 822).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the L B SERVO CTL MODE POS (ANI 7-1) from the SEC 2 (1CE2) MON part to the first terminal block (Ref. ASM 27-94/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-811

Loss of the Signal of the Left Blue Elevator-Servocontrol Solenoid Valve by the SEC 2

<u>CAUTION</u>: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-L ELEVATOR, OUTBD B (34CE3)
- SEC-2 (1CE2)
- R ELAC-1 (2CE1)
 - solenoid valve of the servocontrol 34CE3
 - wiring of the SOL VLV2 signal from the servocontrol (34CE3) to the SEC2 (1CE2)
 - wiring from the SEC2 (1CE2) COM part to the SEC2 MON part

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------------|------------------------------|--|
| | | | |
| | AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| | AMM | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator Solenoid Valve |
| | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| | AMM | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator Solenoid Valve |
| R | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| R | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM ASM | 27-96-00-740-001 27-94/08 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).

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(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 MON OR WIRING TO L B ELEV SOL VLV 34CE3
 - (1) Remove the SEC2 (Ref. AMM TASK 27-94-34-000-001).
 - (2) At the SEC2 receptacle, do a check of the resistance between the pin AB/14D and the pin AE/14G (Ref. ASM 27-94/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the outboard elevator servocontrol (34CE3), do a check of the resistance of the solenoid valve between the pin C/J and the pin C/U (Ref. ASM 27-94/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE3 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between the pin C/J and the pin C/U of the outboard elevator servocontrol (34CE3) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance values are in the specified limits: Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV2 signal from the servocontrol (34CE3) to the SEC2 (1CE2), from the pin C/J to the pin AB/14D and from the pin C/U to the pin AE/14G (Ref. ASM 27-94/08):
 - \underline{b} Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

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- (b) If the resistance is more than 100 Ohms:
 - at the outboard elevator servocontrol (34CE3), do a check of the resistance of the solenoid valve between the pin C/J and the pin C/U (Ref. ASM 27-94/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE3 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/J and the pin C/U of the outboard elevator servocontrol (34CE3) (40 to 100 0hms).
 - If the resistance values are out of the specified limits: . Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance values are in the specified limits: Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
- 2 If the resistance values are in the specified limits:
 - a Repair the wiring of the SOL VLV2 signal from the servocontrol (34CE3) to the SEC2 (1CE2), from the pin C/J to the pin AB/14D and from the pin C/U to the pin AE/14G (Ref. ASM 27-94/08):
 - b Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
- (c) If the resistance values are in the specified limits: - See Para. (3).
- (3) At the SEC2 receptacle, do a check of the insulation between pin AE/14G (pin AB/14D) and the ground.

NOTE: The resistance must be more than 100 Meghoms.

- (a) If the resistance is more than 100 Megohms:
 - Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - If the fault continues:
 - Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - If the fault continues:
 - Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

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- do a check of the wiring from the SEC2 (1CE2) COM part to the SEC2 MON part, from the pin AB/11F to the pin AE/14E (Ref. ASM 27-94/08):
 - a If the wiring is correct:
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001)
 and (Ref. AMM TASK 27-94-34-400-001).
 - b If the wiring is not correct:
 - repair it
 - install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is less than 100 Meghoms:
 - At the SERVO CTL-L ELEVATOR, OUTBD B (34CE3), do a check of the insulation between pin C/U (pin C/J) and the ground.
 - 1 If the resistance is less than 100 Megohms:
 - Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>a</u> Do again a check of the insulation of the solenoid valve between pin C/U (pin C/J) and the ground.
 - If the resistance is less than 100 Megohms:
 - . Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 100 Meghoms:
 - Repair the wiring of the solenoid valve signal from the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) to the SEC-2 (1CE2).
 - <u>b</u> Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (4) If the fault continues:
 - replace the ELAC-1 (2CE1), (MON part relay K1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-812

Failure of the Left Green Elevator-Servocontrol Position-Transducer

1. Possible Causes

- SERVO CTL-L ELEVATOR, INBD G (34CE1)
- wiring of the POS XDCR COM SPLY signal from the servocontrol (34CE1) to the first terminal block
- wiring of the POS XDCR COM V1, V2 signals from the servocontrol (34CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|---|
| | | | |
| | 27-9 | 0-00-810-823 | Loss of the ACS1 Signal of the ELAC2 COM Side and SEC2 COM Side |
| | 31-3 | 2-00-810-933 | Failure of the Analog Links |
| | AMM | 27-34-00-040-001 | Elevator Servocontrol Position-Transducer - Connection of the Spare Transducer |
| | AMM | 27-34-00-440-001 | Reactivation of Elevator Servocontrol Position-Transducer |
| R | AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| R | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-93/07 | • |
| | ASM | 27-93/08 | |
| | ASM | 27-94/07 | |
| | | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: L G ELEV pos XDCR 34CE1 COM E2/S2:USE STBY XDCR - refer to Para. Fault Isolation.

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(b) If the ground scanning gives at least two maintenance messages of the list below:

L G ELEV pos XDCR 34CE1 COM E2/S2:USE STBY XDCR R Y ELEV pos XDCR 34CE2 COM E2/S2:USE STBY XDCR ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-823).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - L G ELEV POS XDCR 34CE1 COM E2/S2 : USE STBY XDCR
 - deactivate the defective RVDT and connect the spare RVDT (Ref. AMM TASK 27-34-00-040-001) and (Ref. AMM TASK 27-34-00-440-001).
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933)
 related to the ANI 2-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (2) If the fault continues:
 - replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (3) If the fault continues:
 - (a) Do a check of the wiring of the POS XDCR COM SPLY signal from the servocontrol (34CE1) to the first terminal block (Ref. ASM 27-93/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the POS XDCR COM V1, V2 signals from the servocontrol (34CE1) to the first terminal block (Ref. ASM 27-93/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-813

Loss of the Signal of the Left Green Elevator-Servocontrol Position-Transducer by the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the POS XDCR COM (ANI 2-1) signal from the SEC 2 (1CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| 27-90-00-810-821 AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-710-020 | Loss of the ACS1 Signal of the SEC2 COM Side Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly |
| AMM 27-96-00-740-001 ASM 27-94/08 | (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 2 pushbutton switch (on this pushbutton switch the OFF legend comes on).

- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC2 OR WIRING FROM L G ELEV MODE XDCR 34CE1
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
SEC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2

SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-821).

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4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR COM (ANI 2-1) signal from the SEC 2 (1CE2) to the first terminal block (Ref. ASM 27-94/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-814

Failure of the Left Elevator Position MON Transducer

1. Possible Causes

- XDCR UNIT-ELEV POS, L (49CE1)
- wiring of the POS XDCR MON SPLY signal
- wiring of the POS XDCR MON V1, V2 signals

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|--------|------|------------------|---|
| | 27-9 | 0-00-810-824 | Loss of the ACS1 Signal of the ELAC2 MON Side and SEC2 MON Side |
| | 31-3 | 2-00-810-933 | Failure of the Analog Links |
| R R | AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| R R | AMM | 27-92-13-400-001 | <pre>Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2</pre> |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-93/07 | · |
| | ASM | 27-93/08 | |
| | ASM | 27-94/07 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: L ELEV POS MON XDCR OF ELAC2/SEC2
 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:
 - L B ELEV MODE XDCR 34CE3
 - L ELEV POS MON XDCR OF ELAC2/SEC2
 - R B ELEV MODE XDCR 34CE4
 - R ELEV POS MON XDCR OF ELAC2/SEC2

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ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-824).

4. Fault Isolation

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- R A. If the test gives the maintenance message L ELEV POS MON XDCR OF R ELAC2/SEC2
 - disconnect and cross the electrical connectors of the elevator position transducer unit (49CE1) (Ref. ASM 27-93/08) and do the test given in Para. 3.
 - NOTE : After the test connect the electrical connectors on their initial plugs.
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 2-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (2) If the test gives the maintenance message L ELEV POS MON XDCR OF ELAC1/SEC1:
 - replace the XDCR UNIT-ELEV POS, L (49CE1) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - (3) If the test gives the maintenance message L ELEV POS MON XDCR OF ELAC2/SEC2
 - (a) Do a check of the wiring of the POS XDCR MON SPLY signal from the transducer unit (49CE1) plug A to the first terminal block (Ref. ASM 27-93/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the POS XDCR MON V1, V2 signals from the transducer unit (49CE1) plug A to the first terminal block (Ref. ASM 27-93/08).
 - B. Do the test given in Para. 3.

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TASK 27-30-00-810-816

Loss of the Signal of the Left Elevator Position Transducer (MON) by the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the POS XDCR MON (ANI 2-1) signal from the SEC 2 (1CE2) MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|--------------------------------------|--|--|
| 27-90-00-810-822 | Loss of the ACS1 Signal of the SEC2 MON Side | |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM 27-96-00-740-001 ASM 27-94/08 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC2 OR WIRING FROM L ELEV POS MON XDCR - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3

SEC2 OR WIRING FROM L ELEV POS MON XDCR

SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4

SEC2 OR WIRING FROM R ELEV POS MON XDCR

SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

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- do this trouble shooting procedure (Ref. TASK 27-90-00-810-822).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 OR WIRING FROM L ELEV POS MON XDCR
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR MON (ANI 2-1) signal from the SEC 2 (1CE2) MON part to the first terminal block (Ref. ASM 27-94/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-817

Failure of the Left Green Elevator-Servocontrol Servovalve

1. Possible Causes

- servovalve of the servocontrol 34CE1
- wiring of the SV signal from the servocontrol (34CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|------------------------------|--|
| AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-93/08 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - L G ELEV SERVO VLV 34CE1
 - replace the servovalve of the servocontrol 34CE1 (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (1) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servocontrol (34CE1) to the first terminal block (Ref. ASM 27-93/08).
- B. Do the test given in Para. 3.

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TASK 27-30-00-810-818

Loss of the Signal of the Left Green Elevator-Servocontrol Servovalve by the SEC 2 (COM Part)

1. Possible Causes

- SEC-2 (1CE2)
- R SERVO CTL-L ELEVATOR, INBD G (34CE1)
 - wiring of the L ELEV SV (ANO 1) signal from the SEC 2 (1CE2) COM part to the MON part
 - wiring from the SEC 2 (1CE2) MON part, pins AD/1F, 1G to the first terminal block
- R wiring of the SV XDCR SPLY signal
- wiring of the POS XDCR (ANI 3-1) signal

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION |
|--------|------------|--------------------------------------|--|
| R R | AMM AMM | 27-34-51-000-001 27-34-51-000-008 | Removal of the Elevator Servo Control Removal of the Elevator Servo Control Actuator Servo |
| R R | AMM | 27-34-51-400-001 | Valve Installation of the Elevator Servo Control |
| R R | AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-94/08 | • |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

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4. Fault Isolation

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- A. If the test gives the maintenance message: SEC2 COM OR WIRING TO L G ELEV SERVO VLV 34CE1
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- R (1) If the fault continues:
 - replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
- R (2) If the fault continues:
 - (a) Do a check of the wiring of the L ELEV SV (ANO 1) signal from the SEC 2 (1CE2) COM part to the MON part, from pins AA/1A, 1B to pins AD/1J, 1K (Ref. ASM 27-94/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring from the SEC 2 (1CE2) MON part, pins AD/1F, 1G to the first terminal block (Ref. ASM 27-94/08):
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Do a check of the wiring of the SV XDCR SPLY signal, from the servocontrol (34CE1) to the first terminal block (Ref. ASM 27-94/08):
 - if there is continuity see Para. (d)
 - if there is no continuity repair the above wiring.
 - (d) Do a check of the wiring of the POS XDCR (ANI 3-1) signal, from the SEC 2 (1CE2) MON part to the servocontrol (34CE1) (Ref. ASM 27-94/08):
 - if there is continuity see Para. (3)
 - if there is no continuity repair the above wiring.
 - (3) If the fault continues:
 - replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - B. Do the tests given in Para. 3.

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TASK 27-30-00-810-819

Loss of the Signal of the Left Green Elevator-Servocontrol Servovalve by the SEC 2 (MON Part)

1. Possible Causes

- SEC-2 (1CE2)
- XDCR UNIT-ELEV POS, L (49CE1)
- SERVO CTL-L ELEVATOR, INBD G (34CE1)
- servovalve of the servocontrol 34CE1
- wiring of the SV XDCR V1 signal from the servocontrol (34CE1) to the SEC 2 (1CE2)
- wiring of the SV XDCR SPLY signal from the servocontrol (34CE1) to the first te minal block
- wiring of the POS XDCR MON signal from the transducer unit (49CE1) to the SEC 2 (1CE2)

2. Job Set-up Information

SROS

A. Referenced Information

| | REFE | RENCE | DESIGNATION | |
|--------|------------|--------------------------------------|--|--|
| | AMM AMM | 27-34-51-000-001 27-34-51-000-008 | Removal of the Elevator Servo Control Removal of the Elevator Servo Control Actuator Servo Valve | |
| | AMM AMM | 27-34-51-400-001 27-34-51-400-003 | Installation of the Elevator Servo Control Installation of the Elevator Servo Control Actuator Servo Valve | |
| R R | AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 | |
| R R | AMM | 27-92-13-400-001 | Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2 | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | AMM ASM | 27-96-00-740-001 27-94/08 | BITE Test of the EFCS (Ground Scanning) | |

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3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 MON OR WIRING TO L G ELEV SERVO VLV 34CE1
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Replace the XDCR UNIT-ELEV POS, L (49CE1) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - (2) If the fault continues:
 - replace the servovalve of the servocontrol 34CE1 (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
 - (3) If the fault continues:
 - Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - (4) If the fault continues:
 - (a) Do a check of the wiring of the SV XDCR V1 signal from the servocontrol (34CE1) to the SEC 2 (1CE2) (Ref. ASM 27-94/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring of the SV XDCR SPLY signal from the servocontrol (34CE1) to the first te minal block (Ref. ASM 27-94/08).
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Repair the wiring of the POS XDCR MON signal from the transducer unit (49CE1) to the SEC 2 (1CE2) (Ref. ASM 27-94/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-820

Failure of the Left Green Elevator-Servocontrol Mode-Transducer

1. Possible Causes

- mode selector valve transducer of the servocontrol (34CE1)
- wiring of the MODE XDCR SPLY signal from the servocontrol (34CE1) to the first terminal block
- wiring of the MODE XDCR V1 signal from the servocontrol (34CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| 27-90-00-810-820 | Loss of the ACS1 Signal of the ELAC1 MON Side and SEC1 MON Side |
| 31-32-00-810-933 | Failure of the Analog Links |
| AMM 27-34-51-000-006 | Removal of the Elevator Servo Control Actuator Mode Selector Valve Transducer MSVT |
| AMM 27-34-51-400-005 | Installation of the Elevator Servo Control Actuator Mode Selector Valve Transducer MSVT |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM 27-96-00-740-001 ASM 27-93/07 ASM 27-94/07 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).
 - (a) If the ground scanning gives the maintenance message:
 L G ELEV MODE XDCR 34CE1
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

L ELEV POS MON XDCR OF ELAC1/SEC1

L G ELEV MODE XDCR 34CE1

R B ELEV POS MON XDCR OF ELAC1/SEC1

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R Y ELEV MODE XDCR 34CE2 THS ACTR XDCR2 MON 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-820).

4. Fault Isolation

R

- A. If the test gives the maintenance message:
 - L G ELEV MODE XDCR 34CE1
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 7-X analog input signal of the ELAC MON and SEC MON (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (1) If the fault continues:
 - replace the mode selector valve transducer of the servocontrol (34CE1) (Ref. AMM TASK 27-34-51-000-006) and (Ref. AMM TASK 27-34-51-400-005).

NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.

- (2) If the fault continues:
 - (a) Do a check of the wiring of the MODE XDCR SPLY signal from the servocontrol (34CE1) to the first terminal block (Ref. ASM 27-93/07):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Repair the wiring of the MODE XDCR V1 signal from the servocontrol (34CE1) to the first terminal block (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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EFF: ALL

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TASK 27-30-00-810-821

Loss of the Left Green Elevator-Servocontrol Mode-Transducer by the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the L G SERVO CTL MODE POS (ANI 7-1) from SEC 1 (1CE1) MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--------------------------------------|--|
| 27-90-00-810-818 | loss of the ACC1 Signal of the SEC1 MON Side |
| | Loss of the ACS1 Signal of the SEC1 MON Side |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM 27-96-00-740-001 ASM 27-94/07 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC1 OR WIRING FROM L ELEV POS MON XDCR

SEC1 OR WIRING FROM R ELEV POS MON XDCR

SEC1 MON OR WIRING FROM THS ACTR XDCR2 9CE

SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1

SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2

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- do this trouble shooting procedure (Ref. TASK 27-90-00-810-818).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the L G SERVO CTL MODE POS (ANI 7-1) from SEC 1 (1CE1) MON part to the first terminal block (Ref. ASM 27-94/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-822

Loss of the Signal of the Left Green Elevator-Servocontrol Solenoid Valve by the SEC 1

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-L ELEVATOR, INBD G (34CE1)
- SEC-1 (1CE1)
- R ELAC-2 (2CE2)
 - solenoid valve of the servocontrol 34CE1
 - wiring of the SOL VLV2 signal from the servocontrol (34CE1) to the SEC1 (1CE1)
 - wiring from the SEC1 (1CE1) COM part to the SEC1 MON part

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|--|--|
| | | | | |
| | AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control | |
| | AMM | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator Solenoid Valve | |
| | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control | |
| | AMM | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator Solenoid Valve | |
| R | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-94/07 | | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).

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(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 MON OR WIRING TO L G ELEV SOL VLV 34CE1
 - (1) Remove the SEC1 (Ref. AMM TASK 27-94-34-000-001).
 - (2) At the SEC1 receptacle, do a check of the resistance between the pin AB/14D and the pin AE/14G (Ref. ASM 27-94/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the inboard elevator servocontrol (34CE1), do a check of the resistance of the solenoid valve between the pin C/J and the pin C/U (Ref. ASM 27-94/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE1 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/J and the pin C/U of the inboard elevator servocontrol (34CE1) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance values are in the specified limits: Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV2 signal from the servocontrol (34CE1) to the SEC1 (1CE1), from the pin C/J to the pin AB/14D and from the pin C/U to the pin AE/14G (Ref. ASM 27-94/07):
 - <u>b</u> Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

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- (b) If the resistance is more than 100 Ohms:
 - at the inboard elevator servocontrol (34CE1), do a check of the resistance of the solenoid valve between the pin C/J and the pin C/U (Ref. ASM 27-94/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE1 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/J and the pin C/U of the inboard elevator servocontrol (34CE1) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance values are in the specified limits: Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV2 signal from the servocontrol (34CE1) to the SEC1 (1CE1), from the pin C/J to the pin AB/14D and from the pin C/U to the pin AE/14G (Ref. ASM 27-94/07):
 - b Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
- (c) If the resistance values are in the specified limits:
 See Para. (3)
- (3) At the SEC1 receptacle, do a check of the insulation between pin AE/14G (pin AB/14D) and the ground.

NOTE: The resistance must be more than 100 Meghoms.

- (a) If the resistance is more than 100 Megohms:
 - Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 1 If the fault continues:
 - Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - 2 If the fault continues:
 - Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

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- do a check of the wiring from the SEC1 (1CE1) COM part to the SEC1 MON part, from the pin AB/11F to the pin AE/14E (Ref. ASM 27-94/07):
 - a If the wiring is correct:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - b If the wiring is not correct:
 - repair it
 - install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is less than 100 Meghoms:
 - At the SERVO CTL-L ELEVATOR, INBD G (34CE1), do a check of the insulation between pin C/U (pin C/J) and the ground.
 - 1 If the resistance is less than 100 Megohms:
 - Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>a</u> Do again a check of the insulation of the solenoid valve between pin C/U (pin C/J) and the ground;
 - If the resistance is less than 100 Megohms:
 .Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 100 Meghoms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-L ELEVATOR, INBD G (34CE1) to the SEC-1 (1CE1).
 - <u>b</u> Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (4) If the fault continues:
 - replace the ELAC-2 (2CE2), (MON part relay K1), (Ref. AMM TASK 27-93-34-000-001) and(Ref. AMM TASK 27-93-34-400-001).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-30-00-810-823

Failure of the Right Blue Elevator-Servocontrol Position-Transducer

1. Possible Causes

- SERVO CTL-R ELEVATOR, OUTBD B (34CE4)
- wiring of the POS XDCR COM SPLY signal from the servocontrol (34CE4) to the first terminal block
- wiring of the POS XDCR COM V1, V2 signals from the servocontrol (34CE4) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|--|---|
| 27-9 | 0-00-810-819 | Loss of the ACS1 Signal of the ELAC1 COM Side and SEC1 COM Side |
| 31-3 | 32-00-810-933 | Failure of the Analog Links |
| AMM | 27-34-00-040-001 | Elevator Servocontrol Position-Transducer - Connection of the Spare Transducer |
| AMM | 27-34-00-440-001 | Reactivation of Elevator Servocontrol Position-Transducer |
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | 27-96-00-740-001 27-93/07 27-94/07 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message:

 R B ELEV POS XDCR 34CE4 COM E1/S1: USE STBY XDCR

 refer to Para. Fault Isolation.

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- (b) If the ground scanning gives at least two maintenance messages of the list below:
 - L B ELEV POS XDCR 34CE3 COM E1/S1 : USE STBY XDCR R B ELEV POS XDCR 34CE4 COM E1/S1 : USE STBY XDCR THS ACTR XDCR2 9CE
 - do this trouble shooting procedure (Ref. TASK 27-90-00-810-819).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - R B ELEV POS XDCR 34CE4 COM E1/S1 : USE STBY XDCR
 - deactivate the defective RVDT and connect the spare RVDT (Ref. AMM TASK 27-34-00-040-001) and (Ref. AMM TASK 27-34-00-440-001).
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933)
 related to the ANI 2-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (2) If the fault continues:
 - replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (3) If the fault continues:
 - (a) Do a check of the wiring of the POS XDCR COM SPLY signal from the servocontrol (34CE4) to the first terminal block (Ref. ASM 27-93/07):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the POS XDCR COM V1, V2 signals from the servocontrol (34CE4) to the first terminal block (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-824

Loss of the Signal of the Right Blue Elevator-Servocontrol Position-Transducer by the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the POS XDCR COM (ANI 2-2) signal from the SEC 1 (1CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|--|--|
| 27-90-00-810-817 | Loss of the ACS1 Signal of the SEC1 COM Side | |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | (Activation for the BITE Test) | |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM 27-94/07 | | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 pushbutton switch (on this pushbutton switch, the OFF legend comes on).

- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC1 COM OR WIRING FROM THS ACTR XDCR2 9CE SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3

SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-817).

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4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR COM (ANI 2-2) signal from the SEC 1 (1CE1) to the first terminal block (Ref. ASM 27-94/07).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-30-00-810-825

Failure of the Right Elevator Position MON Transducer

1. Possible Causes

- XDCR UNIT-ELEV POS, R (49CE2)
- wiring of the POS RVDT MON SPLY signal
- wiring of the POS RVDT MON V1, V2 signals

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|--------|------|--|---|
| | 27-9 | 0-00-810-820 | Loss of the ACS1 Signal of the ELAC1 MON Side and SEC1 MON Side |
| | 31-3 | 2-00-810-933 | Failure of the Analog Links |
| R R | AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| R R | AMM | 27-92-13-400-001 | <pre>Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2</pre> |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | | 27-96-00-740-001 27-93/07 27-94/07 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R ELEV POS MON XDCR OF ELAC1/SEC1 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

L ELEV POS MON XDCR OF ELAC1/SEC1 L G ELEV MODE XDCR 34CE1 R ELEV POS MON XDCR OF ELAC1/SEC1 R Y ELEV MODE XDCR 34CE2 THS ACTR XDCR2 MON 9CE

EFF: ALL

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- do this trouble shooting procedure (Ref. TASK 27-90-00-810-820).

4. Fault Isolation

- R A. If the test gives the maintenance message R ELEV POS MON XDCR OF R ELAC1/SEC1:
 - disconnect and cross the electrical connectors of the elevator position transducer unit (49CE2) (Ref. ASM 27-93/07) and do the test given in Para. 3.

NOTE : After the test connect the electrical connetors on their initial plugs.

- (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933)
 related to the ANI 2-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
- R (2) If the test gives the maintenance message R ELEV POS MON XDCR OF R ELAC2/SEC2:
 - replace the XDCR UNIT-ELEV POS, R (49CE2) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).

NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.

- R (3) If the test gives the maintenance message R ELEV POS MON XDCR OF R ELAC1/SEC1:
 - (a) Do a check of the wiring of the POS RVDT MON SPLY signal from the transducer unit (49CE2) plug B to the first terminal block (Ref. ASM 27-93/07).
 - If there is continuity see Para. (b).
 - If there is no continuity repair the above wiring.
 - (b) Do a check and repair the wiring of the POS RVDT MON V1, V2 signals from the transducer unit (49CE2), plug B to the first terminal block (Ref. ASM 27-93/07).
 - B. Do the test given in Para. 3.

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EFF: ALL

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TASK 27-30-00-810-826

Loss of the Right Elevator because of its two Servocontrols

- 1. Possible Causes
 - SERVO CTL-R ELEVATOR, INBD Y (34CE2)
 - SERVO CTL-R ELEVATOR, OUTBD B (34CE4)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|--|
| | AMM | 27-34-00-200-001 | Check of the Elevator Servo Controls and Hinge Bearings for too much Play and Condition |
| | AMM | 27-34-00-710-001 | Operational Test of the Elevator and Hydraulic Actuation |
| R | AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| R | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| | AMM | 27-96-00-710-008 | Operational Test of the Damping Measurement (Elevator) |

- 3. Fault Confirmation
 - A. Test
 - (1) Not applicable, you cannot confirm this fault on the ground.
- 4. Fault Isolation
 - A. Do a check of the right elevator servocontrols and hinge bearings for too much play and condition (Ref. AMM TASK 27-34-00-200-001).
 - (1) Do an operational test of the damping measurement (Elevator) (Ref. AMM TASK 27-96-00-710-008):
 - if the result of the test is not in the tolerances, see Para. (a)
 - if the result of the test is in the tolerances, see Para. (b).
 - (a) Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) and the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) of the right elevator (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

NOTE : The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.

(b) Do the operational test of the elevator and hydraulic actuation (Ref. AMM TASK 27-34-00-710-001).

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TASK 27-30-00-810-827

Loss of the Signal of the Right Elevator Position Transducer (MON) by the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the POS XDCR MON (ANI 2-2) signal from the SEC 1 (1CE1) MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|--|--|
| AMM AMM | 0-00-810-818 27-94-34-000-001 27-94-34-400-001 27-96-00-710-020 | Loss of the ACS1 Signal of the SEC1 MON Side Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-94/07 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC1 OR WIRING FROM R ELEV POS MON XDCR - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC1 OR WIRING FROM L ELEV POS MON XDCR

SEC1 OR WIRING FROM R ELEV POS MON XDCR

SEC1 MON OR WIRING FROM THS ACTR XDCR2 9CE

SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1

SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2

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- do this trouble shooting procedure (Ref. TASK 27-90-00-810-818).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 OR WIRING FROM R ELEV POS MON XDCR
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR MON (ANI 2-2) signal from the SEC 1 (1CE1) MON part to the first terminal block (Ref. ASM 27-94/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-828

Failure of the Right Blue Elevator-Servocontrol Servovalve

1. Possible Causes

- servovalve of the servocontrol 34CE4
- wiring of the SV signal from the servocontrol (34CE4) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | RENCE | DESIGNATION | |
|-----------|------------|------------------------------|--|--|
| | AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo | |
| | A | 21 34 31 000 000 | Valve | |
| | AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | AMM ASM | 27-96-00-740-001 27-93/07 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - R B ELEV SERVO VLV 34CE4
 - replace the servovalve of the servocontrol 34CE4 (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (1) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servocontrol (34CE4) to the first terminal block (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-829

Loss of the Signal of the Right Blue Elevator-Servocontrol Servovalve by the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- R SERVO CTL-R ELEVATOR, OUTBD B (34CE4)
 - wiring of the R ELEV SV (ANO 2) signal from the SEC 1 (1CE1) COM part to the MON part
 - wiring from the SEC 1 (1CE1) MON part, pins AD/2F, 2G to the first terminal block
- R wiring of the LVDT SV SPLY signal
 - wiring of the LVDT POS (ANI 3-2) signal

2. Job Set-up Information

A. Referenced Information

| REFE | ERENCE | DESIGNATION | |
|--------------------------------|--|--|--|
| R AMM R AMM R | 27-34-51-000-001 27-34-51-000-008 | Removal of the Elevator Servo Control Removal of the Elevator Servo Control Actuator Servo Valve | |
| R AMM R AMM R AMM AMM | 27-34-51-400-001 27-34-51-400-003 27-94-34-000-001 27-94-34-400-001 27-96-00-710-020 27-96-00-740-001 27-94/07 | Installation of the Elevator Servo Control Installation of the Elevator Servo Control Actuator Servo Valve Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton switches (on these pushbutton switches, the OFF legends come on).

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

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4. Fault Isolation

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- A. If the test gives the maintenance message: SEC1 COM OR WIRING TO R B ELEV SERVO VLV 34CE4
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- R (1) If the fault continues:
 - replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
- R (2) If the fault continues:
 - (a) Do a check of the wiring of the R ELEV SV (ANO 2) signal from the SEC 1 (1CE1) COM part to the MON part, from pins AA/2A, 2B to pins AD/2J, 2K (Ref. ASM 27-94/07):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring from the SEC 1 (1CE1) MON part, pins AD/2F, 2G to the first terminal block (Ref. ASM 27-94/07):
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Do a check of the wiring of the LVDT SV SPLY signal, from the servocontrol (34CE4) to the first terminal block (Ref. ASM 27-94/07):
 - if there is continuity see Para. (d)
 - if there is no continuity repair the above wiring.
 - (d) Do a check of the wiring of the LVDT POS (ANI 3-2) signal, from the SEC 1 (1CE1) MON part to the servocontrol (34CE4) (Ref. ASM 27-94/07):
 - if there is continuity see Para. (3)
 - if there is no continuity repair the above wiring.
- R (3) If the fault continues:
 - replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - B. Do the tests given in Para. 3.

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TASK 27-30-00-810-830

Loss of the Signal of the Right Blue Elevator-Servocontrol Servovalve by the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- XDCR UNIT-ELEV POS, R (49CE2)
- SERVO CTL-R ELEVATOR, OUTBD B (34CE4)
- servovalve of the servocontrol 34CE4
- wiring of the LVDT SV V1 signal from the servocontrol (34CE4) to the SEC 1 (1CE1)
- wiring of the LVDT SV SPLY signal from the servocontrol (34CE4) to the first terminal block
- wiring of the POS RVDT MON signal from the transducer unit (49CE2) to the SEC 1 (1CE1)

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| 4 MM | 27.7/ 54.000.004 | Barra al ref. tha Ela refer Control |
| AMM | | Removal of the Elevator Servo Control |
| AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| AMM | 27-92-13-400-001 | <pre>Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2</pre> |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-94/07 | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE : Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton

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switches (on these pushbutton switches, the OFF legends come on).

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 MON OR WIRING TO R B ELEV SERVO VLV 34CE4
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Replace the XDCR UNIT-ELEV POS, R (49CE2) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - (2) If the fault continues:
 - replace the servovalve of the servocontrol 34CE4 (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
 - (3) If the fault continues:
 - Replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - (4) If the fault continues:
 - (a) Do a check of the wiring of the LVDT SV V1 signal from the servocontrol (34CE4) to the SEC 1 (1CE1) (Ref. ASM 27-94/07):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring of the LVDT SV SPLY signal from the servocontrol (34CE4) to the first terminal block (Ref. ASM 27-94/07).
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Repair the wiring of the POS RVDT MON signal from the transducer unit (49CE2) to the SEC 1 (1CE1) (Ref. ASM 27-94/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-831

Failure of the Right Blue Elevator-Servocontrol Mode-Transducer

1. Possible Causes

- mode selector valve transducer of the servocontrol (34CE4)
- wiring of the MODE XDCR SPLY signal from the servocontrol (34CE4) to the first terminal block
- wiring of the MODE XDCR V1 signal from the servocontrol (34CE4) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|---|
| | | | |
| | 27-9 | 0-00-810-824 | Loss of the ACS1 Signal of the ELAC2 MON Side and SEC2 MON Side |
| | 31-3 | 2-00-810-933 | Failure of the Analog Links |
| | AMM | 27-34-51-000-006 | Removal of the Elevator Servo Control Actuator Mode Selector Valve Transducer MSVT |
| | AMM | 27-34-51-400-005 | Installation of the Elevator Servo Control Actuator Mode Selector Valve Transducer MSVT |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| R | | | · |
| | ASM | 27-93/08 | |
| R | ASM | 27-94/08 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R B ELEV MODE XDCR 34CE4 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

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L B ELEV MODE XDCR 34CE3

L ELEV POS MON XDCR OF ELAC2/SEC2

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R B ELEV MODE XDCR 34CE4
R Y ELEV POS MON XDCR OF ELAC2/SEC2
ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-824).

4. Fault Isolation

R

A. If the test gives the maintenance message:

R B ELEV MODE XDCR 34CE4

- do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 7-X analog input signal of the ELAC MON and SEC MON (Ref. ASM 27-93/08) and (Ref. ASM 27-94/08).

(1) If the fault continues:

- replace the mode selector valve transducer of the servocontrol (34CE4) (Ref. AMM TASK 27-34-51-000-006) and (Ref. AMM TASK 27-34-51-400-005).

NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.

- (2) If the fault continues:
 - (a) Do a check of the wiring of the MODE XDCR SPLY signal from the servocontrol (34CE4) to the first terminal block (Ref. ASM 27-93/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Repair the wiring of the MODE XDCR V1 signal from the servocontrol (34CE4) to the first terminal block (Ref. ASM 27-93/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-832

Loss of the Right Blue Elevator-Servocontrol Mode-Transducer by the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the R B SERVO CTL MODE POS (ANI 7-2) from the SEC 2 (1CE2) MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--------------------------------------|--|
| 27-90-00-810-822 | Loss of the ACS1 Signal of the SEC2 MON Side |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM 27-96-00-740-001 ASM 27-94/08 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches, the OFF legends come on).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3

SEC2 OR WIRING FROM L ELEV POS MON XDCR

SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4

SEC2 OR WIRING FROM R ELEV POS MON XDCR

SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

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- do this trouble shooting procedure (Ref. TASK 27-90-00-810-822).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the R B SERVO CTL MODE POS (ANI 7-2) from the SEC 2 (1CE2) MON part to the first terminal block (Ref. ASM 27-94/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-833

Loss of the Signal of the Right Blue Elevator-Servocontrol Solenoid Valve by the SEC 2

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-R ELEVATOR, OUTBD B (34CE4)
- SEC-2 (1CE2)
- R ELAC-1 (2CE1)
 - solenoid valve of the servocontrol 34CE4
 - wiring of the SOL VLV2 signal from the servocontrol (34CE4) to the SEC2 (1CE2)
 - wiring from the SEC2 (1CE2) COM part to the SEC2 MON part

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------------|------------------------------|--|
| | | | |
| | AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| | AMM | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator Solenoid Valve |
| | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| | AMM | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator Solenoid Valve |
| R | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| R | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM ASM | 27-96-00-740-001 27-94/08 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).

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(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 MON OR WIRING TO R B ELEV SOL VLV 34CE4
 - (1) Remove the SEC2 (Ref. AMM TASK 27-94-34-000-001).
 - (2) At the SEC2 receptacle, do a check of the resistance between the pin AB/15D and the pin AE/15G (Ref. ASM 27-94/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the outboard elevator servocontrol (34CE4), do a check of the resistance of the solenoid valve between the pin C/J and the pin C/U (Ref. ASM 27-94/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE4 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between pin C/J and the pin C/U of the outboard elevator servocontrol (34CE4) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance values are in the specified limits: Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV2 signal from the servocontrol (34CE4) to the SEC2 (1CE2), from the pin C/J to the pin AB/15D and from the pin C/U to the pin AE/15G (Ref. ASM 27-94/08):
 - \underline{b} Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

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- (b) If the resistance is more than 100 Ohms:
 - at the outboard elevator servocontrol (34CE4), do a check of the resistance of the solenoid valve between the pin C/J and the pin C/U (Ref. ASM 27-94/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE4 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between pin C/J and the pin C/U of the outboard elevator servocontrol (34CE4) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance values are in the specified limits: Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV2 signal from the servocontrol (34CE4) to the SEC2 (1CE2), from the pin C/J to the pin AB/15D and from the pin C/U to the pin AE/15G (Ref. ASM 27-94/08):
 - b Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
- (c) If the resistance values are in the specified limits:
 See Para. (3).
- (3) At the SEC2 receptacle, do a check of the insulation between pin AE/15G (pin AB/15D) and the ground.

NOTE: The resistance must be more than 100 Meghoms.

- (a) If the resistance is more than 100 Megohms:
 - Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 1 If the fault continues:
 - Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - 2 If the fault continues:
 - Replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

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- do a check of the wiring from the SEC2 (1CE2) COM part to the SEC2 MON part, from the pin AB/12F to the pin AE/15E (Ref. ASM 27-94/08):
 - a If the wiring is correct:
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001)
 and (Ref. AMM TASK 27-94-34-400-001).
 - b If the wiring is not correct:
 - repair it
 - install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is less than 100 Meghoms:
 - At the SERVO CTL-R ELEVATOR, OUTBD B (34CE4), do a check of the insulation between pin C/U (pin C/J) and the ground.
 - 1 If the resistance is less than 100 Megohms:
 - Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>a</u> Do again a check of the insulation of the solenoid valve between pin C/U (pin C/J) and the ground;
 - If the resistance is less than 100 Megohms:
 .Replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-400-001).
 - Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 100 Meghoms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) the SEC-2 (1CE2).
 - <u>b</u> Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (4) If the fault continues:
 - replace the ELAC-1 (2CE1), (MON part relay K2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-834

Failure of the Right Yellow Elevator-Servocontrol Position-Transducer

1. Possible Causes

- SERVO CTL-R ELEVATOR, INBD Y (34CE2)
- wiring of the POS RVDT COM SPLY signal from the servocontrol (34CE2) to the first terminal block
- wiring of the POS RVDT COM V1, V2 signals from the servocontrol (34CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| 27-9 | 0-00-810-823 | Loss of the ACS1 Signal of the ELAC2 COM Side and SEC2 COM Side |
| 31-3 | 2-00-810-933 | Failure of the Analog Links |
| AMM | 27-34-00-040-001 | Elevator Servocontrol Position-Transducer - Connection of the Spare Transducer |
| AMM | 27-34-00-440-001 | Reactivation of Elevator Servocontrol Position-Transducer |
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-93/08 | |
| ASM | 27-94/08 | |

3. Fault Confirmation

A. Test

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- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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(a) If the ground scanning gives the maintenance message: R Y ELEV pos XDCR 34CE2 COM E2/S2:USE STBY XDCR - refer to Para. Fault Isolation.

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(b) If the ground scanning gives at least two maintenance messages of the list below:

L G ELEV pos XDCR 34CE1 COM E2/S2:USE STBY XDCR R Y ELEV pos XDCR 34CE2 COM E2/S2:USE STBY XDCR ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-823).

4. Fault Isolation

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- A. If the test gives the maintenance message:
 - R Y ELEV POS XDCR 34CE2 COM E2/S2 : USE STBY XDCR
 - deactivate the defective RVDT and connect the spare RVDT (Ref. AMM TASK 27-34-00-040-001) and (Ref. AMM TASK 27-34-00-440-001).
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933)
 related to the ANI 2-2 analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/08) and (Ref. ASM 27-94/08).
 - (2) If the fault continues:
 - replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - NOTE : The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (3) If the fault continues:
 - (a) Do a check of the wiring of the POS RVDT COM SPLY signal from the servocontrol (34CE2) to the first terminal block (Ref. ASM 27-93/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the POS RVDT COM V1, V2 signals from the servocontrol (34CE2) to the first terminal block (Ref. ASM 27-93/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-835

Loss of the Signal of the Right Yellow Elevator-Servocontrol Position-Transducer by the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the POS XDCR COM (ANI 2-2) signal from the SEC 2 (1CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| 27-90-00-810-821 AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-710-020 | Loss of the ACS1 Signal of the SEC2 COM Side Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly |
| AMM 27-96-00-740-001 ASM 27-94/08 | (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 2 pushbutton switch (on this pushbutton switch the OFF legend comes on).

- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 SEC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2

SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-821).

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4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR COM (ANI 2-2) signal from the SEC 2 (1CE2) to the first terminal block (Ref. ASM 27-94/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-836

Failure of the Right Elevator Position MON Transducer

1. Possible Causes

- XDCR UNIT-ELEV POS, R (49CE2)
- wiring of the POS RVDT MON SPLY signal
- wiring of the POS RVDT MON V1, V2 signals

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|--------|------------------|----------------------|---|--|
| | 27-90-00-810-824 | | Loss of the ACS1 Signal of the ELAC2 MON Side and SEC2 MON Side | |
| | 31-3 | 2-00-810-933 | Failure of the Analog Links | |
| R R | AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 | |
| R R | AMM | 27-92-13-400-001 | <pre>Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2</pre> | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-93/07 | Till rese of the Iros (s. sand osaming) | |
| | ASM ASM | 27-93/08 27-94/07 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R ELEV POS MON XDCR OF ELAC2/SEC2 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

L B ELEV MODE XDCR 34CE3

L ELEV POS MON XDCR OF ELAC2/SEC2

R B ELEV MODE XDCR 34CE4

R ELEV POS MON XDCR OF ELAC2/SEC2

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ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-824).

4. Fault Isolation

- R A. If the test gives the maintenance message R ELEV POS MON XDCR OF R ELAC2/SEC2:
 - disconnect and cross the electrical connectors of the elevator position transducer unit (49CE2) (Ref. ASM 27-93/08) and do the test given in Para. 3.
 - NOTE : After the test connect the electrical connectors on their initial plugs.
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933)
 related to the ANI 2-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
- R (2) If the test gives the maintenance message R ELEV POS MON XDCR OF R ELAC1/SEC1:
 - replace the XDCR UNIT-ELEV POS, R (49CE2) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
- R (3) If the test gives the maintenance message R ELEV POS MON XDCR OF R ELAC2/SEC2:
 - (a) Do a check of the wiring of the POS RVDT MON SPLY signal from the transducer unit (49CE2) plug A to the first terminal block (Ref. ASM 27-93/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the POS RVDT MON V1, V2 signals from the transducer unit (49CE2) plug A to the first terminal block (Ref. ASM 27-93/08).
 - B. Do the test given in Para. 3.

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TASK 27-30-00-810-838

Loss of the Signal of the Right Elevator Position Transducer (MON) by the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the POS XDCR MON (ANI 2-2) signal from the SEC 2 (1CE2) MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|--|--|
| AMM AMM | 0-00-810-822 27-94-34-000-001 27-94-34-400-001 27-96-00-710-020 | Loss of the ACS1 Signal of the SEC2 MON Side Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-94/08 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC2 OR WIRING FROM R ELEV POS MON XDCR - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 SEC2 OR WIRING FROM L ELEV POS MON XDCR SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4 SEC2 OR WIRING FROM R ELEV POS MON XDCR

SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

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- do this trouble shooting procedure (Ref. TASK 27-90-00-810-822).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 OR WIRING FROM R ELEV POS MON XDCR
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR MON (ANI 2-2) signal from the SEC 2 (1CE2) MON part to the first terminal block (Ref. ASM 27-94/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-839

Failure of the Right Yellow Elevator-Servocontrol Servovalve

1. Possible Causes

- servovalve of the servocontrol 34CE2
- wiring of the SV signal from the servocontrol (34CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|------------------------------|--|
| AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-93/08 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - R Y ELEV SERVO VLV 34CE2
 - replace the servovalve of the servocontrol 34CE2 (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (1) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servocontrol (34CE2) to the first terminal block (Ref. ASM 27-93/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-840

Loss of the Signal of the Right Yellow Elevator-Servocontrol Servovalve by the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- R - SERVO CTL-R ELEVATOR, INBD Y (34CE2)
 - wiring of the R ELEV SV (ANO 2) signal from the SEC 2 (1CE2) COM part to the MON part
 - wiring from the SEC 2 (1CE2) MON part, pins AD/2F, 2G to the first terminal block
- wiring of the LVDT SV SPLY signal
- wiring of the LVDT POS (ANI 3-2) signal

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION |
|--------|------------|--------------------------------------|--|
| R R | AMM AMM | 27-34-51-000-001 27-34-51-000-008 | Removal of the Elevator Servo Control Removal of the Elevator Servo Control Actuator Servo |
| R | AMM | 21-34-71-000-008 | Valve |
| R | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| R | AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator |
| R | | | Servo Valve |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | | | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-94/08 | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the test gives the maintenance message:
 SEC2 COM OR WIRING TO R Y ELEV SERVO VLV 34CE2
 replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- R (1) If the fault continues:
 R replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref.
 R AMM TASK 27-34-51-400-003).
- R (2) If the fault continues:
 - (a) Do a check of the wiring of the R ELEV SV (ANO 2) signal from the SEC 2 (1CE2) COM part to the MON part, from the pins AA/2A, 2B to the pins AD/2J, 2K (Ref. ASM 27-94/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of wiring from the SEC 2 (1CE2) MON part, pins AD/2F, 2G to the first terminal block (Ref. ASM 27-94/08):
 - if there is continuity see Para. (c)
 - if there is no continuity repair the above wiring.
 - (c) Do a check of the wiring of the LVDT SV SPLY signal, from the servocontrol (34CE2) to the first terminal block (Ref. ASM 27-94/08):
 - if there is continuity see Para. (d)
 - if there is no continuity repair the above wiring.
 - (d) Do a check of the wiring of the LVDT POS (ANI 3-2) signal, from the SEC 2 (1CE2) MON part to the servocontrol (34CE2) (Ref. ASM 27-94/08)
 - if there is continuity see Para. (3)
 - if there is no continuity repair the above wiring.
 - (3) If the fault continues:
 - replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - B. Do the tests given in Para. 3.

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TASK 27-30-00-810-841

Loss of the Signal of the Right Yellow Elevator-Servocontrol Servovalve by the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- XDCR UNIT-ELEV POS, R (49CE2)
- SERVO CTL-R ELEVATOR, INBD Y (34CE2)
- servovalve of the servocontrol 34CE2
- wiring of the LVDT SV V1 signal from the servocontrol (34CE2) to the SEC 2 (1CE2)
- wiring of the LVDT SV SPLY signal from the servocontrol (34CE2) to the first terminal block
- wiring of the POS RVDT MON signal from the transducer unit (49CE2) to the SEC 2 (1CE2)

2. Job Set-up Information

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A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|--------------------------------------|--|
| AMM AMM | 27-34-51-000-001 27-34-51-000-008 | Removal of the Elevator Servo Control Removal of the Elevator Servo Control Actuator Servo |
| Ailii | 21 34 31 000 000 | Valve |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| AMM | 27-92-13-400-001 | <pre>Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2</pre> |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-94/08 | |

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3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1 and FLT CTL/ELAC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC2 MON OR WIRING TO R Y ELEV SERVO VLV 34CE2
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - Replace the XDCR UNIT-ELEV POS, R (49CE2) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - (2) If the fault continues:
 - replace the servovalve of the servocontrol 34CE2 (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
 - (3) If the fault continues:
 - Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - (4) If the fault continues:
 - (a) Do a check of the wiring of the LVDT SV V1 signal from the servocontrol (34CE2) to the SEC 2 (1CE2) (Ref. ASM 27-94/08):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring of the LVDT SV SPLY signal from the servocontrol (34CE2) to the first terminal block (Ref. ASM 27-94/08).
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Repair the wiring of the POS RVDT MON signal from the transducer unit (49CE2) to the SEC 2 (1CE2) (Ref. ASM 27-94/08).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-842

Failure of the Right Yellow Elevator-Servocontrol Mode-Transducer

1. Possible Causes

- mode selector valve transducer of the servocontrol (34CE2)
- wiring of the MODE XDCR SPLY signal from the servocontrol (34CE2) to the first terminal block
- wiring of the MODE XDCR V1 signal from the servocontrol (34CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--------------------------------------|---|
| 27-90-00-810-820 | Loss of the ACS1 Signal of the ELAC1 MON Side and SEC1 MON Side |
| 31-32-00-810-933 | Failure of the Analog Links |
| AMM 27-34-51-000-006 | Removal of the Elevator Servo Control Actuator Mode Selector Valve Transducer MSVT |
| AMM 27-34-51-400-005 | Installation of the Elevator Servo Control Actuator Mode Selector Valve Transducer MSVT |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM 27-96-00-740-001 ASM 27-93/07 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-94/07 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).
 - (a) If the ground scanning gives the maintenance message:
 R Y ELEV MODE XDCR 34CE2
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

L ELEV POS MON XDCR OF ELAC1/SEC1

L G ELEV MODE XDCR 34CE1

R B ELEV POS MON XDCR OF ELAC1/SEC1

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R Y ELEV MODE XDCR 34CE2 THS ACTR XDCR2 MON 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-820).

4. Fault Isolation

R

- A. If the test gives the maintenance message:
 - R Y ELEV MODE XDCR 34CE2
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 7-X analog input signal of the ELAC MON and SEC MON (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (1) If the fault continues:
 - replace the mode selector valve transducer of the servocontrol (34CE2) (Ref. AMM TASK 27-34-51-000-006) and (Ref. AMM TASK 27-34-51-400-005).

NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.

- (2) If the fault continues:
 - (a) Do a check of the wiring of the MODE XDCR SPLY signal from the servocontrol (34CE2) to the first terminal block (Ref. ASM 27-93/07):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Repair the wiring of the MODE XDCR V1 signal from the servocontrol (34CE2) to the first terminal block (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-843

Loss of the Right Yellow Elevator-Servocontrol Mode-Transducer by the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the R Y SERVO CTL MODE POS (ANI 7-2) from SEC 1 (1CE1) MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--------------------------------------|--|
| 27-90-00-810-818 | loss of the ACC1 Signal of the SEC1 MON Side |
| | Loss of the ACS1 Signal of the SEC1 MON Side |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM 27-96-00-740-001 ASM 27-94/07 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC1 OR WIRING FROM L ELEV POS MON XDCR

SEC1 OR WIRING FROM R ELEV POS MON XDCR

SEC1 MON OR WIRING FROM THS ACTR XDCR2 9CE

SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1

SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2

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- do this trouble shooting procedure (Ref. TASK 27-90-00-810-818).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the R Y SERVO CTL MODE POS (ANI 7-2) from SEC 1 (1CE1) MON part to the first terminal block (Ref. ASM 27-94/07).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-844

Loss of the Signal of the Right Yellow Elevator-Servocontrol Solenoid Valve by the SEC 1

<u>CAUTION</u>: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-R ELEVATOR, INBD Y (34CE2)
- SEC-1 (1CE1)
- R ELAC-2 (2CE2)
 - solenoid valve of the servocontrol 34CE2
 - wiring of the SOL VLV2 signal from the servocontrol (34CE2) to the SEC1 (1CE1)
 - wiring from the SEC1 (1CE1) COM part to the SEC1 MON part

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|--|--|
| | | | | |
| | AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control | |
| | AMM | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator Solenoid Valve | |
| | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control | |
| | AMM | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator Solenoid Valve | |
| R | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-94/07 | | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 1, FLT CTL/ELAC 2 and FLT CTL/SEC 2 pushbutton switches (on these pushbutton switches the OFF legends come on).

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(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message: SEC1 MON OR WIRING TO R Y ELEV SOL VLV 34CE2
 - (1) Remove the SEC1 (Ref. AMM TASK 27-94-34-000-001).
 - (2) At the SEC1 receptacle, do a check of the resistance between the pin AB/15D and the pin AE/15G (Ref. ASM 27-94/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the inboard elevator servocontrol (34CE2), do a check of the resistance of the solenoid valve between the pin C/J and the pin C/U (Ref. ASM 27-94/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE2 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/J and the pin C/U of the inboard elevator servocontrol (34CE2) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance values are in the specified limits: Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV2 signal from the servocontrol (34CE2) to the SEC1 (1CE1), from the pin C/J to the pin AB/15D and from the pin C/U to the pin AE/15G (Ref. ASM 27-94/07):
 - \underline{b} Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

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- (b) If the resistance is more than 100 Ohms:
 - at the inboard elevator servocontrol (34CE2), do a check of the resistance of the solenoid valve between the pin C/J and the pin C/U (Ref. ASM 27-94/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE2 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/J and the pin C/U of the inboard elevator servocontrol (34CE2) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance values are in the specified limits: Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV2 signal from the servocontrol (34CE2) to the SEC1 (1CE1), from the pin C/J to the pin AB/15D and from the pin C/U to the pin AE/15G (Ref. ASM 27-94/07):
 - b Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
- (c) If the resistance values are in the specified limits:
 See Para. (3).
- (3) At the SEC1 receptacle, do a check of the insulation between pin AE/15G (pin AB/15D) and the ground.

NOTE: The resistance must be more than 100 Meghoms.

- (a) If the resistance is more than 100 Megohms:
 - Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 1 If the fault continues:
 - Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - 2 If the fault continues:
 - Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

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- do a check of the wiring from the SEC1 (1CE1) COM part to the SEC1 MON part, from the pin AB/12F to the pin AE/15E (Ref. ASM 27-94/07):
 - a If the wiring is correct:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - b If the wiring is not correct:
 - repair it
 - install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is less than 100 Meghoms:
 - At the SERVO CTL-R ELEVATOR, INBD Y (34CE2), do a check of the insulation between pin C/U (pin C/J) and the ground.
 - 1 If the resistance is less than 100 Megohms:
 - Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>a</u> Do again a check of the insulation of the solenoid valve between pin C/U (pin C/J) and the ground.
 - If the resistance is less than 100 Megohms:
 .Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 100 Meghoms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-R ELEVATOR, INBD Y (34CE2) to the SEC-1 (1CE1).
 - <u>b</u> Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (4) If the fault continues:
 - replace the ELAC-2 (2CE2), (MON part relay K2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the tests given in Para. 3.

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TASK 27-30-00-810-845

Loss of the two Elevator Servocontrols on the left Elevator

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE

R

DESIGNATION

AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

- 3. Fault Confirmation
 - A. Test Not applicable.
- 4. Fault Isolation
 - A. This warning is shown after the failure of the two elevator servocontrols.

To do the trouble shooting, refer to the POST FLIGHT REPORT and start the trouble shooting from the first F/CTL ELEV SERVO FAULT warning and its related maintenance message.

After this step, on the upper ECAM DU the F/CTL L ELEV FAULT warning will go out of view and be replaced by the F/CTL ELEV SERVO FAULT warning with a related maintenance message. Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001), to know the related maintenance message.

Do the trouble shooting related to this message. R

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TASK 27-30-00-810-846

Loss of the Two Elevator Servocontrols on the Right Elevator

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE **DESIGNATION** ______

AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

- 3. Fault Confirmation
 - A. Test Not applicable.
- 4. Fault Isolation

R

A. This warning is shown after the failure of the two elevator servocontrols.

To do the trouble shooting refer to the POST FLIGHT REPORT and start the trouble shooting from the first F/CTL ELEV SERVO FAULT warning and its related maintenance message.

After this step, on the upper ECAM DU the F/CTL R ELEV FAULT warning will go out of view and be replaced by the F/CTL ELEV SERVO FAULT warning with a related maintenance message. Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001), to know the related maintenance message.

R Do the trouble shooting procedure related to this message.

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TASK 27-30-00-810-847

Loss of the Four Elevator Servocontrols

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE **DESIGNATION**

R

R

AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

- 3. Fault Confirmation
 - A. Test Not applicable.
- 4. Fault Isolation
 - A. This warning is shown after the failure of the four elevator servocontrols.

To do the trouble shooting refer to the POST FLIGHT REPORT and start the trouble shooting from the first F/CTL ELEV SERVO FAULT warning and its related maintenance message.

After this step, on the upper ECAM DU the F/CTL L ELEV FAULT or F/CTL R ELEV FAULT warning will go out of view and be replaced by F/CTL L ELEV FAULT and F/CTL ELEV SERVO FAULT or F/CTL R ELEV FAULT and F/CTL ELEV SERVO FAULT warning with a related maintenance message. Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001), to know the related maintenance message.

Do the trouble shooting procedure related to this message.

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TASK 27-30-00-810-848

Elevator Damping Test not Possible

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING : MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROLS ARE CLEAR.

MOVEMENT OF FLIGHT CONTROLS CAN CAUSE INJURY TO PERSONS AND/OR

DAMAGE.

1. Possible Causes

- SERVO CTL-L ELEVATOR, OUTBD B (34CE3)
- SERVO CTL-L ELEVATOR, INBD G (34CE1)
- SERVO CTL-R ELEVATOR, OUTBD B (34CE4)
- SERVO CTL-R ELEVATOR, INBD Y (34CE2)

2. Job Set-up Information

A. Referenced Information

REFERENCE DESIGNATION

27-30-00-810-851 Elevator Damping Test Not Possible (Decoding)
R AMM 27-34-51-000-001 Removal of the Elevator Servo Control
Installation of the Elevator Servo Control
Operational Test of the Damping Measurement
(Elevator)
27-30-00-991-001 Fig. 201

3. Fault Confirmation

A. Test

(1) Do the operational test of the damping measurement (elevator) (Ref. AMM TASK 27-96-00-710-008).

4. Fault Isolation

- A. If the message TEST NOT POSSIBLE is shown related to the normal engagement codes (03FF):
 - the right (left) elevator damping test consists of 3 sequences as follows:

(Ref. Fig. 201/TASK 27-30-00-991-001)

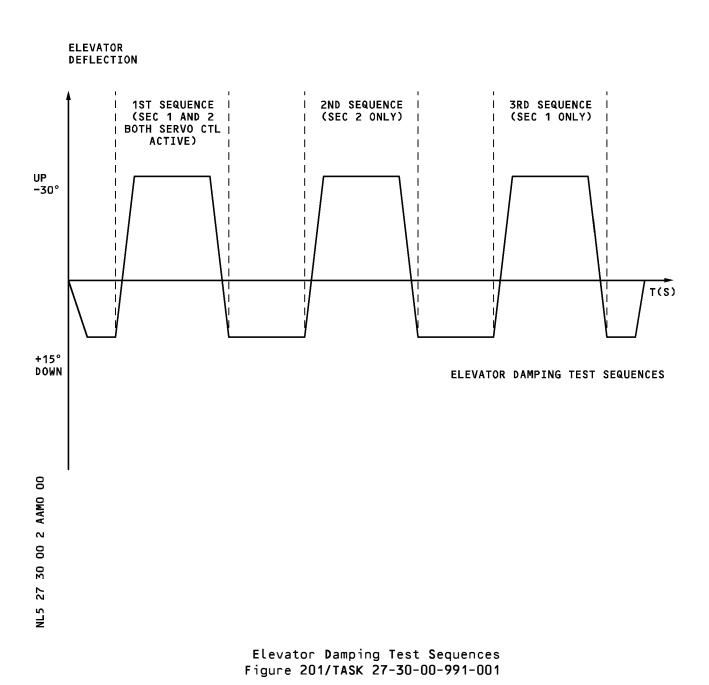
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- (1) If the test stops during the first sequence (the 2 servocontrols are controlled by the SEC1 and SEC2):
 - (a) Do an elevator operational test as follows:
 - make sure that the Green, Blue and Yellow hydraulic systems are pressurized
 - make sure that the SEC1 is engaged (the ELAC1 is disengaged)
 - disengage the SEC2 (the ELAC2 is disengaged).
 - Quickly move a side stick (CAPT or F/O) in full nose up then in full nose down position:
 - on the lower ECAM DU, the two elevator indexes move at the same time with the same travel speed.
 - If the left elevator does not move or if the travel speed is less than the travel speed of the right elevator:

 do the action in Para. (3)(a)1
 - If the right elevator does not move or if the travel speed is less than the travel speed of the left elevator:

 do the action in Para. (3)(b)1
 - (b) Do an elevator operational test as follows:
 - make sure that the Green, Blue and Yellow hydraulic systems are pressurized
 - make sure that the SEC2 is engaged (the ELAC2 is disengaged)
 - disengage the SEC1 (the ELAC1 is disengaged).
 - Quickly move a side stick (CAPT or F/O) in full nose up then in full nose down position:
 - on the lower ECAM DU, the two elevator indexes move at the same time with the same travel speed.
 - If the left elevator does not move or if the travel speed is less than the travel speed of the right elevator:

 do the action in Para. (2)(a)1
 - If the right elevator does not move or if the travel speed is less than the travel speed of the left elevator:

 do the action in Para. (2)(b)1
- (2) If the test stops during the second sequence (one servocontrol is controlled by the SEC2):
 - (a) For the test of the left elevator:
 - replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - 1 If the fault continues:
 - replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

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- (b) For the test of the right elevator:
 - replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) (Ref. AMM TASK 27-34-51-400-001).
 - 1 If the fault continues:
 - replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) (Ref. AMM TASK 27-34-51-400-001).
- (3) If the test stops during the third sequence (one servocontrol is controlled by the SEC1):
 - (a) For the test of the left elevator:
 - replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) (Ref. AMM TASK 27-34-51-400-001).
 - 1 If the fault continues:
 - replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) (Ref. AMM TASK 27-34-51-400-001).
 - (b) For the test of the right elevator:
 - replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) (Ref. AMM TASK 27-34-51-400-001).
 - 1 If the fault continues:
 - replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) (Ref. AMM TASK 27-34-51-400-001).
- **B.** If the message TEST NOT POSSIBLE is shown related to an another code (different of O3FF):
 - do the trouble shooting procedure (Ref. TASK 27-30-00-810-851).
- C. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-30-00-810-849

Vibrations Felt Along the Cabin and in the Cockpit

- 1. Possible Causes
 - elevator servo control
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|--|
| 05-50-00-810-801 | Identification of the Cause of In-Flight Airframe |
| AMM 27-34-00-200-002 | Vibrations and/or Noises Check of the Elevator Servo Control Oscillations. |

3. Fault Confirmation

A. Test

Make sure that the identification of the cause of the vibrations is correct (Ref. TASK 05-50-00-810-801)

4. Fault Isolation

- A. If you feel vibrations along the cabin and in the cockpit:
 - do a check of the elevator servo control oscillations (Ref. AMM TASK 27-34-00-200-002).

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TROUBLE SHOOTING MANUAL

TASK 27-30-00-810-850

Vibrations Felt in the Rear Cabin

1. Possible Causes

- elevator servo controls and hinge bearings

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| 05-5 | 0-00-810-801 | Identification of the Cause of In-Flight Airframe Vibrations and/or Noises |
| AMM | 27-34-00-200-001 | Check of the Elevator Servo Controls and Hinge Bearings for too much Play and Condition |
| AMM | 27-34-00-820-003 | Adjustment of the Elevator and Hydraulic Actuation with the Gauge-Elevator Neutral Setting (98027309002000) |
| AMM | 27-34-00-820-003 | Adjustment of the Elevator and Hydraulic Actuation to 0.5 Degrees Nose-Up with the Gauge-Elevator Neutral Setting (98D27309006000) |
| AMM | 27-34-00-820-003 | Adjustment of the Elevator and Hydraulic Actuation to 0.5 Degrees Nose-Up with the Gauge-Elevator Neutral Setting (98D27309002000) |
| AMM | 55-26-00-200-002 | Check of Elevator Attachment Fittings for wear, LH/RH |

3. Fault Confirmation

A. Test

Make sure that the identification of the cause of the vibrations is correct (Ref. TASK 05-50-00-810-801).

4. Fault Isolation

- A. If you feel vibrations in the rear cabin:
- R (1) Do a check of the elevator servo controls and hinge bearings for too much play and condition (Ref. AMM TASK 27-34-00-200-001).
- R (2) Do a check of the adjustment of the elevator and hydraulic actuation (Ref. AMM TASK 27-34-00-820-003) or (Ref. AMM TASK 27-34-00-820-003) or (Ref. AMM TASK 27-34-00-820-003).
- R (3) If the fault continues, do an inspection/check of the elevator attach fittings (Ref. AMM TASK 55-26-00-200-002).

EFF: ALL
SROS

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TROUBLE SHOOTING MANUAL

TASK 27-30-00-810-851

Elevator Damping Test Not Possible (Decoding)

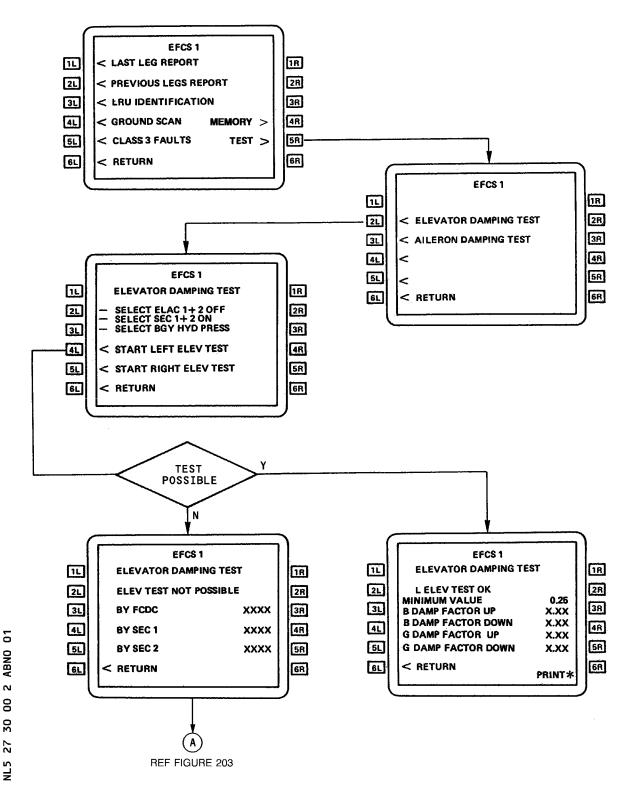
- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| 27-30-00-810-848 AMM 27-96-00-710-008 | Elevator Damping Test not Possible Operational Test of the Damping Measurement |
| | (Elevator) |
| 27-30-00-991-002 27-30-00-991-003 | Fig. 202 Fig. 203 |
| | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the damping measurement (elevator) (Ref. AMM TASK 27-96-00-710-008).
 (Ref. Fig. 202/TASK 27-30-00-991-002)
- 4. Fault Isolation
 - A. If the message ELEV TEST NOT POSSIBLE is shown on the MCDU associated to:
 - (1) Code of normal engagement conditions (code: 03FF):- do the trouble shooting procedure (Ref. TASK 27-30-00-810-848).
 - B. Do the test given in para. 3.

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TROUBLE SHOOTING MANUAL



MCDU Procedure of the Elevator Damping Test Figure 202/TASK 27-30-00-991-002

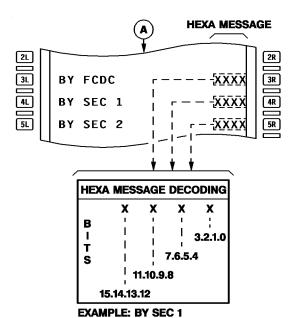
SROS

R

27-30-00

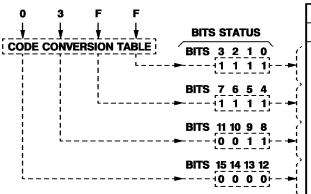
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TROUBLE SHOOTING MANUAL



| | BY FCDC | |
|--|--|--|
| BIT | PARAMETER | |
| 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | LEFT ELEV TEST RIGHT ELEV TEST AIRCRAFT IN FLT ENG 1 OIL HIPR ENG 2 OIL HIPR ENG 2 OIL HIPR ON GROUND AND WHEEL SPEED LT. 6KTS HYD GREEN PRESS HYD BLUE PRESS HYD YELLOW PRESS OPPOSITE SEC TEST FCDC CONFIG E 1 PUSHBUTTON SWITCH OFF E 2 PUSHBUTTON SWITCH OFF S 1 FAULT S 2 FAULT | |

NORMALY: 3.F.8



| | BY SEC 1 |
|-------------------|---|
| BIT | PARAMETER |
| 01234567890112345 | WHEEL SPEED SIC LESS THAN 6KTS WHEEL SPEED SIM LESS THAN 6KTS A/C ON GROUND SIC A/C ON GROUND SIM SPLR X SIC AVAIL SPLR X SIM AVAIL L ELEV SIM AVAIL L ELEV SIM AVAIL R ELEV SIC AVAIL R ELEV SIM AVAIL FCDC SIC FAIL FCDC SIM FAIL |

NORMALY: 03FF

| CODE CON | | |
|--|---|--|
| (X) HEXADECIMAL | BINARY | DECIMAL |
| 0 1 2 3 4 5 6 7 8 9 A B C D E F | 0 0 0 0 0 0 0 1 0 0 1 0 0 1 0 1 0 1 0 0 0 1 1 1 1 0 0 0 1 0 1 0 1 0 1 1 1 1 0 0 1 1 1 1 1 1 1 0 1 1 1 1 | 0 1 2 3 4 5 6 7 8 9 10 11 12 14 15 |

8

R

| | BY SEC 2 | |
|--|---|--|
| BIT | PARAMETER | |
| 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | WHEEL SPEED S2C LESS THAN 6KTS WHEEL SPEED S2M LESS THAN 6KTS A/C ON GROUND S2C A/C ON GROUND S2M SPLR X S2C AVAIL SPLR X S2M AVAIL L ELEV S2C AVAIL L ELEV S2C AVAIL R ELEV S2C AVAIL R ELEV S2M AVAIL FCDC S2M FAIL | |

NORMALY: 03FF

Decoding Table of the Elevator Damping Test Not Possible Figure 203/TASK 27-30-00-991-003

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-30-00-810-852

Operational Test of the Damping Measurement (Elevator) not OK

- 1. Possible Causes
 - elevator servocontrol
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|--------|-----------|--|---|--|
| | | | PESIGNATION | |
| R R | AMM | 27-34-51-000-001 27-34-51-400-001 27-96-00-710-008 | Removal of the Elevator Servo Control Installation of the Elevator Servo Control Operational Test of the Damping Measurement (Elevator) | |

3. Fault Confirmation

A. Test

Do the operational test of the damping measurement (elevator) (Ref. AMM TASK 27-96-00-710-008).

4. Fault Isolation

- A. If the damping factor in the down or in the up position is less than 0.25:
 - replace the related elevator servocontrol (34CE1 or 34CE2 or 34CE3 or 34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001) .
- B. Do the test given in Para. 3.

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EFF:

ALL

TROUBLE SHOOTING MANUAL

TASK 27-30-00-810-853

- R A/C pitch up or down more than 2.5 degrees per minute
 - 1. Possible Causes
 - ELAC-2 (2CE2)
 - ACCLRM-3 (12CE3)
 - ACCLRM-4 (12CE4)
 - wirings
 - 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-------------------|--|--|--|
| AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| AMM | 27-92-16-400-001 | Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| AMM AMM ASM | 27-93-34-000-001 27-93-34-400-001 27-92/24 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) | |

- 3. Fault Confirmation
 - A. Not applicable, you cannot confirm this fault on the ground.
- 4. Fault Isolation
- A. If the fault is identified by the crew observation: A/C pitch up or down more than 2.5 degrees per minute - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues during the subsequent flight: - replace the ACCLRM-3 (12CE3) and ACCLRM-4 (12CE4) (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
 - (2) If the fault continues during the subsequent flight:
 - Do a check and repair these wirings: (Ref. ASM 27-92/24)

- . ANI 4-1 signal from ELAC-2 MON side to ACCLRM-3.
- . ANI 4-1 signal from ELAC-2 COM side to ACCLRM-3.
- . ANI 4-2 signal from ELAC-2 MON side to ACCLRM-4.
- . ANI 4-2 signal from ELAC-2 COM side to ACCLRM-4.

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EFF: ALL **SROS**

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TROUBLE SHOOTING MANUAL

TRIMMABLE HORIZONTAL STABILIZER (THS) - FAULT ISOLATION PROCEDURES

TASK 27-40-00-810-801

Failure of the THS Actuator Servo Motor 3 for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- RELAY-PITCH TRIM ACTUATOR MOTOR 3 SPLY (36CE3)
- electronic module 3
- wiring of the enable signal from the THS actuator (9CE) to the SEC 2 (1CE2)
- wiring of the DSI-25 signal from the SEC 2 (1CE2) to the THS actuator
- wiring from the relay (36CE3) to the SEC 2 (1CE2) and to the THS actuator (9CE)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|------------|------------------------------|--|--|
| АММ | 27-44-57-000-002 | Removal of the Electronic Modules of the Pitch Trim Actuator | |
| AMM | 27-44-57-400-002 | Installation of the Electronic Modules of the Pitch Trim Actuator | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| AMM ASM | 27-96-00-740-001 27-94/13 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

SROS

R

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the SEC 2.

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: Wait 60 seconds before you start the BITE test.

EFF: ALL

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: THS ACTR SERVO MOT 3 9CE OF SEC2
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 3 SPLY (36CE3) (Ref. IPC 27920803).
 - (2) If the fault continues:
 - replace the electronic module **3** (Ref. AMM TASK 27-44-57-000-002) and (Ref. AMM TASK 27-44-57-400-002).
 - (3) If the fault continues:
 - do a check of the wiring of the enable signal from the THS actuator (9CE) to the SEC 2 (1CE2) (Ref. ASM 27-94/13).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check of the wiring of the DSI-25 signal from the SEC 2
 (1CE2) to the THS actuator (9CE) (Ref. ASM 27-94/13).
 - 1 If there is no continuity, repair the wiring.
 - 2 If there is continuity:
 - do a check and repair the wiring from the relay (36CE3) to the SEC 2 (1CE2) and to the THS actuator (9CE) (Ref. ASM 27-94/13).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-40-00-810-802

Failure of the Override Switch 1

1. Possible Causes

- ELAC-2 (2CE2)
- wiring from the DSI-31 signal of the ELAC 2 (2CE2) to the first terminal block
- wiring from the overriding signal of the THS actuator (9CE) to the first terminal block
- pitch trim actuator

2. Job Set-up Information

A. Referenced Information

| REF | ERENCE | DESIGNATION | |
|--------------|--------------------|---|--|
| | . 27 // 57 000 004 | | |
| AMN | 1 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE | |
| AMN | 1 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE | |
| AMN | 1 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMN | 1 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| R AMN Asn | | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

SROS

R

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message:

THS ACTR OVRD SW1 9CE

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check of the wiring from the DSI-31 signal of the ELAC 2 (2CE2) to the first terminal block, COM part and MON part (Ref. ASM 27-93/13).
 - (a) If there is no continuity, repair the wiring.

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- (b) If there is continuity:
 - do a check of the wiring from the overriding signal of the THS actuator (9CE) to the first terminal block (Ref. ASM 27-93/13).
 - 1 If there is no continuity, repair the wiring.
 - 2 If there is continuity:
 - replace the pitch trim actuator (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-40-00-810-803

Incorrect Position of the THS for the SEC 1

1. Possible Causes

- RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2)
- SEC-1 (1CE1)
- electronic module N°2 of the pitch trim actuator
- monitor position transducer of the THS actuator
- RLY-PITCH TRIM ACTR MOT 2 SPLY (36CE2)
- wiring from the relay (36CE2), pin A/X2 to the ground
- wiring from the relay (36CE2) to the SEC 1 (1CE1)
- wiring from the relay (36CE2) to the ELAC 1 (2CE1)
- wiring from the THS actuator pin B/M to the ground
- wiring from the relay (36CE2) to the THS actuator (9CE)
- wiring from the relay (36CE2) pin A/A2 to the C/B (19CE2)
- wiring of the XDCR MON MOT 2 (V1, V2) signal

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| IPC | 27920803 | |
| AMM | 27-44-56-000-001 | Removal of the Position Transducer from the THS Actuator 9CE |
| AMM | 27-44-56-400-001 | Installation of the Position Transducer to the THS Actuator 9CE |
| AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE |
| AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| PC | 27920803 | _ |
| ASM | 27-93/12 | |
| ASM | 27-94/12 | |

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SROS

R

TROUBLE SHOOTING MANUAL

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the SEC 1.

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: THS ACTR POS ERROR 9CE OF SEC1
- R (1) Remove the RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2) (Ref. PC 27920803).
 - (2) Do a check of the resistance between pins X1 and X2.
 - (a) If the resistance is less than 280 ohms:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2)
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is more than 400 ohms:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2).
 - (c) If the resistance is between 280 and 400 ohms:
 - install the RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2)
 - see para (3).
 - (3) If the fault continues:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (4) If the fault continues:
 - replace the electronic module N°2 of the pitch trim actuator (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001).
 - (5) If the fault continues:
 - replace the monitor position transducer of the THS actuator (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (6) If the fault continues:
 - replace the RLY-PITCH TRIM ACTR MOT 2 SPLY (36CE2) (Ref. IPC 27920803).

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- R (7) If the fault continues:
 - do a check of the wiring from the relay (36CE2), pin A/X2 to the ground (Ref. ASM 27-94/12).
 - do a check of the wiring from the relay (36CE2) to the SEC 1 (1CE1), from the pin A/X1 to the pin AE/13E (Ref. ASM 27-94/12).
 - do a check of the wiring from the relay (36CE2) to the ELAC 1 (2CE1), from the pin A/X1 to the pin AD/15J (Ref. ASM 27-93/12).
 - (a) If there is no continuity, repair the wiring.
 - (b) if there is continuity:
 - do a check of the wiring from the THS actuator pin B/M to the ground (Ref. ASM 27-94/12).
 - do a check of the wiring from the relay (36CE2) to the THS actuator (9CE), from the pin A/A1 to the pin B/K (Ref. ASM 27-94/12).
 - 1 If there is no continuity, repair the wiring.
 - 2 if there is continuity:
 - do a check of the wiring from the relay (36CE2) pin A/A2 to the C/B (19CE2) (Ref. ASM 27-94/12).
 - a If there is no continuity, repair the wiring.
 - b if there is continuity:
 - do a check and repair the wiring of the XDCR MON MOT 2
 (V1, V2) signal, from THS actuator (9CE) to the SEC 1
 (1CE1) (Ref. ASM 27-94/12).
 - B. Do the tests given in Para. 3.

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EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-40-00-810-804

Failure of the Override Switch 2

1. Possible Causes

- ELAC-1 (2CE1)
- SEC-1 (1CE1)

R

- wiring from the DSI-31 signal of the ELAC 1 (2CE1) to the first terminal block
- wiring from the overriding signal of the THS actuator (9CE) to the first terminal block
- pitch trim actuator

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------------------|------------------|---|
| | 31-32-00-810-932 | | Failure of the Discrete Links |
| | AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE |
| | AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| R | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| R | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-93/12 | · |
| | ASM | 27-93/13 | |

3. Fault Confirmation

A. Test

SROS

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

R

A. If the BITE test gives the maintenance message:

THS ACTR OVRD SW2 9CE OF ELAC1

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DSI 31 discret input signal of the ELAC 1 MON, SEC 1 MON and ELAC 2 (Ref. ASM 27-93/12) and (Ref. ASM 27-93/13).
- (2) If the fault continues:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- R (3) If the fault continues:
 - do a check of the wiring from the DSI-31 signal of the ELAC 1 (2CE1) to the first terminal block, COM part and MON part (Ref. ASM 27-93/12).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check of the wiring from the overriding signal of the THS actuator (9CE) to the first terminal block (Ref. ASM 27-93/12).
 - 1 If there is no continuity, repair the wiring.
 - 2 If there is continuity:
 - replace the pitch trim actuator (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001).
 - B. Do the tests given in Para. 3.

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EFF: ALL

TROUBLE SHOOTING MANUAL

TASK 27-40-00-810-805

Incorrect Position of the THS for the SEC 2

1. Possible Causes

- RELAY-PITCH TRIM ACTUATOR MOTOR 3 SPLY (36CE3)
- SEC-2 (1CE2)
- electronic module N°3 of the pitch trim actuator
- monitor position transducer of the THS actuator
- RLY-PITCH TRIM ACTR MOT 3 SPLY (36CE3)
- wiring from the relay (36CE3), pin A/X2 to the ground
- wiring from the relay (36CE3) to the SEC 2 (1CE2)
- wiring from the THS actuator pin D/J to the ground
- wiring from the relay (36CE3) to the THS actuator (9CE)
- wiring from the relay (36CE3) A/A2 to the C/B (19CE3)
- wiring of the XDCR MON MOT 3 (V1, V2) signal

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|------------------|--|--|--|
| | | | |
| IPC | 27920803 | | |
| AMM | 27-44-56-000-001 | Removal of the Position Transducer from the THS Actuator 9CE | |
| AMM | 27-44-56-400-001 | Installation of the Position Transducer to the THS Actuator 9CE | |
| AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE | |
| AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| AMM PC ASM | 27-96-00-740-001 27920803 27-94/13 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

R

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the SEC 2.

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(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: THS ACTR POS ERROR 9CE OF SEC2
- R (1) Remove the RELAY-PITCH TRIM ACTUATOR MOTOR 3 SPLY (36CE3) (Ref. PC 27920803).
 - (2) Do a check of the resistance between pins X1 and X2.
 - (a) If the resistance is less than 280 ohms:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 3 SPLY (36CE3)
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) (Ref. AMM TASK 27-94-34-400-001).

 - (c) If the resistance is between $280\ \text{and}\ 400\ \text{ohms}$:
 - install the RELAY-PITCH TRIM ACTUATOR MOTOR 3 SPLY (36CE3)
 - see para (3).
 - (3) If the fault continues:
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (4) If the fault continues:
 - replace the electronic module $N^{\circ}3$ of the pitch trim actuator (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001).
 - (5) If the fault continues:
 - replace the monitor position transducer of the THS actuator (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (6) If the fault continues:
 - replace the RLY-PITCH TRIM ACTR MOT 3 SPLY (36CE3) (Ref. IPC 27920803).
 - (7) If the fault continues:
 - do a check of the wiring from the relay (36CE3), pin A/X2 to the ground (Ref. ASM 27-94/13).
 - do a check of the wiring from the relay (36CE3) to the SEC 2 (1CE2), from the pin A/X1 to the pin AE/13E (Ref. ASM 27-94/13).
 - (a) If there is no continuity, repair the wiring.

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- (b) if there is continuity:
 - do a check of the wiring from the THS actuator pin D/J to the ground (Ref. ASM 27-94/13).
 - do a check of the wiring from the relay (36CE3) to the THS actuator (9CE), from the pin A/A1 to the pin D/H (Ref. ASM 27-94/13).
 - 1 If there is no continuity, repair the wiring.
 - 2 if there is continuity:
 - do a check of the wiring from the relay (36CE3) A/A2 to the C/B (19CE3) (Ref. ASM 27-94/13).
 - a If there is no continuity, repair the wiring.
 - b if there is continuity:
 - do a check and repair the wiring of the XDCR MON MOT 3
 (V1, V2) signal, from THS actuator (9CE) to the SEC 2
 (1CE2) (Ref. ASM 27-94/13).
- B. Do the tests given in Para. 3.

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TASK 27-40-00-810-806

Failure of the Override Switch 3

1. Possible Causes

- SEC-2 (1CE2)
- wiring from the DSI-24 signal of the SEC 2 (1CE2) to the first terminal block
- wiring from the overriding signal of the THS actuator (9CE) to the first terminal block
- pitch trim actuator

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|------------|------------------------------|---|--|
| | | 27 // 57 000 004 | Danaval of the Ditak Tain Astrophys from the TUC | |
| | AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE | |
| | AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| ? | AMM ASM | 27-96-00-740-001 27-94/13 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

R

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

 $\ensuremath{\text{\textbf{A.}}}$ If the $\ensuremath{\text{\textbf{BITE}}}$ test gives the maintenance message:

THS ACTR OVRD SW3 9CE

- replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check of the wiring from the DSI-24 signal of the SEC 2 (1CE2) to the first terminal block COM part and MON part (Ref. ASM 27-94/13).
 - (a) If there is no continuity, repair the wiring.

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- (b) If there is continuity:
 - do a check of the wiring from the overriding signal of the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-94/13).
 - 1 If there is no continuity, repair the wiring.
 - 2 If there is continuity:
 - replace the pitch trim actuator, (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001).
- B. Do the tests given in Para. 3.

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TASK 27-40-00-810-807

Failure of the THS Actuator

1. Possible Causes

- ACTUATOR-THS (9CE)
- R position transducer units
- R pitch trim actuator

2. Job Set-up Information

R A. Fixtures, Tools, Test and Support Equipment

R ------

R REFERENCE QTY DESIGNATION

R No specific standard locking bolt

R 0U190360 1 PIN - RIGGING

R B. Referenced Information

REFERENCE DESIGNATION

REFERENCE PESIGNATION

ISB 27-1164 R AMM 27-41-00-210-001 Detailed Visual Inspection of the THS Mechanical R Control R AMM 27-41-00-210-002 Visual Inspection of the Pitch-Trim Control Wheel R Indicators AMM 27-41-00-210-003 Visual Inspection and Lubrication of the Rear THS R R control cable (between FR71 and the THS actuator) AMM 27-41-00-220-001 Check of the Cable Tension Regulator of the THS Trim R R Control (Pointer in the Limits) AMM 27-41-00-720-001 Functional Test of the THS-Actuator Overtravel R Related to the Mechanical Indicator R AMM 27-41-00-730-001 System Test of the THS Actuator Electrical Control R Removal of the Control Mechanism-Pitch Trim R AMM 27-41-41-000-001 R AMM27-41-41-400-001 Installation of the Control Mechanism-Pitch Trim AMM 27-41-42-000-001 Removal of the Cable Tension Regulator R R AMM 27-41-42-400-001 Installation of the Cable Tension Regulator AMM 27-41-43-000-001 Removal of the Pitch Trim Control Stop and Gearset R R AMM 27-41-43-400-001 R Installation of the Pitch Trim Control Stop and Gearset Unit R AMM 27-41-44-000-001 Removal of the THS Control Cables R Installation of the THS Control Cables AMM 27-41-44-400-001 AMM 27-44-51-000-001 Removal of the Trimmable Horizontal Stabilizer (THS) Actuator (9CE)

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| REFE | RENCE | DESIGNATION | |
|------------------|------------------|--|--|
| AMM | 27-44-51-400-001 | Installation of the Trimmable Horizontal Stabilizer (THS) Actuator (9CE) | |
| AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE | |
| AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 53-59-00-210-001 | Operational Check of Single Drain Pipe Aft of FR70 from Outside | |
| 27-40-00-991-001 | | Fig. 201 | |

- 3. Fault Confirmation
 - A. Not Applicable
- 4. Fault Isolation
 - A. Inspection of the upper and lower attachments of the THS actuator:
 - (1) Do an inspection of the integrity of the load path (primary and secondary) at the upper and lower attachment of the THS actuator (Ref. ISB 27-1164):
 - (a) If the result of the inspection is not satisfactory:replace the ACTUATOR-THS (9CE), (Ref. AMM TASK 27-44-51-000-001) and (Ref. AMM TASK 27-44-51-400-001).
 - (b) If the result of the inspection is satisfactory:
 - Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).
 - NOTE : Keep the Green and the Yellow hydraulic systems pressurized.
 - $\underline{2}$ Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - <u>NOTE</u>: Keep the Green and the Yellow hydraulic systems pressurized.
 - a If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF SEC2 - do the step 4.B.

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| R R | | b If the BILE test does not give maintenance messages: no maintenance action is necessary. | | |
|-----------------------|--------|---|--|--|
| R R | | Do a functional test of the THS actuator overtravel related to the mechanical indicator (Ref. AMM TASK 27-41-00-720-001): | | |
| R | NOTE : | Keep the Green and the Yellow hydraulic systems pressurized. | | |
| R R R | - d | you do not find stiffness: epressurized the Green and the Yellow hydraulic systems and do the tep 4.C. | | |
| R | (2) If | you find stiffness: | | |
| R R | (a) | Make sure that there is no water or ice in the lower area of the tail cone. | | |
| R R | | If you find water or ice, remove it and make sure that the drain tube is not clogged (Ref. AMM TASK 53-59-00-210-001). | | |
| R R R | (b) | Disconnect the shaft (2) from the THS actuator (1) (see detail A): (Ref. Fig. 201/TASK 27-40-00-991-001) | | |
| R | | $\underline{1}$ Put the pitch-trim control wheel in the zero position. | | |
| R R | | Put the PIN - RIGGING (OU190360) (8) in position on the THS actuator (1). | | |
| R R | | $\underline{3}$ Disconnect the mechanical system link-plate (7) from the input lever (9). | | |
| R R R R R | | Move the pitch-trim control wheel from one stop to the other and go back to the neutral position: if you do not find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM TASK 27-44-51-000-001) and (Ref. AMM TASK 27-44-51-400-001). if you find stiffness, do this step: | | |
| R R | (c) | Disconnect the shaft (4) from the stop and gearset unit (5) (see detail B): | | |
| R R | | $\underline{1}$ Install the HOLDING TOOL-TRIM CTL LOWER SHAFT (98D27403000000) on the drive shaft (4). | | |
| R | | $\underline{2}$ Install the standard locking bolt (10) on the chain (11). | | |
| R | | $\underline{3}$ Remove the tapered pin (12). | | |
| R R R | | Move the pitch-trim control wheel from one stop to the other and go back to the neutral position: if you do not find stiffness, go to Para. (e). | | |
| | | AT 40 00 | | |

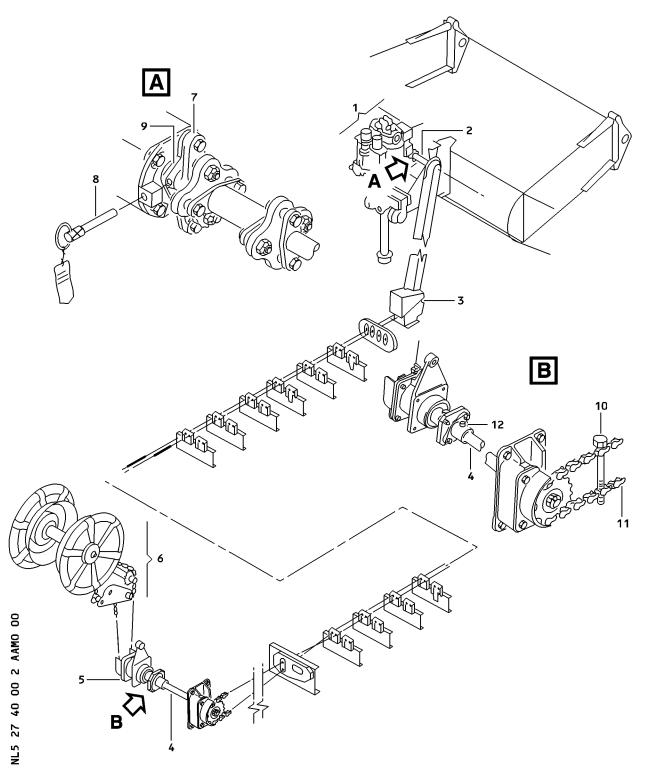
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THS Mechanical Control Figure 201/TASK 27-40-00-991-001

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| R | | - if you find stiffness, go to Para. (d). |
|-----------------------|---|--|
| R R | | Do a check for a failure of the mechanical part of the pitch-trim control mechanism (6) and the stop and gearset unit (5): |
| R R R R R | | Do this corrective action: - replace the pitch-trim control mechanism (Ref. AMM TASK 27-41-41-000-001) and (Ref. AMM TASK 27-41-41-400-001). or - replace the pitch trim control stop and gearset unit (Ref. AMM TASK 27-41-43-000-001) and (Ref. AMM TASK 27-41-43-400-001). |
| R R R | : | Connect the shaft (4) to the stop and gearset unit (5): |
| R R R R | ; | Connect the shaft (2) to the THS actuator (1): connect the mechanical system link-plate (7) to the input lever (9). remove the THS-actuator mechanical input lever rigging-pin (8). |
| R | | 4 Go to the Para. (g). |
| | | |
| R R | | Check of the cable tension regulator: - do a visual inspection of the cable tension regulator (3): |
| | | |
| R R | | - do a visual inspection of the cable tension regulator (3): 1 Make sure that the cables are correctly installed in the |
| R R R | | do a visual inspection of the cable tension regulator (3): Make sure that the cables are correctly installed in the pulleys. Make sure that the rigging scale index is in the correct |
| R R R R R | | do a visual inspection of the cable tension regulator (3): Make sure that the cables are correctly installed in the pulleys. Make sure that the rigging scale index is in the correct position on the cable tension regulator. Do a check of the cable tension regulator of the THS trim control (Ref. AMM TASK 27-41-00-220-001): if OK, go to Para. (f). |
| R R R R R R R R | | do a visual inspection of the cable tension regulator (3): Make sure that the cables are correctly installed in the pulleys. Make sure that the rigging scale index is in the correct position on the cable tension regulator. Do a check of the cable tension regulator of the THS trim control (Ref. AMM TASK 27-41-00-220-001): if OK, go to Para. (f). if not OK, do this corrective action: a Replace the cable tension regulator (Ref. AMM TASK 27-41- |

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| (f) Check of the THS mechanical control: | | | |
|--|-------------|-----|--|
| R | R R | (f) | - do a visual inspection of the THS mechanical control (Ref. AMM TASK 27-41-00-210-003), (Ref. AMM TASK 27-41-00-210-002), (Ref. |
| Install the THS control cables (Ref. AMM TASK 27-41-44-400-001). R Connect the shaft (4) to the stop and gearset unit (5): - install the tapered pin (12) remove the standard locking bolt (10) remove the trim-control lower shaft holding-tool. Connect the shaft (2) to the THS actuator (1): - connect the mechanical system link-plate (7) to the input lever (9). Go to Para. (g). (g) Do a system test of the THS actuator electrical control (Ref. AMM TASK 27-41-00-730-001). (h) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022). NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R (i) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. I If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC | | | - |
| R Q01). R Quantity to the stop and gearset unit (5): - install the tapered pin (12) remove the standard locking bolt (10) remove the trim-control lower shaft holding-tool. R Substantial to the mechanical system link-plate (7) to the input lever (9). R Go to Para. (g). R (g) Do a system test of the THS actuator electrical control (Ref. AMM TASK 27-41-00-730-001). R (h) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R (i) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R 1 If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF SEC2 - go to the Para. (j). Quantity The BITE test does not give maintenance messages: - no maintenance action is necessary. R (j) Move the pitch-trim control wheel from one stop to the other and go back to the neutral position: - if you find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM | R | | $\underline{2}$ Do a check of the bearings of the shafts (2) and (4). |
| R - install the tapered pin (12). R - remove the standard locking bolt (10). r remove the trim-control lower shaft holding-tool. R - connect the shaft (2) to the THS actuator (1): r - connect the mechanical system link-plate (7) to the input lever (9). R - 6 Go to Para. (g). R (g) Do a system test of the THS actuator electrical control (Ref. AMM TASK 27-41-00-730-001). R (h) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022). R - NOTE : Keep the Green and the Yellow hydraulic systems pressurized. R (i) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001). R - NOTE : Keep the Green and the Yellow hydraulic systems pressurized. R - 1 If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF SEC2 go to the Para. (j). 2 If the BITE test does not give maintenance messages: no maintenance action is necessary. R (j) Move the pitch-trim control wheel from one stop to the other and go back to the neutral position: - if you find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM | | | |
| - connect the mechanical system link-plate (7) to the input lever (9). R 6 Go to Para. (g). R (g) Do a system test of the THS actuator electrical control (Ref. AMM TASK 27-41-00-730-001). R (h) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R (i) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R 1 If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF SEC2 - go to the Para. (j). R 2 If the BITE test does not give maintenance messages: - no maintenance action is necessary. R (j) Move the pitch-trim control wheel from one stop to the other and go back to the neutral position: - if you find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM | R R | | - install the tapered pin (12).- remove the standard locking bolt (10). |
| R (g) Do a system test of the THS actuator electrical control (Ref. AMM TASK 27-41-00-730-001). R (h) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R (i) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R 1 If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF SEC2 - go to the Para. (j). 2 If the BITE test does not give maintenance messages: - no maintenance action is necessary. R (j) Move the pitch-trim control wheel from one stop to the other and go back to the neutral position: - if you find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM | R | | - connect the mechanical system link-plate (7) to the input |
| R TASK 27-41-00-730-001). R (h) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R (i) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R 1 If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF SEC2 - go to the Para. (j). R 2 If the BITE test does not give maintenance messages: - no maintenance action is necessary. R (j) Move the pitch-trim control wheel from one stop to the other and go back to the neutral position: - if you find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM | R | | <u>6</u> Go to Para. (g). |
| R (Ref. AMM TASK 27-96-00-710-022). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R (i) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R 1 If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF SEC2 R 2 THS ACTR POS ERROR 9CE OF SEC2 R 3 THS ACTR POS ERROR 9CE OF SEC2 R 4 THS ACTR POS ERROR 9CE OF SEC2 R 5 THS ACTR POS ERROR 9CE OF SEC2 R 6 THS ACTR POS ERROR 9CE OF SEC2 R 7 THS ACTR POS ERROR 9CE OF SEC2 R 8 THS ACTR POS ERROR 9CE OF SEC2 R 90 to the Para. (j). R 1 THS BITE test does not give maintenance messages: R 1 THS ACTR POS ERROR 9CE OF SEC2 R 1 THS ACTR POS ERROR 9CE OF SEC2 R 2 THS ACTR POS ERROR 9CE OF SEC2 R 3 THS ACTR POS ERROR 9CE OF SEC2 R 4 THS ACTR POS ERROR 9CE OF SEC2 R 5 THS ACTR POS ERROR 9CE OF SEC2 R 6 THS ACTR POS ERROR 9CE OF SEC2 R 7 THS ACTR POS ERROR 9CE OF SEC2 R 8 THS ACTR POS ERROR 9CE OF SEC2 R 90 THS ACTR POS | | (g) | |
| R (i) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R 1 If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF SEC2 R 2 go to the Para. (j). R 2 If the BITE test does not give maintenance messages: R - no maintenance action is necessary. R (j) Move the pitch-trim control wheel from one stop to the other and go back to the neutral position: R - if you find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM) | | (h) | |
| R 96-00-740-001). R NOTE: Keep the Green and the Yellow hydraulic systems pressurized. R 1 If the BITE test gives the maintenance messages: R 1 THS ACTR POS ERROR 9CE OF ELAC2 R 1 THS ACTR POS ERROR 9CE OF ELAC1 R 1 THS ACTR POS ERROR 9CE OF SEC2 R 2 THS ACTR POS ERROR 9CE OF SEC2 R 3 THS ACTR POS ERROR 9CE OF SEC2 R 4 THS ACTR POS ERROR 9CE OF SEC2 R 5 THS ACTR POS ERROR 9CE OF SEC2 R 6 THS ACTR POS ERROR 9CE OF SEC2 R 7 THS ACTR POS ERROR 9CE OF SEC2 R 8 THS ACTR POS ERROR 9CE OF SEC2 R 9 THS ACTR POS ERROR 9CE OF SEC2 R 1 THS ACTR POS ERROR 9CE OF SEC2 R 2 THS ACTR POS ERROR 9CE OF SEC2 R 3 THS ACTR POS ERROR 9CE OF SEC2 R 4 THS ACTR POS ERROR 9CE OF SEC2 R 5 THS ACTR POS ERROR 9CE OF SEC2 R 6 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF SEC2 R 6 THS ACTR POS ERROR 9CE OF ELAC2 | | | |
| R pressurized. R 1 If the BITE test gives the maintenance messages: THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC | | (i) | |
| THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF SEC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS ELAC1 THS ACTR POS | | | |
| R - no maintenance action is necessary. R (j) Move the pitch-trim control wheel from one stop to the other and go back to the neutral position: R - if you find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM) | R R R | | THS ACTR POS ERROR 9CE OF ELAC2 THS ACTR POS ERROR 9CE OF ELAC1 THS ACTR POS ERROR 9CE OF SEC2 |
| R go back to the neutral position: R - if you find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM | _ | | |
| | R R | (j) | <pre>go back to the neutral position: if you find stiffness, replace the ACTUATOR-THS (9CE) (Ref. AMM</pre> |

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| R R | if you do not find stiffness, depressurize the Green and Yellow hydraulic systems and go to the Para. 4.C. |
|--------|--|
| R R | C. Replace the two position transducer units (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001). |
| R R | (1) If the fault continues, replace the pitch trim actuator (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001). |
| R | (a) If the fault continues, replace the ACTUATOR-THS (9CE) (Ref. AMM |

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TASK 27-40-00-810-808

Stiffness of the Pitch-Trim Control Wheel

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROLS ARE CLEAR.

MOVEMENT OF FLIGHT CONTROLS CAN CAUSE INJURY TO PERSONS AND/OR

DAMAGE.

1. Possible Causes

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE **QTY DESIGNATION**

No specific standard locking bolt

0U190360 1 PIN - RIGGING

98D274O3OOOOO 1 HOLDING TOOL-TRIM CTL LOWER SHAFT

B. Referenced Information

| | REFE | RENCE | DESIGNATION | |
|---|------|------------------|--|--|
| R | AMM | 27-41-00-210-001 | Detailed Visual Inspection of the THS Mechanical Control | |
| | AMM | 27-41-00-220-001 | Check of the Cable Tension Regulator of the THS Trim Control (Pointer in the Limits) | |
| | AMM | 27-41-00-720-001 | Functional Test of the THS-Actuator Overtravel Related to the Mechanical Indicator | |
| | AMM | 27-41-00-730-001 | System Test of the THS Actuator Electrical Control | |
| | AMM | 27-41-41-000-001 | Removal of the Control Mechanism-Pitch Trim | |
| | AMM | 27-41-41-400-001 | Installation of the Control Mechanism-Pitch Trim | |
| | AMM | 27-41-42-000-001 | Removal of the Cable Tension Regulator | |
| | AMM | 27-41-42-400-001 | Installation of the Cable Tension Regulator | |
| | AMM | 27-41-43-000-001 | Removal of the Pitch Trim Control Stop and Gearset Unit | |
| | AMM | 27-41-43-400-001 | Installation of the Pitch Trim Control Stop and Gearset Unit | |
| | AMM | 27-41-44-000-001 | Removal of the THS Control Cables | |
| | AMM | 27-41-44-400-001 | Installation of the THS Control Cables | |

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| REFERENCE | | DESIGNATION | |
|------------------|------------------|---|--|
| AMM | 27-44-51-000-001 | Removal of the Trimmable Horizontal Stabilizer (THS) Actuator (9CE) | |
| AMM | 27-44-51-400-001 | <pre>Installation of the Trimmable Horizontal Stabilizer (THS) Actuator (9CE)</pre> | |
| AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE | |
| AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE | |
| AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump | |
| AMM | 29-23-00-864-001 | <pre>Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU</pre> | |
| AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the Electric Pump | |
| AMM AMM | | Depressurize the Yellow Hydraulic System Operational Check of Single Drain Pipe Aft of FR70 from Outside | |
| 27-40-00-991-001 | | Fig. 201 | |

3. Fault Confirmation

A. Test

NOTE: Make sure that there is no message on EFCS LAST LEG REPORT

(1) Do a functional test of the THS-actuator overtravel related to the mechanical indicator (Ref. AMM TASK 27-41-00-720-001).

4. Fault Isolation

WARNING: MAKE SURE THAT THE ELAC'S ARE ELECTRICALLY ISOLATED DURING WORK ON THE MECHANICAL CONTROL SYSTEM OF THE THS.

IF NOT, PARTS CAN MOVE AND CAUSE INJURY AND/OR DAMAGE.

A. Make sure that this(these) circuit breaker(s) is(are) open, safetied and tagged

| PANEL | DESIGNATION | IDENT. | LOCATION |
|--------|---------------------------------|--------|----------|
| 49VU | FLIGHT CONTROLS/ELAC1/NORM/SPLY | 15CE1 | B11 |
| 49VU | FLIGHT CONTROLS/THS/ACTR/MOT2 | 19CE2 | В09 |
| 105VU | FLT CTL/ELAC1/STBY SPLY | 16CE1 | AO1 |
| 12 1VU | FLIGHT CONTROLS/THS ACTR/MOT3 | 19CE3 | Q17 |
| 12 1VU | FLIGHT CONTROLS/THS ACTR/MOT1 | 19CE1 | Q16 |

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B. If you find stiffness:

R

- (1) Make sure that there is no water or ice in the lower area of the tail cone.
 - (a) If you find water or ice, remove it and check that the drain tube is not clogged (Ref. AMM TASK 53-59-00-210-001).
- (2) Do a check of the pitch-trim control wheel and cable linkage (Ref. Fig. 201/TASK 27-40-00-991-001)
 - (a) Disconnect the shaft (2) from the THS actuator (1) (see detailA).
 - 1 put the pitch-trim control wheel in the zero position.
 - <u>2</u> put the PIN RIGGING (OU190360) (8) in position on the THS actuator (1).
 - disconnect the mechanical system link-plate (7) from the input lever (9)
 - 4 move the pitch-trim control wheel and go back to the neutral position.
 - . if you do not find stiffness : see Para. (3)
 - . if you find stiffness : see Para. (b).
 - (b) disconnect the shaft (4) from the stop and gearset unit (5) (see detail B):
 - install the HOLDING TOOL-TRIM CTL LOWER SHAFT (98D27403000000) on the drive shaft (4).
 - 2 install the standard locking bolt (10) on the chain (11).
 - 3 remove the tapered pin (12).
 - 4 move the pitch-trim control wheel and go back to the neutral position
 - . if you do not find stiffness : see Para. (d)
 - . if you find stiffness : see Para. (c)
 - (c) Check of the mechanical part failure of the pitch-trim control mechanism (6) and the stop and gearset unit (5).
 - 1 do this corrective action:
 - replace the pitch-trim control mechanism (6) (Ref. AMM TASK 27-41-41-000-001) and (Ref. AMM TASK 27-41-41-400-001) or
 - replace the pitch trim control stop and gearset unit (5) (Ref. AMM TASK 27-41-43-000-001) and (Ref. AMM TASK 27-41-43-400-001).

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- 2 connect the shaft (4) to the stop and gearset unit (5)
 - install the tapered pin (12)
 - remove the standard locking bolt (10)
 - remove the trim-control lower shaft holding-tool
- 3 connect the shaft (2) to the THS actuator (1)
 - connect the mechanical system link-plate (7) to the input lever (9)
 - remove the THS-actuator mechanical input lever rigging-pin
 (8)
- 4 do the test given in Para. C.
- (d) Check of the cable tension regulator
 - do a visual inspection of the cable tension regulator (3)
 - make sure that the cables are correctly installed in the pulleys.
 - 2 make sure that the rigging scale index is in the correct position on the cable tension regulator.
 - 3 do a check of the cable tension regulator of the THS trim control (Ref. AMM TASK 27-41-00-220-001)
 - . if OK : see Para. (e)
 - . if not **OK** : do this corrective action:
 - a replace the cable tension regulator if necessary (Ref. AMM TASK 27-41-42-000-001) and (Ref. AMM TASK 27-41-42-400-001).
 - b connect the shaft (2) to the THS actuator (1)
 - connect the mechanical system link-plate (7) to the input lever (9)
 - . remove the THS-actuator, mechanical input lever rigging-pin (8).
 - c Do the test given in Para. C.
- (e) Check of the THS mechanical control:
 - do a visual inspection of the THS mechanical control (Ref. AMM TASK 27-41-00-210-001).
 - 1 remove the THS control cables (Ref. AMM TASK 27-41-44-000-001)
 - 2 do the check of the bearings of the shafts (2) and (4).
 - Install the THS control cables (Ref. AMM TASK 27-41-44-400-001).

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- 4 connect the shaft (4) to the stop and gearset unit (5).
 - install the tapered pin (12)
 - remove the standard locking bolt (10).
 - remove the trim-control lower shaft holding-tool
- 5 connect the shaft (2) to the THS actuator (1)
 . connect the mechanical system link-plate (7) to the input lever (9)
- 6 Do the test given in Para. C.
- (3) Check of the THS actuator
 - (a) connect the shaft (2) to the THS actuator (1)
 connect the mechanical system link-plate (7) to the input lever (9)
 - . remove the THS actuator mechanical input lever rigging-pin (8).
 - (b) remove the pitch trim actuator from the THS actuator (9CE) (Ref. AMM TASK 27-44-57-000-001).
 - (c) Pressurize the Green and Yellow hydraulic systems (Ref. AMM TASK 29-23-00-863-001) and (Ref. AMM TASK 29-24-00-863-001).
 - (d) Move the pitch-trim control wheel and go back to the neutral position.
 - 1 If you do not find stiffness:
 - <u>a</u> Depressurize the Green and Yellow hydraulic systems (Ref. AMM TASK 29-23-00-864-001) and (Ref. AMM TASK 29-24-00-864-001).
 - \underline{b} replace the pitch trim actuator of the THS actuator (9CE) (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001)
 - c Do the test given in Para. C.
 - 2 If you find stiffness:
 - <u>a</u> Replace the THS actuator (9CE) (Ref. AMM TASK 27-44-51-000-001) and (Ref. AMM TASK 27-44-51-400-001).
 - **b** Do the test given in Para. C.
 - If you do not find stiffness:do the test given in Para. C.
- C. Do the system test of the THS actuator electrical control (Ref. AMM TASK 27-41-00-730-001).

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TASK 27-40-00-810-809

Disagree of the THS Position Indication Between the System Display and the Pitch Trim Control Wheel

- 1. Possible Causes
 - ACTUATOR-THS (9CE)
- 2. Job Set-up Information
 - A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

0U190360 2 PIN - RIGGING

OU190834 2 TOOL - ZERO POSITIONING, THS ACTUATOR

B. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| | | |
| AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the |
| | | External Power |
| AMM | 27-41-00-820-001 | Adjustment of the THS Zero Position |
| AMM | 27-41-00-820-002 | Adjustment of the THS Control-Cables Length |
| AMM | 27-41-41-000-001 | Removal of the Control Mechanism-Pitch Trim |
| AMM | 27-41-41-400-001 | Installation of the Control Mechanism-Pitch Trim |
| AMM | 27-44-51-000-001 | Removal of the Trimmable Horizontal Stabilizer (THS) |
| | | Actuator (9CE) |
| AMM | 27-44-51-400-001 | Installation of the Trimmable Horizontal Stabilizer |
| | | (THS) Actuator (9CE) |
| AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow |
| | | Hydraulic System through the PTU with the Electric |
| | | Pump |
| AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the |
| | | Electric Pump |
| AMM | 31-60-00-860-001 | EIS Start Procedure |
| | - - | |

- 3. Fault Confirmation
 - A. Job Set-up

Aircraft Maintenance Configuration

(1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).

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- (2) Do the EIS start procedure (Upper ECAM DU and lower ECAM DU only) (Ref. AMM TASK 31-60-00-860-001).
- (3) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-24-00-863-001) (Ref. AMM TASK 29-23-00-863-001).
- (4) On the overhead panel 23VU:
 - make sure that the FLT CTL/ELAC1 and FLT CTL/SEC1 pushbutton switches are pushed (the OFF legends of these pushbutton switches are off).
- (5) On the overhead panel 24VU:
 - make sure that the FLT CTL/ELAC2 and FLT CTL/SEC2 pushbutton switches are pushed (the OFF legends of these pushbutton switches are off).
- B. Test

ACTION RESULT

- 1. On the center pedestal:
 - move the pitch-trim control the PITCH TRIM Indicator shows: wheels in the nose-up direction to the mechanical stop.
- 2. On the center pedestal:
 - wheels in the nose-down direction to the mechanical stops.

On the SD:

13.5 +0.4 -0.6 deg.

On the SD:

- move the pitch-trim control the PITCH TRIM Indicator shows: 4 +0.3 -0.5 deg..
- 4. Fault Isolation
 - A. On the SD, the THS position is in the tolerances:
 - (1) Install the TOOL ZERO POSITIONING, THS ACTUATOR (0U190834) on the screw jack of the THS actuator.
 - (2) Install the PIN RIGGING (0U190360) on the input lever of the THS actuator.
 - (3) Do the adjustment of the THS control cables (Ref. AMM TASK 27-41-00-820-002).
 - (4) If the fault continues:
 - remove and install in the correct position the pitch-trim control mechanism (Ref. AMM TASK 27-41-41-000-001) and (Ref. AMM TASK 27-41-41-400-001).

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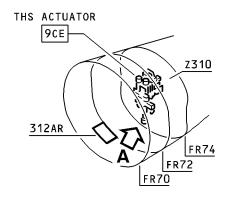
- (5) Remove the TOOL ZERO POSITIONING, THS ACTUATOR (OU190834) and the PIN RIGGING (OU190360).
- B. On the SD, the THS position is out of the tolerances:
 - (1) Install the TOOL ZERO POSITIONING, THS ACTUATOR (OU190834) on the screw jack of the THS actuator.
 - (2) Install the PIN RIGGING (OU190360) on the input lever of the THS actuator.
 - (3) Do the adjustment of the THS zero position (Ref. AMM TASK 27-41-00-820-001).
 - (4) Do the adjustment of the THS control cables (Ref. AMM TASK 27-41-00-820-002).
 - (5) Remove and install in the correct position the pitch-trim control mechanism (Ref. AMM TASK 27-41-41-000-001) and (Ref. AMM TASK 27-41-41-400-001).
 - (6) If the fault continues:
 replace the ACTHATOR-THS (9CF) (Ref. AMM TASK)
 - replace the ACTUATOR-THS (9CE) (Ref. AMM TASK 27-44-51-000-001) and (Ref. AMM TASK 27-44-51-400-001)
 - (7) Remove the TOOL ZERO POSITIONING, THS ACTUATOR (OU190834) and PIN -RIGGING (OU190360)
- C. Test
 Do the test given in Para. 3.

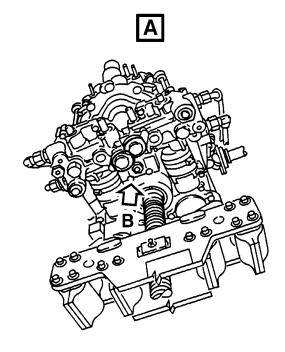
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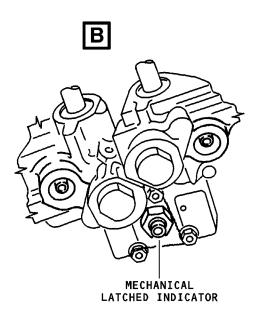
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Mechanical Latched Indicator Figure 202/TASK 27-40-00-991-002

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FLAPS ELECTRICAL CONTROL AND MONITORING - FAULT ISOLATION PROCEDURES

TASK 27-51-00-810-802

SFCC - FLAP PCU VALVEBLOCK Fault

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- VALVE BLOCK-FLAP 1 (23CV)
- VALVE BLOCK-FLAP 2 (24CV)
- SFCC-1 (21CV)
- SFCC-2 (22CV)
- SOLENOID VALVE
- valveblock filters
- aircraft wiring

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

QTY DESIGNATION

50VDC +5VDC/-5VDC Isolation Tester R No specific

1 MULTIMETER - STANDARD No specific

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B. Referenced Information

| REFE | RENCE | DESIGNATION | |
|-------------------|--|--|--|
| АММ | 27-50-00-866-008 | Extension of the Flaps on the Ground | |
| AMM | 27-50-00-866-009 | Retraction of the Flaps on the Ground | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) | |
| AMM | | Removal of the Valve Blocks 23CV, 24CV of the Power Control Unit (Flap) | |
| AMM | 27-54-53-000-002 | Removal of the Solenoid Valves of the Power Control Unit (Flap) | |
| AMM | 27-54-53-000-003 | Removal of the Filters of the Valve Blocks | |
| AMM | 27-54-53-400-001 | Installation of the Valve Blocks 23CV, 24CV of the Power Control Unit (Flap) | |
| AMM | 27-54-53-400-002 | Installation of the Solenoid Valves of the Power Control Unit (Flap) | |
| AMM ASM ASM | 27-54-53-400-003 27-51/02 27-51/03 | Installation of the Filters of the Valve Blocks | |

3. Fault Confirmation

A. Test

- (1) Make sure that the Post Flight Report does not show hydraulic system faults.
- (2) Move the flaps (Ref. AMM TASK 27-50-00-866-008) (Ref. AMM TASK 27-50-00-866-009).
 - (a) Examine the SFCC, FLP ON GROUND FAULTS page for a valveblock message.
 - (b) If a valveblock message is shown, or the A/C has had this fault before, do the fault isolation procedure.

4. Fault Isolation

A. Procedure

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

(1) Do a check of the circuit resistance and circuit isolation of the extend and retract solenoid valves as follows:

NOTE: A test is not available for the Linear Variable Differential Transducer (LVDT)

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- (a) Get access to the electrical connector at the applicable VALVE BLOCK-FLAP 1 (23CV) or VALVE BLOCK-FLAP 2 (24CV), (Ref. AMM TASK 27-54-53-000-001).
- (b) Use a MULTIMETER STANDARD to do a check of the resistance values at the connector. Make a note of the resistance values between:
 - For SFCC1/VALVE BLOCK-FLAP 1 (23CV), (EXTEND) pins T and U, (RETRACT) pins J and H (Ref. ASM 27-51/02)
 - For SFCC2/VALVE BLOCK-FLAP 2 (24CV), (EXTEND) pins T and U, (RETRACT) pins J and H (Ref. ASM 27-51/03).
- (c) The resistance values must be as follows:
 - For solenoid valves with Part No. 667C0000-02, between 71 0hms and 84 0hms
 - For solenoid valves with Part No. 903A0000-01, between 53 0hms and 60 0hms
 - For solenoid valves with Part No. 1106A0000-01 or 1111A0000-01, between 53 Ohms and 60 Ohms.
- (d) At the valveblock electrical connector, do a check for circuit isolation:
 - 1 For the EXTEND solenoid, connect the pins U and T together.
 - 2 For the RETRACT solenoid, connect the pins J and H together.
 - Connect one test lead of the 50VDC +5VDC/-5VDC Isolation Tester to the pins UT or JH and the other test lead to pin G.
 - 4 Supply a test signal for 5 seconds then read the resistance value shown.
 - 5 The resistance value must be more than 100 Megohms.
- (2) If a SOLENOID VALVE fails one of the two tests at Para. (1):
 Replace the applicable solenoid valve (Ref. AMM TASK 27-54-53-000-002) and (Ref. AMM TASK 27-54-53-400-002).
- (3) If the tests at Para. (1) are satisfactory, or the fault message included the FIN 23CV or 24CV:
 - (a) Examine the valveblock filters, if neccesary clean/replace them (Ref. AMM TASK 27-54-53-000-003) and (Ref. AMM TASK 27-54-53-400-003).
- (4) Move the flaps Ref. Para. 3.A. (2). Operate the flaps many times during the operational test to bleed the air from the system.
- (5) If the fault continues, replace the applicable VALVE BLOCK-FLAP 1 (23CV) or VALVE BLOCK-FLAP 2 (24CV), (Ref. AMM TASK 27-54-53-000-001) and (Ref. AMM TASK 27-54-53-400-001).

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- (6) If the fault continues:
 - (a) Get access to the electrical connector at the applicable valveblock.
 - (b) Release the connector.
 - (c) Do a check of the aircraft wiring from the applicable SFCC ARINC tray interface to the valveblock electrical connector (Ref. ASM 27-51/02) or (Ref. ASM 27-51/03).
 - (d) If there is a fault, do the repair.
- (7) If there are no faults found, interchange the SFCC1 and SFCC2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (8) Move the flaps Ref. Para. 3.A. (2).
- (9) If the fault moves to the other system, replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV), (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (10) Move the flaps Ref. Para. 3.A. (2).
 - (a) At the MCDU get access to the SFCC system status and make sure that a NO FAULTS message is shown.

Close-up

R

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-803

R APPU Fault or APPU to One SFCC Interface Fault

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)

- SFCC-2 (22CV)

- APPU-L FLAP (29CV)

- APPU-R FLAP (30CV)

- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | 27 54 40 000 004 | |
| AMM | 27-51-18-000-001 | Removal of the Asymmetry-Position Pick-Off Unit 29CV (30CV) |
| AMM | 27-51-18-400-001 | <pre>Installation of the Asymmetry-Position Pick-Off Unit 29CV (30CV)</pre> |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-81-00-740-002 | Bite Test of the Slat and Flap Control Computers (Slat System) |
| ASM | 27-51/06 | |
| ASM | 27-51/07 | |

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3. Fault Confirmation

A. Test

- (1) Do a system BITE test of the SFCC1 and the SFCC2 (Ref. AMM TASK 27-81-00-740-002).
 - (a) If the MCDU shows a message that includes FPPU 29CV (30CV) or SFCC, do the fault isolation procedure given in Para. 4.

4. Fault Isolation

A. Procedure.

- (1) Swap the SFCC1 with the SFCC2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (2) If the failure moves to the other SFCC position:
 - (a) Replace the SFCC-1 (21CV) (SFCC-2 (22CV)) that shows the failure.
- (3) If the failure does not move to the other SFCC position:
 - (a) Replace the applicable APPU-L FLAP (29CV) (APPU-R FLAP (30CV)) (Ref. AMM TASK 27-51-18-000-001) and (Ref. AMM TASK 27-51-18-400-001).
- (4) If the failure continues:
 - (a) Do a check of the aircraft wiring (Ref. ASM 27-51/06) and (Ref. ASM 27-51/07).
 - (b) Do the repair.
 - (c) Do the test given in Para. 3.A.(1).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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EFF:

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TASK 27-51-00-810-804

R FPPU Fault or FPPU to One SFCC Interface Fault.

WARNING : PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)

- SFCC-2 (22CV)
- 27CV (27CV)
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| | | |
| AMM | 27-50-00-866-008 | Extension of the Flaps on the Ground |
| AMM | 27-50-00-866-009 | Retraction of the Flaps on the Ground |
| AMM | 27-51-19-000-001 | Removal the Feed Back Position Pick-Off Unit |
| AMM | 27-51-19-400-001 | Installation of the Feed Back Position Pick-Off Unit |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-54-00-710-001 | Operational Test of the Flap System |
| ASM | 27-51/06 | · |
| ASM | 27-51/07 | |

3. Fault Confirmation

A. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|-------|---------------------------------------|--------|----------|
| 49٧0 | FLIGHT CONTROLS/FLP/CTL AND MONG/SYS1 | 6CV | B07 |
| 121VU | FLIGHT CONTROLS/FLP/CTL AND/MONG/SYS2 | 8CV | Q21 |

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- B. Reset and Inialization.
 - (1) At the circuit breakers.
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds
 - (2) Move the flaps.(Ref. AMM TASK 27-50-00-866-008) (Ref. AMM TASK 27-50-00-866-009)
 - (a) Examine the UPPER ECAM and the SD FLT/CTL page for the fault warnings and System status.
 - (b) Access the FLP ON GROUND FAULTS log and do a check of the ground log.
 - (c) If an UPPER ECAM warning, SD FLT/CTL status and a ground log fault message, is displayed do the Fault Isolation.
 - (d) If the UPPER ECAM, SD FLT/CTL status and the FLP ON GROUND FAULTS log are clear. No further maintenance actions are required.

4. Fault Isolation

- A. Procedure.
 - (1) Set the MCDU to MENU MODE page 2 and access the submenu <FLP SYSTEM DATA.
 - (a) Press the line key 1R <PPU.
 - (b) Do a check of the PPU DATA (DEG) page. Refer to page block 301 table 2 for FPPU fault analysis.
 - (c) If the no data "xxxx.x" is shown.
- R (2) Swap SFCC 1 and SFCC 2, (Ref. AMM TASK 27-51-34-000-001) for (Ref. R AMM TASK 27-51-34-400-001) do Para. 2,3 and 4 only.
 - (a) Access the FLP ON GROUND FAULTS and do a check of the ground log.
 - (b) If the fault moves with SFCC 1(2).
 - (c) Install the SFCC 1 (2) in their initial locations.
 - (d) Replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)) Ref. Para.4.A.(2).

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- (3) Do the steps at 4.A.(1).
- R

R R

- (a) If data is shown, do step 3.B.(2).
- (b) Set the MENU MODE and access the FLP ON GROUND FUALTS and check that the ground log is clear.
- (4) If the fault does not move.
 - (a) On the FPPU 27CV, swap the electrical connectors 27CV-A and 27CV-B.
 - (b) If the fault moves to the other SFCC, go to step 4.A.(5).
 - (c) If the fault remains in the same circuit do step 4.A.(6).
- (5) Replace the 27CV (27CV) (Ref. AMM TASK 27-51-19-000-001) (Ref. AMM TASK 27-51-19-400-001),
- (6) Do a check of the aircraft wiring between the SFCC 1 (2) ARINC tray interface and the flap FPPU electrical connector (Ref. ASM 27-51/06) (Ref. ASM 27-51/07).
 - (7) If there is a wiring/interface fault do the repair.
 - (8) Do the operational test of the flaps system, (Ref. AMM TASK 27-54-00-710-001)
 - (a) Access the FLP ON GROUND FAULTS and make sure the ground log is clear.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-805

CSU Fault (51CV) or Fault in Wiring to SFCC 1 (2)

WARNING : PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

R WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)

- SFCC-2 (22CV)

- CSU (51CV)

- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|---------------------------------|--|---|
| AMM AMM AMM AMM AMM | 27-51-17-000-001 27-51-17-400-001 27-51-34-000-001 27-51-34-400-001 27-54-00-710-002 31-32-00-860-006 | Removal of the Command Sensor Unit (CSU) (51CV) Installation of the Command Sensor Unit (CSU) (51CV) Removal of the SFCC (21CV,22CV) Installation of the SFCC (21CV,22CV) Operational Test of the Flap and Slat Systems Procedure to Get Access to the SYSTEM REPORT/TEST |
| ASM ASM | 27-51/02 27-51/03 | F/CTL Page |

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3. Fault Confirmation

A. Test

- (1) Do the operational test of the slats and flaps (Ref. AMM TASK 27-54-00-710-002). Do this not less than 5 times.
- (2) Get access to the SYSTEM REPORT/TEST F/CTL page (Ref. AMM TASK 31-32-00-860-006).
 - (a) Set the related SFCC 1 or SFCC 2, which gave the initial failure message.
 - (b) Get access to the SYSTEM STATUS page:
 - If a CSU (51CV) failure message is shown, do the fault isolation procedure in Para. 4.A.
 - 2 If a different failure message is shown, do the trouble shooting procedure related to the failure message.
 - 3 If the fault does not occur again, do a check of the PFR:
 - <u>a</u> If the CSU (51CV) failure message is related to an ECAM warning, do the steps as given in Para 4.B.
 - <u>b</u> If the CSU (51CV) failure message is not related to an ECAM warning, no more action is necessary.

NOTE: It is necessary to RETURN to the F/CTL page and set the related SFCC again to update the SYSTEM STATUS page.

4. Fault Isolation

A. Procedure

- (1) Interchange the SFCC 1 and SFCC 2, (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (2) If the fault moves to the other SFCC, replace the defective SFCC-1 (21CV) or SFCC-2 (22CV).
- (3) If the fault stays in the same SFCC, get access to the CSU and interchange the electrical connectors 51CV-A and 51CV-B (Ref. AMM TASK 27-51-17-000-001).
- (4) Do the test in Para. 3.A.
- (5) If the fault moves to the other SFCC, replace the CSU (51CV).

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- (6) If the fault stays in the initial SFCC, do a check and repair the aircraft wiring between the applicable SFCC ARINC tray interface and the applicable electrical connector 51CV-A or 51CV-B, (Ref. ASM 27-51/02) or (Ref. ASM 27-51/03).
- (7) Do the test in Para. 3.A.

B. Procedure

- (1) Interchange the SFCC 1 and SFCC 2, (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001) and dispatch the aircraft.
- (2) If the fault moves to the other SFCC during the subsequent flights, replace the defective SFCC-1 (21CV) or SFCC-2 (22CV).
- (3) If the fault occurs again at the same SFCC, replace the CSU (51CV) (Ref. AMM TASK 27-51-17-000-001) and (Ref. AMM TASK 27-51-17-400-001).
- R (4) During the subsequent flights, if the fault occurs again at the same SFCC,
 - Do a check and repair the aircraft wiring between the related SFCC ARINC tray interface and the related electrical connector 51CV-A or 51CV-B, (Ref. ASM 27-51/02) or (Ref. ASM 27-51/03).
 - (5) Do the test in Para. 3.A.

R 5. Close-up

- R A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- R B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-806

Data Fault Between SFCC 1 and SFCC 2. Loss of Cross-computer Link or Faulty Data.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | | |
|-------------|------------------|---|--|--|
| А ММ | 27 54 7/ 000 004 | Paraual of the CCCC (240V 220V) | | |
| | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | | |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) | | |
| AMM | 27-54-00-710-001 | Operational Test of the Flap System | | |
| AMM | 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST | | |
| | | F/CTL Page | | |
| ASM | 27-51/08 | | | |

3. Fault Confirmation

A. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | | IDENT. LOCATION | |
|-------|---|------------|-----------------|--|
| | FLIGHT CONTROLS/FLP/CTL AND MONG/SYS1 FLIGHT CONTROLS/FLP/CTL AND/MONG/SYS2 | 6CV 8CV | B07 Q21 | |

EFF: ALL

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- B. Reset and Intialization.
 - (1) At the circuit breakers:
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds and do the next step.
 - (2) At the MCDU set the SYSTEM REPORT/TEST FLT CTL page (Ref. AMM TASK 31-32-00-860-006):
 - (a) Set the SFCC related to the flap channel which reported the loss of data.
 - (b) At the applicable SFCC1 (or SFCC2) SYSTEM STATUS FLAP page:
 - If the message FLP1 NO SFCC2 DATA (or FLP2 NO SFCC1 DATA) is shown, do the fault isolation procedure given in Para. 4.A.
 - If a different message is shown, do the trouble shooting procedure related to the message.
 - If no message is shown, no further maintenance action is necessary.

4. Fault Isolation

- A. Procedure
 - (1) Interchange SFCC1 with SFCC2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (2) Do the test given in Para. 3.B.(2):
 - if the message stays the same, do step (5)
 - if the message goes, do the next step.
 - (3) Replace the SFCC-1 (21CV) or SFCC-2 (22CV) in the flap channel which reported the loss of data (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001):
 - if the fault continues, do the next step.
 - (4) Replace the opposite SFCC to that replaced in step (3):if the fault continues, do the next step.
 - (5) Do a check and repair the aircraft wiring between SFCC1 and SFCC2 (Ref. ASM 27-51/08).
 - (6) Do the operational test of the flaps system (Ref. AMM TASK 27-54-00-710-001).

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TASK 27-51-00-810-807

R Loss of SFCC 1 (2) Because of an A/C Pin Program Fault

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - A/C wiring at the ARINC tray interface
- 2. Job Set-up Information
 - A. Fixtures, Tools, Test and Support Equipment

REFERENCE **QTY DESIGNATION**

No specific ARINC Connector breakout box

B. Referenced Information

| REFERENCE | DESIGNATION |
|-----------|-------------|
| REIERENCE | DESIGNATION |
| | |
| | |
| | |

| AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers |
|-----|------------------|--|
| | | (Flap System) |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-54-00-710-001 | Operational Test of the Flap System |
| | | |

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3. Fault Confirmation

A. Test

- (1) Do a Bite Test of the applicable SFCC/flap system (Ref. AMM TASK 27-51-00-740-002).
- (2) If the test gives a message that includes PIN PROGRAM DISAGREE, do the fault isolation.

4. Fault Isolation

A. Procedure

- (1) Interchange the SFCC 1 and SFCC 2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001), do Para. 3. 4. A. and 4. B. of the installation procedure only.
 - (a) Do the test in Para. 3. A.
 - (b) If the fault moves with the SFCC 1 (2).
 - (c) Replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)).
- (2) If the fault continues:
 - (a) Use the ARINC Connector breakout box and do a check of the applicable A/C wiring at the ARINC tray interface (Ref. ASM 27-51/08).
 - (b) Repair the wiring/interface.
 - (c) Do the test in Para. 3. A.
- (3) Do the operational test of the flaps system (Ref. AMM TASK 27-54-00-710-001).
 - (a) Access the FLP ON GROUND FAULTS and make sure that there are no faults shown.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-808

R FPPU (FLAP) Fault or Wiring/interface Fault to SFCC 1(2).

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- 27CV (27CV)

- aircraft wiring

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

No specific circuit breaker(s) safety clip(s)
No specific ARINC connector breakout box

B. Referenced Information

REFERENCE DESIGNATION

AMM 27-51-00-740-002 Bite Test of the Slat and Flap Control Computers

(Flap System)

AMM 27-51-19-000-001 Removal the Feed Back Position Pick-Off Unit

AMM 27-51-19-400-001 Installation of the Feed Back Position Pick-Off Unit

ASM 27-51/06

ASM 27-51/07

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3. Fault Confirmation

- A. SFCC system peripherals test.
 - (1) Do the SFCC1 (2) SYSTEM TEST (BITE) (Ref. AMM TASK 27-51-00-740-002). The fault data "FPPU disconnected or faulty and WTB's set" is displayed. Page block 301 Table 7 gives the SFCC test menu selection details.
 - (2) Do the fault isolation.

4. Fault Isolation

A. Open, safety and tag this(these) circuit breaker(s):

| PANEL | DESIGNATION | | LOCATION |
|-------|---------------------------------------|-----|----------|
| 49VU | FLIGHT CONTROLS/FLP/CTL AND MONG/SYS1 | 6CV | B07 |
| 121VU | FLIGHT CONTROLS/FLP/CTL AND/MONG/SYS2 | 8CV | Q21 |

- B. Procedure
 - (1) Go to the maintenance procedure (Ref. AMM TASK 27-51-19-000-001) Figure 401/TASK 27-51-19 991 001 and find the FPPU 27CV (27CV).
 - (a) Swap the connectors 27CV-A and 27CV-B.
 - (b) Remove the safety clips and the tags and close the circuit breakers Ref.Para 4.A.
 - (c) Wait 60 seconds for SFCC initialization.
 - (d) Set the MENU MODE and access the FLP ON GROUND FAULTS and check the ground log.
 - (e) If the fault moves to SFCC 1 (2). Swap back the connectors 27CV-B and 27CV-A.
 - (f) Replace the 27CV (27CV), (Ref. AMM TASK 27-51-19-000-001) (Ref. AMM TASK 27-51-19-400-001)
 - (2) If the fault does not move
 - (3) Open, safety and tag the circuit breakers Ref.Para 4.A.
 - (4) Use ARINC connector breakout box and do a check of the aircraft wiring. Between the SFCC 1 (2) and the FPPU (Ref. ASM 27-51/06) (Ref. ASM 27-51/07)
 - (5) Do the repair

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- (6) Connect the electrical connectors 27CV-A and 27CV-B to the FPPU.
- (7) Remove the safety clips and the tags and close the circuit breakers Ref.Para.4.A.
- (8) Wait 60 seconds for SFCC initialization.
- (9) Set the MENU MODE and access the FLP ON GROUND FAULTS and check that the ground log is clear.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-809

APPU FLAP LH/RH Fault.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- APPU-L(R) FLAP 29CV (30CV)
- A/C Wiring between the SFCC 1 (2) and the APPU connectors 29CV-A (30CV-B)
- 2. Job Set-up Information

R

R A. Referenced Information

| REFERENCE | DESIGNATION | |
|---------------|-------------|--|
| | | |
| | | |
| ESPM 20-52-21 | | |
| ECDM 20-52-22 | | |

| R | ESPM | 20-52-21 | |
|---|------|------------------|---|
| R | ESPM | 20-52-22 | |
| | AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers (Flap System) |
| | AMM | 27-51-18-000-001 | Removal of the Asymmetry-Position Pick-Off Unit 29CV (30CV) |
| | AMM | 27-51-18-400-001 | <pre>Installation of the Asymmetry-Position Pick-Off Unit 29CV (30CV)</pre> |
| | AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| | AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| | AMM | 27-54-00-710-001 | Operational Test of the Flap System |

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3. Fault Confirmation

- A. SFCC system test.
 - (1) Do a BITE test on the SFCC 1 (2) (Ref. AMM TASK 27-51-00-740-002).
 - (2) If the fault data "APPU disconnected or faulty and WTB set" is displayed, page block 301 Table 7 gives the SFCC test menu selection details.
 - (3) Do the fault isolation.

4. Fault Isolation

| R A. F | Procedure |
|--------|-----------|
|--------|-----------|

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- R (1) Interchange the SFCC 1 with the SFCC 2.
- R (2) After 60 seconds, examine the UPPER ECAM and the SD FLT/CTL page for R the fault warnings and status data.
- R (3) Access the FLP ON GROUND FAULTS and do a check for faults.
- R (4) If the fault moves with the SFCC, replace the applicable SFCC-1
 R (21CV) or SFCC-2 (22CV) (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (5) If the fault does not move to the other SFCC, replace the applicable APPU-L(R) FLAP 29CV (30CV) (Ref. AMM TASK 27-51-18-000-001) (Ref. AMM TASK 27-51-18-400-001).
 - (6) Access the FLP ON GROUND FAULTS and do a check for faults.
 - (7) If the fault stays, do a check of the A/C Wiring between the SFCC 1 (2) and the APPU connectors 29CV-A (30CV-B) (Ref. ASM 27-51/06), (Ref. ASM 27-51/07), (Ref. ESPM 20-52-21) and (Ref. ESPM 20-52-22).
- R (8) Do the repair.
- R (9) Do the SYSTEM TEST (BITE) (refer to Para 3.A.(1)).
- R (a) If the BITE test shows NO FAULTS.
 - <u>1</u> Do a check of the UPPER ECAM and the SD FLT/CLT page for the fault warning and status data.

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R $\underline{2}$ If the fault warning and status data fields are clear, do the operational test of the flap system (Ref. AMM TASK 27-54-00-710-001).

R

(10) Access the FLP ON GROUND FAULTS and make sure there are no faults shown.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-810

Flap System Jam.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

1. Possible Causes

- POWER CONTROL UNIT (6201CM)
- BRAKE-L WING TIP (33CV)
- BRAKE-R WING TIP (34CV)
- Rotary Actuators
- Transmission Assembly
- PCU hydraulic motor

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| AMM | 27-50-00-866-010 | Reset of the Torque Limiters of the Flap System on the Ground | |
| AMM | 27-51-51-000-001 | Removal of the Flap Wing-Tip Brake | |
| AMM | 27-51-51-400-001 | Installation of the Flap Wing-Tip Brake | |
| AMM | 27-54-00-200-001 | Detailed Visual Inspection of the Transmission Assembly (Including Part of the Transmission in Zone 140) | |
| AMM | 27-54-00-710-001 | Operational Test of the Flap System | |
| AMM | 27-54-49-000-001 | Removal of the Flap Track 1 Actuator 6205CM(6255CM) | |
| AMM | 27-54-49-400-001 | <pre>Installation of the Flap Track 1 Actuator 6205CM(6255CM)</pre> | |
| AMM | 27-54-51-000-001 | Removal of the Power Control Unit 6201CM of the Flap System | |
| AMM | 27-54-51-400-001 | Installation of the Power Control Unit 6201CM of the Flap System | |
| AMM | 27-54-54-000-001 | Removal of the Hydraulic Motor of the Flap Power Control-Unit (6201CM) with the Pressure-Off Brake and the Valve Block Assembly | |

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| REFERENCE | | DESIGNATION |
|-------------------|--|---|
| AMM | 27-54-54-400-001 | <pre>Installation of the Hydraulic Motor of the Flap Power Control-Unit (6201CM) with the Pressure-Off Brake and the Valve Block Assembly</pre> |
| AMM AMM AMM | 27-54-61-000-001 29-10-00-863-001 29-10-00-864-002 | Removal of the Inboard Flap Pressurize the Green Hydraulic System Depressurize the Yellow Hydraulic System |

3. Fault Confirmation

A. Test

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- (1) Do the operational test of the flap system (Ref. AMM TASK 27-54-00-710-001):
 - if the flaps do not move, but the left and right flap transmission shafts move freely, do the fault isolation procedure in Para 4.A.(1)
 - if the flaps do not move and one of the flap transmission shafts does not move freely, start the fault isolation procedure at Para 4.A.(4).
- (2) If you did not find a fault during the operational test procedure, as a precaution:
 - (a) Replace those Rotary Actuators that have a torque limiter tripped (Ref. AMM 27-54-49).

4. Fault Isolation

A. Procedure.

(1) Do a check of the Position Pick-off Units (PPUs) on the Centralized Fault Display System (CFDS) and make a record of the APPU and FPPU synchro angles (Ref. AMM TASK 27-54-49-000-001) and (Ref. AMM TASK 27-54-49-400-001).

<u>NOTE</u>: This data will let you compare APPU and FPPU angles, before removal and after installation of a part of the flap transmission system. The difference in angles must be in the specified limits.

- (2) Move the Flap control lever to a different applicable position and see if there is movement of the PCU (6201CM) output shafts:
 - if there is movement of the PCU output shafts, go to step (4)
 - if there is no movement of the PCU output shafts, do the next step.
- (3) Replace the POWER CONTROL UNIT (6201CM), (Ref. AMM TASK 27-54-51-000-001) and (Ref. AMM TASK 27-54-51-400-001).

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- (4) Do the detailed visual inspection of the Transmission Assembly (Ref. AMM TASK 27-54-00-200-001).
 - (a) If it is not possible to move the flaps for the visual inspection, move the flaps manually (Ref. AMM TASK 27-54-61-000-001).

NOTE: The failure will be outboard of a tripped torque limiter.

- (b) Do the reset of the torque limiters (Ref. AMM TASK 27-50-00-866-010).
- (c) If you find a fault, correct or repair as necessary. Refer to the AMM 27-5X-XX for the applicable repair, or removal and installation procedures.
- (5) Do the test in Para. 3.A:if the fault continues, do the next step.
- (6) Remove each transmission shaft, one at a time to do a check for friction in each component of the flap system, (Ref. AMM chap. 27) removal installation procedures.
 - (a) If you find a fault, correct or repair as necessary. Refer to the AMM 27-5X-XX for the applicable repair, or removal and installtaion procedures.
 - (b) Make sure that you install all components removed.
- (7) Do the test in Para 3.A:if the fault continues, do the next step.
- (8) Disconnect the transmission shafts on each side of the WTB 33CV (34CV) (Ref. AMM TASK 27-51-51-000-001):
 - (a) Make sure that you can easily turn the WTB by hand:
 - if you can easily turn the WTB by hand, connect the transmission shafts (Ref. AMM TASK 27-51-51-400-001) and do step (9)
 - if you cannot easily turn the WTB by hand, or there is an incorrect noise, do the next step.
 - (b) Replace the WTB BRAKE-L WING TIP (33CV) or BRAKE-R WING TIP (34CV) (Ref. AMM TASK 27-51-51-000-001) and (Ref. AMM TASK 27-51-51-400-001).
- (9) Do the test in Para. 3.A:if the fault continues, do the next step.

SROS

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- R (10) Set the CFDS MENU MODE and get access to the SYSTEM STATUS FLAP and make sure that NO FAULTS is shown.
 - B. If the fault continues do the steps that follow:
 - (1) Do the operational test of the flap system (Ref. para 3. A. (1)):
 - during the test make sure that the power transfer unit is set to OFF. This is to make sure that only the flap system 2 PCU hydraulic motor operates.
 - record the time necessary to extend the flaps and to retract the flaps.
 - (2) Do the operational test of the flap system (Ref. para 3. A. (1)):
 - pressurise the Green hydraulic system for this test, (Ref. AMM TASK 29-10-00-863-001)
 - during the test make sure that the power transfer unit is set to OFF. This is to make sure that only the flap system 1 hydraulic motor operates
 - during the test make sure that the Yellow hydraulic system is depressurised (Ref. AMM TASK 29-10-00-864-002)
 - this is to make sure that only the flap system 1 hydraulic motor operates
 - record the time necessary to extend the flaps and to retract the flaps.
 - (3) Replace the PCU hydraulic motor on the slower system (Ref. AMM TASK 27-54-54-000-001) and (Ref. AMM TASK 27-54-54-400-001).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-811

R COMMAND SENSOR UNIT. CSU Out of Adjustment (Sensor out of valid region) No WTB

R Set.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- CSU (51CV)

- SFCC-1 (21CV)

- SFCC-2 (22CV)

- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|--|--|--|
| AMM 2 AMM 2 AMM 2 AMM 2 AMM 2 AMM 2 | 7-50-00-866-008 7-50-00-866-009 7-51-17-000-001 7-51-17-400-001 7-51-34-000-001 7-51-34-400-001 7-54-00-710-001 7-51/02 | Extension of the Flaps on the Ground Retraction of the Flaps on the Ground Removal of the Command Sensor Unit (CSU) (51CV) Installation of the Command Sensor Unit (CSU) (51CV) Removal of the SFCC (21CV,22CV) Installation of the SFCC (21CV,22CV) Operational Test of the Flap System |

3. Fault Confirmation

SROS

- A. SFCC System Operational Test.
 - (1) Move the slats and flaps control lever from and back to the initial position.
 - (a) Examine the UPPER ECAM and the SD FLT/CTL page to see if the fault clears.

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- (b) If the fault message clears, access FLP ON GROUND FAULTS and make sure the Ground Log is clear.
- (2) Do the operational test of the flaps.(Ref. AMM TASK 27-54-00-710-001)
 - (a) If the ECAM warning. FLAPS FAULT is displayed.
 - (b) If the FLP ON GROUND FAULTS fault message: SLT/FLP CSU 51CV is displayed.
 - (c) Do the fault isolation.

4. Fault Isolation

- A. Procedure.
 - (1) Set MENU MODE and go to the sub-MENU, SYSTEM DATA FLAPS.
 - (a) Push the line key 3L, (DICRETE INPUTS).
 - (b) The named SFCC trasmits the DISCRETE INPUTS page (this page is transmitted every 5 seconds).
 - (c) Set the flap/slat control lever (CSU LEVER) to each flap/slat position.
 - (d) Compare the CSU switch banks A and B:
 - (e) If a difference is found, (reference table 1 page block 301).
 - (f) Replace the defective CSU (51CV) (Ref. AMM TASK 27-51-17-000-001) (Ref. AMM TASK 27-51-17-400-001)
 - (g) If no difference is found go to Para.4.A.(2).
 - (2) Swap the SFCC 1 and SFCC 2.(Ref. AMM TASK 27-51-34-000-001) for (Ref. AMM TASK 27-51-34-400-001) do a check of the ground log.
 - (a) Access the FLP ON GROUND FAULTS and do a check of the ground log.
 - (b) If the fault moves with SFCC 1 (2).
 - (c) Replace SFCC-1 (21CV) (SFCC-2 (22CV)) Ref. Para.4.A.(2)(a).
 - (3) Move the slats and flaps control lever from and to a valid position.
 - (a) Examine the ECAM EWD and the SD FLT/CTL page and check if the fault clears.
 - (b) If the fault message clears, access the FLP ON GROUND FAULTS page and make sure the ground log is clear.

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- (4) If the fault continues, do a check of the aircraft wiring between the SFCC 1(2) and the CSU (Ref. ASM 27-51/02).
 - (a) If there is a circuit/interface fault do the repair.
 - (b) Move the flaps (Ref. AMM TASK 27-50-00-866-008) (Ref. AMM TASK 27-50-00-866-009)
 - (c) Access the FLP ON GROUND FAULTS page and make sure the ground log is clear.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-812

R SFCC 1 (2) OR FLP PPU POWER SFCC Generated FLAP PPU Power Fault.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - A/C wiring/interface between SFCC 1 (2) and the PPUs'.
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers (Flap System) |
| | | · · · |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| ASM | 27-51/01 | |
| ASM | 27-51/08 | |

3. Fault Confirmation

SROS

- A. SFCC system exitation power test.
 - (1) Do the SYSTEM TEST (BITE) on the SFCC 1 (2) (Ref. AMM TASK 27-51-00-740-002). The fault data" PPU excitation power short circuit" is displayed. Page block 301 table 7 gives the SFCC test menu selections details.

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(2) Do the fault isolation.

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4. Fault Isolation

A. Procedure

- (1) Make sure that there is no SFCC to PPU external circuit/interface short circuit fault, before troubleshooting the SFCC 1 (2).
 - (a) Do a check of the A/C wiring/interface between SFCC 1 (2) and the PPUs'. (Ref. ASM 27-51/01) (Ref. ASM 27-51/08)
- (2) If there is a wiring/interface fault, do the repair.
 - (a) Do the BITE test of the SFCC 1 (2).
 - (b) If the same fault message is shown and there are no circuit/interface faults.
- (3) Swap the SFCC 1 and SFCC 2.(Ref. AMM TASK 27-51-34-000-001) for (Ref. AMM TASK 27-51-34-400-001) do Para.2,3 and 4 only.
 - (a) Access the FLP ON GROUND FAULTS and do a check of the ground log.
 - (b) If the fault moves with SFCC 1(2).
 - (c) Return the SFCC 1 (2) to their initial locations.
 - (d) Replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)) Ref. Para.4.A.(1).
- (4) Do the BITE test of the SFCC 1 (2) Ref. Para 3.A.(1).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-814

FLAP SYSTEM 1 (2) FAULT, No CFDS Message (normal mode)

R

- <u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:
 - THE FLIGHT CONTROLS
 - THE FLIGHT CONTROL SURFACES
 - THE LANDING GEAR AND THE RELATED DOORS
 - COMPONENTS THAT MOVE.
- WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

R

- VALVE BLOCK-FLAP 1 (23CV)
- R VALVE BLOCK-FLAP 2 (24CV)
- R RELAY-FLAP 1 FAULT (91CV)
- R RELAY-FLAP 2 FAULT (93CV)
- R SFCC-1 (21CV)
- R SFCC-2 (22CV)
- R transient fault
- R aircraft wiring

2. Job Set-up Information

R A. Fixtures, Tools, Test and Support Equipment

R ------

R REFERENCE QTY DESIGNATION

R ------

R No specific multimeter

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B. Referenced Information

R

| | REFERENCE | DESIGNATION | |
|-------------|--|---|--|
| | | | |
| | 27-51-00-810-802 27-51-00-810-805 | SFCC - FLAP PCU VALVEBLOCK Fault CSU Fault (51CV) or Fault in Wiring to SFCC 1 (2) | |
| | 27-51-00-810-841 | Wrong Inhibit Sign From Cargo Door Yellow System. | |
| R | AMM 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | |
| R | | Installation of the SFCC (21CV,22CV) | |
| | AMM 27-54-00-710-001 | Operational Test of the Flap System | |
| R R | AMM 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST F/CTL Page | |
| R | AMM 31-60-00-860-001 | EIS Start Procedure | |
| R | AMM 31-60-00-860-002 | EIS Stop Procedure | |
| R | ASM 27-51/02 | | |
| R | ASM 27-51/03 | | |
| | 3. Fault Confirmation | | |
| R | A. Fault Analysis | | |
| R R R | - if the ECAM N | the Post Flight Report (PFR): Narning message FLAP SYS 1 (2) FAULT is shown without a message and the flaps operated correctly, do the next | |
| R | (2) Do the EIS Star | rt Procedure (Ref. AMM TASK 31-60-00-860-001). | |
| R R | (3) At an MCDU, get TASK 31-32-00-8 | access to the SYSTEM REPORT/TEST F/CTL page (Ref. AMM 860-006). | |
| R | (a) Set F/CTL a | and get access to the SFCC 1 and SFCC 2 menus. | |
| R R R | | FCC, set LAST LEG REP FLP and do a check for one or messages that follow: | |
| K | - DC POWER - DC POWER - Single MC - Lever Out | TOP DUE TO LOW PRESSURE INTERRUPT BELOW 16 V DTOR OPERATION T OF DETENT FOR MORE THAN 10 SEC. SIGNAL FROM CARGO DOOR YELLOW SYSTEM. | |
| R R R | help | se messages are shown in the Last Leg Report (LLR) to with trouble shooting when the ECAM Warning message SYS 1 (2) FAULT is shown because of a transient | |

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- (c) From the check of the LLR:
 - if one or more of the applicable messages is shown, do the fault isolation procedure in Para. 4.A.
 - if none of the applicable messages are shown, do the fault isolation procedure in Para. 4.B.

4. Fault Isolation

R **ON A/C 201-225, 227-227, 229-275, 426-475, 551-599, 701-749,

A. Procedure

- (1) For the applicable message from the SFCC 1 (2) Flap LLR, do the related procedure step:
 - for SYSTEM STOP DUE TO LOW PRESSURE, do step (2)
 - for DC POWER INTERRUPT, do step (3)
 - for DC POWER BELOW 16V, do step (4)
 - for SINGLE MOTOR OPERATION, do step (5)
 - for INHIBIT SIGNAL FROM CARGO DOOR YELLOW SYSTEM, do step (6).

(2) SYSTEM STOP DUE TO LOW PRESSURE:

- if the ECAM Warning FLAP SYS 1 (2) FAULT was shown because of a hydraulic low pressure problem (green or yellow), no more maintenance work is necessary
- if there is no apparent hydraulic system problem, do the next step.
- (a) Do the operational test of the flap system (Ref. AMM TASK 27-54-00-710-001).
 - if a permanent fault is found go to Page Block 101 and do the applicable fault isolation procedure
 - if there is no apparent fault with the flap operation, or the operation is intermittent, do the next step.
- (b) Do the trouble shooting procedure for the applicable VALVE BLOCK-FLAP 1 (23CV) or VALVE BLOCK-FLAP 2 (24CV), (Ref. TASK 27-51-00-810-802).
 - NOTE: When the hydraulic motor operates, the spool of the control valve is moved and flow occurs. This flow can push particles, in the hydraulic fluid, against the valve block filter and cause a blockage. If a blockage occurs, the flow decreases and the spool moves back. This movement of the spool is sensed by the related SFCC, which stops the applicable hydraulic motor. Flow then decreases and lets the particles become free from the filter. This removal of the blockage then increases the flow, which moves the spool. This movement of the spool is sensed by the related SFCC, which releases the applicable hydraulic motor. This causes the flow to increase to the condition where a blockage can occur again. This fault condition can cause the slats to operate intermittently.

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(3) DC POWER INTERRUPT:

- if the ECAM Warning FLAP SYS 1 (2) FAULT was shown because of a DC power interrupt, no more maintenance work is necessary
- if there is no apparent DC power problem, do step (7).

NOTE: The message DC POWER INTERRUPT is shown in the LLR when the DC power is less than 14VDC for more than 40 msec.

(4) DC POWER BELOW 16V:

- if the ECAM Warning FLAP SYS 1 (2) FAULT was shown because the DC power was less than 16.5 VDC, no more maintenance work is necessary
 if there is no apparent DC Power problem, do step (7).
- NOTE: The message DC POWER BELOW 16V is shown in the LLR when the DC power is less than 16.5VDC, but more than 14VDC, for more than 20 msec.

(5) SINGLE MOTOR OPERATION:

- if the ECAM Warning FLAP SYS 1 (2) FAULT was shown because the flaps operated momentarily on one motor only, no more maintenance work is necessary
- if there is no apparent flap motor problem, do step (7).

(6) INHIBIT SIGNAL FROM CARGO DOOR YELLOW SYSTEM.

- if the ECAM Warning FLAP SYS 2 FAULT was shown because the flap operation was prevented by a Cargo Door fault, no more maintenance work is necessary
- if there is no apparent Cargo Door fault, do the next step.

NOTE: The cargo door inhibit signal is supplied by System 2 only.

- (a) At the MCDU set RETURN to go back to the SFCC 2 menu page.
- (b) Set CLASS 3 FAULTS FLP and do a check for the message WRONG INHIBIT SIGN FROM CARGO DOOR YELLOW SYSTEM:
 - if the message is shown, do the related trouble shooting procedure (Ref. TASK 27-51-00-810-841)
 - if the message is not shown, do the next step.
- (7) Make a record in the aircraft logbook to monitor the operation of the flap system during the next flight.

**ON A/C 276-299, 476-499, 503-549,

A. Procedure

- (1) For the applicable message from the SFCC 1 (2) Flap LLR, do the related procedure step:
 - for SYSTEM STOP DUE TO LOW PRESSURE, do step (2)
 - for DC POWER INTERRUPT, do step (3)
 - for DC POWER BELOW 16V, do step (4)

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- for SINGLE MOTOR OPERATION, do step (5)
- for LEVER OUT OF DETENT FOR MORE THAN 10 SEC, do step (6)
- for INHIBIT SIGNAL FROM CARGO DOOR YELLOW SYSTEM, do step (7).

(2) SYSTEM STOP DUE TO LOW PRESSURE:

- if the ECAM Warning FLAP SYS 1 (2) FAULT was shown because of a hydraulic low pressure problem (green or yellow), no more maintenance work is necessary
- if there is no apparent hydraulic system problem, do the next step.
- (a) Do the operational test of the flap system (Ref. AMM TASK 27-54-00-710-001).
 - if a permanent fault is found go to Page Block 101 and do the applicable fault isolation procedure
 - if there is no apparent fault with the flap operation, or the operation is intermittent, do the next step.
- (b) Do the trouble shooting procedure for the applicable VALVE BLOCK-FLAP 1 (23CV) or VALVE BLOCK-FLAP 2 (24CV), (Ref. TASK 27-51-00-810-802).

NOTE: When the hydraulic motor operates, the spool of the control valve is moved and flow occurs. This flow can push particles, in the hydraulic fluid, against the valve block filter and cause a blockage. If a blockage occurs, the flow decreases and the spool moves back. This movement of the spool is sensed by the related SFCC, which stops the applicable hydraulic motor. Flow then decreases and lets the particles become free from the filter. This removal of the blockage then increases the flow, which moves the spool. This movement of the spool is sensed by the related SFCC, which releases the applicable hydraulic motor. This causes the flow to increase to the condition where a blockage can occur again. This fault condition can cause the slats to operate intermittently.

(3) DC POWER INTERRUPT:

- if the ECAM Warning FLAP SYS 1 (2) FAULT was shown because of a DC power interrupt, no more maintenance work is necessary
- if there is no apparent DC power problem, do step (8).

NOTE : The message DC POWER INTERRUPT is shown in the LLR when the DC power is less than 14VDC for more than 40 msec.

(4) DC POWER BELOW 16V:

- if the ECAM Warning FLAP SYS 1 (2) FAULT was shown because the DC power was less than 16.5 VDC, no more maintenance work is necessary
- if there is no apparent DC Power problem, do step (8).

NOTE: The message DC POWER BELOW 16V is shown in the LLR when the DC power is less than 16.5VDC, but more than 14VDC, for more than 20 msec.

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EFF: 276-299, 476-499, 503-549,

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- (5) SINGLE MOTOR OPERATION:
 - if the ECAM Warning FLAP SYS 1 (2) FAULT was shown because the flaps operated momentarily on one motor only, no more maintenance work is necessary
 - if there is no apparent flap motor problem, do step (8)
 - if the message LEVER OUT OF DETENT FOR MORE THAN 10 SEC is also shown in the LLR, do the next step.
- (6) LEVER OUT OF DETENT FOR MORE THAN 10 SEC:
 - if the ECAM Warning FLAP SYS 1 (2) FAULT was shown because the flap lever was sensed out of detent by one system only, do the next step.
 - (a) Do a check of the CSU and its wiring to the SFCC, which identified the out of detent condition (Ref. TASK 27-51-00-810-805):

NOTE: When one system senses that the flap control lever is out of detent, but the other system senses a correct condition, then the fault is usually in the CSU.

- (7) INHIBIT SIGNAL FROM CARGO DOOR YELLOW SYSTEM.
 - if the ECAM Warning FLAP SYS 2 FAULT was shown because the flap operation was prevented by a Cargo Door fault, no more maintenance work is necessary
 - if there is no apparent Cargo Door fault, do the next step.

NOTE: The cargo door inhibit signal is supplied by System 2 only.

- (a) At the MCDU set RETURN to go back to the SFCC 2 menu page.
- (b) Set CLASS 3 FAULTS FLP and do a check for the message WRONG INHIBIT SIGN FROM CARGO DOOR YELLOW SYSTEM:
 - if the message is shown, do the related trouble shooting procedure (Ref. TASK 27-51-00-810-841)
 - if the message is not shown, do the next step.
- (8) Make a record in the aircraft logbook to monitor the operation of the flap system during the next flight.

**ON A/C ALL

- B. Procedure
 - (1) If the ECAM warning FLAP SYS 1 (2) FAULT is shown, but there is no related CFDS message on the PFR, or on the SFCC 1 (2) Flap LLR, do step (2).

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- (2) Remove the applicable flap fault relay 91CV or 93CV and use a multimeter to do a check at the base of the holder for a ground on pin Z and 28VDC on pin X:
 - if there is a ground on pin Z and 28VDC on pin X, do step (3)
 - if there is no ground on pin I, do step (4)
 - if there is no 28VDC on pin X, do step (6)
- (3) Replace the applicable flap fault relay:
 - for a FLAP SYS 1 FAULT message, replace RELAY-FLAP 1 FAULT (91CV)
 - for a FLAP SYS 2 FAULT message, replace RELAY-FLAP 2 FAULT (93CV).
 - (a) Do a check of the upper ECAM DU for the ECAM warning FLAP SYS 1 (2) FAULT:
 - if the message shows, do step (4)
 - if the message does not show, no more maintenance work is necessary.
- (4) Interchange SFCC1 with SFCC 2, (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Do a check of the upper ECAM DU for the ECAM Warning FLAP SYS 1(2) FAULT:
 - if the fault moves to the opposite system, do step (5)
 - if the fault stays in the intial system, do step (6).
- (5) Replace the SFCC-1 (21CV) or SFCC-2 (22CV) identified in the ECAM warning message shown in step (4)(a), (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001):
 - (a) Do a check of the upper ECAM DU for the ECAM warning FLAP SYS 1 (2) FAULT:
 - if the message shows, do step (6)
 - if the message does not show, no more maintenance is necessary.
- (6) Do a check and repair as necessary the aircraft wiring between the applicable C/B and connector AA pin 3J of the SFCC mounting tray:
 - for relay 91CV, do the check from C/B 6CV and SFCC 1 (Ref. ASM 27-51/02)
 - for relay 93CV, do the check from C/B 8CV and SFCC 2 (Ref. ASM 27-51/03).
 - (a) Do the Operational Test of the Flap System (Ref. AMM TASK 27-54-00-710-001):

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5. Close-up

- A. Put the aircraft back to its initial configuration.
 - (1) Do the EIS Stop Procedure, if not done before (Ref. AMM TASK 31-60-00-860-002).
 - (2) Remove the ground support and maintenance equipment, the special and standard tools and all other items.

EFF: ALL
SROS

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TASK 27-51-00-810-815

FLAP SYSTEM 1 (2) Fault With a FLAP SYSTEM 2 (1) FAULT and Both CFDS Message Are Not the Same

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

- 1. Possible Causes
- 2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

No specific circuit breaker(s) safety clip(s)

B. Referenced Information

REFERENCE DESIGNATION

AMM 27-51-00-740-001 Read-out of Class 3 Faults in the Flap System

- 3. Fault Confirmation
 - A. Open, safety and tag this(these) circuit breaker(s):

PANEL DESIGNATION IDENT. LOCATION .-----

49VU FLIGHT CONTROLS/FLP/CTL AND MONG/SYS1

B07 6CV 8CV Q21

121VU FLIGHT CONTROLS/FLP/CTL AND/MONG/SYS2

EFF: ALL **27-51-00**

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- B. SFCC Reset and Initialization.
 - (1) At the circuit breakers.
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds
 - (d) Do a check of the UPPER ECAM and the FLT/CTL SD page for the fault warnings.
 - (e) If the ECAM warning clears.
 - (f) Access the FLP ON GROUND FAULTS, and make sure the ground log is clear.
 - (g) If the ECAM warning and a ground log message is displayed do the fult isolation.

4. Fault Isolation

A. Procedure

- (1) The SFCC flap system has two (2) reported fault coditions.
- (2) Access the LAST LEG REPORT and look for the message " SFCC 1". and ""SFCC 2".
 - (a) Each SFCC is the subject of the system test (BITE) and each fault is identified as a separate subject.
 - (b) Do the system test (BITE) (Ref. AMM TASK 27-51-00-740-001) on each SFCC in turn.
 - (c) Refer the applicable fault symptoms to page block 101 and carry out the related TSM procedure.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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@A319/A320/A321

TROUBLE SHOOTING MANUAL

TASK 27-51-00-810-817

Left Flap Interconnecting-Strut Attachment Failure-Detection Sensor Fault

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (37CV)
- SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (39CV)
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| 32-3 | 31-00-810-828 | Left Flap Disconnect Proximity Sensor (37CV, 39CV) | |
| AMM | 27-51-00-710-002 | Operational Test of the Flap Interconnecting Strut and the Flap-Attachment Failure-Detection Sensors | |
| AMM | 27-51-15-000-002 | Removal of the Proximity-Sensors of the Interconnecting Strut | |
| AMM | 27-51-15-400-002 | Installation of the Proximity-Sensors of the Interconnecting Strut | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) | |
| AMM | 32-69-00-740-001 | BITE Check Landing Gear Control Interface Unit (LGCIU) using MCDU to Ensure that Continuous BITE is Operative | |
| ASM | 27-51/06 | · | |
| ASM | 27-51/07 | | |

EFF: ALL 27-51-00

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3. Fault Confirmation

A. Test

- (1) Do a BITE test with the LGCIU given in the CFDS message (Ref. AMM TASK 32-69-00-740-001).
- (2) If the test gives a message that includes the DISC PROX SENSOR (37CV or 39CV), do the fault isolation procedure in (Ref. TASK 32-31-00-810-828).
- (3) If the test does not give a message that includes the DISC PROX SENSOR (37CV or 39CV), but the fault continues, do the fault isolation procedure in Para. 4.

4. Fault Isolation

A. Procedure

(1) Interchange the SFCCs, use (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).

NOTE: This will cause each SFCC to get a new identification.

- (2) Do an operational test of the flap interconnecting strut (Ref. AMM TASK 27-51-00-710-002).
- (3) If the test is OK:
 - (a) Replace the SFCC-1 (21CV) or SFCC-2 (22CV) that was the source of the initial CFDS message.
- (4) If the test is not OK (gives the same CFDS message as the initial CFDS message):
 - (a) Replace the applicable proximity sensor SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (37CV) or SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (39CV), (Ref. AMM TASK 27-51-15-000-002) and (Ref. AMM TASK 27-51-15-400-002).
- (5) If the fault continues, do a check and repair as necessary the aircraft wiring between:
 - the applicable proximity sensor and the related LGCIU, (Ref. ASM 27-51/06) or (Ref. ASM 27-51/07)
 - the applicable LGCIU and the related SFCC, (Ref. ASM 27-51/06) or (Ref. ASM 27-51/07).
 - (a) Do the test given in Para.(2).

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TASK 27-51-00-810-818

Flap Alignment Fault

1. Possible Causes

- flap drive assembly
- flap-actuator
- interconnecting strut
- flap transmission assembly
- backlash

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 27-51-00-820-008 | Adjustment of the Flap Rigged Position with the Sharks Fin Tool (A318/319/320) | |
| AMM | 27-51-00-820-009 | Adjustment of the Flap Rigged Position with the Sharks Fin Tool (A321) | |
| AMM | 27-51-44-820-001 | Adjustment of the Interconnecting Strut | |
| AMM | 27-54-00-200-001 | Detailed Visual Inspection of the Transmission Assembly (Including Part of the Transmission in Zone 140) | |
| AMM | 27-54-00-200-003 | <pre>Detailed Dimensional Check - Free Movement at the Trailing Edge of the Flaps</pre> | |
| AMM | 27-54-00-710-001 | Operational Test of the Flap System | |
| AMM | 27-54-49-000-008 | Removal of the Flap Track 1 to 4 Actuators 6205CM(6255CM)/6211CM(6261CM)/ 6221CM(6271CM)/6233CM(6283CM) | |
| AMM | 27-54-49-400-005 | <pre>Installation of the Flap Track 1 to 4 Actuators 6205CM(6255CM)/6211CM(6261CM)/ 6221CM(6271CM)/6233CM(6283CM)</pre> | |
| AMM | 27-54-55-000-001 | Removal of the Flap-Actuator Lever Assembly - Tracks 1 and 2 | |
| AMM | 27-54-55-000-002 | Removal of the Flap-Actuator Lever Assembly - Track 3 | |
| AMM | 27-54-55-000-003 | Removal of the Flap-Actuator Lever Assembly - Track 4 | |
| AMM | 27-54-55-400-001 | <pre>Installation of the Flap-Actuator Lever Assembly - Tracks 1 and 2</pre> | |
| AMM | 27-54-55-400-002 | Installation of the Flap-Actuator Lever Assembly - Track 3 | |
| AMM | 27-54-55-400-003 | Installation of the Flap-Actuator Lever Assembly - Track 4 | |

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3. Fault Confirmation

A. Test

NOTE: Some flap alignment faults can occur in flight (when the flaps are under an aerodynamic load), but do not occur during an operational test on the ground.

Thus when a flap alignment fault messsage (FLP 1 (2) CHK LH (RH) MECH DRIVE) is shown on the Post Flight Report (PFR), but the initial test on the ground is OK (the flaps move and align correctly), it is necessary to continue with the fault isolation procedure. This is because some faults, in the interconnecting strut or flap transmission assembly, only show during flight. It is also possible that a subsequent test can be OK (after maintenance work has been done), but the fault has not gone. Thus it is necessary to make a record in the aircraft log to monitor the operation of the flaps during the next flight.

If the initial test is not **OK** (the flaps move, but the surfaces do not align correctly) the cause of the fault can be damage to the flap track mechanism, or an unserviceable flap actuator. This fault condition will show during the initial operational test and a subsequent test will show if the fault has gone. A record in the aircraft log book, to monitor the flaps during the next flight, will make sure that the flaps also operate correctly under an aerodynamic load.

- (1) Do the Operational Test of the Flap System (Ref. AMM TASK 27-54-00-710-001):
 - if the initial test is not **OK**, do the fault isolation procedure in **P**ara. **4.A.(1)**
 - if the initial test is OK, continue and do the fault isolation procedure in Para. 4.A.(5)
 - if a subsequent test is **OK**, make a record in the aircraft log to monitor the operation of the flaps, during the next flight.

4. Fault Isolation

R **ON A/C 201-225, 227-227, 229-275, 426-475, 551-599, 701-749,

A. Procedure

SROS

- (1) Do a visual check of the alignment of the inboard and outboard flap surfaces, on the applicable wing:
 - if the flap surfaces are aligned, do step (5)
 - if the flap surfaces are not aligned, do step (2).

NOTE: When a flap alignment fault occurs, the torque-limiters do not usually operate. If a torque-limiter has operated, it is

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possible that the related flap-actuator or flap-track mechanism is the cause of the alignment fault.

- (2) Examine the flap-actuators and flap-track mechanisms of the flap which is not aligned correctly (Ref. AMM TASK 27-54-00-200-001):
 - if there are no worn or damaged components, do step (4)
 - if there are worn or damaged components, do step (3).
- (3) Replace as necessary, the worn or damaged components in the applicable flap drive assembly:
 - for the flap tracks 1 and 2 (Ref. AMM TASK 27-54-55-000-001) and (Ref. AMM TASK 27-54-55-400-001)
 - for the flap track 3 (Ref. AMM TASK 27-54-55-000-002) and (Ref. AMM TASK 27-54-55-400-002)
 - for the flap track 4 (Ref. AMM TASK 27-54-55-000-003) and (Ref. AMM TASK 27-54-55-400-003).
 - (a) If the fault continues, do step (4).
- (4) Replace the applicable flap-actuator, (Ref. AMM TASK 27-54-49-000-008) and (Ref. AMM TASK 27-54-49-400-005).
 - (a) If the fault continues, do step (5).
- (5) From the operational test:
 - if the result of the operational test is correct and the flap surfaces are aligned, but an alignment fault message is shown, do step (6).
 - NOTE: When an alignment fault occurs, the flaps on the related wing do not move together correctly. When this fault occurs, the interconnecting strut senses the asymmetry. If the flaps are apparently aligned correctly, but an alignment fault has occurred, then it is possible that the interconnecting strut or the flap rigging are not adjusted correctly.
- (6) Do the adjustment of the interconnecting strut, (Ref. AMM TASK 27-51-44-820-001).
 - (a) If the fault continues, do step (7).
- (7) Do a check of the flap transmission assembly, (Ref. AMM TASK 27-54-00-200-001).
 - (a) From the check of the transmission assembly:
 - if the transmission assembly shows backlash, do step (8)
 - if it is necessary to adjust the transmission assembly, do step
 (9)
 - if the transmission assembly is fully serviceable, do the test in Para. 3.A.

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- (8) Do a detailed dimensional check of the flaps, to make sure that there is no backlash in the flap transmission assembly, (Ref. AMM TASK 27-54-00-200-003).
 - (a) Do the test in Para. 3.A.:if the fault continues, do step (9).
- (9) Do the adjustment of the flap rigged position, (Ref. AMM TASK 27-51-00-820-008).

**ON A/C 276-299, 476-499, 503-549,

A. Procedure

- (1) Do a visual check of the alignment of the inboard and outboard flap surfaces, on the applicable wing:
 - if the flap surfaces are aligned, do step (5)
 - if the flap surfaces are not aligned, do step (2).
 - NOTE: When a flap alignment fault occurs, the torque-limiters do not usually operate. If a torque-limiter has operated, it is possible that the related flap-actuator or flap-track mechanism is the cause of the alignment fault.
- (2) Examine the flap-actuators and flap-track mechanisms of the flap which is not aligned correctly (Ref. AMM TASK 27-54-00-200-001):
 - if there are no worn or damaged components, do step (4)
 - if there are worn or damaged components, do step (3).
- (3) Replace as necessary, the worn or damaged components in the applicable flap drive assembly:
 - for the flap tracks 1 and 2 (Ref. AMM TASK 27-54-55-000-001) and (Ref. AMM TASK 27-54-55-400-001)
 - for the flap track 3 (Ref. AMM TASK 27-54-55-000-002) and (Ref. AMM TASK 27-54-55-400-002)
 - for the flap track 4 (Ref. AMM TASK 27-54-55-000-003) and (Ref. AMM TASK 27-54-55-400-003).
 - (a) If the fault continues, do step (4).
- (4) Replace the applicable flap-actuator, (Ref. AMM TASK 27-54-49-000-008) and (Ref. AMM TASK 27-54-49-400-005).
 - (a) If the fault continues, do step (5).
- (5) From the operational test:
 - if the result of the operational test is correct and the flap surfaces are aligned, but an alignment fault message is shown, do step (6).

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| R R R R R | | NOTE: When an alignment fault occurs, the flaps on the related wing do not move together correctly. When this fault occurs, the interconnecting strut senses the asymmetry. If the flaps are apparently aligned correctly, but an alignment fault has occurred, then it is possible that the interconnecting strut or the flap rigging are not adjusted correctly. | |
|-----------------------|-----|--|--|
| R R | (6) | Do the adjustment of the interconnecting strut, (Ref. AMM TASK 27-51-44-820-001). | |
| R | | (a) If the fault continues, do step (7). | |
| R R | (7) | Do a check of the flap transmission assembly, (Ref. AMM TASK 27-54-00-200-001). | |
| R R R R R | | (a) From the check of the transmission assembly: if the transmission assembly shows backlash, do step (8) if it is necessary to adjust the transmission assembly, do step (9) if the transmission assembly is fully serviceable, do the test in Para. 3.A. | |
| R R R | (8) | Do a detailed dimensional check of the flaps, to make sure that there is no backlash in the flap transmission assembly, (Ref. AMM TASK 27-54-00-200-003). | |
| R R | | (a) Do the test in Para. 3.A.:if the fault continues, do step (9). | |
| R R | (9) | Do the adjustment of the flap rigged position, (Ref. AMM TASK 27-51-00-820-009). | |

276-299, 476-499, 503-549, EFF :

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**ON A/C ALL

TASK 27-51-00-810-819

R Flap System Asymmetry Fault

WARNING : PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

1. Possible Causes

- Flap transmission

- APPU

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|--------|-----------|---------------------|--|--|
| | AMM | 27-50-00-869-006 | Reset of the Wing Tip Brake (WTB) of the Flap System on the Ground | |
| | AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers (Flap System) | |
| | AMM | 27-51-00-820-001 | Manual Adjustment of the Position Pick-Off Units | |
| R R | AMM | 27-51-00-820-003 | To do a Check of the Flap Rigged Position (with the Sharks Fin) | |
| | AMM | 27-51-00-820-006 | Adjustment of the Flap Rigged Position (with the Rigging Boards) | |
| | AMM | 27-51-18-000-001 | Removal of the Asymmetry-Position Pick-Off Unit 29CV (30CV) | |
| | AMM | 27-54-00-200-001 | Detailed Visual Inspection of the Transmission Assembly (Including Part of the Transmission in Zone 140) | |
| | AMM | 27-54-00-710-001 | Operational Test of the Flap System | |
| R | TSM | 275100 P. Block 301 | • • | |

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3. Fault Confirmation

A. Procedure

- (1) For the fault message, FLP 1 ASYMMETRY LH/RH. CHECK FLP MECH DRIVE.

 Access the MENU Mode and set SFCC 1.
 - (a) Go to the submenu SYSTEM DATA FLAP.
 - (b) Press the line key 1L to set the PPU page.
 - (c) The SFCC transmits the LH and RH APPU DATA page(s) to the CFDS.
 - (d) The APPU DATA page is transmitted again every 5 seconds with refreshed data.
 - (e) (Refer to page block 301 table 3). The LH APPU and RH APPU synchro angles are shown as a decimal value.
 - (f) If there is a difference between the LH and RH values, do the fault isolation.
 - (g) A difference of more than 5.2 deg. generates an ASYMMETRY fault message.
- (2) For the fault message, FLP 2 ASYMMETRY LH/RH. CHECK FLP MECH DRIVE. Do the procedure at Para.3.A.(1) but set SFCC 2.

4. Fault Isolation

R **ON A/C 201-208, 227-227, 229-244, 276-284, 426-427, 476-478,

A. Procedure.

- (1) Do the BITE test. (Ref. AMM TASK 27-51-00-740-002).
 - (a) The BITE gives a "WTB, s set in this channel".
 - (b) Refer to the PPU DATA to find the defective wing, the APPU DATA that is incremented from the set control lever position by more than 5.2 deg. shows the defective wing. (Ref. page block 301 table 4) for the control lever position to APPU data.
- (2) Do the reset of the wing tip brakes (Ref. AMM TASK 27-50-00-869-006)

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- (3) Do the detailed visual inspection of the Flap transmission assembly (Ref. AMM TASK 27-54-00-200-001), correct any failure, (Ref. AMM chap. 27).
 - (a) During the inspection at Para 4.A.(3):
 - refer to (Ref. AMM TASK 27-51-18-000-001) Figure 402/Task 27-51-18-991-001 and identify the APPU.
 - do a check of the APPU zero datum mark.
 - (b) If the zero datum mark is not aligned. Do the manual adjustment of the position pick off units (Ref. AMM TASK 27-51-00-820-001).
 - (c) If the zero datum is aligned:
 - do the adjustment of the flap rigged position (Ref. AMM TASK 27-51-00-820-006) and make sure that the transmission shafts and spherical bearings are satisfactory.
- (4) Do the operational test of the flap system, (Ref. AMM TASK 27-54-00-710-001).
- (5) Access the SYSTEM STATUS FLAP and make sure that NO FAULTS is shown.

R **ON A/C 201-206, 209-225, 227-227, 229-277, 279-299, 426-499, 503-549, R 551-599, 701-749, R Post SB 27-1119 For A/C 201-206.227-227.229-244.276-277.279-284.426-427

Post SB 27-1119 For A/C 201-206,227-227,229-244,276-277,279-284,426-427, 476-478,

R A. Procedure

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- (1) Do the BITE test of the slat and flap control computers (Ref. AMM TASK 27-51-00-740-002).
- (a) The BITE shows "WTB, s set in this channel".
 - (b) Refer to the APPU DATA to find the defective wing. The APPU DATA shown (in increments) from the set control lever position by more than 5.2 degrees, shows the defective wing. Refer to the TSM (Ref. TSM 275100 P. Block 301) table 4 for the control lever position to APPU data.
- (2) Do the reset of the wing tip brakes (Ref. AMM TASK 27-50-00-869-006).
 - (3) Do the detailed visual inspection of the Flap transmission assembly (Ref. AMM TASK 27-54-00-200-001). Correct the failures (Refer to the AMM chapter 27). During the inspection, do a check of the APPU zero datum mark (Ref. AMM TASK 27-51-18-000-001):
 - (a) If the zero datum mark is not aligned, do the manual adjustment of the position pick-off units (Ref. AMM TASK 27-51-00-820-001).

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| R | (b) If the zero datum is aligned, do the adjustment of the flap |
|---|---|
| R | rigged position (Ref. AMM TASK 27-51-00-820-003). Make sure that |
| R | the transmission shafts and the spherical bearings are in the |
| R | correct condition. |
| R | (4) Do the operational test of the flap system (Ref. AMM TASK 27-54-00- |
| R | 710-001). |

- 710-001).
- (5) Get access to the SYSTEM STATUS FLAP page on the multifunctional control and display unit (MCDU). Make sure that NO FAULTS is shown.

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R **ON A/C ALL

TASK 27-51-00-810-820

Flap System Runaway.

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| AMM | 27-50-00-869-006 | Reset of the Wing Tip Brake (WTB) of the Flap System on the Ground |
| AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers (Flap System) |
| AMM | 27-51-00-820-001 | Manual Adjustment of the Position Pick-Off Units |
| AMM | 27-51-19-000-001 | Removal the Feed Back Position Pick-Off Unit |
| AMM | 27-54-00-200-001 | Detailed Visual Inspection of the Transmission Assembly (Including Part of the Transmission in Zone 140) |
| AMM | 27-54-00-710-001 | Operational Test of the Flap System |

3. Fault Confirmation

- A. Analysis.
 - (1) Runaway is a position difference between the two APPU's and the FPPU, or, a flap movement away from the commanded position.
 - (2) For the fault message, FLP 1 RUNAWAY CHECK FLP MECH DRIVE. Access the MENU MODE and set it to SFCC 1.
 - (a) Go to the submenu SYSTEM DATA FLAP.
 - (b) Press the line key 1L to set the PPU page.
 - (c) The SFCC transmits the LH and RH APPU and the FPPU data page(s) to the CFDS.
 - (d) Refer to page block 301 table 3. The LH APPU, the FPPU and RH APPU synchro angles are shown as a decimal value.
 - (e) The selected page is transmitted again every five seconds with refreshed data.

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- (f) The LH and RH APPU values are approximately the same (a difference of not more than 5.2 degrees).
- (3) A runaway is shown if there is a difference between the APPU values, and the FPPU of more than 5.2 degrees. Do the fault isolation.
- (4) For the fault message, FLP 2 RUNAWAY CHECK FLP MECH DRIVE.Do the procedure at Para. 3.A.(1) but for SFCC 2.

4. Fault Isolation

- A. Procedure.
 - (1) Do the BITE test (Ref. AMM TASK 27-51-00-740-002).
 - (a) The BITE gives a "WTBs set in this channel"
 - (2) Do the detailed inspection of the PCU (Ref. AMM TASK 27-54-00-200-001)).
 - (a) During the inspection at Para 4.A.(2).
 - refer to (Ref. AMM TASK 27-51-19-000-001) Figure 402 and identify the FPPU:
 - do a check of the FPPU zero datum mark.
 - if the zero datum marks are NOT aligned. Do (Ref. AMM TASK 27-51-00-820-001).
 - if the zero datum is set
 - do the reset of the wing tip brakes (Ref. AMM TASK 27-50-00-869-006)
 - (3) Do the operational test of the flap system, (Ref. AMM TASK 27-54-00-710-001).
 - (4) Access the FLP ON GROUND FAULTS and check that the ground log is clear.

5. Close-up

A. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-821

Right Flap Interconnecting-Strut Attachment Failure-Detection Sensor Fault

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (38CV)
- SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (40CV)
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| 32-3 | 1-00-810-829 | Right Flap Disconnect Proximity Sensor (38CV, 40CV) |
| AMM | 27-51-00-710-002 | Operational Test of the Flap Interconnecting Strut and the Flap-Attachment Failure-Detection Sensors |
| AMM | 27-51-15-000-002 | Removal of the Proximity-Sensors of the |
| | | Interconnecting Strut |
| AMM | 27-51-15-400-002 | Installation of the Proximity-Sensors of the |
| | | Interconnecting Strut |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 32-69-00-740-001 | BITE Check Landing Gear Control Interface Unit |
| | | (LGCIU) using MCDU to Ensure that Continuous BITE is |
| | | Operative State of the Control of th |
| ASM | 27-51/06 | |
| ASM | 27-51/07 | |

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3. Fault Confirmation

A. Test

- (1) Do a BITE test with the LGCIU given in the CFDS message (Ref. AMM TASK 32-69-00-740-001).
- (2) If the test gives a message that includes the DISC PROX SENSOR (38CV or 40CV), do the fault isolation procedure in (Ref. TASK 32-31-00-810-829).
- (3) If the test does not give a message that includes the DISC PROX SENSOR (38CV or 40CV), but the fault continues, do the fault isolation procedure in Para. 4.

4. Fault Isolation

A. Procedure

(1) Interchange the SFCCs, use (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).

NOTE: This will cause each SFCC to get a new identification.

- (2) Do an operational test of the flap interconnecting strut (Ref. AMM TASK 27-51-00-710-002).
- (3) If the test is OK:
 - (a) Replace the SFCC-1 (21CV) or SFCC-2 (22CV) that was the source of the initial CFDS message.
- (4) If the test is not OK (gives the same CFDS message as the initial CFDS message):
 - (a) Replace the applicable proximity sensor SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (38CV) or SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (40CV), (Ref. AMM TASK 27-51-15-000-002) and (Ref. AMM TASK 27-51-15-400-002).
- (5) If the fault continues, do a check and repair as necessary the aircraft wiring between:
 - the applicable proximity sensor and the related LGCIU, (Ref. ASM 27-51/06) or (Ref. ASM 27-51/07)
 - the applicable LGCIU and the related SFCC, (Ref. ASM 27-51/06) or (Ref. ASM 27-51/07).
 - (a) Do the test given in Para.(2).

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TASK 27-51-00-810-825

Flap System Uncommanded Movement.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - POB Solenoid
 - Pressure-off Brake,
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-50-00-869-006 | Reset of the Wing Tip Brake (WTB) of the Flap System on the Ground |
| AMM | 27-51-00-710-001 | Operational Test of the Wing Tip Brake and the Pressure Off Brake |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-54-52-000-001 | Removal of the Pressure-Off Brake of the Flap Power Control Unit |
| AMM | 27-54-52-400-001 | Installation of the Pressure-Off Brake of the Flap Power Control Unit |
| AMM | 27-54-53-000-002 | Removal of the Solenoid Valves of the Power Control Unit (Flap) |
| AMM | 27-54-53-400-002 | Installation of the Solenoid Valves of the Power Control Unit (Flap) |

3. Fault Confirmation

A. For the fault confirmation, do the fault isolation.

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4. Fault Isolation

A. Procedure

- (1) Do the reset of the WTB's (Ref. AMM TASK 27-50-00-869-006).
 - (a) Do the operational test of the wing tip brake and the pressure-off brake (Ref. AMM TASK 27-51-00-710-001) to find the defective system.
 - (b) Swap the SFCC's (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (c) Do the test (Ref. para 4. A. (1)).
- (2) If the fault moves, replace the SFCC-1 (21CV) or SFCC-2 (22CV) from the initial defective system (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Do the test (Ref. para 4. A. (1)).
- (3) If the fault does not move to the other system:
 - (a) Replace the POB Solenoid of the defective system, (Ref. AMM TASK 27-54-53-000-002) and (Ref. AMM TASK 27-54-53-400-002).
 - (b) Do the test (Ref. para 4. A. (1)).
- (4) If the fault continues:
 - (a) Replace the Pressure-off Brake, (Ref. AMM TASK 27-54-52-000-001) and (Ref. AMM TASK 27-54-52-400-001).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TROUBLE SHOOTING MANUAL

TASK 27-51-00-810-826

Half Speed Operation Detected.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- VALVE BLOCK-FLAP 1 (23CV)

- VALVE BLOCK-FLAP 2 (24CV)
- aircraft wiring
- POB SOLENOID
- Hydraulic Motor of the Flap Power Control Unit
- FILTERS

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

REFERENCE WIT PESIGNATION

No specific 45VDC Isolation Tester
No specific 1 MULTIMETER - STANDARD

B. Referenced Information

REFERENCE DESIGNATION

AMM 27-54-00-710-001 Operational Test of the Flap System

AMM 27-54-52-000-001 Removal of the Pressure-Off Brake of the Flap Power

Control Unit

AMM 27-54-52-400-001 Installation of the Pressure-Off Brake of the Flap

Power Control Unit

AMM 27-54-53-000-001 Removal of the Valve Blocks 23CV, 24CV of the Power

Control Unit (Flap)

AMM 27-54-53-000-002 Removal of the Solenoid Valves of the Power Control

Unit (Flap)

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| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 27-54-53-000-003 | Removal of the Filters of the Valve Blocks | |
| AMM | 27-54-53-400-001 | Installation of the Valve Blocks 23CV, 24CV of the Power Control Unit (Flap) | |
| AMM | 27-54-53-400-002 | <pre>Installation of the Solenoid Valves of the Power Control Unit (Flap)</pre> | |
| AMM | 27-54-53-400-003 | Installation of the Filters of the Valve Blocks | |
| AMM | 27-54-54-000-002 | Removal of the Hydraulic Motor of the Flap Power Control-Unit (6201CM) without the Pressure-Off Brake and the Valve Block Assembly | |
| AMM | 27-54-54-400-002 | Installation of the Hydraulic Motor of the Flap Power Control-Unit (6201CM) without the Pressure-Off Brake and the Valve Block Assembly | |
| ASM | 27-51/02 | • | |
| ASM | 27-51/03 | | |

3. Fault Confirmation

A. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | | OCATION |
|--------|---------------------------------------|-----|---------|
| 49VU | FLIGHT CONTROLS/FLP/CTL AND MONG/SYS1 | 6CV | B07 |
| 12 1VU | FLIGHT CONTROLS/FLP/CTL AND/MONG/SYS2 | 8CV | Q21 |

- B. SFCC Reset and Initialization.
 - (1) At the circuit breakers.
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds.
 - (d) Check the UPPER ECAM and the SD FLT/CTL page for the fault warnings.
 - (e) If the ECAM warning message clears, set the MCDU to MENU MODE and access the FLP ON GROUND FAULTS page and make sure that the ground log is clear.
 - (f) If the ECAM warning and the fault message stay displayed, do the fault isolation.

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4. Fault Isolation

A. Procedure

- (1) Do the operational test of the flaps system (Ref. AMM TASK 27-54-00-710-001)
 - NOTE : For this operational test, it is necessary that the Power Transfer Unit (PTU) is in operation.
- (2) During the test procedure, monitor the ECAM display for the fault indications.
- (3) If the fault indication gives a slow extension or a slow retraction without a hydraulic fault, isolate the PCU and compare the two motor speeds:
 - (a) Stop the SFCC 1 and move the flaps. Measure the extension time.
 - (b) Energize the SFCC 1 and stop the SFCC 2.
 - (c) Move the flaps and measure the extension time.
 - NOTE: The time difference shows the slowest system. The slowest system is the PCU with possible internal friction.
 - (d) During the steps above, if one SFCC is energized and a flap extension starts but the flaps do not move freely:
 Do a check of the POB solenoid circuit (refer to Para 4.A.(4)).
 - (e) If the flaps move freely, go to Para 4.A.(12).
- (4) Do a check of the POB electrical circuit:
 - (a) Refer to (Ref. AMM TASK 27-54-52-000-001) Figure 401/Task 27-54-52-991-001.
 - (b) Find the electrical connector for the VALVE BLOCK-FLAP 1 (23CV) or VALVE BLOCK-FLAP 2 (24CV) POB solenoids and release it.
 - (c) Do a check of the aircraft wiring from the SFCC ARINC tray interface to the POB solenoid electrical connectors 23CV-A/24CV-A (Ref. ASM 27-51/02) and (Ref. ASM 27-51/03).
 - (d) If there is a wiring/interface fault, do the repair.
- (5) If the A/C wiring is satisfactory, do a check of the circuit resistance and isolate the circuit of the fault related solenoid valve.
 - (a) On the valve-block use a MULTIMETER STANDARD and do a check of the resistance between:

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For SFCC1 -23CV = POB pins L and K
SM/275102S01
For SFCC2 -24CV = POB pins L and K
SM/275103S01

- (b) The resistance for the POB solenoid 667C0000-02 must be between 71 ohms and 84 ohms.
- (c) The resistance for the POB solenoid 903A0000-01 must be between 53 ohms and 60 ohms.
- (6) On the valve-block, do a check for circuit isolation:
 - (a) For the POB solenoid, connect the pins L & K together.
 - (b) Connect one test lead of the 45VDC Isolation Tester to the pins LK and the other test lead to pin G.
 - (c) Supply a test signal for 5 seconds and read the shown resistance value.
 - (d) The resistance value must be more than 100 Megohms.
- (7) If the results of one of the two POB SOLENOID tests in Paras 4.A.(5) and (6) are unsatisfactory, replace the POB solenoid (Ref. AMM TASK 27-54-53-000-002) and (Ref. AMM TASK 27-54-53-400-002).
- (8) If the results of one of the two POB SOLENOID tests in Paras 4.A.(5) and (6) are satisfactory, replace the POB related to the defective channel (Ref. AMM TASK 27-54-52-000-001) and (Ref. AMM TASK 27-54-52-400-001).
- (9) Do the test in Para 4.A.(3) and if the flaps do not move freely, replace the Hydraulic Motor of the Flap Power Control Unit (Ref. AMM TASK 27-54-54-000-002) and (Ref. AMM TASK 27-54-54-400-002).
- (10) If the test in Para 4.A.(3) is satisfactory, do the test given in Para 4.A.(1).
- (11) Set the MCDU to MENU MODE and get access to the FLP ON GROUND FAULTS page and make sure that the ground log is clear.
- (12) If the CFDS shows the same fault message, then the fault is with the PCU valve-block.
 - (a) Examine the valve-block FILTERS (Ref. AMM TASK 27-54-53-000-003) and (Ref. AMM TASK 27-54-53-400-003) and clean/replace the examined item.
 - (b) If the fault continues, do the test in Para 4.A.(1) and do a check of the FLP ON GROUND FAULTS page.

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- (c) Examine the VALVE BLOCK-FLAP 1 (23CV) or VALVE BLOCK-FLAP 2 (24CV) and replace the defective item (Ref. AMM TASK 27-54-53-000-001) and (Ref. AMM TASK 27-54-53-400-001).
- (d) Do the test in Para 4.A.(1) and make sure that the ground log is clear.
- (e) Do the SFCC 1 (2) reset (refer to Para 3.B.).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-828

Flaps Command Sensor Unit Failure.

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

- 1. Possible Causes
 - CSU (51CV)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| AMM | 27-50-00-869-006 | Reset of the Wing Tip Brake (WTB) of the Flap System on the Ground |
| AMM | 27-51-17-000-001 | Removal of the Command Sensor Unit (CSU) (51CV) |
| AMM | 27-51-17-400-001 | Installation of the Command Sensor Unit (CSU) (51CV) |
| AMM | 27-54-00-710-001 | Operational Test of the Flap System |
| AMM | 27-80-00-869-004 | Reset of the Wing Tip Brake (WTB) of the Slat System on the Ground |
| AMM | 27-84-00-710-001 | Operational Test of the Slat System |

3. Fault Confirmation

- A. Procedure.
 - (1) This fault has locked the wing tip brakes of the slat and flap system, no fault confirmation is necessary.
 - (a) Do the fault isolation.

4. Fault Isolation

- A. Procedure.
 - (1) Replace the defective CSU (51CV) (Ref. AMM TASK 27-51-17-000-001) (Ref. AMM TASK 27-51-17-400-001), but do not do the operational tests of the flaps and slats.

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- (2) Do the reset of the WTBs of the flaps and slats (Ref. AMM TASK 27-50-00-869-006) and (Ref. AMM TASK 27-80-00-869-004).
- (3) Do the operational test of the flaps and slats (Ref. AMM TASK 27-54-00-710-001) and (Ref. AMM TASK 27-84-00-710-001).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-830

SFCC 1 or 2 Shows a LH or RH Flap Attachment Proximity Sensor as a Misadjustment

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (37CV)
- SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (38CV)
- SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (39CV)
- SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (40CV)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|--|--|
| | | |
| 27-51-00-810-817 | Left Flap Interconnecting-Strut Attachment | |
| | Failure-Detection Sensor Fault | |
| 27-51-00-810-821 | Right Flap Interconnecting-Strut Attachment | |
| | Failure-Detection Sensor Fault | |
| 32-31-00-810-802 | LGCIU Fault | |
| AMM 27-51-00-710-002 | Operational Test of the Flap Interconnecting Strut and the Flap-Attachment Failure-Detection Sensors | |
| AMM 27-51-44-000-002 | Removal of the Proximity-Sensor of the | |
| | Interconnecting Strut | |
| AMM 27-51-44-400-002 | Installation of the Proximity-Sensor of the | |
| | Interconnecting Strut | |
| AMM 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST F/CTL Page | |

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3. Fault Confirmation

A. Test

- (1) Trouble shoot any LGCIU faults (Ref. TASK 32-31-00-810-802) before you continue this procedure (Ref. Chap. 32 Page block 101)
- (2) Do an operational test of the failure detection sensor for the flap attachment (Ref. AMM TASK 27-51-00-710-002).

4. Fault Isolation

A. Procedure

- (1) If there is a proximity sensor misadjustment failure :
 - (a) Refer to the (Ref. AMM TASK 27-51-44-000-002) and (Ref. AMM TASK 27-51-44-400-002), use the removal and installation procedures to do the proximity sensor adjustment.
 - (b) Get access to the SYSTEM REPORT/TEST (Ref. AMM TASK 31-32-00-860-006).
 - (c) Make sure that the SYSTEM STATUS shows NO FAULTS.
- (2) If the fault continues:
 - (a) Replace the applicable proximity sensor
 - SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (37CV)
 - SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (38CV)
 - SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (39CV)
 - SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (40CV)
 - (Ref. AMM TASK 27-51-44-000-002) and (Ref. AMM TASK 27-51-44-400-002)
 - (b) Repeat the test in Para. 3.A.(2).
- (3) If the fault continues do the applicable task for an invalid proximity sensor (Ref. TASK 27-51-00-810-817) or (Ref. TASK 27-51-00-810-821).
 - (a) Repeat the test in Para. 3.A.(2), and make sure that the SYSTEM STATUS shows NO FAULTS.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

EFF: ALL

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TASK 27-51-00-810-831

SFCC 1 No LGCIU 1 Data or SFCC 2 No LGCIU 2 Data.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

1. Possible Causes

- LGCIU-1 (5GA1)
- LGCIU-2 (5GA2)
- SFCC-1 (21CV)
- SFCC-2 (22CV)
- aircraft wiring between the LGCIU 1 ARINC connector and the SFCC 1 (2) ARINC electrical connecter.

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 32-31-71-000-001 | Removal of the LGCIU (5GA1, 5GA2) |
| AMM | 32-31-71-400-001 | Installation of the LGCIU (5GA1, 5GA2) |
| AWM | 32-61-05 | |
| AWM | 32-61-06 | |
| | | |

3. Fault Confirmation

- A. Message Analysis.
 - (1) Access the submenu page "SYSTEM DATA FLAP" and press the line key "2L".
 - (a) The page shown is the "ARINC 429 INPUT STATUS" and is refreshed every 5 seconds.

NOTE : Refer to page block 301 for example of FLAP ARINC INPUT STATUS page.

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- (b) If the ARINC INPUT STATUS page shows LGCIU LABEL *** NO DATA, do the fault isolation.
- (2) If the ARINC INPUT STATUS page shows LGCIU 1 (2) OK.
 - (a) Do the SFCC 1 (2) Reset and Initialization.
- B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|--------|---------------------------------------|--------|----------|
| 49VU | FLIGHT CONTROLS/FLP/CTL AND MONG/SYS1 | 6CV | B07 |
| 12 1VU | FLIGHT CONTROLS/FLP/CTL AND/MONG/SYS2 | 8cv | Q21 |

4. Fault Isolation

- A. SFCC Reset and Initialization.
 - (1) At the circuit breakers.
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds
 - (d) Check the UPPER ECAM and the SD FLT/CTL page for the fault warnings.
 - (e) If the ECAM warning clears, access the FLP ON GROUND FAULTS page and make sure that the ground log is clear.
 - (f) If the checks at Para.4.A.(1)(e) are satisfactory there is no further maintenance action.

B. Procedure,

- (1) Swap the LGCIU 1 with LGCIU 2 (Ref. AMM TASK 32-31-71-000-001) (Ref. AMM TASK 32-31-71-400-001).
- (2) Access the submenu page "SYSTEM DATA FLAP" and press the line key "2L".
 - (a) The page shown is the "ARINC 429 INPUT STATUS" and is refreshed every 5 seconds.
 - (b) If the ARINC INPUT STATUS page shows "LGCIU 1 (2) OK", then the initial LGCIU 1 (2) is at fault.
- (3) Install the LGCIU 1 and 2 in their initial locations and replace the unserviceable LGCIU-1 (5GA1) LGCIU-2 (5GA2) . Refer to Para. 4.B.(1).

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- (4) Go to the submenu page "SYSTEM DATA FLAP" and access the "ARINC 429 INPUT STATUS" page.
 - (a) If the fault remains in the SFCC 1 (2) the fault is in the SFCC 1(2) interface/circuit.
- (5) Swap the SFCC 1 (2) with SFCC 2 (1) (Ref. AMM TASK 27-51-34-000-001) (Ref. AMM TASK 27-51-34-400-001).
- (6) Go to the submenu page "SYSTEM DATA FLAP" and access the "ARINC 429 INPUT STATUS" page, SFCC 1 and then SFCC 2.
 - (a) If the fault moves with the SFCC 1 (2) to the SFCC 2 (1) position, the fault is in the SFCC 1 (2) input interface.
- (7) Instal the SFCC 1 and 2 in their initial locations and replace the unserviceable SFCC-1 (21CV) SFCC-2 (22CV) Refer to Para. 4.A.(3).
 - (a) Do Para. 4.A.(6). If the fault remains in the SFCC 1 (2) interface/circuit.
- (8) Do a check of the aircraft wiring between the LGCIU 1 ARINC connector and the SFCC 1 (2) ARINC electrical connecter. (Ref. AWM 32-61-05) (Ref. AWM 32-61-06).
- (9) If there is a fault repair the wiring/interface.
- (10) Do the BITE test as in Para. 3.A.(2) and Para. 3.A.(4).
 - (a) Set the MCDU to MENU MODE and access the FLAP ON GROUND FAULTS page and make sure that the ground log is clear.

5. Close-up

A. Put the aircraft back to its initial configuration.

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TROUBLE SHOOTING MANUAL

TASK 27-51-00-810-832

SFCC 1 FLP 1 No ADIRU 1 Data or SFCC 2 FLP 2 No ADIRU 1 Data.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - ADIRU-1 (1FP1)
 - aircraft wiring
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|------------|--|--|--|
| AMM | 27-51-34-000-001 27-51-34-400-001 31-32-00-860-006 | Removal of the SFCC (21CV,22CV) Installation of the SFCC (21CV,22CV) Procedure to Get Access to the SYSTEM REPORT/TEST | |
| AMM AMM | 34-12-34-000-001 34-12-34-400-001 27-51/08 | F/CTL Page Removal of the ADIRU (1FP1, 1FP2, 1FP3) Installation of the ADIRU (1FP1, 1FP2, 1FP3) | |

- 3. Fault Confirmation
 - A. Test
 - (1) At the ADIRU 1 CDU, set the OFF/NAV/ATT selector switch to NAV.
 - (2) At the MCDU, set the MENU MODE and get access to the SYSTEM REPORT/TEST F/CTL page (Ref. AMM TASK 31-32-00-860-006).
 - (a) Get access to the SFCC 1 (2) SYSTEM DATA FLAP page and push the line key adjacent to the ARINC 429 INPUT STATUS indication:
 - if the ARINC input status shows ADIRU 1 LABEL *** NO DATA, do the Fault Isolation Procedure.

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4. Fault Isolation

A. Procedure

- (1) Interchange the SFCC 1 (2) with SFCC 2 (1) (Ref. AMM TASK 27-51-34-000-001) (Ref. AMM TASK 27-51-34-400-001).
- (2) Do the test given in Para. 3.A:
 - (a) If the fault does not continue, replace the initial SFCC-1 (21CV) (SFCC-2 (22CV)) (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (b) If the fault continues, replace the ADIRU-1 (1FP1) (Ref. AMM TASK 34-12-34-000-001) and (Ref. AMM TASK 34-12-34-400-001).
- (3) Do the test given in Para. 3.A.if the fault continues, do the next step.
- (4) Do a check and repair the aircraft wiring (Ref. ASM 27-51/08).
- (5) Do the test given in Para. 3.A.

EFF: ALL

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TASK 27-51-00-810-833

Flap Position Indication Disagree

1. Possible Causes

- FWC-1 (1WW1)
- FWC-2 (1WW2)
- FLAP-PCU (6201CM)
- PPU-INSTRUMENTATION (IPPU) (3CN)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-54-51-000-001 | Removal of the Power Control Unit 6201CM of the Flap System | |
| AMM | 27-54-51-400-001 | Installation of the Power Control Unit 6201CM of the Flap System | |
| AMM | 27-55-11-000-001 | Removal of the Instrumentation Position Pick-Off Unit | |
| AMM | 27-55-11-400-001 | <pre>Installation of the Instrumentation Position Pick-Off Unit</pre> | |
| AMM | 31-53-34-000-001 | Removal of the Flight Warning Computer (FWC) (1WW1,1WW2) | |
| AMM | 31-53-34-400-001 | <pre>Installation of the Flight Warning Computer (FWC) (1WW1,1WW2)</pre> | |
| ASM | 27-55/01 | | |

3. Fault Confirmation

A. Make sure of the apparently incorrect Slat/Flap position indications on the ECAM display.

4. Fault Isolation

- A. If the apparently incorrect Slat/Flap position indications show on the ECAM display:
 - Pull circuit breaker of FWC 1 (1CN):
 - (1) If the fault does not continue:
 - Replace the FWC 1 (1WW1) (Ref. AMM TASK 31-53-34-000-001) and (Ref. AMM TASK 31-53-34-400-001) FWC-1 (1WW1).
 - Reset the circuit breaker of FWC 1 (1CN).

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- (a) If the fault continues:
 - Change the electrical connector 3CN-A with 3CN-B.
 - 1 If the fault does not continue:
 - Replace the PPU-INSTRUMENTATION (IPPU) (3CN) (Ref. AMM TASK 27-55-11-000-001) and (Ref. AMM TASK 27-55-11-400-001).
 - 2 If the fault continues:
 - Change back the electrical connector 3CN-A with 3CN-B
 - Do a check for 26VAC at the electrical connector 3CN-A/A,B.
 - a If the voltage is correct:
 - Do a check and repair the aircraft wiring from IPPU (3CN) A/C,D,E to the FWC 1 (1WW1) AA/13B,13C,13D
 - Do a check and repair the aircraft wiring from IPPU (3CN) B/C,D,E to the FWC 2 (1WW2) AD/13F,13G,13H (Ref. ASM 27-55/01).
 - b If the voltage is not correct:
 - Do a check and repair the aircraft wiring from IPPU (3CN) A/A,B to the circuit breaker (1CN) and the ground
 - Do a check and repair the aircraft wiring from IPPU (3CN) B/A,B to the breaker (2CN) and ground (Ref. ASM 27-55/01).
- (2) If the fault continues:
 - Pull the circuit breaker of FWC 1 (1CN) and FWC 2 (2CN):
 - (a) If the fault does not continue:
 - Replace the FWC-1 (1WW1) and FWC-2 (1WW2) (Ref. AMM TASK 31-53-34-000-001) (Ref. AMM TASK 31-53-34-400-001)
 - Reset the circuit breaker of FWC 1 (1CN) and FWC 2 (2CN).
 - 1 If the fault continues:
 - Replace the PPU-INSTRUMENTATION (IPPU) (3CN) (Ref. AMM TASK 27-55-11-000-001) and (Ref. AMM TASK 27-55-11-400-001).
 - (b) If the fault continues:
 - Replace the FLAP-PCU (6201CM) (Ref. AMM TASK 27-54-51-000-001) and (Ref. AMM TASK 27-54-51-400-001).

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TASK 27-51-00-810-834

SFCC 1 FLP 1 no CFDIU Data or SFCC 2 FLP 2 no CFDIU Data, Fault Related to the SFCC Arinc Input

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- aircraft wiring between the CFDIU ARINC connector and the SFCC 1 (2) ARINC electrical connector.

2. Job Set-up Information

A. Referenced Information

REFERENCE

DESIGNATION

AMM 27-51-34-000-001 Removal of the SFCC (21CV,22CV)
AMM 27-51-34-400-001 Installation of the SFCC (21CV,22CV)

AWM 27-51-21

AWM 27-51-22

3. Fault Confirmation

- A. Message Analysis
 - (1) This fault confirmation is for the SFCC 1 and SFCC 2.
 - (a) For the CFDIU BUS 3 and the CFDIU BUS 4 data transmission faults, refer to P. Block 201 chapter 31-32-00.
 - (2) The fault message is generated by the SFCC 1 (2) if the CFDIU BUS#3 (CFDIU BUS#4) supplies no data.
 - (a) Set the MCDU to MENU MODE and go to the FLAP ARINC INPUT STATUS page.
 - (b) If the CFDIU displays the message: 'WAIT FOR SYSTEM RESPONSE'on the MCDU scratchpad and then replaces the message with: 'NO RESPONSE PRESS RETURN'
 - do the CFDIU troubleshooting procedure (refer to the TSM P. Block 201 chapter 31-32-00).

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- (c) If the FLAP prompt does not appear (FLAP MENU NOT AVAILABLE ON CFDIU), do the troubleshooting task TSM 27-51-00-810-844.
- (d) If access to the SFCC 1 (2) SYSTEM DATA is possible, go to the FLAP ARINC INPUT STATUS page.
- (e) If the FLAP ARINC INPUT STATUS page shows CFDIU LABEL *** NO DATA, do the fault isolation procedure in Para 4.
- (f) If the FLAP ARINC INPUT STATUS page shows CFDIU OK, do the SFCC Reset and Initialization Para.4.A. and 4.B.
- (g) Set the MCDU to MENU MODE and go to the FLAP ON GROUND FAULTS page and make sure that the ground log is clear.

4. Fault Isolation

A. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | | LOCATION |
|-------|---------------------------------------|-----|----------|
| 49VU | FLIGHT CONTROLS/FLP/CTL AND MONG/SYS1 | 6CV | B07 |
| 121VU | FLIGHT CONTROLS/FLP/CTL AND/MONG/SYS2 | 8CV | Q21 |

- B. SFCC Reset and Initialization.
 - (1) At the circuit breakers.
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds.
 - (d) Check the UPPER ECAM and the SD FLT/CTL page for the fault warnings.
 - (e) If the ECAM warning message clears, set the MCDU to MENU MODE and access the FLP ON GROUND FAULTS page and make sure that the ground log is clear.
 - (f) If the ECAM warning and the fault message stay displayed, do the procedure at Para.4.C.

C. Procedure

- (1) Interchange the SFCC 1 (2) with SFCC 2 (1) (Ref. AMM TASK 27-51-34-000-001) (Ref. AMM TASK 27-51-34-400-001).
 - (a) If the fault moves with the SFCC 1 (2) to the SFCC 2 (1) position, the fault is in the SFCC 1 (2).

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- (2) Put the SFCC 1 (2) and 2 (1) back in their initial locations and replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)) (refer to Para. 4.A.(1)).
 - (a) If the fault remains in the SFCC 1 (2) the fault is in the SFCC 1 (2) interface/circuit or CFDIU.
- (3) Do a check of the aircraft wiring between the CFDIU ARINC connector and the SFCC 1 (2) ARINC electrical connector. (Ref. AWM 27-51-21) (Ref. AWM 27-51-22).
- (4) If there is no continuity, repair the wiring/interface.
- (5) Do the reset as in Para. 3.A.(2)(c).
 - (a) Set the MCDU to MENU MODE and go to the FLAP ON GROUND FAULTS page. Make sure that the ground log is clear.
- (6) If the fault stays, the fault is with the circuit interface to the CFDIU (refer to TSM P. Block 201 34-12-00).

5. Close-up

A. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-835

Electrical Power to the FLP 1 WTB Monitored to Below 14Vdc Electrical Power to the FLP 2 WTB Monitored to Below 14Vdc

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.
- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - A/C wiring/interface between SFCC 1 (2) and the WTB.
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers (Flap System) | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) | |
| ASM | 24-68/12 | | |
| ASM | 24-68/13 | | |
| ASM | 27-51/01 | | |
| ASM | 27-51/08 | | |

3. Fault Confirmation

- A. SFCC System Bite WTB Power Test.
 - (1) Do a BITE test on the SFCC 1 (2) (Ref. AMM TASK 27-51-00-740-002). The fault data" WTB electrical power off" is displayed.
 - (2) Do the fault isolation.

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4. Fault Isolation

A. Table of the circuit breakers used in this procedure:

PANEL DESIGNATION IDENT. LOCATION

121VU FLIGHT CONTROLS/WTB/FLP/SYS2 12CV P20
122VU FLIGHT CONTROLS/WTB/FLP/SYS1 10CV S07

B. Procedure

- (1) At the circuit breakers.
 - (a) Examine the C/B for integrity.
 - (b) Do a check of the A/C HOT BUS 28VDC supply. (Ref. ASM 24-68/12) (Ref. ASM 24-68/13)
 - (c) If the fault is found at steps 4.A.(1)(a) and/or (b), do the repair and do the test at step 3.A.(1).
- (2) If the fault continues.
 - (a) Swap the SFCC 1 and SFCC 2. (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (b) If the fault moves with SFCC 1(2).
 - (c) Return the SFCC 1 (2) to their initial locations.
 - (d) Replace the unserviceable SFCC-1 (21CV) or SFCC-2 (22CV).
- (3) Do the BITE test of the SFCC 1 (2) Ref. Step 3.A.(1).
- (4) If the fault continues, do a check of the A/C wiring/interface between SFCC 1 (2) and the WTB. (Ref. ASM 27-51/01) (Ref. ASM 27-51/08)
- (5) If there is a wiring/interface fault, do the repair.
- (6) Do the BITE test.Ref 3.A.(1).

5. Close-up

A. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-836

FLP LH WTB BLU Solenoid 33CV or Open or Short Circuit to SFCC 1 FLP LH WTB YEL Solenoid 33CV or Open or Short Circuit to SFCC 2

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- WING TIP BRAKE (33CV)
- SFCC-1 (21CV)
- SFCC-2 (22CV)
- WTB Solenoid Valve
- aircraft wiring

Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

______ REFERENCE **QTY DESIGNATION**

No specific 45VDC Isolation Tester No specific 1 MULTIMETER - STANDARD

B. Referenced Information

REFERENCE **DESIGNATION**

AMM 27-51-00-740-002 Bite Test of the Slat and Flap Control Computers (Flap System) AMM 27-51-34-000-001 Removal of the SFCC (21CV,22CV)

27-51-34-400-001 Installation of the SFCC (21CV,22CV) AMM 27-51-51-000-001 Removal of the Flap Wing-Tip Brake AMM

AMM 27-51-51-000-002 Removal of the Solenoid Valves of the Flap Wing-Tip

Brake (WTB)

AMM 27-51-51-400-001 Installation of the Flap Wing-Tip Brake

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EFERENCE DESIGNATION

AMM 27-51-51-400-002

Installation of the Solenoid Valves of the Flap Wing-Tip Brake (WTB)

ASM 27-51/06

ASM 27-51/07

3. Fault Confirmation

A. Test

- (1) Do a BITE test on the SFCC 1 or SFCC 2, identified in the failure message (Ref. AMM TASK 27-51-00-740-002).
- (2) If the failure message LH WTB SOLENOID OPEN CIRCUIT (DISCONNECT) or LH WTB SOLENOID SHORT CIRCUIT is shown, do the fault isolation procedure in Para. 4.A.

4. Fault Isolation

A. Procedure

<u>CAUTION</u>: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

- (1) Disconnect the applicable electrical connector attached to the wing tip brake (33CV) solenoid-valve, identified in the failure message:
 - For the LH WTB Blue hydraulic-system solenoid, disconnect the connector 33CV-A
 - For the LH WTB Yellow hydraulic-system solenoid, disconnect the connector 33CV-B.
- (2) Use a MULTIMETER STANDARD to do a check of the resistance between pin A and pin B (Ref. ASM 27-51/06) or (Ref. ASM 27-51/07):
 - The resistance for the solenoid valve 667C0000-02 must be between 71 ohms and 84 ohms
 - The resistance for the solenoid valves 903A0000-01, 1106A0000-1 and 1111A0000-01 must be between 53 ohms and 60 ohms.
- (3) Connect the pins A and B together. Use a 45VDC Isolation Tester to do an isolation test between pins AB and pin C (ground):
 - The resistance value must be more than 100 Megohms.
- (4) Connect the connector disconnected in step (1).
- (5) If the solenoid electrical checks are correct, go to step (7).

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- (6) If the solenoid electrical checks are not correct:
 - Replace the applicable WTB Solenoid Valve (Ref. AMM TASK 27-51-51-000-002) and (Ref. AMM TASK 27-51-51-400-002).
- (7) If the fault continues:
 - Replace the WING TIP BRAKE (33CV), (Ref. AMM TASK 27-51-51-000-001) and (Ref. AMM TASK 27-51-51-400-001).
- (8) If the fault continues, do a check and repair the aircraft wiring between:
 - The applicable SFCC 1 (2) ARINC tray interface
 - The applicable electrical connector 33CV-A or 33CV-B (Ref. ASM 27-51/06) or (Ref. ASM 27-51/07).
- (9) Interchange the SFCC 1 and SFCC 2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (10) If the fault goes to the opposite SFCC position:
 - Replace the unserviceable SFCC-1 (21CV) or SFCC-2 (22CV).
- (11) Do the test in Para. 3.A.

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TASK 27-51-00-810-837

FLP RH WTB BLU Solenoid 34CV or Open or Short Circuit to SFCC 1 FLP RH WTB GRN Solenoid 34CV or Open or Short Circuit to SFCC 2

<u>WARNING</u>: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

1. Possible Causes

- WING TIP BRAKE (34CV)
- SFCC-1 (21CV)
- SFCC-2 (22CV)
- A/C wiring between the SFCC 1 ARINC tray interface and the electrical connector
- 34CVA
- A/C wiring between the SFCC 2 ARINC tray interface and the electrical connector
- 34CVB
- WTB Solenoid Valve

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE DTY DESIGNATION

REFERENCE QTY DESIGNATION

No specific 45VDC Isolation Tester
No specific 1 MULTIMETER - STANDARD

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B. Referenced Information

| RENCE | DESIGNATION |
|------------------|--|
| | |
| 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers (Flap System) |
| 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| 27-51-51-000-001 | Removal of the Flap Wing-Tip Brake |
| 27-51-51-000-002 | Removal of the Solenoid Valves of the Flap Wing-Tip |
| | Brake (WTB) |
| 27-51-51-400-001 | Installation of the Flap Wing-Tip Brake |
| 27-51-51-400-002 | Installation of the Solenoid Valves of the Flap |
| | Wing-Tip Brake (WTB) |
| 27-51/06 | |
| 27-51/07 | |
| | 27-51-34-000-001 27-51-34-400-001 27-51-51-000-001 27-51-51-000-002 27-51-51-400-001 27-51-51-400-002 |

3. Fault Confirmation

- A. SFCC System Bite WTB Solenoid test
 - (1) Do a BITE test on the SFCC 1 (2) (Ref. AMM TASK 27-51-00-740-002). The fault data "RH WTB solenoid open circuit (disconnect)" is displayed, or the fault data "RH WTB solenoid short circuit" is displayed.
 - (2) Do the fault isolation.

4. Fault Isolation

A. Procedure

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

- (1) Disconnect the electrical connector for the WING TIP BRAKE (34CV) solenoids.
- (2) Do a check of the A/C wiring between the SFCC 1 ARINC tray interface and the electrical connector (Ref. ASM 27-51/06) 34CVA (BLUE solenoid).
- (3) Do a check of the A/C wiring between the SFCC 2 ARINC tray interface and the electrical connector (Ref. ASM 27-51/07) 34CVB (GREEN solenoid).
- (4) If there is no continuity, repair the wiring/interface.

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- (5) If the A/C wiring is satisfactory, do a check of the circuit resistance and circuit isolation of the fault indicated solenoid valve.
- (6) On the RH WTB, use a MULTIMETER STANDARD to do a check of the resistance between:
 - (a) For SFCC1 34CVA RH Blue Solenoid Pins A and B (Ref. ASM 27-51/06).
 - (b) For SFCC2 34CVB RH Green Solenoid Pins A and B (Ref. ASM 27-51/07).
 - (c) The resistance for the solenoid valve 667C0000-02 must be between 71 ohms and 84 ohms.
 - (d) The resistance for the solenoid valves 903A0000-01, 1106A0000-01 and 1111A0000-01 must be between 53 ohms and 60 ohms.
- (7) On the RH WTB BLUE solenoid, do a check for circuit isolation:
 - (a) For the BLUE solenoid connect the pins A and B together.
 - (b) Connect one test lead of the 45VDC Isolation Tester to the pins AB for the BLUE solenoid. Connect the other test lead to pin C.
 - (c) Supply a test signal for 5 seconds and read the shown resistance value.
 - (d) The resistance value must be more than 100 Megohms.
 - (e) For the GREEN solenoid, do the steps given in Para (7) again.
- (8) If the WING TIP BRAKE (34CV) does not give the correct results for one of the two tests (given at Paras 4.A.(6) and (7)):
 - Replace the WTB Solenoid Valve (Ref. AMM TASK 27-51-51-000-002) and (Ref. AMM TASK 27-51-51-400-002).
- (9) If the fault continues:
 - Replace the WING TIP BRAKE (34CV) (Ref. AMM TASK 27-51-51-000-001) and (Ref. AMM TASK 27-51-51-400-001).
- (10) Interchange the SFCC 1 and SFCC 2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Get access to the FLP ON GROUND FAULTS and do a check of the ground log.
- (11) If the fault moves with the SFCC 1(2), install the SFCC 1 (2) in its initial location.

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- (12) Replace the unserviceable SFCC-1 (21CV) or SFCC-2 (22CV) (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (13) Do the system BITE test as given in Para 3.A.(1).
- (14) Set the MCDU to MENU MODE and access the FLP ON GROUND FAULTS page.

 Make sure that the ground log is empty.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-51-00-810-839

EFCS Identifies a Loss of Data from the SFCC-1 (2).

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - aircraft wiring between:
- 2. Job Set-up Information
 - A. Referenced Information

AWM 275123W01 AWM 275124W01 AWM 278123W01 AWM 278124W01

AMM 27-51-34-000-001 Removal of the SFCC (21CV,22CV)
AMM 27-51-34-400-001 Installation of the SFCC (21CV,22CV)

- 3. Fault Confirmation
 - A. Select MCDU MENU mode, set the CFDS then A/C CURRENT STATUS or AVIONICS STATUS.
 - (1) Do a check of the STATUS report and look for a SFCC-1 (2) fault on the SDAC, CFDIU, ELAC, FAC and SEC.
 - (2) If these systems identify an SFCC-1 (2) fault, do the fault isolation.
- 4. Fault Isolation
 - A. This fault isolation procedure is for a fault (loss of data) not identified with the SFCC-1 (2) but identified with the related systems.
 - (1) Interchange the SFCC-1 (2) with SFCC-2 (1) (Ref. AMM TASK 27-51-34-000-001), (Ref. AMM TASK 27-51-34-400-001),
 - (2) Do the procedure at Para. 3.A.(1).
 - (3) If the fault does not continue, the fault is in the SFCC-1 (2).
 - (a) Install the serviceable SFCC-2 (1) in its initial location and replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)), Refer to Para. 4.A.(1).

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- (b) Do the procedure at Para. 3.A.(1).
- (4) If the fault continues in the SFCC-1 (2) circuit, do a check of the aircraft wiring between:
 - The SFCC-1 (2) FLAP ARINC connector tray and the BUS connector to 1853VT (SFFC 1 (Ref. AWM 275123W01)) (SFFC 2 (Ref. AWM 275124W01)).
 - The SFFC-1 (2) SLAT ARINC connector tray and the BUS connector to the first terminal blocks (SFFC 1 1862VT and 1833VT (Ref. AWM 278123W01)) (SFFC 2 1862VT and 1842VT (Ref. AWM 278124W01)).
 - (a) If there is a wiring/interface fault, do the repair.
 - (b) Do the procedure at Para. 3.A.(1).
- (5) Access the SFCC-1 (2) FLAP/SLAT ON GROUND FAULTS and make sure that there are no faults.

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TASK 27-51-00-810-840

Flap System Shaft Overspeed.

- 1. Possible Causes
 - ACTUATOR ASSY (6205CM)
 - ACTUATOR ASSY (6211CM)
 - ACTUATOR ASSY (6221CM)
 - ACTUATOR ASSY (6233CM)
 - ACTUATOR ASSY (6255CM)
 - ACTUATOR ASSY (6261CM)
 - ACTUATOR ASSY (6271CM)
 - ACTUATOR ASSY (6283CM)
 - BRAKE-L WING TIP (33CV)
 - BRAKE-R WING TIP (34CV)
- 2. Job Set-up Information
 - A. Fixtures, Tools, Test and Support Equipment

REFERENCE

QTY DESIGNATION

No specific Torque Wrench: range 0.00 to 1.20 m.daN (0.00 to 9.00 lbf.ft)

B. Consumable Materials

REFERENCE DESIGNATION

No specific Titanine JC5A

C. Referenced Information

REFERENCE **DESIGNATION**

AMM 27-50-00-866-008 Extension of the Flaps on the Ground AMM 27-50-00-866-009 Retraction of the Flaps on the Ground Reset of the Wing Tip Brake (WTB) of the Flap System AMM 27-50-00-869-006 on the Ground

27-51-51-000-001 AMM Removal of the Flap Wing-Tip Brake 27-51-51-400-001 AMM

Installation of the Flap Wing-Tip Brake AMM 27-54-00-200-001 Detailed Visual Inspection of the Transmission

Assembly (Including Part of the Transmission in Zone

140)

AMM 27-54-49-000-001 Removal of the Flap Track 1 Actuator 6205CM(6255CM)

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| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| АММ | 27-54-49-000-002 | Removal of the Flap Track 2 Actuator 6211CM(6261CM) |
| AMM | 27-54-49-000-003 | Removal of the Flap Track 3 Actuator 6221CM(6271CM) |
| AMM | 27-54-49-000-004 | Removal of the Flap Track 4 Actuator 6233CM(6283CM) |
| AMM | 27-54-49-400-001 | <pre>Installation of the Flap Track 1 Actuator 6205CM(6255CM)</pre> |
| AMM | 27-54-49-400-002 | <pre>Installation of the Flap Track 2 Actuator 6211CM(6261CM)</pre> |
| AMM | 27-54-49-400-003 | <pre>Installation of the Flap Track 3 Actuator 6221CM(6271CM)</pre> |
| AMM | 27-54-49-400-004 | <pre>Installation of the Flap Track 4 Actuator 6233CM(6283CM)</pre> |
| 27-5 | 1-00-991-001 | Fig. 201 |

3. Fault Confirmation

A. For the fault confirmation do the fault isolation.

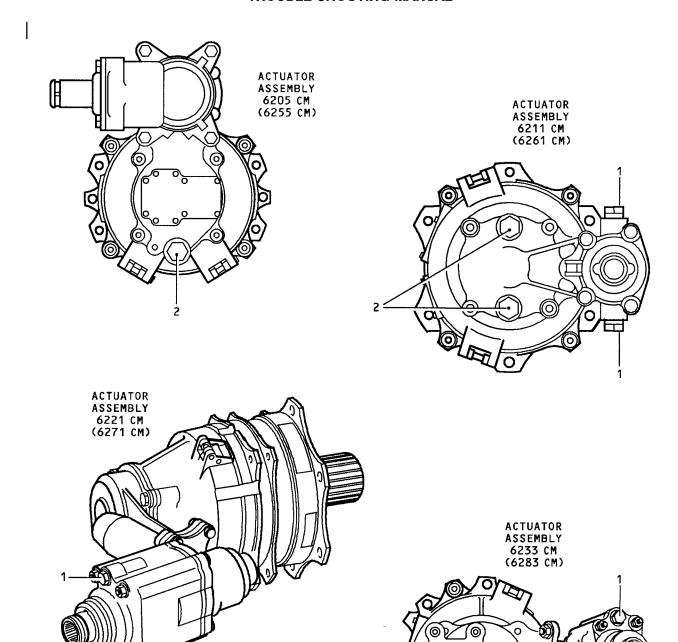
4. Fault Isolation

A. Procedure

- (1) Do the wing tip brake (WTB) reset procedure (Ref. AMM TASK 27-50-00-869-006).
- (2) Do the inspection/check of the flap system (Ref. AMM TASK 27-54-00-200-001). Repair or correct any defect found.
- (3) While the flaps are extended examine the flap actuator assemblies on the identified wing:
 - For the LH wing ACTUATOR ASSY (6205CM) ACTUATOR ASSY (6211CM) ACTUATOR ASSY (6221CM) and ACTUATOR ASSY (6233CM)
 - For the RH wing ACTUATOR ASSY (6255CM) ACTUATOR ASSY (6261CM) ACTUATOR ASSY (6271CM) and ACTUATOR ASSY (6283CM). (Ref. Fig. 201/TASK 27-51-00-991-001)
 - (a) Remove the inspection plugs (1) and (2) on each actuator, clear the grease in the inspection holes and examine for water.
 - (b) Install the inspection plugs (1) and (2) into the actuators:
 - seal the inspection plugs with Titanine JC5A
 - torque the inspection plugs (1) to between 0.36 and 0.44 m.daN
 (31.85 and 38.93 lbf.in)
 - torque the inspection plugs (2) to between 0.54 and 0.66 m.daN (47.78 and 58.40 lbf.in).

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Inspection Plug Location Figure 201/TASK 27-51-00-991-001

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- (c) If water is found replace the defective rotary actuator as follows:
 - for actuator assembly 6205CM (6255CM) (Ref. AMM TASK 27-54-49-000-001) and (Ref. AMM TASK 27-54-49-400-001)
 - for actuator assembly 6211CM (6261CM) (Ref. AMM TASK 27-54-49-000-002) and (Ref. AMM TASK 27-54-49-400-002)
 - for actuator assembly 6221CM (6271CM) (Ref. AMM TASK 27-54-49-000-003) and (Ref. AMM TASK 27-54-49-400-003)
 - for actuator assembly 6233CM (6283CM) (Ref. AMM TASK 27-54-49-000-004) and (Ref. AMM TASK 27-54-49-400-004).
- (d) If no water is found, make sure that the WTB reset is done (Ref. para 4. A.(1)) and move the flaps (Ref. AMM TASK 27-50-00-866-008) and (Ref. AMM TASK 27-50-00-866-009).
- (e) While the flaps move do a check for incorrect noise at the WTB.
- (f) If there is an incorrect noise at the WTB, replace the BRAKE-L WING TIP (33CV) or BRAKE-R WING TIP (34CV) (Ref. AMM TASK 27-51-51-000-001) and (Ref. AMM TASK 27-51-51-400-001).
- (g) If there is no incorrect noise at the WTB, disconnect the transmission shafts on each side of the WTB (Ref. para (3)(f)).
- (4) Make sure that the WTB is easily turned, if it is not easily turned, replace the WTB (Ref. para (3)(f)).

NOTE: The breakout torque of the WTB must not be more than 0.5 NM.

(a) If no fault is found replace the rotary actuator 6211CM (6261CM) at flap track position 2, (Ref para (3)(c)).

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TASK 27-51-00-810-841

Wrong Inhibit Sign From Cargo Door Yellow System.

<u>WARNING</u>: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

- 1. Possible Causes
 - RELAY-SCCB PWR SPLY 3811GX
 - TIME RELAY 3816GX
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE DESIGNATION

AMM 31-32-00-860-006

Procedure to Get Access to the SYSTEM REPORT/TEST F/CTL Page

ASM 29-24/01

- 3. Fault Confirmation
 - A. Test
 - (1) Get access to the SYSTEM REPORT/TEST F/CTL page (Ref. AMM TASK 31-32-00-860-006).
 - (2) Get access to the SFCC-2 flap discrete i/p status page:

NOTE: The cargo door signal status is shown as follows:

- sgoi: 0 = cargo door closed
 sgoi: 1 = cargo door open
- (3) Make sure that the cargo doors are closed.

4. Fault Isolation

- A. Procedure
 - (1) If the SFCC-2 flap dicrete i/p status page shows sgoi: 1:
 - (a) Do a check for 28VDC at the RELAY-SCCB PWR SPLY 3811GX connector pin X1 (Ref. ASM 29-24/01).
 - (b) If there is no 28VDC replace the RELAY-SCCB PWR SPLY 3811GX.
 - (c) If there is 28VDC replace the TIME RELAY 3816GX (Ref. ASM 2924/01).

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- (2) Do the test in para 3A. and make sure that the cargo door indications are correct.
- (3) Get access to the SFCC-2 system status flap, and make sure that the message 'inhibit signal from cargo yellow door system' is not shown.

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TASK 27-51-00-810-842

Flap SFCS Status Message.

- 1. Possible Causes
 - Not applicable
- 2. Job Set-up Information

Not Applicable

- 3. Fault Confirmation
 - A. If the SFCS STATUS MAINTENANCE message has been shown on the ECAM. If there are no flap/slat system fault messages shown on the post flight report, maintenance steps are Not applicable.
- 4. Fault Isolation
 - A. If there are flap/slat system fault messages shown on the post flight report:
 - Do the trouble shooting procedures related to the fault messages.

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TASK 27-51-00-810-843

Flap Flag Indication Does Not Agree With Flap Position

- 1. Possible Causes
 - IPPU-FLAP (3CN)
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE

DESIGNATION

TSM 27-51-00-810-833

Flap Position Indication Disagree

- 3. Fault Confirmation
 - A. Procedure
 - (1) Examine the post flight report for a CFDS fault message with the FIN 3CN A or 3CN B shown.
- 4. Fault Isolation
 - A. Procedure
 - (1) If the FIN 3CN A or 3CN B is shown:
 - (a) This is an IPPU-FLAP (3CN) fault.
 - (b) For the trouble-shooting procedure (Ref. 27 CFDS).
 - (2) If the FIN 3CN A or 3CN B is not shown, do the trouble shooting (Ref. TSM TASK 27-51-00-810-833).

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TASK 27-51-00-810-844

Flap Menu Not Available On The CFDIU, Fault Related to the SFCC ARINC Output

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- RELAY-A/C ON GND (95CV)
- RELAY-A/C ON GND (97CV)
- PROX SNSR R L/G EXT 20GA
- PROX SNSR L L/G EXT 21GA
- PROX SNSR R L/G EXT 22GA
- PROX SNSR L L/G EXT 23GA
- aircraft wiring, installation and pin program wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| 4 MM | 27 54 00 7/0 002 | B'to Took of the Olek and Elec Control Compatible |
| AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers (Flap System) |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| ASM | 27-51/02 | |
| ASM | 27-51/03 | |

3. Fault Confirmation

- A. Test
 - (1) Make sure that the Flap channel 1 (2) is on.
 - (2) Do a BITE test of the applicable SFCC (Ref. AMM TASK 27-51-00-740-002).

4. Fault Isolation

- A. Procedure
 - (1) If the flap menu is not available:
 - Interchange the SFCC's and do again the test in Para. 3.A. on the SFCC-1 (21CV) and the SFCC-2 (22CV).
 - (2) If the fault moves to the other SFCC position, interchange the SFCCs back and replace the SFCC that has the fault (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).

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- (3) If the fault did not move to the other SFCC position, interchange the SFCCs back (refer to Para. (2)).
 - (a) Make sure that there are no landing gear system faults. Main landing gear shock absorber proximity sensor faults will cause this failure.
 - For SFCC 1 PROX SNSR R L/G EXT 20GA and PROX SNSR L L/G EXT 21GA
 - For SFCC 2 PROX SNSR R L/G EXT 22GA and PROX SNSR L L/G EXT 23GA
- (4) If there are landing gear faults, do the test in Para. 3.A.
- (5) If the fault continues:
 - (a) Interchange the RELAY-A/C ON GND (95CV) with the RELAY-A/C ON GND (97CV).
 - (b) Do the test in Para. 3.A. on the SFCC 1 and SFCC 2.
 - (c) If the fault moves to the other system, replace the relay in the system that has the fault.
 - (d) Do the test in Para. 3.A.
- (6) If the fault does not move to the other system, do a check of the aircraft wiring, installation and pin program wiring:
 - For SFCC 1 from C/B 6CV to the LGCIU 1 and from the RELAY A/C ON GND 95CV to SFCC 1 (Ref. ASM 27-51/02).
 - For SFCC 2 from C/B 8CV to the LGCIU 2 and from the RELAY A/C ON GND 97CV to SFCC 2 (Ref. ASM 27-51/03).
 - (a) If necessary, repair the defective items.
 - (b) Do the test in Para. 3.A.
- (7) If the fault continues, make sure that no installation pin program fault occurred (refer to the TSM 27-51-00-810-846).

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TASK 27-51-00-810-845

Flaps SFCC Flap Channel Failure

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-51-00-710-001 | Operational Test of the Wing Tip Brake and the |
| | | Pressure Off Brake |
| AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers |
| | | (Flap System) |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-54-00-710-001 | Operational Test of the Flap System |
| AMM | 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST |
| | | F/CTL Page |

3. Fault Confirmation

- A. Fault monitor action.
 - (1) Possible causes of the SFCC 1 (2) reported fault are as follows:
 - (a) The non-validity of the synchro-excitation power generation.
 - (b) The SFCC primary/secondary internal power supply fault.
 - (c) Automatic integrity test detected fault conditions:
 - processor checks
 - ROM and RAM tests
 - processor I/O tests
 - consolidation logic tests.

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(d) A cross lane monitoring fault.

B. Procedure

- (1) Set the MCDU to the MENU MODE and access the LAST LEG REPORT for a list of fault messages (Ref. AMM TASK 31-32-00-860-006).
- (2) Do a BITE test with the applicable SFCC (Ref. AMM TASK 27-51-00-740-002).
- (3) If the MCDU shows a failure message, do the Fault Isolation procedure.

4. Fault Isolation

A. Procedure

- (1) Interchange the SFCC-1 with the SFCC-2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (2) If the failure moves with the SFCC, replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV).
- (3) If the failure does not move with the SFCC or there is no fault found, do the Operational Test of the Flap System (Ref. AMM TASK 27-54-00-710-001).
- (4) If a fault is found, interchange the SFCC-1 with the SFCC-2.
- (5) Do the Operational Test of the Flap System again.
- (6) If the fault moves with the SFCC, replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV).
- (7) If the fault does not move with the SFCC, refer to P. Block 101 for the related system trouble-shooting procedure.
- (8) If there is no fault found, do the Operational Test of the Wing-Tip Brake and the Pressure-Off Brake (Ref. AMM TASK 27-51-00-710-001).
- (9) If a fault is found, interchange the SFCC-1 with the SFCC-2.
- (10) Do the Operational Test of the Wing-Tip Brake and the Pressure-Off Brake again.
- (11) If the fault moves with the SFCC, replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV).
- (12) If the fault does not move with the SFCC, refer to P. Block 101 for the system trouble-shooting procedure.

EFF: ALL

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TASK 27-51-00-810-846

Flap Pin Program Disagree Installation Fault

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| 27-81-00-810-833 ASM 275108S01 | Slats - Pin Program Disagree Installation Fault |
| AMM 27-51-34-000-001 AMM 27-51-34-400-001 | Removal of the SFCC (21CV,22CV) Installation of the SFCC (21CV,22CV) |
| AMM 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST F/CTL Page |

3. Fault Confirmation

A. Test

- (1) Get access to the SYSTEM REPORT/TEST F/CTL page, (Ref. AMM TASK 31-32-00-860-006), press the line key for the applicable SFCC menu, and press the line key for FLP class 3 faults.
- (2) If you can get access to the SFCC menu, and FLP class 3 faults, the fault has gone. The system is also serviceable if "PIN PROGRAM DISAGREE INSTALLATION" is shown in class 3 faults, no further action is required. The fault has gone but it has been recorded.
- (3) If you cannot get access to the SFCC menu, do the fault isolation procedure.

4. Fault Isolation

A. Procedure

- (1) If the message "pin prog disagree" is shown, go to Para. (3).
- (2) If the message "pin prog disagree flp" is shown, go to Para. (4).

<u>NOTE</u>: If the message "pin prog disagree slt" is shown, go to the procedure (Ref. TASK 27-81-00-810-833).

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- NOTE: During this procedure when you interchange, remove or install an SFCC, the AMM procedures (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001) must be used.
- (3) If you cannot get access to the SFCC menu and the message "pin prog disagree" is shown:
 - (a) Interchange the SFCC's and try to access the SFCC menu of the two SFCC's, Ref. Para. 3. A. (1).
 - (b) If the fault moves to the other SFCC position:
 - 1 Put the SFCC's back in their initial position.
 - 2 Replace the SFCC-1 (21CV) or SFCC-2 (22CV) that has the fault.
 - 3 Do the test in Para. 3. A. (1).
 - (c) If the fault does not move to the other SFCC position:
 - 1 Put the SFCC's back in their initial positon.
 - 2 Do a check of the aircraft wiring at the SFCC flap channel (Ref. ASM 275108S01).
 - 3 Repair any defect found.
 - 4 Do the test in Para. 3. A. (1).
- (4) If the message "pin prog disagree flp" is shown:
 - (a) Interchange the SFCC's.
 - (b) Do the test in Para. 3. A. (1).
 - (c) If the fault moves to the other SFCC position:
 - 1 Put the SFCC's back in their initial position.
 - 2 Replace the SFCC that has the fault.
 - 3 Do the test in Para. 3. A. (1).
 - (d) If the fault does not move to the other SFCC position:
 - 1 Put the SFCC's back in their initial position.
 - 2 Do a check of the aircraft wiring, Ref. Para. (3) (c)2.
 - 3 Repair any defect found.
 - 4 Do the test in Para. 3. A. (1).

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TASK 27-51-00-810-847

Standard of SFCC-1 and SFCC-2 Does Not Agree With Aicraft Type

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-51-34-000-001 AMM 27-51-34-400-001 AMM 31-32-00-860-001 | Removal of the SFCC (21CV,22CV) Installation of the SFCC (21CV,22CV) Procedure to Get Access to the SYSTEM REPORT/TEST Menu Page |

3. Fault Confirmation

**ON A/C 201-225, 451-475, 551-599,

A. Procedure

- (1) Get access to the Flight Controls (F/CTL) SYSTEM REPORT/TEST page (Ref. AMM TASK 31-32-00-860-001).
- (2) Do a check of the Part Numbers (P/N) of the SFCC-1 (21CV) and the SFCC-2 (22CV):
 - (a) Push in the line key adjacent to SFCC-1.
 - (b) Push in the line key adjacent to LRU IDENT.
 - (c) Record the manufacturers P/N of the SFCC-1.
 - (d) Push in the line key adjacent to RETURN.
 - (e) Do steps (a) to (c) for the SFCC-2.
 - (f) Push in the line key adjacent to RETURN until the F/CTL SYSTEM REPORT/TEST page is shown.

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- (3) Compare the P/Ns of the SFCC-1 and the SFCC-2 with the permitted interchangeability given in the IPC and the permitted mixability given in the SIL 27-116:
 - if the mix of SFCC P/Ns does not agree with those permitted, do the fault isolation procedure in Para 4.A.
- R **ON A/C 227-227, 229-275, 426-450, 701-749,

A. Procedure

- (1) Get access to the Flight Controls (F/CTL) SYSTEM REPORT/TEST page (Ref. AMM TASK 31-32-00-860-001).
- (2) Do a check of the Part Numbers (P/N) of the SFCC-1 (21CV) and the SFCC-2 (22CV):
 - (a) Push in the line key adjacent to SFCC-1.
 - (b) Push in the line key adjacent to LRU IDENT.
 - (c) Record the manufacturers P/N of the SFCC-1.
 - (d) Push in the line key adjacent to RETURN.
 - (e) Do steps (a) to (c) for the SFCC-2.
 - (f) Push in the line key adjacent to RETURN until the F/CTL SYSTEM REPORT/TEST page is shown.
- (3) Compare the P/Ns of the SFCC-1 and the SFCC-2 with the permitted interchangeability given in the IPC and the permitted mixability given in the SIL 27-116:
 - if the mix of SFCC P/Ns does not agree with those permitted, do the fault isolation procedure in Para 4.A.

**ON A/C 276-299, 476-499, 503-549,

A. Procedure

- (1) Get access to the Flight Controls (F/CTL) SYSTEM REPORT/TEST page (Ref. AMM TASK 31-32-00-860-001).
- (2) Do a check of the Part Numbers (P/N) of the SFCC-1 (21CV) and the SFCC-2 (22CV):
 - (a) Push in the line key adjacent to SFCC-1.
 - (b) Push in the line key adjacent to LRU IDENT.
 - (c) Record the manufacturers P/N of the SFCC-1.

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- (d) Push in the line key adjacent to RETURN.
- (e) Do steps (a) to (c) for the SFCC-2.
- (f) Push in the line key adjacent to RETURN until the F/CTL SYSTEM REPORT/TEST page is shown.
- (3) Compare the P/Ns of the SFCC-1 and the SFCC-2 with the permitted interchangeability given in the IPC and the permitted mixability given in the SIL 27-116:
 - if the mix of SFCC P/Ns does not agree with those permitted, do the fault isolation procedure in Para 4.A.

**ON A/C ALL

4. Fault Isolation

A. Procedure

(1) Replace the SFCC1 and/or the SFCC2 with the P/N that is not permitted, with a permitted P/N, (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-51-00-810-848

Flaps - Torque Limiter Tripped Without a Cockpit Effect

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

- 1. Possible Causes
 - torque limiter/s
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|-----------|-------------|

27-51-00-810-810 Flap System Jam.

AMM 27-50-00-866-010 Reset of the Torque Limiters of the Flap System on

the **G**round

AMM 27-54-00-710-001 Operational Test of the Flap System

- 3. Fault Confirmation
 - A. Test
 - (1) A test is not necessary, do the fault isolation procedure.
- 4. Fault Isolation
 - A. Procedure
 - (1) Identify and reset the applicable torque limiter/s of the flap system (Ref. AMM TASK 27-50-00-866-010).
 - (2) Do an operational test of the flap system (Ref. AMM TASK 27-54-00-710-001).
 - (3) If the fault occurs again do the task (Flap System Jam) (Ref. TASK 27-51-00-810).

EFF: ALL

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TASK 27-51-00-810-849

Flaps - WTB Applied During APU Start With The Batteries

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| AMM | 27-50-00-869-006 | Reset of the Wing Tip Brake (WTB) of the Flap System on the Ground |
| AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers (Flap System) |

3. Fault Confirmation

- A. Test
 - (1) When you start the APU with the batteries, the warning message "F/CTL FLAPS LOCKED" can show on the upper ECAM DU. Also, the Wing Tip Brakes (WTB) are applied.

NOTE: The ECAM message "F/CTL SLATS LOCKED" can also show.

- 4. Fault Isolation
 - A. Procedure
 - (1) Do a reset of the WTBs of the Flap System (Ref. AMM TASK 27-50-00-869-006).
 - (2) Do a BITE test of the SFCC (Ref. AMM TASK 27-51-00-740-002):
 - If the test gives a fault message, do the trouble shooting procedure related to this fault message.

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TASK 27-51-00-810-850

Flaps - SFCC TEST Gives the Message NO FAULTS BUT

- 1. Possible Causes
- 2. Job Set-up Information

Not Applicable

- 3. Fault Confirmation
 - A. Test
 - (1) Do Para. 4. if the FLAPS SFCC TEST gives the message NO FAULTS BUT, with any of the messages that follow:
 - OTHER SFCC ARM SIGNAL NOT TESTED

or

- WTB SET
 - and/or
- NO WTB POWER
- LH WTB SOLENOID S/C (or O/C)
- RH WTB SOLENOID S/C (or O/C)
- LH APPU FAULT
- FPPU FAULT
- RH APPU FAULT
- 4. Fault Isolation
 - A. Procedure
 - (1) At the MCDU access the CFDS MENU then LAST LEG REPORT to see if a related fault message was given during normal system operation. The table that follows shows the relationship between the messages given during the SFCC TEST and normal mode, it also gives the related trouble shooting task. Do Para. 4.A. of the applicable task.
 - NOTE: A fault message given during normal mode will make sure that the fault identified during the SFCC TEST is correct. It will also give the FIN of the defective component.

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| CFDS LAST LEG REPORT MESSAGE | TS TASK IN 27-51-00 |
|---------------------------------|--|
| FLP 1 (2) NO SFCC 2 (1) DATA | 804 |
| FLP 1 (2) WTB C/B 10CV (12CV) | 835 |
| | 836 |
| | 837 |
| | 809 |
| FLP FPPU 27CV OR WIRING TO | 808 |
| • • | 809 |
| | MESSAGE FLP 1 (2) NO SFCC 2 (1) DATA FLP 1 (2) WTB C/B 10CV (12CV) FLP LH WTB BLU (YEL) SOLENOID 33CV OR WIRING TO FLP 1 (2) FLP RH WTB BLU (GRN) SOLENOID 34CV OR WIRING TO SLT 1 (2) LH FLP APPU 29CV OR WIRING TO FLP 1 (2) FLP FPPU 27CV OR WIRING TO FLP 1 (2) RH FLP APPU 30CV OR WIRING TO |

 $\underline{\underline{\text{NOTE}}}$: The LAST LEG REPORT messages shown are for SFCC1, the items in () are for SFCC 2.

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TASK 27-51-00-810-851

Flaps - SFCC 1 and SFCC 2 Show PCU Valveblock Fault Message (23CV, 24CV)

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING GEAR.

- 1. Possible Causes
 - flaps control lever is out of detent
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE DESIGNATION

AMM 27-51-00-740-002 Bite Test of the Slat and Flap Control Computers (Flap System)

- 3. Fault Confirmation
 - A. Test
 - (1) At the ECAM Control Panel, push the STS P/BSW to show the status page on the lower ECAM DU:
 - if a FLAPS status message is not shown, there is no flaps fault
 - if a FLAPS status message is shown, do the fault isolation procedure given in Para. 4.
- 4. Fault Isolation
 - A. Procedure
 - (1) Make sure that the flaps control lever is in the correct detent and reset it if necessary:
 - if the FLAPS status message has gone, there is no fault
 - if the FLAPS status message stays, do the next step.

NOTE: When the flaps control lever is out of detent, SFCC1 and SFCC2 will find that the lever position and the flap position (signal from the Valveblock PPU) disagree. The FLP 1 (2) PCU VALVEBLOCK 23CV (24CV) message will then be given by each SFCC

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and the ECAM message FLAPS FAULT will be shown. This flight control configuration error can be cleared by a reset of the flaps control lever.

- (2) Do a BITE test of the SFCC1 and SFCC2 flaps system (Ref. AMM TASK 27-51-00-740-002):
 - if the test gives a fault message, do the trouble shooting procedure related to this message.

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TASK 27-51-00-810-852

Flaps - SFCC 1 (2) Gives PCU Valveblock 23CV (24CV) Valve Sensor Message

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- VALVE BLOCK-FLAP 1 (23CV)
- VALVE BLOCK-FLAP 2 (24CV)
- valve sensor
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| | | | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) | |
| AMM | 27-54-53-000-001 | Removal of the Valve Blocks 23CV, 24CV of the Power Control Unit (Flap) | |
| AMM | 27-54-53-400-001 | Installation of the Valve Blocks 23CV, 24CV of the Power Control Unit (Flap) | |
| AMM | 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST F/CTL Page | |
| ASM | 27-51/02 | | |
| ASM | 27-51/03 | | |

3. Fault Confirmation

A. Test

- (1) At the MCDU, access the SYSTEM REPORT / TEST page and select F/CTL> (Ref. AMM TASK 31-32-00-860-006).
- (2) Select <SFCCX (where X is the No. of the applicable SFCC).

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- (3) Select <SFCC/TEST, to do the SFCC BITE test:</p>
 - if the fault message FLP1 (2) PCU VALVEBLOCK 23CV (24CV) VALVE SENSOR 27-54-53 is shown, do the Fault Isolation Procedure given in Para. 4.

NOTE: This message is not a CFDS Normal Mode message and is only shown in SFCC reports.

4. Fault Isolation

A. Procedure

- (1) Interchange the SFCC1 and SFCC2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (2) Do the test given in Para. 3.A:
 - (a) If the fault goes, replace the initial SFCC-1 (21CV) or SFCC-2 (22CV), (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (b) If the fault continues, replace the applicable VALVE BLOCK-FLAP 1 (23CV) or VALVE BLOCK-FLAP 2 (24CV), (Ref. AMM TASK 27-54-53-000-001) and (Ref. AMM TASK 27-54-53-400-001).

NOTE: The valve sensor is not a Line Replaceable Unit (LRU) and it is necessary to replace the valve block.

(3) If the fault continues:

- (a) Do a check of the aircraft wiring and repair as necessary (Ref. ASM 27-51/02) or (Ref. ASM 27-51/03).
- (b) Do the test given in Para. 3.A.

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ALL

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TASK 27-51-00-810-853

Flap Attachment ECAM Warning (FLT/CTL - FLAP ATTACH SENSOR)

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- LGCIU-1 (5GA1)
- LGCIU-2 (5GA2)
- SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (37CV)
- SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (39CV)
- SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (38CV)
- SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (40CV)

2. Job Set-up Information

A. Referenced Information

| | DESIG | RENCE | REFERENC |
|---|--|----------------------------------|---------------------------------|
| | | | |
| d SFCC 2. Loss of | | 1-00-810-806 | 27-51-00 |
| | | | |
| C 2 No LGCIU 2 Data. | 31 SFCC | 1-00-810-831 | 27-51-00 |
| ty Sensor (37CV, 39CV) | 28 Left | 1-00-810-828 | 32-31-00 |
| ity Sensor (38CV, 40CV) | 29 Right | 1-00-810-829 | 32-31-00 |
| ap Control Computers | 740-002 Bite | 27-51-00-740-002 | AMM 27- |
| | (Flap | | |
| rol Interface Unit | 740-001 BITE | 32-69-00-740-00 | AMM 32- |
| that Continuous BITE is | (LGCI | | |
| | O pera | | |
| ity Sensor (38CV, 40CV) ap Control Computers rol Interface Unit | 31 SFCC 28 Left 29 Right 740-002 Bite (Flap 740-001 BITE (LGCI | 1-00-810-829 27-51-00-740-002 | 32-31-00 32-31-00 AMM 27- |

3. Fault Confirmation

A. Test

- (1) Do a BITE test of the SFCC-1 (21CV) or SFCC-2 (22CV), identified on the Post Flight Report (PFR) (Ref. AMM TASK 27-51-00-740-002) and record each fault related to the flap attachment, for example:
 - SFCC 1 (2) 21CV (22CV) (SFCC fault)
 - NO LGCIU 1 (2) DATA / CHECK WIRING TO FLP 1 (2) (ARINC 429 Input fault)
 - FLP 1 (2) NO SFCC 2 (1) DATA / CHECK WIRING & SFCC 2 (1) (ARINC 429 X-computer data link fault).

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- (2) Do a BITE test of the LGCIU-1 (5GA1) or LGCIU-2 (5GA2) identified on the PFR (Ref. AMM TASK 32-69-00-740-001) and record each fault related to the flap attachment, for example:
 - L FLP DISC PROX SNSR SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (37CV) or SENSOR-L FLAP ATTACHMENT FAILURE DETECTION (39CV) (LH flap attachment sensor 1 or 2 fault)
 - R FLP DISC PROX SNSR SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (38CV) or SENSOR-R FLAP ATTACHMENT FAILURE DETECTION (40CV) (RH flap attachment sensor 1 or 2 fault)
- (3) Do the fault isolation procedure given in Para. 4.

NOTE: The ECAM Warning message "FLT/CTL - FLAP ATTACH SENSOR" is only shown when there are two faults in the flap attachment monitoring system. One fault in System 1 and one fault in System 2. The ECAM warning is not shown if the two faults are a failure of Sensor 1 and Sensor 2 on the same interconnecting strut. This condition is a MISADJUSTMENT fault which does not give an ECAM warning.

4. Fault Isolation

A. Procedure

- (1) For SFCC faults do the TSM Task (Ref. TASK 27-51-00-810-806).
- (2) For LGCIU faults do the TSM Task (Ref. TASK 27-51-00-810-831).
- (3) For LH flap attachment sensor faults do the TSM Task (Ref. TASK 32-31-00-810-828).
- (4) For RH flap attachment sensor faults do the TSM Task (Ref. TASK 32-31-00-810-829).

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TASK 27-51-00-810-854

Flaps - SFCC TEST Gives the Message PERFORMED WITH FAULT

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE

DESIGNATION

AMM 27-51-34-000-001 AMM 27-51-34-000-001 AMM 27-51-34-400-001 Removal of the SFCC (21CV,22CV)

Installation of the SFCC (21CV,22CV)

- 3. Fault Confirmation
 - A. Test
 - (1) If the FLAP SFCC TEST gives the message PERFORMED WITH FAULT, do the fault isolation procedure given in Para. 4.
- 4. Fault Isolation
 - A. Procedure
 - (1) Replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV), (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).

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TASK 27-51-00-810-855

Flaps - WTB/POB Does Not Complete

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- POWER CONTROL UNIT (6201CM)
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| AMM | 27-51-00-710-001 | Operational Test of the Wing Tip Brake and the Pressure Off Brake |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-54-51-000-001 | Removal of the Power Control Unit 6201CM of the Flap System |
| AMM | 27-54-51-400-001 | Installation of the Power Control Unit 6201CM of the Flap System |

3. Fault Confirmation

A. Test

- (1) Do an operational test of the wing-tip brake and the pressure-off brake (Ref. AMM TASK 27-51-00-710-001):
 - if the test does not complete in less than 2 minutes do the fault isolation procedure in Para. 4.
 - if the test is OK, no more maintenance work is necessary.

4. Fault Isolation

A. Procedure

- (1) Abort the test as follows:
 - (a) Reset the circuit breaker of the channel on test.
- (2) Interchange the SFCCs (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Do the test in Para. 3. A.
 - if the test is OK, do step (3)
 - if the test does not complete, do step (4).

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- (3) Replace the unserviceable SFCC-1 (21CV) or SFCC-2 (22CV) that was the source of the initial fault.
 - (a) Do the test in Para. 3. A.if the test does not complete, do the next step.
- (4) Replace the POWER CONTROL UNIT (6201CM) (Ref. AMM TASK 27-54-51-000-001) and (Ref. AMM TASK 27-54-51-400-001).
 - (a) Do the test in Para. 3. A:if the test does not complete, do the next step.
- (5) Do a check of the aircraft wiring between the applicable SFCC and the PCU:
 - do the repair.
 - (a) Do the test in Para. 3. A.

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FLAPS ELECTRICAL CONTROL AND MONITORING - TASK SUPPORTING DATA

1. TABLE 1

A. The DISCRETE I/P STATUS page diplay for the CSU Track Switch Bank A and B comparison checks.

SFCC=(1) or (2) ZZZZ DISCRETE I/P STATUS

XXXX XXXXX XXXXXXX XXXX

YYY YYYY YYYYY YYYY

AOG: * A/C:???? SGOI: ° <PRINT>

Explanation:

Where the * = FLAP 1 or 2 (dependent on the selection)

Where the ZZZZ is = SLAT or FLAP

Where the XX-----XX is = FLAP RELIEF ENABLED.

or = FLAP RELIEF DISABLED.

or = FLAP RELIEF CODING FAIL.

Where the YY-----YY is = MAX FLAP 35 DEG (CMF).

or = MAX FLAP 40 DEG (IAE).

or = MAX FLAP CODING FAIL.

Where the o is function set (1) or function reset (0).

Where the % is a logic 1 or a logic 0 as given by the input circuit.

Were the ???? is = A320, A321 or FAIL depending on the Aircraft type

pin programming in that channel.

Where AOG means aircraft on ground.

Where SGOI means system ground inhibit.

The CSU is monitored by both lanes of the associated SFCC.

Each lane receives 2 sets of the 5 switch tracks.

Each set has 5 detent patterns, two (2) adjacent switch tracks connected to return and four (4) OUT-OF- DETENT patterns (one of each track 2, 3, 4, and 5), connected to ground.

- B. The Discrete Input Word 1
 - (1) The Discrete Input Word 1 has the discrete inputs that follow.

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```
R
 MSB
                                               LSB
  -----
      ∞ Bank 2 ∞ Bank 2 ∞ Bank 2 ∞ Bank 1 ∞ Bank 1 ∞ Bank 1
 A321
 A/C Type∞ CSU ∞ CSU ∞ CSU ∞ CSU ∞ CSU ∞ CSU
 Coding 1∞ Switch 4∞ Switch 5∞ Switch 2∞ Switch 4∞ Switch 3∞ Switch 2∞ Switch 1
     (2) The table that follows gives a description of each discrete input.
 ______
 Bit ∞ Name
                   ∞ Description
 ______
  0 ∞ BANK 1 CSU SWITCH 1
                  ∞ The first input from the CSU switch bank 1.
  -----
  1 ∞ BANK 1 CSU SWITCH 2 ∞ The second input from the CSU switch bank 1.
 ______
  2 ∞ BANK 1 CSU SWITCH 3
                  ∞ The third input from the CSU switch bank 1.
  ._____
  3 ∞ BANK 1 CSU SWITCH 4 ∞ The fourth input from the CSU switch bank 1.
                 ∞ The second input from the CSU switch bank 2.
  4 ∞ BANK 2 CSU SWITCH 2
 ______
  5 ∞ BANK 2 CSU SWITCH 5 ∞ The fifth input from the CSU switch bank 2.
 ______
                  ∞ The fourth input from the CSU switch bank 2.
  6 ∞ BANK 2 CSU SWITCH 4
  -----
  7 ∞ A321 A/C TYPE CODING 1 ∞ A/C Type Coding 1/2 shows the aircraft type the
                   ∞ SFCC is installed on.
                   ∞ A/C Type Coding 1/2 reset = A321

    A/C Type Coding 1/2 reset = A320

   C. The Discrete Input Word 2
     (1) The Discrete Input Word 2 has the discrete inputs that follow.
R
 MSB
                                               LSB
 ______
 Aircraft∞ Spare ∞ Spare ∞ 28V
                       ∞ Spare ∞ Spare ∞ Bank 1 ∞ Spare
```

∞ Power ∞ ∞ CSU on ∞ Supply ∞ ∞ Switch 5∞

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TROUBLE SHOOTING MANUAL (2) The table that follows gives a description of each discrete input. R Bit ∞ Name ∞ Description ______ 1 ∞ BANK 1 CSU SWITCH 5 ∞ The fifth input from the CSU switch bank 1. ______ 2 ∞ SPARE 3 ∞ SPARE 4 ∞ 28V POWER SUPPLY ∞ 28V power supply monitor. -----5 ∞ SPARE 6 ∞ SPARE 7 ∞ AIRCRAFT ON GROUND ∞ Used to show if the aircraft is in the air or ∞ on the ground. ______ D. The Discrete Input Word 3 (1) The Discrete Input Word 3 has the discrete inputs that follow. R MSB LSB ______ ∞ Flap ∞ Spare ∞ Engine ∞ Install-∞ Flap ∞ A321 A/C∞ Engine SGOI ∞ Relief ∞ ∞ Mode ∞ ation ∞ Relief ∞ Type ∞ Mode ∞ Coding 2∞ ∞ Coding 2∞ Coding 1∞ Coding 1∞ Coding 2∞ Coding 1 ______ (2) The table that follows gives a description of each discrete input. R Bit ∞ Name Description ______ 0 ∞ ENGINE MODE CODING 1 ∞ Engine Mode Coding 1/2 shows the engine type ∞ installed on the aircraft. ■ Engine Mode Coding 1 set/Engine Mode Coding 2 ∞ reset = CFM engine □ Engine Mode Coding 1 reset/Engine Mode Coding 2 ∞ set = IAE engine ______ 1 ∞ A321 A/C TYPE CODING 2 ∞ A/C Type Coding 1/2 shows the aircraft type the ∞ SFCC is installed on. A/C Type Coding 1/2 reset = A321 ∞ A/C Type Coding 1/2 set = A320 2 ∞ OPERATION MODE CODING ∞ Operation Mode Coding 1/2 shows the SFCC mode **27-51-00** EFF: ALL Page 303

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| | | Name | |
|-------|-----------|---------------------------------|--|
| | 8 8 8 8 | 1 | <pre> Description of operation. Operation Mode Coding 1 set/Operation Mode Coding 2 reset = Flap Relief prevented Operation Mode Coding 1 reset/Operation Mode Coding 2 set = Flap Relief enabled </pre> |
| 3 | 8 8 8 8 8 | INSTALLATION CODING 1 | <pre></pre> |
| 4 | 8 8 8 8 | ENGINE MODE CODING 2 | Engine Mode Coding 1/2 shows the engine type installed on the aircraft. Engine Mode Coding 1 set/Engine Mode Coding 2 reset = CFM engine Engine Mode Coding 1 reset/Engine Mode Coding set = IAE engine |
| 5 | | SPARE | oo |
| 6 | | OPERATION MODE CODING 2 | <pre> ∞ Operation Mode Coding 1/2 shows the SFCC mode ∞ of operation. ∞ Operation Mode Coding 1 set/Operation Mode ∞ Coding 2 reset = Flap Relief prevented ∞ Operation Mode Coding 1 reset/Operation Mode ∞ Coding 2 set = Flap Relief enabled </pre> |
| 7 | | SYSTEM GROUND OPERATION INHIBIT | Used to prevent system operation when the |
| F | E. | The Discrete Input Wor | d 4 |
| | | (1) The Discrete Input | Word 4 has the discrete inputs that follow. |
| | | pu-v | |

```
Bank 2 ∞ Spare ∞ Bank 2 ∞ Spare ∞ Spare ∞ PPU ∞ LVDT ∞ Install-
             ∞ CSU ∞
                            ∞ ∞ Voltage ∞ Excit- ∞ ation
Switch 1∞
            ∞ Switch 3∞
                            œ
                                   ∞ ∞ ation ∞ Coding 2
```

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R (2) The table that follows gives a description of each discrete input.

| Bit | ∞ | Name | ∞ Description |
|-----|---------|-----------------------|---|
| 0 | 8 8 8 8 | INSTALLATION CODING 2 | <pre> ∞ Installation Coding 1/2 shows the position in ∞ which the SFCC is installed. ∞ Installation Coding 1 set/Installation Coding 2 ∞ reset = SFCC installation position 1 ∞ Installation Coding 1 reset/Installation Coding ∞ 2 set = SFCC installation position 2 </pre> |
| 1 | | LVDT EXCITATION | ∞ LVDT excitation output monitor. |
| 2 | ∞ | PPU EXCITATION | ∞ PPU excitation output monitor. |
| 3 | ∞ | SPARE | ω |
| 4 | ∞ | SPARE | оо |
| 5 | ∞ | BANK 2 CSU SWITCH 3 | ∞ The third input from the CSU switch bank 2. |
| 6 | ∞ | SPARE | оо Оо |
| 7 | ∞ | BANK 1 CSU SWITCH 1 | ∞ The first input from the CSU switch bank 2. |

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2. TABLE 2

A. X-LINK DATA DISPLAY

(1) When on the submenu pages SYSTEM DATA FLAP or SLAT, the Line Key "1R" "X LINK INPUT>" is pressed, the nominated SFCC transmits the following page to the CFDS.

| | ∞∞ | |
|----|---|----|
| | ∞ SFCC- X ∞ | |
| | ∞ X-LINK INPUT DATA ∞ | |
| 1L | ∞ BIT No. ∞ | 1R |
| | ∞ 9 15 21 27 3 2 ∞ | |
| 2L | 00 | 2R |
| | ∞ LABEL 23 ∞ | |
| 3L | ∞ xxxxxxxxxxx = no data = xxxxxxxxxx ∞ | 3R |
| | ∞ LABEL 60 ∞ | |
| 4L | ∞ 1 0 1 0 1 0 = faulty data = 1 0 1 0 ∞ | 4R |
| | ∞ LABEL 61 ∞ | |
| 5L | ∞ 1 0 1 0 1 0 = faulty data = 1 0 1 0 ∞ | 5R |
| | ∞ ∞ | |
| 6L | ∞ <return print=""> ∞</return> | |
| | m | |

- (2) LABEL 23 is transmitted as xxxxx- for no data.
- (3) LABEL 60 is transmitted as 1 and 0 (no parity bit) for faulty data.
- (4) LABEL 61 is transmitted as 1 and 0 (no parity bit) for faulty data.
- B. LABEL 023 SLAT/FLAP ATTACHMENT DATA

```
    Function

Number ∞
 1-8 ∞ Label Identifier
      ∞ SDI
                                                   SFCC 1
                                                                  SFCC 2
9
                                                    1
                                                                   0
                                                    0
 10
 11
                            ∞ Spare
 12
                            ∞ Spare
 13
                            ∞ Spare
 14
                            ∞ Spare
 15
                            ∞ Spare
 16
                            ∞ Spare
 17
                            ∞ Spare
 18
                            ∞ Spare
 19
                            ∞ Spare
20
    ∞ Data Field
                            ∞ Spare
```

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```
Bit

    Function

  Number ∞
   21
                             ∞ L Flap Attachment Failure
                             ∞ L Flap Attachment Sensor Failure
   22
R
   23
                             ∞ Echo of L Flap Attachment Failure
R
   24
                             ∞ Echo of L Flap Sensor Failure
   25
                             ∞ R Flap Attachment Failure
R
   26
                             ∞ R Flap Attachment Sensor Failure
R
                             ∞ Echo of R Flap Attachment Failure
   27
R
   28
                             ∞ Echo of R Flap Sensor Failure
R
   29
                             ∞ Flap Data Failure
R
        ∞ SSM
R
   31
       ∞ SSM
R
   32
R
         ∞ Parity
     C. LABEL 060 SYSTEM FAILURE INFORMATION
R
R
  Bit
         ∞ Function
R
  Number ∞
R
R
       ∞ Label Identifier
R
   9
         ∞ SDI
R
R
   10
         ∞ SDI
  ______
R
   11
        ∞ Spare
R
   12
         ∞ Cross lane discrepancy
   13
R
        ∞ Spare
R
   14
         ∞ LH Asymmetry fault
   15
         ∞ RH Asymmetry fault
R
R
   16
         ∞ Runaway fault
   17
        ∞ End stop
R
   18
         ∞ FPPU Overspeed failure
R
   19
         ∞ LH APPU Overspeed failure
R
   20
R
        ∞ RH APPU Overspeed failure
   21

    □ Uncommanded movement

   22
         ∞ CSU Misadjustment detected
R
   23
R

    □ Cross computer arm wrap around

   24
         ∞ Spare
R
   25
R
         ∞ Spare
   26
R
         ∞ Spare
   27
R

    Spare

   28
R

    Spare

   29
R
         ∞ Spare
                     _____
R
   30
         ∞ SSM
```

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```
Bit

    Function

  Number ∞
   31
       ∞ SSM
R

    Parity

          ------
    D. LABEL 061 SYSTEM TEST DATA WORD 1
R
  Bit
       ∞ Function
  Number ∞
   1-8

    □ Label Identifier

R
  9
       ∞ SDI
R
   10
R
       ∞ SDI
  ______
   11
R
       ∞ Spare
R
   12

    Spare

   13
R
       ∞ Spare
R
   14
       ∞ System Jam Failure
   15
      ∞ CSU Fault/CSU Out of Detent
R
R
   16
       ∞ Low Hydraulic Pressure
R
   17
      ∞ Valve Sensor Failure
   18
      ∞ Valve Response Failure
R
   19
       ∞ Spare
   20
R
       ∞ Spare
   21
R

    Spare

R
   22
       ∞ Spare
   23

    Spare

   24
R
       ∞ Spare
   25
R
       ∞ Spare
   26
      ∞ Spare
R
R
   27
       ∞ Spare
   28

    Spare

   29
R
       ∞ Spare
R
   30
       ∞ SSM
   31
      ∞ SSM
R
R

    Parity

               ______
```

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E. LABEL 062 SYSTEM TEST DATA WORD 2 R Bit Function Number ∞ R ∞ Label Identifier R 9 R ∞ SDI 10 ∞ SDI R R ______ R 11 ∞ Spare 12 ∞ Spare R 13 ∞ Spare R 14 ∞ Actual CSU Position O R 15 ∞ Actual CSU Position 1 R R 16 ∞ Actual CSU Position 2 17 ∞ Actual CSU Position 3 R 18 R ∞ Actual CSU Position FULL 19 ∞ PRESSURE OFF BRAKE status (active low) 20 ∞ RETRACT (active low) R 21 EXTEND (active low) 22 ∞ Cross Computer WTB Arm R 23 R ∞ LH WTB Arm 24 ∞ RH WTB Arm R 25 ∞ Control Valve Half Speed Monitor Point reached R 26 ■ Lowspeed Threshold Command being performed 27 R Slat Alpha Lock engaged 28 ∞ Slat Baulk engaged R ∞ Flap relief engaged R 30 ∞ SSM 31 ∞ SSM R R ∞ Parity ______ R F. LABEL 063 FPPU DATA WORD R Bit ∞ Function Number ∞ R R ∞ Label Identifier R R 9 ∞ SDI ∞ SDI 10 R R 11 ∞ Spare R R 12 ∞ Spare 13 R ∞ Spare R

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```
Bit

    Function

   Number ∞
          ∞ FPPU Value (LS Bit)
    14
    15
R
    16
R
    17
R
    18
    19
R
    20
R
    21
R
    22
    23
R
R
    24
    25
          ∞ FPPU Value (MS Bit)
R
R
R
    26
          ∞ Spare
    27
          ∞ Spare
R
    28
          ∞ Spare
R
    29
          ∞ Spare
    30
          ∞ SSM
R
R
   31
        ∞ SSM
R
R
          ∞ Parity
R
R
      G. LABEL 064 LAPPU DATA WORD
   Bit
R

    Function

R
   Number ∞
R
         ∞ Label Identifier
R
R
          ∞ SDI
   10
         ∞ SDI
R
R
    11
          ∞ Spare
R
R
    12
          ∞ Spare
R
    13
          ∞ Spare
R
    14
          ∞ LAPPU Value (LS Bit)
R
    15
R
R
    16
    17
R
R
    18
    19
R
    20
R
    21
    22
```

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```
Bit

    Function

   Number ∞
   23
   24
R
   25
          ∞ LAPPU Value (MS Bit)
R
    26
R
          ∞ Spare
    27
          ∞ Spare
R
    28
          ∞ Spare
R
    29
          ∞ Spare
R
   30
R
         ∞ SSM
   31
R
         ∞ SSM
R
R
   32
         ∞ Parity
      H. LABEL 065 RAPPU DATA WORD
R
R
   Bit

    Function

   Number ∞
R
         ∞ Label Identifier
R
   9
R
        ∞ SDI
        ∞ SDI
   10
R
   11
R
         ∞ Spare
R
   12
         ∞ Spare
R
    13
          ∞ Spare
R
   14
R
          ∞ RAPPU Value (LS Bit)
    15
R
R
    16
   17
R
    18
R
    19
    20
R
    21
R
R
    22
    23
    24
R
    25
R
          ∞ RAPPU Value (MS Bit)
R
R
   26
          ∞ Spare
    27
R
          ∞ Spare
    28
R
          ∞ Spare
    29
          ∞ Spare
```

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```
Bit

    Function

 Number ∞
 30
    ∞ SSM
R
 31
    ∞ SSM
R
 32
     ∞ Parity
   J. LABEL 066 SPARE TEST DATA WORD
 ______
 Bit
    ∞ Function
R
R
 Number ∞
R
 1-8 ∞ Label Identifier
R
 ______
R
     ∞ SDI
 10 ∞ SDI
R
R
R
  11-29 ∞ Spare
R
R
 30
     ∞ SSM
 31
    ∞ SSM
R
R
 32
     ∞ Parity
```

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3. TABLE **3**

A. PPU DATA DISPLAY.

(1) When on the submenu pages SYSTEM DATA FLAP, the Line Key "1L" "PPU" is pressed, the named SFCC transmits the following page to the CFDS.

| | | SFCC- X | ĺ | |
|------------|---|---------------|---------|----|
| | | PPU DATA (DEG |) | |
| 1L | DATE: | UTC: | | 1R |
| | LH APPU | FPPU | RH APPU | |
| 2L | XXX.X | XXX.X | XXX.X | 2R |
| | ***HEX | ***HEX | ***HEX | |
| 3L | Ì | | | 3R |
| | Ì | OTHER SFCC | | |
| 4L | LH APPU | FPPU | RH APPU | 4R |
| | XXX.X | XXX.X | XXX.X | |
| 5 l | ***HEX | ***HEX | ***HEX | 5R |
| 6 l | <return< td=""><td></td><td>PRINT> </td><td></td></return<> | | PRINT> | |
| | | | | |

- (2) The XXX.X fields are replaced with the decimal value of the synchro angle.
- (3) The *** fields are replaced with the hexadecimal value Of the synchro angle.
- (4) If no data is available then the decimal value is replaced with XXX.X.

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R **ON A/C 201-225, 227-227, 229-275, 426-475, 551-599, 701-749,

4. TABLE 4

- A. Flap Operating System.
 - (1) Mechanical and Electronic Interface Data.

| CONTROL LEVER POSITION | SURFACE ANGLE SYNCHRO A APPU FPF | = |
|------------------------|--|-----|
| | Mech.Stop retr -1.91 | deg |
| 0 | 0 deg 0 | deg |
| 1 Auto | 0 deg 0 | deg |
| 1 Norm | 10 deg 120.22 | deg |
| 2 | 15 deg 145.51 | deg |
| 3 | 20 deg 168.34 | deg |
| FULL | Configuration Pin Prog. Operation Mode 3 | |
| | 35 deg 231.24 Configuration Pin Prog. Operation Mode 4 | deg |
| | 40 deg 251. 91 | deg |
| | Mech. Stop ext 253. 91 | deg |
| | Relief 30 deg1) 210.68 | deg |
| | Relief 35 deg1) 231.24 | deg |

NOTE: The APPUs must agree within 0.45 deg. At position 0 the APPU/FPPU must agree within 0.9 deg. At positions 1, 2, 3 and FULL, the APPU/FPPU must agree within 1.3 deg.

EFF: 201-225, 227-227, 229-275, 426-475, 551-599, 701-749,

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R **ON A/C 276-299, 476-499, 503-549,

R 4. TABLE 4

- A. Flap Operating System.
- R (1) Mechanical and Electronic Interface Data.

| R | | | | |
|---|---------------|-----------------|-----------------|------|
| R | CONTROL LEVER | SURFACE ANGLE | SYNCHRO ANGLE | į |
| R | POSITION | | APPU FPPU I | :PPU |
| R | | | | |
| R | | Mech.Stop retr | -3.73 d | leg |
| R | 0 | 0 deg | 0 0 | leg |
| R | 1 Auto | 0 deg | 0 d | leg |
| R | 1 Norm | 10 deg | 153.09 d | leg |
| R | 2 | 14 deg | 179.21 d | leg |
| R | 3 | 21 deg | 220.17 d | leg |
| R | FULL | 25 deg | 242.12 d | leg |
| R | | Mech. Stop ext | C | leg |
| R | | Relief 30 deg1) | 242.12 d | leg |

NOTE: The APPUs must agree within 0.45 deg. At position 0 the APPU/FPPU must agree within 0.9 deg. At positions 1, 2, 3 and FULL, the APPU/FPPU must agree within 1.3 deg.

R **ON A/C ALL

R

R R

5. TABLE 5

A. WTB RESET Page.

(1) When on the submenu pages SFCC-(1) (2) TEST/RESET the Line Key "1R" "WTB-RESET" is pressed, the named SFCC transmits the following page to the CFDS.

| | | SFCC- X | ĺ | |
|------------|---------------------------------------|------------|----------|----|
| | (| WTB=RESET | | |
| 1L | CAUTION: XXX | XX WILL | MOVE | 1R |
| | ENSURE TH | AT SURFACE | E | |
| 2L | MOVEMENT IS | POSSIBL | _E | 2R |
| | WITHOUT DAI | NGER TO | | |
| 3L | PERSONNEL OR | | | 3R |
| | AIRCRAFT OR | | | |
| 4L | MECHANICAL SYS | STEM | | 4R |
| | | | | |
| 5 l | < START WTB | RESET | | 5R |
| | | | | |
| 6 l | <pre><return< pre=""></return<></pre> | | PRINT> | |
| | | | | |

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- (2) In line 3 "CAUTION: XXXX WILL MOVE" the "XXXX" field is replaced with the the word FLAPS in the amber colour code.
- (3) When on the WTB RESET instruction page the key 5L "START WTB RESET" is pressed.
- (4) The related WTB relays in the SFCC are reset and the result is transmitted to the CFDS as

| | İ | cc- x | |
|------------|--|---------|----|
| | W | B RESET | |
| 1L | | 1 | 1R |
| | PERF |)RMED | |
| 2L | | Į | 2R |
| | ! | ļ | |
| 3L | | ļ. | 3R |
| | | ļ | |
| 4L | | ! | 4R |
| 5 l | | ł | 5R |
| J (| | i | אכ |
| 6 l | <return< td=""><td>PRINT></td><td></td></return<> | PRINT> | |
| • | | | |

6. TABLE 6

- A. SFCC SYSTEM DATA FLAP.
 - (1) System Data submenu page.

| | | SFCC-* | | |
|----|-----|--|-----|----|
| | | SYSTEM DATA FLAP | | |
| 1L | ### | <ppu input="" x-link=""> </ppu> | ### | 1R |
| 2L | ### | <pre><arinc 429="" input="" pre="" status<=""></arinc></pre> | ### | 2R |
| 3L | ### | <pre><discrete inputs<="" pre=""></discrete></pre> | ### | 3R |
| 4L | ### | | ### | 4R |
| 5L | ### | | ### | 5R |
| 6L | ### | <pre><return pre="" <=""></return></pre> | ### | 6R |
| | | | | |

(2) Flap Arinc Input Status page.

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| | | 9 | SFCC- | k | | 1 |
|---|-------|-------|-------|--------|------|-------|
| | FLAP | ARINC | INPU | T STAT | US | |
| ADRIU | 1 | | 0K | | | |
| ADIRU | 2 | | *** | | (VIA | SLT) |
| | LABEL | *** | NO | DATA | | |
| | LABEL | *** | INV | DATA | | |
| LGCIU | | | 0K | | | |
| CFDIU | | | 0K | | | |
| WRAPAR | ROUND | | 0K | | | |
| | | | | | | |
| <retu< td=""><td>RN</td><td></td><td></td><td></td><td>PF</td><td>RINT></td></retu<> | RN | | | | PF | RINT> |
| | | | | | | |

7. TABLE 7

- A. SFCC MENU Selection.
 - (1) Set MENU MODE
 - (a) Set CFDS
 - (b) Set SYSTEM REPORT TEST
 - (c) Set F/CTL
 - (d) Set SFCC 1 or SFCC 2. The page that follows is displayed.

(2) Set NEXT PAGE. The page that follows is displayed.

```
| SFCC-*

1L ### | <SLT TEST/RESET FLP>| ### 1R

2L ### | <SLT SYSTEM DATA FLP>| ### 2R

3L ### | <SLT TROUB SH DATA FLP>| ### 3R

4L ### | <SLT ON GRND FAULTS FLP>| ### 4R

5L ### | <RETURN | ### 6R
```

(3) Set TEST/RESET FLP>. The page that follows is displayed.

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(4) Set <SFCC TEST. The page that follows is displayed.

| SFCC-*
| FLAP SFCC TEST
|IN PROGRESS

(a) If the SFCC TEST is satisfactory, the page that follows is displayed.

| SFCC-* | | FLAP SFCC TEST | |DATE:+++ ++ UTC: ++++ |

If the X computer arm test is not done during the test, this message shows:

| OTHER SFCC ARM SIGNAL |
| NOT TESTED |

(5) If the SFCC TEST finds the SFCC at fault the SFCC TEST results page is displayed as follows.

| SFCC-* | |
|--|--------|
| FLAP SFCC TEST | |
| 1L ### DATE:+++ ++ UTC: (time) | ### 1R |
| PERFORMED WITH FAULT | |
| 2L ### <fault data<="" td=""><td> ### 2R</td></fault> | ### 2R |
| 3L ### | ### 3R |
| 4L ### | ### 4R |
| 5L ### | ### 5R |
| 6L ### <return< td=""><td> ### 6R</td></return<> | ### 6R |
| | |

(6) Set FAULT DATA. The page that follows is displayed.

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-----SFCC-* FLAP SFCC TEST | DATE:+++ ++ UTC: (time) |FAILURE DATA LANE 1:00000 L 1:000000000000 0/P C/S L 2 : 0 0 : 0 0 0 0 0 0 0 0 0 0 0 0IP 2:000000 LANE |C/S L2 : 0 0 ARINC : 0 0 0 0 0 0 0 0 0 0 0 <RETURN PRINT>

NOTE: LANE 1 is Lane 1 test

- O/P L1 is Output test from lane 1

- C/S L1 is Common services and PCU test from lane 1

- I/P is Test of input discretes

LANE 2 is Lane 2 test

- O/P L2 is Output test from lane 2

- C/S L2 is Common services and PCU test from lane 2

- ARINC is Arinc test

(7) If the SFCC-TEST is done and the SFCC periphery is not complete, an SFCC-TEST result page is transmitted to the CFDS to indicate the status. SLAT or FLAP is added to the title.

| ù SFCC-* | ->ù | |
|--|--|---|
| ù FLAP SFCC TEST | ù | |
| ###ù DATE: UTC: | ù### 1 | R |
| ù no faults but | ù | |
| ###ù* | ù### 2 | R |
| ù | ù | |
| ###ù** | ù### 3 | R |
| ù | ù | |
| ###ù | ù### 4 | R |
| ù | ù | |
| ###ù | ù### 5 | R |
| ù | ù | |
| ###ù <return< td=""><td>PRINT>ù### 6</td><td>R</td></return<> | PRINT>ù### 6 | R |
| | ù FLAP SFCC TEST ###ù DATE: UTC: ù NO FAULTS BUT ###ù* ù ###ù* | ù FLAP SFCC TEST ù ###ù DATE: UTC: ù### 1 ù NO FAULTS BUT ù ###ù* ù ### 2 ù ù ù ### 3 ù ù ù ### 4 ù ù u ### 5 ù ù u ### 5 ù |

SFCC test result page for SFCC periphery not complete, see Para (8).

- (8) SFCC test result page for SFCC periphery not complete.

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(b) "**" shows the peripheral faults or system messages that are not complete.

| either | ùWTB SET | ù |
|--------|----------------------|---|
| and/or | ùno wtb power | ù |
| and/or | ùLH WTB SOLENOID X/X | ù |
| and/or | ùRH WTB SOLENOID X/X | ù |
| and/or | ùFPPU FAULT | ù |
| and/or | ùLH APPU FAULT | ù |
| and/or | ùRH APPU FAULT | ù |

NOTE: X/X shows short circuit (S/C) or open circuit (O/C).

- (c) If more than one page is needed the "->" code is shown in the 24th character of line one of each SFCC test result page.
- (d) The results of previous SFCC-TEST (automatic integrity test and maintenance SFCC test) can be shown with "SFCC TEST FAILURE REPORT" selected from the TEST/RESET MENU key "3L".

8. TABLE 8

A. Table of ground circuits supplied from SFCC 1 (Refence ASM/275110S01).

| FIN | FUNCTION DESIGNATION | | FLP POSITION | |
|--------|------------------------------|------------|---------------|--|
| 1WZ | GROUND PROXIMITY WARN. COMP. | P/BSW 13WZ | B2-FAP 1 >35' | |
| | | | B1-FAP 5 >19' | |
| 101RH | CIDS DIRECTOR | | B1-FAP 5 >19' | |
| 1FP1 3 | ADIRU 1 and ADIRU 3 | | FAP 7 >9' | |
| | | | FAP 5 >19' | |
| | | | FAP 1 >35' | |
| 1FP2 | ADIRU 2 | | FAP 6 >35' | |
| | | | FAP 2 >9' | |
| | | | FAP 3 >19' | |
| 102RH | CIDS DIRECTOR | | FAP 3 >19' | |
| 1kS1 | EIU 1 LEVER IN RET. POS. | | FAP 4 | |
| 11001 | LIO I LLVEN IN NEIL 1001 | | ini a | |

B. Table of ground circuits supplied from SFCC 2 (Refence ASM/275110S01).

| FIN | FUNCTION DESIGNATION | FLP POSITION |
|--------|----------------------|---------------|
| | | B1-FAP 5 >19' |
| 101RH | CIDS DIRECTOR | B1-FAP 5 >19' |
| 1FP1 3 | ADIRU 1 and ADIRU 3 | FAP 6 >35' |
| | | FAP 2 >9' |
| | | FAP 3 >19' |
| 1FP2 | ADIRU 2 | FAP 7 >9' |
| | | FAP 1 >35' |
| | | FAP 5 >19' |

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| FIN | FUNCTION DESIGNATION | FLP POSITION |
|-------|--------------------------|--------------|
| 102RH | CIDS DIRECTOR 2 | FAP 3 >19' |
| 1kS1 | EIU 1 LEVER IN RET. POS. | FAP 4 |

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FLAPS HYDRAULIC ACTUATION AND POWER TRANSMISSION - FAULT ISOLATION PROCEDURES

TASK 27-54-00-810-801

Flap Vibration

1. Possible Causes

- upper kink seal
- lower kink seal
- cushion seal
- free movement at the trailing edge of the flaps
- Spherical Bearing

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------------|------------------|--|
| 05-50-00-810-801 | | Identification of the Cause of In-Flight Airframe Vibrations and/or Noises |
| CMM | 275443 | |
| AMM | 27-54-00-200-003 | Detailed Dimensional Check - Free Movement at the Trailing Edge of the Flaps |
| AMM | 27-54-46-000-002 | Removal of the No.1 Flap Carriage |
| AMM | 27-54-46-400-002 | Installation of the No.1 Flap Carriage |
| AMM | 27-54-61-000-002 | Removal of the Flap Kink-Seals |
| AMM | 27-54-61-400-006 | Installation of the Flap Kink-Seals |
| AMM | 53-35-11-000-001 | Removal of the Wing-to-Fuselage Fairings |
| AMM | 53-35-11-400-001 | Installation of the Wing-to-Fuselage Fairings |
| | | |

3. Fault Confirmation

A. Inspection

- (1) Make sure that the identification of the cause of the vibration is correct, (Ref. TASK 05-50-00-810-801).
- (2) Make sure that the upper kink seal, lower kink seal and the cushion seal are not damaged and are correctly installed (Ref. AMM TASK 27-54-61-000-002) (Ref. AMM TASK 27-54-61-400-006).
- (3) Make sure that the amount of free movement at the trailing edge of the flaps is correct (Ref. AMM TASK 27-54-00-200-003).

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- (4) Do a check of the inboard flap to carriage attachment, self lubricating spherical bearing as follows:
 - (a) Remove the applicable wing to fuselage panels from the identified defective wing, (Ref. AMM TASK 53-35-11-000-001).
 - (b) Examine the spherical bearing for play, and migration of the teflon liner.
 - (c) If no play or teflon liner migration is found, replace the applicable wing to fuselage panels (Ref. AMM TASK 53-35-11-400-001).
 - (d) If play or teflon liner migration is found, do the fault isolation procedure.

4. Fault Isolation

- A. Procedure.
 - (1) Remove the No. 1 flap carriage (Ref. AMM TASK 27-54-46-000-002).
 - (a) Replace the Spherical Bearing (Ref. CMM 275443).
 - (2) Install the No. 1 flap carriage (Ref. AMM TASK 27-54-46-400-002).
 - (3) After the subsequent flight, make sure that the fault does not continue.

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SPOILER - FAULT ISOLATION PROCEDURES

TASK 27-60-00-810-801

Loss of the Speedbrake Control Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - XDCR UNIT-SPD BRK CTL (7CE)
 - wiring from the SEC 1 (1CE1) to the transducer unit (7CE)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|--------|-----------|------------------|--|--|
| | AMM | 27-92-14-000-001 | Removal of the Speedbrake Control Transducer Unit (7CE) | |
| | AMM | 27-92-14-400-001 | Installation of the Speedbrake Control Transducer Unit (7CE) | |
| R R | AMM | 27-94-00-710-002 | Operational Test of the Spoiler Elevator Computer 1 (SEC 1) | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-92/19 | _ | |

- 3. Fault Confirmation
 - A. Test

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- (1) Do the operational test of the spoiler elevator computer 1 (Ref. AMM TASK 27-94-00-710-002).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 OR INPUT OF SPBK CTL XDCR UNIT 7CE
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the XDCR UNIT-SPD BRK CTL (7CE), (Ref. AMM TASK 27-92-14-000-001) and (Ref. AMM TASK 27-92-14-400-001).

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- (2) If the fault continues:
 - do a check and repair the wiring from the SEC 1 (1CE1) to the transducer unit (7CE) (Ref. ASM 27-92/19).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-60-00-810-802

Loss of the Speedbrake Control Signal for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - XDCR UNIT-SPD BRK CTL (7CE)
 - wiring from the SEC 3 (1CE3) to the transducer unit (7CE)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|------------|------------------|--|--|
| АММ | 27-92-14-000-001 | Removal of the Speedbrake Control Transducer Unit (7CE) | |
| AMM | 27-92-14-400-001 | Installation of the Speedbrake Control Transducer Unit (7CE) | |
| AMM | 27-94-00-710-001 | Operational Test of the Spoiler Elevator Computer 3 (SEC 3) | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM ASM | | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the spoiler elevator computer 3 (Ref. AMM TASK 27-94-00-710-001).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

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- A. If the BITE test gives the maintenance message: SEC3 OR INPUT OF SPBK CTL XDCR UNIT 7CE
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the XDCR UNIT-SPD BRK CTL (7CE), (Ref. AMM TASK 27-92-14-000-001) and (Ref. AMM TASK 27-92-14-400-001).

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- (2) If the fault continues:
 - do a check and repair the wiring from the SEC 3 (1CE3) to the transducer unit (7CE) (Ref. ASM 27-92/19).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-60-00-810-803

Failure of the Speedbrake Control Transducer-Unit

- 1. Possible Causes
 - XDCR UNIT-SPD BRK CTL (7CE)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 27-92-14-000-001 | Removal of the Speedbrake Control Transducer Unit (7CE) | |
| AMM | 27-92-14-400-001 | <pre>Installation of the Speedbrake Control Transducer Unit (7CE)</pre> | |
| AMM | 27-94-00-710-001 | Operational Test of the Spoiler Elevator Computer 3 (SEC 3) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 29-10-00-863-001 | Pressurize the Green Hydraulic System | |
| AMM | 29-10-00-864-001 | Depressurize the Green Hydraulic System | |

- 3. Fault Confirmation
- R **ON A/C 227-227, 229-232, 276-281, 476-477,
 - A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - (2) Pull the speedbrake control lever (7CE) up to the armed position on the panel 11VU.
 - (3) On the overhead panel 23VU:
 - release the FLT CTL/SEC1 pushbutton switch (the OFF legend comes on).
 - (4) On the overhead panel 24VU:
 - release the FLT CTL/SEC2 and FLT CTL/SEC3 pushbutton switches (the OFF legends come on).
 - (5) On the overhead panel 23VU:
 - push the FLT CTL/SEC1 pushbutton switch (the OFF legend goes off).

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- (6) On the overhead panel 24VU:
 - push the FLT CTL/SEC2 and FLT CTL/SEC3 pushbutton switches (the OFF legends go off).
- (7) On the center pedestal, on the ECAM control panel push:
 - the CLR key until all the warnings (if any) stop
 - the F/CTL mode key (on the lower ECAM display unit the F/CTL page comes into view).

**ON A/C ALL

- B. Test
 - (1) Do the operational test of the SEC 3 (Ref. AMM TASK 27-94-00-710-001).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- R **ON A/C 227-227, 229-232, 276-281, 476-477,
 - C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).
 - (2) Disarm the speedbrake control lever (7CE) on the panel 11VU.

**ON A/C ALL

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SPBK CTL XDCR UNIT 7CE
 - replace the XDCR UNIT-SPD BRK CTL (7CE), (Ref. AMM TASK 27-92-14-000-001) and (Ref. AMM TASK 27-92-14-400-001).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-60-00-810-804

Loss of the Left Throttle Lever Transducer Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- CTL UNIT-THROTTLE, ENG 1 (8KS1)
- wiring of the VS and SPLY signals from the SEC 1 (1CE1) to the throttle control unit (8KS1)

Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) | |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8KS1, 8KS2)</pre> | |
| | ASM | 27-92/20 | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 23VU:
 - release the FLT CTL/SEC1 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 23VU:
 - push the FLT CTL/SEC1 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the left throttle lever in TO/GA and MAX REV during 5 seconds.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 OR INPUT OF L THROTTLE CTL UNIT 8KS1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 1 (8KS1), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
 - (2) If the fault continues:
 - do a check and repair the wiring of the VS and SPLY signals from the SEC 1 (1CE1) to the throttle control unit (8KS1) (Ref. ASM 27-92/20).
- B. Do the BITE test given in Para. 3.

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TASK 27-60-00-810-805

Loss of the Left Throttle Lever Transducer Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- CTL UNIT-THROTTLE, ENG 1 (8KS1)
- wiring of the VS and SPLY signals from the SEC3 (1CE3) to the throttle control unit (8KS1)

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) | |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8K\$1, 8K\$2)</pre> | |
| | ASM | 27-92/20 | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 24VU:
 - release the FLT CTL/SEC3 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 24VU:
 - push the FLT CTL/SEC3 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the left throttle lever in TO/GA and MAX REV during 5 seconds.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR INPUT OF L THROTTLE CTL UNIT 8KS1
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 1 (8KS1), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
 - (2) If the fault continues:
 - do a check and repair the wiring of the VS and SPLY signals from the SEC3 (1CE3) to the throttle control unit (8KS1) (Ref. ASM 27-92/20).
- B. Do the BITE test given in Para. 3.

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TASK 27-60-00-810-806

Loss of the Right Throttle Lever Transducer Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- CTL UNIT-THROTTLE, ENG 2 (8KS2)
- wiring of the VS and SPLY signals from the SEC1 (1CE1) to the throttle control unit (8KS2)

Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) | |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8K\$1, 8K\$2)</pre> | |
| | ASM | 27-92/20 | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 23VU:
 - release the FLT CTL/SEC1 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 23VU:
 - push the FLT CTL/SEC1 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the right throttle lever in TO/GA and MAX REV during 5 seconds.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 OR INPUT OF R THROTTLE CTL UNIT 8KS2
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 2 (8KS2), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
 - (2) If the fault continues:
 - do a check and repair the wiring of the VS and SPLY signals from the SEC1 (1CE1) to the throttle control unit (8KS2) (Ref. ASM 27-92/20).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-60-00-810-807

Loss of the Right Throttle Lever Transducer Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- CTL UNIT-THROTTLE, ENG 2 (8KS2)
- wiring of the VS and SPLY signals from the SEC3 (1CE3) to the throttle control unit (8KS2)

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) | |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8K\$1, 8K\$2)</pre> | |
| | ASM | 27-92/20 | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 24VU:
 - release the FLT CTL/SEC3 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 24VU:
 - push the FLT CTL/SEC3 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the right throttle lever in TO/GA and MAX REV during 5 seconds.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR INPUT OF R THROTTLE CTL UNIT 8KS2
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 2 (8KS2), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
 - (2) If the fault continues:
 - do a check and repair the wiring of the VS and SPLY signals from the SEC3 (1CE3) to the throttle control unit (8KS2) (Ref. ASM 27-92/20).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-60-00-810-808

Failure of the Left Throttle Control Unit

- 1. Possible Causes
 - CTL UNIT-THROTTLE, ENG 1 (8KS1)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION |
|---|-----------|------------------|---|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8K\$1, 8K\$2) |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8KS1, 8KS2)</pre> |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 23VU:
 - release the FLT CTL/SEC1 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 23VU:
 - push the FLT CTL/SEC1 pushbutton switch (the OFF legend goes off).
 - (4) On the center pedestal 11VU:
 - put the left throttle control lever in TO/GA and MAX REV position during 5 seconds.
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:
 - L THROTTLE CTL UNIT 8KS1
 - replace the CTL UNIT-THROTTLE, ENG 1 (8KS1), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).

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B. Do the BITE test given in Para. 3.

EFF : ALL

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TASK 27-60-00-810-809

Failure of the Right Throttle Control Unit

- 1. Possible Causes
 - CTL UNIT-THROTTLE, ENG 2 (8KS2)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION |
|---|-----------|------------------|---|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8K\$1, 8K\$2) |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8KS1, 8KS2)</pre> |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 23VU:
 - release the FLT CTL/SEC1 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 23VU:
 - push the FLT CTL/SEC1 pushbutton switch (the OFF legend goes off).
 - (4) On the center pedestal 11VU:
 - put the right throttle control lever in TO/GA and MAX REV position during 5 seconds.
 - B. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:
 - R THROTTLE CTL UNIT 8KS2
 - replace the CTL UNIT-THROTTLE, ENG 2 (8KS2), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).

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B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-60-00-810-810

Failure of the Left Spoiler 1 Position Transducer

1. Possible Causes

- SERVO CTL-SPLR1, L G (31CE1)
- wiring of the POS XDCR SPLY signal from the servocontrol (31CE1) to the first terminal block
- wiring of the POS XDCR V1, V2 signals from the servocontrol (31CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION |
|---|-----------|------------------|--|
| | 27-9 | 0-00-810-805 | Loss of the ACS2 Signal of the SEC3 COM side |
| | AMM | 27-64-51-000-001 | Removal of the Spoiler Servo-Control |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/31CE5(31CE6) |
| | AMM | 27-64-51-400-001 | Installation of the Spoiler Servo-Control |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/ 31CE5(31CE6) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | AMM | 29-10-00-863-001 | Pressurize the Green Hydraulic System |
| | AMM | 29-10-00-864-001 | Depressurize the Green Hydraulic System |
| | ASM | 27-94/04 | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - (2) Pull the speedbrake control lever (7CE) up to the armed position on the panel 11VU.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message:
 L SPLR 1 POS XDCR 31CE1
 - refer to the Para. Fault Isolation.

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- - C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).
 - (2) Disarm to speedbrake control lever (7CE) on the panel 11VU.

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - L SPLR 1 POS XDCR 31CE1
 - replace the SERVO CTL-SPLR1, L G (31CE1), (Ref. AMM TASK 27-64-51-000-001) and (Ref. AMM TASK 27-64-51-400-001).
- R NOTE: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE1) to the first terminal block, (Ref. ASM 27-94/04).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCR V1, V2 signals from the servocontrol (31CE1) to the first terminal block, (Ref. ASM 27-94/04).
 - B. Do the test given in Para. 3.

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TASK 27-60-00-810-811

Loss of the Left Spoiler 1 Position Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the ANI 2-4 signal from the SEC 3 (1CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION |
|---|-------------------|--|--|
| R | AMM AMM AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 27-94/04 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - (2) Pull the speedbrake control lever (7CE) up to the armed position on the panel 11VU.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- C. Put the aircraft back to its initial configuration
 - (1) Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).
 - (2) Disarm the speedbrake control lever (7CE) on the panel 11VU.

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC 3 COM OR WIRING FROM L SPLR 1 POS XDCR 31CE1 or
 - SEC 3 MON OR WIRING FROM L SPLR 1 POS XDCR 31CE1
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-4 signal from the SEC 3 (1CE3) to the first terminal block COM part or MON part as shown in the maintenance message (Ref. ASM 27-94/04).
- B. Do the test given in Para. 3.

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TASK 27-60-00-810-812

Loss of the Right Spoiler 1 Position Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the ANI 2-5 signal from the SEC 3 (1CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-------------------|--|--|--|
| R | AMM AMM AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 27-94/04 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - (2) Pull the speedbrake control lever (7CE) up to the armed position on the panel 11VU.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- C. Put the aircraft back to its initial configuration
 - (1) Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).
 - (2) Disarm the speedbrake control lever (7CE) on the panel 11VU.

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC 3 COM OR WIRING FROM R SPLR 1 POS XDCR 31CE2
 - SEC 3 MON OR WIRING FROM R SPLR 1 POS XDCR 31CE2
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-5 signal from the SEC 3 (1CE3) to the first terminal block COM part or MON part of the computer (Ref. ASM 27-94/04).
- B. Do the test given in Para. 3.

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TASK 27-60-00-810-813

Failure of the Right Spoiler 1 Position Transducer

1. Possible Causes

- SERVO CTL-SPLR1, R G (31CE2)
- wiring of the POS XDCR SPLY signal from the servo control (31CE2) to the first terminal block
- wiring of the POS XDCR V1, V2 signals from the servo control (31CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|--------------------------|------------------|---|
| | 27-9 | 0-00-810-805 | Loss of the ACS2 Signal of the SEC3 COM side |
| R | AMM | 27-64-51-000-004 | Removal of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| R | AMM | 27-64-51-400-004 | <pre>Installation of the Spoiler Servo-Control 31CE1 thru 31CE10</pre> |
| | AMM AMM AMM ASM | | BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - (2) Pull the speedbrake control lever (7CE) up to the armed position on the panel 11VU.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R SPLR 1 POS XDCR 31CE2

- refer to the Para. Fault Isolation.

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- (b) If the ground scanning gives the maintenance messages: R SPLR 1 POS XDCR 31CE2 L SPLR 1 POS XDCR 31CE1
 - refer to this procedure (Ref. TASK 27-90-00-810-805).
- C. Put the aircraft back to its initial configuration
 - (1) Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).
 - (2) Disarm the speedbrake control lever (7CE) on the panel 11VU.

4. Fault Isolation

R

- A. If the BITE test gives the maintenance message:
 - R SPLR 1 POS XDCR 31CE2
 - replace the SERVO CTL-SPLR1, R G (31CE2), (Ref. AMM TASK 27-64-51-000-004) and (Ref. AMM TASK 27-64-51-400-004).
 - ${\tt NOTE}$: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servo control (31CE2) to the first terminal block, (Ref. ASM 27-94/04).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCR V1, V2 signals from the servo control (31CE2) to the first terminal block, (Ref. ASM 27-94/04).

R

B. Do the test given in Para. 3.

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TASK 27-60-00-810-814

Loss of the Left Spoiler 1 Servo Valve Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- servo valve of the servo control (31CE1)
- wiring of the SV signal from the servo control (31CE1) to the SEC 3 (1CE3)

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|--------|--------------------------|--|--|--|
| В | AMM | 27-64-51-000-001 | Removal of the Spoiler Servo-Control | |
| R R | AMM | 27-64-51-400-001 | 31CE1(31CE2)/31CE3(31CE4)/31CE5(31CE6) Installation of the Spoiler Servo-Control 31CE1(31CE2)/31CE3(31CE4)/ 31CE5(31CE6) | |
| •• | | 27-94-34-000-001 27-94-34-400-001 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) | |
| | AMM AMM AMM ASM | 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 27-94/04 | BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - (2) Pull the speedbrake control lever (7CE) up to the armed position on the panel 11VU.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).
 - (2) Disarm the speedbrake control lever (7CE) on the panel 11VU.

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4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - L SPLR 1 SERVO VLV 31CE1 OR OUTPUT FROM SEC 3
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE1), (Ref. AMM TASK 27-64-51-000-001) and (Ref. AMM TASK 27-64-51-400-001).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE1) to the SEC 3 (1CE3), (Ref. ASM 27-94/04).
- B. Do the test given in Para. 3.

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TASK 27-60-00-810-815

Loss of the Right Spoiler 1 Servo Valve Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- servo valve of the servo control (31CE2)
- wiring of the SV signal from the servo control (31CE2) to the SEC 3 (1CE3)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-64-51-000-002 | Removal of the Servo-Valve from the Spoiler Servo-Control | |
| AMM | 27-64-51-400-002 | Installation of the Servo-Valve on the Spoiler Servo-Control | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 29-10-00-863-001 | Pressurize the Green Hydraulic System | |
| AMM | 29-10-00-864-001 | Depressurize the Green Hydraulic System | |
| ASM | 27-94/04 | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - (2) Pull the speedbrake control lever (7CE) up to the armed position on the panel 11VU.
- B. Test

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- (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).
 - (2) Disarm the speedbrake control lever (7CE) on the panel 11VU.

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: R SPLR 1 SERVO VLV 31CE2 OR OUTPUT FROM SEC 3
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE2), (Ref. AMM TASK 27-64-51-000-002) and (Ref. AMM TASK 27-64-51-400-002).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE2) to the SEC 3 (1CE3), (Ref. ASM 27-94/04).
- B. Do the test given in Para. 3.

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TASK 27-60-00-810-816

Incorrect Position of the Left Spoiler 1

1. Possible Causes

- SEC-3 (1CE3)
- SERVO CTL-SPLR1, L G (31CE1)
- wiring

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|-------|------------------|--|
| n | AMM | 27-60-00-866-002 | Extension-Retraction of the Spoilers for Maintenance |
| R | AMM | 27-64-51-000-004 | Removal of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| R | AMM | 27-64-51-400-004 | Installation of the Spoiler Servo-Control 31CE1 thru |
| | Ariri | 21-04-31-400-004 | 31CE10 |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | AMM | 29-10-00-863-001 | Pressurize the Green Hydraulic System |
| | AMM | 29-10-00-864-001 | Depressurize the Green Hydraulic System |
| | ASM | 27-94/04 | |
| | AWM | 27-94-03 | |
| | AWM | 27-94-05 | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - (2) Pull the speedbrake control lever (7CE) up to the armed position on the panel 11VU.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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- C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).
 - (2) Disarm the speedbrake control lever (7CE) on the panel 11VU.

4. Fault Isolation

R

- A. If the BITE test gives the maintenance message: L SPLR 1 POS ERROR 31CE1
 - (1) make sure that the maintenance device of the spoiler servocontrol is in the " 0 " position (Ref. AMM TASK 27-60-00-866-002)
 - (2) If the fault continues:
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (3) If the fault continues:
 - replace the SERVO CTL-SPLR1, L G (31CE1), (Ref. AMM TASK 27-64-51-000-004) and (Ref. AMM TASK 27-64-51-400-004).
 - (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-4 signal from the SEC 3 (1CE3) MON part to COM part, (Ref. ASM 27-94/04), (Ref. AWM 27-94-03), (Ref. AWM 27-94-05)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-4 signal from the SEC 3 (1CE3) MON part to the servocontrol (31CE1), (Ref. ASM 27-94/04), (Ref. AWM 27-94-03), (Ref. AWM 27-94-05)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE1) to the SEC 3 (1CE3), (Ref. ASM 27-94/04), (Ref. AWM 27-94-03).

R

B. Do the test given in Para. 3.

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TASK 27-60-00-810-817

Incorrect Position of the Right Spoiler 1

- 1. Possible Causes
 - SEC-3 (1CE3)
 - SERVO CTL-SPLR1, R G (31CE2)
 - wiring
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|--|
| R | AMM | 27-60-00-866-002 | Extension-Retraction of the Spoilers for Maintenance |
| ĸ | AMM | 27-64-51-000-004 | Removal of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| R | | | |
| | AMM | 27-64-51-400-004 | <pre>Installation of the Spoiler Servo-Control 31CE1 thru 31CE10</pre> |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | AMM | 29-10-00-863-001 | Pressurize the Green Hydraulic System |
| | AMM | 29-10-00-864-001 | Depressurize the Green Hydraulic System |
| | ASM | 27-94/04 | |
| | AWM | 27-94-03 | |
| | AWM | 27-94-04 | |
| | AWM | 27-94-06 | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - (2) Pull the speedbrake control lever (7CE) up to the armed position on the panel 11VU.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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- C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).
 - (2) Disarm the speedbrake control lever (7CE) on the panel 11VU.

4. Fault Isolation

R

- A. If the BITE test gives the maintenance message: R SPLR 1 POS ERROR 31CE2
 - (1) Make sure that the maintenance device of the spoiler servocontrol is in the " 0 " position (Ref. AMM TASK 27-60-00-866-002).
 - (2) If the fault continues:
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (3) If the fault continues:
 - replace the SERVO CTL-SPLR1, R G (31CE2), (Ref. AMM TASK 27-64-51-000-004) and (Ref. AMM TASK 27-64-51-400-004).
 - (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-5 signal from the SEC 3 (1CE3) MON part to COM part, (Ref. ASM 27-94/04), (Ref. AWM 27-94-06)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-5 signal from the SEC 3 (1CE3) MON part to the servocontrol (31CE2), (Ref. ASM 27-94/04), (Ref. AWM 27-94-06)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE2) to the SEC 3 (1CE3), (Ref. ASM 27-94/04), (Ref. AWM 27-94-03), (Ref. AWM 27-94-04).

R

B. Do the test given in Para. 3.

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TASK 27-60-00-810-818

Failure of the Left Spoiler 2 Position Transducer

1. Possible Causes

- SERVO CTL-SPLR2, L Y (31CE3)
- wiring of the POS XDCR SPLY signal from the servo control (31CE3) to the first terminal block
- wiring of the POS XDCR V1, V2 signals from the servo control (31CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|--|
| | | | |
| | 27-9 | 0-00-810-806 | Loss of the ACS2 Signal of the SEC3 MON Side |
| | AMM | 27-64-51-000-001 | Removal of the Spoiler Servo-Control |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/31CE5(31CE6) |
| | AMM | 27-64-51-400-001 | Installation of the Spoiler Servo-Control |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/ 31CE5(31CE6) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | | | (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-94/04 | |

3. Fault Confirmation

A. Test

SROS

- (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - - L SPLR 2 POS XDCR 31CE3
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: L SPLR 2 POS XDCR 31CE3
 - R SPLR 2 POS XDCR 31CE4
 - refer to this procedure (Ref. TASK 27-90-00-810-806).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - L SPLR 2 POS XDCR 31CE3
 - replace the SERVO CTL-SPLR2, L Y (31CE3), (Ref. AMM TASK 27-64-51-000-001) and (Ref. AMM TASK 27-64-51-400-001).
 - $\frac{\text{NOTE}}{30}$: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servo control (31CE3) to the first terminal block, (Ref. ASM 27-94/04).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCR V1, V2 signals from the servo control (31CE3) to the first terminal block, (Ref. ASM 27-94/04).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-819

Loss of the Left Spoiler 2 Position Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the ANI 2-6 signal from the SEC 3 (1CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|--|---|
| AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-710-020 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | 27-96-00-740-001 27-94/04 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: SEC 3 COM OR WIRING FROM L SPLR 2 POS XDCR 31CE3 or

SEC 3 MON OR WIRING FROM L SPLR 2 POS XDCR 31CE3

- replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-6 signal from the SEC 3 (1CE3) to the first terminal block COM part or MON part as shown in the maintenance message (Ref. ASM 27-94/04).
- B. Do the tests given in Para. 3.

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TASK 27-60-00-810-820

Loss of the Right Spoiler 2 Position Signal for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring of the ANI 2-7 signal from the SEC 3 (1CE3) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|--------------------------------------|--|
| | 27-94-34-000-001 27-94-34-400-001 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) |
| | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | 27-96-00-740-001 27-94/04 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: SEC 3 COM OR WIRING FROM R SPLR 2 POS XDCR 31CE4 or

SEC 3 MON OR WIRING FROM R SPLR 2 POS XDCR 31CE4

- replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-7 signal from the SEC 3 (1CE3) to the first terminal block COM part or MON part as shown in the maintenance message (Ref. ASM 27-94/04).
- B. Do the tests given in Para. 3.

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TASK 27-60-00-810-821

Failure of the Right Spoiler 2 Position Transducer

1. Possible Causes

- SERVO CTL-SPLR2, R Y (31CE4)
- wiring of the POS XDCR SPLY signal from the servo control (31CE4) to the first terminal block
- wiring of the POS XDCR V1, V2 signals from the servo control (31CE4) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|--|
| | | | |
| | 27-9 | 0-00-810-806 | Loss of the ACS2 Signal of the SEC3 MON Side |
| | AMM | 27-64-51-000-001 | Removal of the Spoiler Servo-Control |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/31CE5(31CE6) |
| | AMM | 27-64-51-400-001 | Installation of the Spoiler Servo-Control |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/ 31CE5(31CE6) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | | | (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-94/04 | • |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R SPLR 2 POS XDCR 31CE4
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: R SPLR 2 POS XDCR 31CE4 L SPLR 2 POS XDCR 31CE3
 - refer to this procedure (Ref. TASK 27-90-00-810-806).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: R SPLR 2 POS XDCR 31CE4
 - replace the SERVO CTL-SPLR2, R Y (31CE4), (Ref. AMM TASK 27-64-51-000-001) and (Ref. AMM TASK 27-64-51-400-001).
 - $\frac{\text{NOTE}}{30}$: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servo control (31CE4) to the first terminal block, (Ref. ASM 27-94/04).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCR V1, V2 signals from the servo control (31CE4) to the first terminal block, (Ref. ASM 27-94/04).
- B. Do the tests given in Para. 3.

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TASK 27-60-00-810-822

Loss of the Left Spoiler 2 Servo Valve Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- servo valve of the servo control (31CE3)
- wiring of the SV signal from the servo control (31CE3) to the SEC 3 (1CE3)

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION | |
|------|------------------|--|--|
| | | | |
| AMM | 27-64-51-000-002 | Removal of the Servo-Valve from the Spoiler Servo-Control | |
| AMM | 27-64-51-400-002 | Installation of the Servo-Valve on the Spoiler Servo-Control | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-94/04 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - L SPLR 2 SERVO VLV 31CE3 OR OUTPUT FROM SEC 3:
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE3), (Ref. AMM TASK 27-64-51-000-002) and (Ref. AMM TASK 27-64-51-400-002).

NOTE: The resistance must be 500 ohms +/- 10 %.

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- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE3) to the SEC 3 (1CE3), (Ref. ASM 27-94/04).
- B. Do the tests given in Para. 3.

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TASK 27-60-00-810-823

Loss of the Right Spoiler 2 Servo Valve Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- servo valve of the servo control (31CE4)
- wiring of the SV signal from the servo control (31CE4) to the SEC 3 (1CE3)

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|------------------------------|--|
| | | |
| AMM | 27-64-51-000-002 | Removal of the Servo-Valve from the Spoiler Servo-Control |
| AMM | 27-64-51-400-002 | Installation of the Servo-Valve on the Spoiler Servo-Control |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-94/04 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - R SPLR 2 SERVO VLV 31CE4 OR OUTPUT FROM SEC 3:
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE4), (Ref. AMM TASK 27-64-51-000-002) and (Ref. AMM TASK 27-64-51-400-002).

NOTE: The resistance must be 500 ohms +/- 10 %.

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- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE4) to the SEC 3 (1CE3), (Ref. ASM 27-94/04).
- B. Do the tests given in Para. 3.

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TASK 27-60-00-810-824

Incorrect Position of the Left Spoiler 2

1. Possible Causes

- SEC-3 (1CE3)
- SERVO CTL-SPLR2, L Y (31CE3)
- wiring

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|----------|------|------------------|--|
| D | AMM | 27-60-00-866-002 | Extension-Retraction of the Spoilers for Maintenance |
| R | AMM | 27-64-51-000-004 | Removal of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| R | | | |
| | AMM | 27-64-51-400-004 | Installation of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-94/04 | - |
| | AWM | 27-94-07 | |
| | AWM | 27-94-17 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

R

- A. If the BITE test gives the maintenance message: L SPLR 2 POS ERROR 31CE3
 - (1) Make sure that the maintenance device of the spoiler servocontrol is in the " 0 " position (Ref. AMM TASK 27-60-00-866-002).
 - (2) If the fault continues
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (3) If the fault continues:
 - replace the SERVO CTL-SPLR2, L Y (31CE3), (Ref. AMM TASK 27-64-51-000-004) and (Ref. AMM TASK 27-64-51-400-004).
 - (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-6 signal from the SEC 3 (1CE3) MON part to COM part, (Ref. ASM 27-94/04), (Ref. AWM 27-94-07)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-6 signal from the SEC 3 (1CE3) MON part to the servocontrol (31CE3), (Ref. ASM 27-94/04), (Ref. AWM 27-94-07)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE3) to the SEC 3 (1CE3), (Ref. ASM 27-94/04), (Ref. AWM 27-94-17).

R

B. Do the tests given in Para. 3.

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TASK 27-60-00-810-825

Incorrect Position of the Right Spoiler 2

1. Possible Causes

- SEC-3 (1CE3)
- SERVO CTL-SPLR2, R Y (31CE4)
- wiring

R

R

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|----|------|------------------|--|
| | AMM | 27-60-00-866-002 | Extension-Retraction of the Spoilers for Maintenance |
| ζ. | AMM | 27-64-51-000-004 | Removal of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| 1 | | | |
| | AMM | 27-64-51-400-004 | <pre>Installation of the Spoiler Servo-Control 31CE1 thru 31CE10</pre> |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-94/04 | - |
| | AWM | 27-94-12 | |
| | AWM | 27-94-17 | |
| | | | |

3. Fault Confirmation

A. Test

SROS

- (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

R

- A. If the BITE test gives the maintenance message: R SPLR 2 POS ERROR 31CE4
 - (1) Make sure that the maintenance device of the spoiler servocontrol is in the " 0 " position (Ref. AMM TASK 27-60-00-866-002).
 - (2) If the fault continues:
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (3) If the fault continues:
 - replace the SERVO CTL-SPLR2, R Y (31CE4), (Ref. AMM TASK 27-64-51-000-004) and (Ref. AMM TASK 27-64-51-400-004).
 - (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-7 signal from the SEC 3 (1CE3) MON part to COM part, (Ref. ASM 27-94/04), (Ref. AWM 27-94-12)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-7 signal from the SEC 3 (1CE3) MON part to the servocontrol (31CE4), (Ref. ASM 27-94/04), (Ref. AWM 27-94-12)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE4) to the SEC 3 (1CE3), (Ref. ASM 27-94/04), (Ref. AWM 27-94-17), (Ref. AWM 27-94-12).

R

B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-826

Failure of the left Spoiler 3 Position Transducer

1. Possible Causes

- SERVO CTL-SPLR3, L B (31CE5)
- wiring of the POS XDCR SPLY signal from the servo control (31CE5) to the first terminal block
- wiring of the POS XDCR V1, V2 signals from the servo control (31CE5) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|--|--|
| | | | | |
| | 27-9 | 0-00-810-802 | Loss of the ACS2 Signal of the SEC1 COM Side | |
| | AMM | 27-64-51-000-001 | Removal of the Spoiler Servo-Control | |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/31CE5(31CE6) | |
| | AMM | 27-64-51-400-001 | Installation of the Spoiler Servo-Control | |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/ 31CE5(31CE6) | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | | | (Activation for the BITE Test) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-94/02 | G | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message:
 - L SPLR 3 POS XDCR 31CE5
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: L SPLR 3 POS XDCR 31CE5
 - R SPLR 3 POS XDCR 31CE6
 - refer to this procedure (Ref. TASK 27-90-00-810-802).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - L SPLR 3 POS XDCR 31CE5:
 - replace the SERVO CTL-SPLR3, L B (31CE5), (Ref. AMM TASK 27-64-51-000-001) and (Ref. AMM TASK 27-64-51-400-001).
 - $\frac{\text{NOTE}}{30}$: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servo control (31CE5) to the first terminal block, (Ref. ASM 27-94/02).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCR V1, V2 signals from the servo control (31CE5) to the first terminal block, (Ref. ASM 27-94/02).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-827

Loss of the Left Spoiler 3 Position Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the ANI 2-4 signal from the SEC 1 (1CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|--|---|
| AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-710-020 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | 27-96-00-740-001 27-94/02 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: SEC1 COM OR WIRING FROM L SPLR3 POS XDCR 31CE5 or

SEC1 MON OR WIRING FROM L SPLR3 POS XDCR 31CE5

- replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-4 signal from the SEC 1 (1CE1) to the first terminal block COM part or MON part as shown in the maintenance message (Ref. ASM 27-94/02).
- B. Do the tests given in Para. 3.

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TASK 27-60-00-810-828

Loss of the Right Spoiler 3 Position Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the ANI 2-5 signal from the SEC 1 (1CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|--------------------------------------|--|
| | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | 27-94-34-400-001 27-96-00-710-020 | <pre>Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test)</pre> |
| AMM ASM | 27-96-00-740-001 27-94/02 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: SEC1 COM OR WIRING FROM R SPLR3 POS XDCR 31CE6 or

SEC1 MON OR WIRING FROM R SPLR3 POS XDCR 31CE6

- replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-5 signal from the SEC 1 (1CE1) to the first terminal block COM part or MON part as shown in the maintenance message (Ref. ASM 27-94/02).
- B. Do the tests given in Para. 3.

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ALL

TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-829

Failure of the Right Spoiler 3 Position Transducer

1. Possible Causes

- SERVO CTL-SPLR3, R B (31CE6)
- wiring of the POS XDCR SPLY signal from the servo control (31CE6) to the first terminal block
- wiring of the POS XDCR V1, V2 signal from the servo control (31CE6) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|--|--|
| | | | | |
| | 27-9 | 0-00-810-802 | Loss of the ACS2 Signal of the SEC1 COM Side | |
| | AMM | 27-64-51-000-001 | Removal of the Spoiler Servo-Control | |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/31CE5(31CE6) | |
| | AMM | 27-64-51-400-001 | Installation of the Spoiler Servo-Control | |
| R | | | 31CE1(31CE2)/31CE3(31CE4)/ 31CE5(31CE6) | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | | | (Activation for the BITE Test) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-94/02 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Ref. AMM TASK 27- 96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R SPLR 3 POS XDCR 31CE6
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: R SPLR 3 POS XDCR 31CE6 L SPLR 3 POS XDCR 31CE5
 - refer to this procedure (Ref. TASK 27-90-00-810-802).

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4. Fault Isolation

- A. IF THE BITE TEST GIVES THE MAINTENANCE MESSAGE:
 - R SPLR 3 POS XDCR 31CE6
 - replace the SERVO CTL-SPLR3, R B (31CE6), (Ref. AMM TASK 27-64-51-000-001) and (Ref. AMM TASK 27-64-51-400-001).
 - $\frac{\text{NOTE}}{30}$: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servo control (31CE6) to the first terminal block, (Ref. ASM 27-94/02).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCR V1, V2 signal from the servo control (31CE6) to the first terminal block, (Ref. ASM 27-94/02).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-830

Loss of the Left Spoiler 3 Servo Valve Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- servo valve of the servo control (31CE5)
- wiring of the SV signal from the servo control (31CE5) to the SEC 1 (1CE1)

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| | | |
| AMM | 27-64-51-000-002 | Removal of the Servo-Valve from the Spoiler Servo-Control |
| AMM | 27-64-51-400-002 | Installation of the Servo-Valve on the Spoiler Servo-Control |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | | (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-94/02 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Ref. AMM TASK 27- 96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - L SPLR 3 SERVO VLV 31CE5 OR OUTPUT FROM SEC 1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE5), (Ref. AMM TASK 27-64-51-000-002) and (Ref. AMM TASK 27-64-51-400-002).

NOTE: The resistance must be 500 ohms +/- 10 %.

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- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE5) to the SEC 1 (1CE1), (Ref. ASM 27-94/02).
- B. Do the tests given in Para. 3.

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TASK 27-60-00-810-831

Loss of the Right Spoiler 3 Servo Valve Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- servo valve of the servo control (31CE6)
- wiring of the SV signal from the servo control (31CE6) to the SEC 1 (1CE1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| AMM | 27-64-51-000-002 | Removal of the Servo-Valve from the Spoiler Servo-Control |
| AMM | 27-64-51-400-002 | Installation of the Servo-Valve on the Spoiler Servo-Control |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-94/02 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - R SPLR3 SERVO VLV 31CE6 OR OUTPUT FROM SEC1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE6), (Ref. AMM TASK 27-64-51-000-002) and (Ref. AMM TASK 27-64-51-400-002).

NOTE: The resistance must be 500 ohms +/- 10 %.

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- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE6) to the SEC 1 (1CE1), (Ref. ASM 27-94/02).
- B. Do the tests given in Para. 3.

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TASK 27-60-00-810-832

Incorrect Position of the Left Spoiler 3

- 1. Possible Causes
 - SEC-1 (1CE1)
 - SERVO CTL-SPLR3, L B (31CE5)
 - wiring
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|-------------------|--|--|
| R | AMM | 27-60-00-866-002 | Extension-Retraction of the Spoilers for Maintenance |
| ĸ | AMM | 27-64-51-000-004 | Removal of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| R | | | |
| | AMM | 27-64-51-400-004 | <pre>Installation of the Spoiler Servo-Control 31CE1 thru 31CE10</pre> |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM ASM AWM | 27-96-00-740-001 27-94/02 27-94-11 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).
- 4. Fault Isolation

R

SROS

- A. If the BITE test gives the maintenance message: L SPLR3 POS ERROR 31CE5
 - (1) Make sure that the maintenance device of the spoiler servocontrol is in the " 0 " position (Ref. AMM TASK 27-60-00-866-002).

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- (2) If the fault continues:
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (3) If the fault continues:
 - replace the SERVO CTL-SPLR3, L B (31CE5), (Ref. AMM TASK 27-64-51-000-004) and (Ref. AMM TASK 27-64-51-400-004).
- (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-4 signal from the SEC 1 (1CE1) MON part to COM part, (Ref. ASM 27-94/02), (Ref. AWM 27-94-11)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-4 signal from the SEC 1 (1CE1) MON part to the servocontrol (31CE5), (Ref. ASM 27-94/02), (Ref. AWM 27-94-11)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE5) to the SEC 1 (1CE1), (Ref. ASM 27-94/02), (Ref. AWM 27-94-11).

R

B. Do the tests given in Para. 3.

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EFF: ALL

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TASK 27-60-00-810-833

Incorrect Position of the Right Spoiler 3

1. Possible Causes

- SEC-1 (1CE1)
- SERVO CTL-SPLR3, R B (31CE6)
- wiring

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|--|
| R | AMM | 27-60-00-866-002 | Extension-Retraction of the Spoilers for Maintenance |
| ĸ | AMM | 27-64-51-000-004 | Removal of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| R | | | |
| | AMM | 27-64-51-400-004 | <pre>Installation of the Spoiler Servo-Control 31CE1 thru 31CE10</pre> |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-94/02 | |
| | AWM | 27-94-08 | |
| | AWM | 27-94-11 | |
| | AWM | 27-94-18 | |

3. Fault Confirmation

A. Test

SROS

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

R

- A. If the BITE test gives the maintenance message: R SPLR3 POS ERROR 31CE6
 - (1) Make sure that the maintenance device of the spoiler servocontrol is in the " 0 " position (Ref. AMM TASK 27-60-00-866-002).
 - (2) If the fault continues:
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (3) If the fault continues:
 - replace the SERVO CTL-SPLR3, R B (31CE6), (Ref. AMM TASK 27-64-51-000-004) and (Ref. AMM TASK 27-64-51-400-004).
 - (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-5 signal from the SEC 1 (1CE1) MON part to COM part, (Ref. ASM 27-94/02), (Ref. AWM 27-94-08)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-5 signal from the SEC 1 (1CE1) MON part to the servocontrol (31CE6), (Ref. ASM 27-94/02), (Ref. AWM 27-94-08)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE6) to the SEC 1 (1CE1), (Ref. ASM 27-94/02), (Ref. AWM 27-94-18), (Ref. AWM 27-94-11).

R

B. Do the tests given in Para. 3.

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EFF: ALL

TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-834

Failure of the Left Spoiler 4 Position Transducer

1. Possible Causes

R

- SERVO CTL-SPLR4, L Y (31CE7)
- wiring of the POS XDCR SPLY signal from the servo control (31CE7) to the first terminal block
- wiring of the POS XDCR V1, V2 signals from the servo control (31CE7) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| 27-90-00-810-803 AMM 27-64-52-000-003 AMM 27-64-52-400-003 AMM 27-96-00-710-020 AMM 27-96-00-740-001 ASM 27-94/02 | Loss of the ACS2 Signal of the SEC1 MON Side Removal of the Spoiler Servo-Control 32CE1 Installation of the Spoiler Servo-Control 32CE1 Operational Test of the Side Stick Assembly (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

R

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message:
 - L SPLR4 POS XDCR 31CE7
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages:
 - L SPLR4 POS XDCR 31CE7
 - R SPLR4 POS XDCR 31CE8
 - refer to this procedure (Ref. TASK 27-90-00-810-803).

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R

4. Fault Isolation

R

- A. If the BITE test gives the maintenance message:
 - L SPLR4 POS XDCR 31CE7
 - replace the SERVO CTL-SPLR4, L Y (31CE7), (Ref. AMM TASK 27-64-52-000-003) and (Ref. AMM TASK 27-64-52-400-003).
 - ${\tt NOTE}$: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servo control (31CE7) to the first terminal block, (Ref. ASM 27-94/02).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCR V1, V2 signals from the servo control (31CE7) to the first terminal block, (Ref. ASM 27-94/02).

R

B. Do the tests given in Para. 3.

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TASK 27-60-00-810-835

Loss of the Left Spoiler 4 Position Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the ANI 2-6 signal from the SEC 1 (1CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-710-020 AMM 27-96-00-740-001 ASM 27-94/02 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

R

A. If the BITE test gives the maintenance message: SEC1 COM OR WIRING FROM L SPLR4 POS XDCR 31CE7

SEC1 MON OR WIRING FROM L SPLR4 POS XDCR 31CE7

- replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-6 signal from the SEC 1 (1CE1) to the first terminal block COM part or MON part as shown in the maintenance message (Ref. ASM 27-94/02).

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R

B. Do the tests given in Para. 3.

EFF: ALL

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TASK 27-60-00-810-836

Loss of the Right Spoiler 4 Position Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the ANI 2-7 signal from the SEC 1 (1CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-710-020 AMM 27-96-00-740-001 ASM 27-94/02 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

R

A. If the BITE test gives the maintenance message: SEC1 COM OR WIRING FROM R SPLR4 POS XDCR 31CE8

SEC1 MON OR WIRING FROM R SPLR4 POS XDCR 31CE8

- replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-7 signal from the SEC 1 (1CE1) to the first terminal block COM part or MON part as shown in the maintenance message (Ref. ASM 27-94/02).

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R

B. Do the tests given in Para. 3.

EFF: ALL

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TASK 27-60-00-810-837

Failure of the Right Spoiler 4 Position Transducer

1. Possible Causes

R

- SERVO CTL-SPLR4, R Y (31CE8)
- wiring of the POS XDCR SPLY signal from the servo control (31CE8) to the first terminal block
- wiring of the POS XDCF V1, V2 signals from the servo control (31CE8) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| 27-90-00-810-803 AMM 27-64-52-000-004 | Loss of the ACS2 Signal of the SEC1 MON Side Removal of the Spoiler Servo-Control 32CE2 |
| AMM 27-64-52-400-004 AMM 27-96-00-710-020 | Installation of the Spoiler Servo-Control 32CE2 Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM 27-96-00-740-001 ASM 27-94/02 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

R

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R SPLR4 POS XDCR 31CE8
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: R SPLR4 POS XDCR 31CE8
 - L SPLR4 POS XDCR 31CE7
 - refer to this procedure (Ref. TASK 27-90-00-810-803).

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R

4. Fault Isolation

R

- A. If the BITE test gives the maintenance message: R SPLR4 POS XDCR 31CE8
 - replace the SERVO CTL-SPLR4, R Y (31CE8), (Ref. AMM TASK 27-64-52-000-004) and (Ref. AMM TASK 27-64-52-400-004).
 - ${\tt NOTE}$: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servo control (31CE8) to the first terminal block, (Ref. ASM 27-94/02).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCF V1, V2 signals from the servo control (31CE8) to the first terminal block, (Ref. ASM 27-94/02).

R

B. Do the tests given in Para. 3.

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TASK 27-60-00-810-838

Loss of the Left Spoiler 4 Servo Valve Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)

R

- servo valve of the servo control (31CE7)
- wiring of the SV signal from the servo control (31CE7) to the SEC 1 (1CE1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-64-52-000-007 | Removal of the Servo-Valve from the Spoiler | |
| , | 2. 0. 32 000 00. | Servo-Control | |
| AMM | 27-64-52-400-007 | Installation of the Servo-Valve on the Spoiler | |
| | | Servo-Control | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | | (Activation for the BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-94/02 | • | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

R

- A. If the BITE test gives the maintenance message:
 - L SPLR4 SERVO VLV 31CE7 OR OUTPUT FROM SEC1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE7), (Ref. AMM TASK 27-64-52-000-007) and (Ref. AMM TASK 27-64-52-400-007).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE7) to the SEC 1 (1CE1), (Ref. ASM 27-94/02).

R

B. Do the tests given in Para. 3.

EFF: ALL 27-60-00

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TASK 27-60-00-810-839

Loss of the Right Spoiler 4 Servo Valve Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)

R

- servo valve of the servo control (31CE8)
- wiring of the SV signal from the servo control (31CE8) to the SEC 1 (1CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| | | | |
| AMM | 27-64-52-000-007 | Removal of the Servo-Valve from the Spoiler Servo-Control | |
| AMM | 27-64-52-400-007 | Installation of the Servo-Valve on the Spoiler Servo-Control | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-94/02 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

EFF: ALL 27-60-00

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4. Fault Isolation

R

- A. If the BITE test gives the maintenance message:
 - R SPLR4 SERVO VLV 31CE8 OR OUTPUT FROM SEC1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE8), (Ref. AMM TASK 27-64-52-000-007) and (Ref. AMM TASK 27-64-52-400-007).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE8) to the SEC 1 (1CE1), (Ref. ASM 27-94/02).

R

B. Do the tests given in Para. 3.

EFF: ALL 27-60-00

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TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-840

Incorrect Position of the Left Spoiler 4

- 1. Possible Causes
 - SEC-1 (1CE1)

R

- SERVO CTL-SPLR4, L Y (31CE7)
- wiring
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| AMM | 27-60-00-866-002 | Extension-Retraction of the Spoilers for Maintenance |
| AMM | 27-64-51-000-004 | Removal of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| AMM | 27-64-51-400-004 | <pre>Installation of the Spoiler Servo-Control 31CE1 thr 31CE10</pre> |
| | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | | (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-94/02 | · |
| AWM | 27-94-15 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).
- 4. Fault Isolation

R

- A. If the BITE test gives the maintenance message: L SPLR4 POS ERROR 31CE7
 - (1) Make sure that the maintenance device of the spoiler servocontrol is in " 0 " position (Ref. AMM TASK 27-60-00-866-002).

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- (2) If the fault continues:
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (3) If the fault continues:
 - replace the SERVO CTL-SPLR4, L Y (31CE7), (Ref. AMM TASK 27-64-51-000-004) and (Ref. AMM TASK 27-64-51-400-004).
- (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-6 signal from the SEC 1 (1CE1) MON part to COM part, (Ref. ASM 27-94/02), (Ref. AWM 27-94-15)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-6 signal from the SEC 1 (1CE1) MON part to the servocontrol (31CE7), (Ref. ASM 27-94/02), (Ref. AWM 27-94-15)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE7) to the SEC 1 (1CE1), (Ref. ASM 27-94/02), (Ref. AWM 27-94-15).

R

B. Do the tests given in Para. 3.

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EFF:

ALL

TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-841

Incorrect Position of the Right Spoiler 4

- 1. Possible Causes
 - SEC-1 (1CE1)

R

- SERVO CTL-SPLR4, R Y (31CE8)
- wiring
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-60-00-866-002 | Extension-Retraction of the Spoilers for Maintenance | |
| AMM | 27-64-52-000-004 | Removal of the Spoiler Servo-Control 32CE2 | |
| AMM | 27-64-52-400-004 | Installation of the Spoiler Servo-Control 32CE2 | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-94/02 | • | |
| AWM | 27-94-15 | | |
| AWM | 27-94-16 | | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

R

- A. If the BITE test gives the maintenance message: R SPLR4 POS ERROR 31CE8
 - (1) Make sure that the maintenance device of the spoiler servocontrol is in " 0 " position (Ref. AMM TASK 27-60-00-866-002).

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- (2) If the fault continues:
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (3) If the fault continues:
 - replace the SERVO CTL-SPLR4, R Y (31CE8), (Ref. AMM TASK 27-64-52-000-004) and (Ref. AMM TASK 27-64-52-400-004).
- (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-7 signal from the SEC 1 (1CE1) MON part to COM part, (Ref. ASM 27-94/02), (Ref. AWM 27-94-16)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-7 signal from the SEC 1 (1CE1) MON part to the servocontrol (31CE8), (Ref. ASM 27-94/02), (Ref. AWM 27-94-16)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE8) to the SEC 1 (1CE1), (Ref. ASM 27-94/02), (Ref. AWM 27-94-15) and (Ref. AWM 27-94-16).

R

B. Do the tests given in Para. 3.

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EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-842

Failure of the Left Spoiler 5 Position Transducer

1. Possible Causes

R

- SERVO CTL-SPLR5, L G (31CE9)
- wiring of the POS XDCR SPLY signal from the servo control (31CE9) to the terminal block
- wiring of the POS XDCR V1, V2 signal from the servo control (31CE9) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| 27-90-00-810-804 | Loss of the ACS2 Signal of the SEC2 MON Side |
| AMM 27-64-52-000-005 | Removal of the Spoiler Servo-Control 32CE3 |
| AMM 27-64-52-400-005 | Installation of the Spoiler Servo-Control 32CE3 |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| AMM 27-96-00-740-001 | (Activation for the BITE Test) |
| ASM 27-94/03 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

R

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message:
 - L SPLR5 POS XDCR 31CE9
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages:
 - L SPLR5 POS XDCR 31CE9
 - R SPLR5 POS XDCR 31CE10
 - refer to this procedure (Ref. TASK 27-90-00-810-804).

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R

4. Fault Isolation

R

- A. If the BITE test gives the maintenance message:
 - L SPLR5 POS XDCR 31CE9
 - replace the SERVO CTL-SPLR5, L G (31CE9), (Ref. AMM TASK 27-64-52-000-005) and (Ref. AMM TASK 27-64-52-400-005).
 - ${\tt NOTE}$: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servo control (31CE9) to the terminal block, (Ref. ASM 27-94/03).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCR V1, V2 signal from the servo control (31CE9) to the first terminal block, (Ref. ASM 27-94/03).

R

B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-843

Loss of the Left Spoiler 5 Position Signal for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the ANI 2-6 signal from the SEC 2 (1CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|--|---|
| AMM AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-710-020 27-96-00-740-001 27-94/03 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

R

A. If the BITE test gives the maintenance message: SEC2 COM OR WIRING FROM L SPLR5 POS XDCR 31CE9

SEC2 MON OR WIRING FROM L SPLR5 POS XDCR 31CE9

- replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-6 signal from the SEC 2 (1CE2) to the first terminal block COM part or MON part as shown in the maintenance message (Ref. ASM 27-94/03).

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R

B. Do the tests given in Para. 3.

EFF: ALL

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TASK 27-60-00-810-844

Loss of the Right Spoiler 5 Position Signal for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the ANI 2-7 signal from the SEC 2 (1CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|--|---|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-710-020 AMM 27-96-00-740-001 ASM 27-94/03 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

R

A. If the BITE test gives the maintenance message: SEC2 COM OR WIRING FROM R SPLR5 POS XDCR 31CE10

SEC2 MON OR WIRING FROM R SPLR5 POS XDCR 31CE10

- replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the ANI 2-7 signal from the SEC 2 (1CE2) to the first terminal block COM part or MON part as shown in the maintenance message (Ref. ASM 27-94/03).

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R

B. Do the tests given in Para. 3.

EFF: ALL

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TASK 27-60-00-810-845

Failure of the Right Spoiler 5 Position Transducer

1. Possible Causes

R

- SERVO CTL-SPLR5, R G (31CE10)
- wiring of the POS XDCR SPLY signal from the servo control (31CE10) to the first terminal block
- wiring of the POS XDCR V1, V2 signals from the servo control (31CE10) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| 27-90-00-810-804 AMM 27-64-52-000-006 AMM 27-64-52-400-006 AMM 27-96-00-710-020 AMM 27-96-00-740-001 ASM 27-94/03 | Loss of the ACS2 Signal of the SEC2 MON Side Removal of the Spoiler Servo-Control 32CE4 Installation of the Spoiler Servo-Control 32CE4 Operational Test of the Side Stick Assembly (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) |
| | |

3. Fault Confirmation

R

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: R SPLR5 POS XDCR 31CE10
 - refer to the Para. Fault Isolation.
 - (b) If the ground scanning gives the maintenance messages: R SPLR5 POS XDCR 31CE10
 - L SPLR5 POS XDCR 31CE9
 - refer to this procedure (Ref. TASK 27-90-00-810-804).

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R

4. Fault Isolation

R

- A. If the BITE test gives the maintenance message:
 - R SPLR5 POS XDCR 31CE10
 - replace the SERVO CTL-SPLR5, R G (31CE10), (Ref. AMM TASK 27-64-52-000-006) and (Ref. AMM TASK 27-64-52-400-006).
 - ${\tt NOTE}$: The resistance of primary and secondary windings must be between 30 ohms and 500 ohms.
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR SPLY signal from the servo control (31CE10) to the first terminal block, (Ref. ASM 27-94/03).
 - (2) If the fault continues:
 - do a check and repair the wiring of the POS XDCR V1, V2 signals from the servo control (31CE10) to the first terminal block, (Ref. ASM 27-94/03).

R

B. Do the tests given in Para. 3.

EFF: ALL

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TASK 27-60-00-810-846

Loss of the Left Spoiler 5 Servo Valve Signal for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)

R

- servo valve of the servo control (31CE9)
- wiring of the SV signal from the servo control (31CE9) to the SEC 2 (1CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|---------------------|--|--|
| Λ. | 1M 27-64-52-000-005 | Removal of the Spoiler Servo-Control 32CE3 | |
| | MM 27-64-52-400-005 | Installation of the Spoiler Servo-Control 32CE3 | |
| ΑN | MM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | MM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AN | MM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| ΑN | MM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AS | SM 27-94/03 | | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

R

- A. If the BITE test gives the maintenance message:
 - L SPLR5 SERVO VLV 31CE9 OR OUTPUT FROM SEC2
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE9), (Ref. AMM TASK 27-64-52-000-005) and (Ref. AMM TASK 27-64-52-400-005).

NOTE: The resistance must be 500 ohms +/- 10 %.

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- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE9) to the SEC 2 (1CE2), (Ref. ASM 27-94/03).

R

B. Do the tests given in Para. 3.

EFF: ALL

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TASK 27-60-00-810-847

Loss of the Right Spoiler 5 Servo Valve Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)

R

- servo valve of the servo control (31CE10)
- wiring of the SV signal from the servo control (31CE10) to the SEC 2 (1CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-64-52-000-006 | Removal of the Spoiler Servo-Control 32CE4 |
| AMM | 27-64-52-400-006 | Installation of the Spoiler Servo-Control 32CE4 |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | | (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-94/03 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

R

- A. If the BITE test gives the maintenance message:
 - R SPLR5 SERVO VLV 31CE10 OR OUTPUT FROM SEC2
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the servo valve of the servo control (31CE10), (Ref. AMM TASK 27-64-52-000-006) and (Ref. AMM TASK 27-64-52-400-006).

NOTE: The resistance must be 500 ohms +/- 10 %.

- (2) If the fault continues:
 - do a check and repair the wiring of the SV signal from the servo control (31CE10) to the SEC 2 (1CE2), (Ref. ASM 27-94/03).

R

B. Do the tests given in Para. 3.

EFF: ALL 27-60-00

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TASK 27-60-00-810-848

Incorrect Position of the Left Spoiler 5

- 1. Possible Causes
 - SEC-2 (1CE2)

R

- SERVO CTL-SPLR5, L G (31CE9)
- wiring
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION | |
|--------|-------------------|--|---|--|
| R | AMM AMM | 27-60-00-866-002 27-64-52-000-004 | Extension-Retraction of the Spoilers for Maintenance Removal of the Spoiler Servo-Control 32CE2 | |
| r R | AMM | 27-64-52-400-004 | Installation of the Spoiler Servo-Control 32CE2 | |
| | AMM AMM AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-710-020 27-96-00-740-001 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Assembly (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-94/03 27-94-19 | 21.1 .coc c. c.c 1.co (c. cana coamiring) | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

R

SROS

- A. If the BITE test gives the maintenance message: L SPLR5 POS ERROR 31CE9
 - (1) Make sure that the maintenance device of the spoiler servocontrol is in " 0 " position (Ref. AMM TASK 27-60-00-866-002).

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- (2) If the fault continues:
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (3) If the fault continues:
 - replace the SERVO CTL-SPLR5, L G (31CE9), (Ref. AMM TASK 27-64-52-000-004) and (Ref. AMM TASK 27-64-52-400-004).
- (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-6 signal from the SEC 2 (1CE2) MON part to COM part, (Ref. ASM 27-94/03), (Ref. AWM 27-94-19)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-6 signal from the SEC 2 (1CE2) MON part to the servocontrol (31CE39, (Ref. ASM 27-94/03), (Ref. AWM 27-94-19)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE9) to the SEC 2 (1CE2), (Ref. ASM 27-94/03), (Ref. AWM 27-94-19).

R

B. Do the tests given in Para. 3.

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EFF: ALL

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TASK 27-60-00-810-849

Incorrect Position of the Right Spoiler 5

- 1. Possible Causes
 - SEC-2 (1CE2)

R

- SERVO CTL-SPLR5, R G (31CE10)
- wiring
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------------|--------------------------------------|---|
| | AMM AMM | 27-60-00-866-002 27-64-52-000-004 | Extension-Retraction of the Spoilers for Maintenance Removal of the Spoiler Servo-Control 32CE2 |
| R | | a= // =a /aa aa/ | |
| R | AMM | 27-64-52-400-004 | Installation of the Spoiler Servo-Control 32CE2 |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-94/03 | • |
| | AWM | 27-94-19 | |
| | AWM | 27-94-20 | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).
- 4. Fault Isolation

R

- A. If the BITE test gives the maintenance message:
 R SPLR5 POS ERROR 31CE10
 - (1) Make sure that the maintenance device of the spoiler servocontrol is in " 0 " position (Ref. AMM TASK 27-60-00-866-002).

EFF: ALL

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- (2) If the fault continues:
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (3) If the fault continues:
 - replace the SERVO CTL-SPLR5, R G (31CE10), (Ref. AMM TASK 27-64-52-000-004) and (Ref. AMM TASK 27-64-52-400-004).
- (4) If the fault continues:
 - (a) Do a check of the wiring of the ANI 2-7 signal from the SEC 2 (1CE2) MON part to COM part, (Ref. ASM 27-94/03), (Ref. AWM 27-94-20)
 - if the wiring is correct, do the Para. (b)
 - if the wiring is not correct, repair it.
 - (b) Do a check of the wiring of the ANI 2-7 signal from the SEC 2 (1CE2) MON part to the servocontrol (31CE10), (Ref. ASM 27-94/03), (Ref. AWM 27-94-20)
 - if the wiring is correct, do the Para. (c)
 - if the wiring is not correct, repair it.
 - (c) Do a check and repair the wiring of the POS XDCR SPLY signal from the servocontrol (31CE10) to the SEC 2 (1CE2), (Ref. ASM 27-94/03), (Ref. AWM 27-94-19) and (Ref. AWM 27-94-20).

B. Do the tests given in Para. 3.

R

R

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EFF: ALL

TROUBLE SHOOTING MANUAL

TASK 27-60-00-810-851

Wrong Spoiler Position Indication

1. Possible Causes

- SEC-1 (1CE1)
- SEC-2 (1CE2)
- SEC-3 (1CE3)
- SERVO CTL-SPLR1, L G (31CE1)
- SERVO CTL-SPLR1, R G (31CE2)
- SERVO CTL-SPLR2, L Y (31CE3)
- SERVO CTL-SPLR2, R Y (31CE4)
- SERVO CTL-SPLR3, L B (31CE5)
- SERVO CTL-SPLR3, R B (31CE6)

R

- SERVO CTL-SPLR4, L Y (31CE7)
- SERVO CTL-SPLR4, R Y (31CE8)
- SERVO CTL-SPLR5, L G (31CE9)
- SERVO CTL-SPLR5, R G (31CE10)
- wiring of the LVDT POS Signal

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|-------------------|--|---|
| R | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power |
| | AMM | 27-64-51-000-004 | Removal of the Spoiler Servo-Control 31CE1 thru 31CE10 |
| R | AMM | 27-64-51-400-004 | <pre>Installation of the Spoiler Servo-Control 31CE1 thru 31CE10</pre> |
| R | AMM AMM AMM | 27-94-34-400-001 29-10-00-863-002 29-10-00-863-003 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Pressurize the Yellow Hydraulic System Pressurize the Blue Hydraulic System with a Ground Power Supply |
| | AMM AMM AMM | _, | Depressurize the Yellow Hydraulic System Depressurize the Blue Hydraulic System Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump |
| | AMM AMM | 29-23-00-864-001 31-60-00-860-001 | Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU EIS Start Procedure |

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DESIGNATION

AMM 31-60-00-860-002 EIS Stop Procedure

ASM 27-94/02 ASM 27-94/04

3. Fault Confirmation

A. Job Set-up

- (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
- (2) On the panel 23VU, make sure that the FLT CTL/SEC 1 pushbutton switch is pushed (on this pushbutton switch, the OFF and FAULT legends are off).
- (3) On the panel 24VU, make sure that the FLT CTL/ SEC 2 and the FLT CTL/SEC3 pushbutton switches are pushed (on these pushbutton switches, the OFF and FAULT legends are off).
- (4) On the center pedestal, make sure that the slats and flaps control lever is in the O position, and the SPEED BRAKE control lever is set
- (5) Make sure that the two side stick controllers are in the neutral position.
- (6) Do the EIS start procedure (Upper ECAM DU and lower ECAM DU only) (Ref. AMM TASK 31-60-00-860-001).
- (7) Pressurize the Green, Blue and Yellow hydraulic systems (Ref. AMM TASK 29-23-00-863-001), (Ref. AMM TASK 29-10-00-863-003) and (Ref. AMM TASK 29-10-00-863-002).
- B. Test

ACTION RESULT ______

- 1. On the center pedestal, on the On the lower ECAM display unit: ECAM control panel:
 - push the F/CTL pushbutton switch

the F/CTL page comes into view.

- the triangle of a spoiler does not show the retracted position.

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C. Close-up

- (1) Depressurize the Green, Blue and Yellow hydraulic systems (Ref. AMM TASK 29-23-00-864-001), (Ref. AMM TASK 29-10-00-864-003) and (Ref. AMM TASK 29-10-00-864-002).
- (2) Do the EIS stop procedure (Ref. AMM TASK 31-60-00-860-002).

4. Fault Isolation

R

- A. If the test confirms the fault:
 - replace the SEC in relation to the wrong indication (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001). for spoilers 3 and 4, replace the SEC-1 (1CE1) for spoiler 5, replace the SEC-2 (1CE2)
 - (1) If the fault continues:
 - replace the Spoiler Servo Control in relation to the wrong indication.

for spoilers 1 and 2, replace the SEC-3 (1CE3).

SERVO CTL-SPLR1, L G (31CE1), SERVO CTL-SPLR1, R G (31CE2), for spoiler 1

SERVO CTL-SPLR2, L Y (31CE3), SERVO CTL-SPLR2, R Y (31CE4), for spoiler 2

SERVO CTL-SPLR3, L B (31CE5), SERVO CTL-SPLR3, R B (31CE6), for spoiler 3

SERVO CTL-SPLR4, L Y (31CE7), SERVO CTL-SPLR4, R Y (31CE8) for spoiler 4

SERVO CTL-SPLR5, L G (31CE9), SERVO CTL-SPLR5, R G (31CE10) for spoiler 5

(Ref. AMM TASK 27-64-51-000-004) and (Ref. AMM TASK 27-64-51-400-004).

- (2) If the fault continues:
 - do a check and repair the wiring of the LVDT POS Signal from the spoiler servocontrol to the SEC COM and MON parts (Ref. ASM 27-94/02), (Ref. ASM 27-94/04).

R

Close-up

A. Do the test given in Para 3.

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TROUBLE SHOOTING MANUAL

SLATS ELECTRICAL CONTROL AND MONITORING - FAULT ISOLATION PROCEDURES

TASK 27-81-00-810-801

SFCC - Slat PCU Valveblock Fault

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- VALVE BLOCK SLAT 1 (25CV)
- VALVE BLOCK SLAT 2 (26CV)
- solenoid valve
- valve block filters
- aircraft wiring

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

No specific 45VDC Isolation Tester

No specific 1 MEGOHMMETER 100 MOHMS - MEASURING VOLTAGE 45VDC

No specific 1 MULTIMETER - STANDARD

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B. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-80-00-866-004 | Extending the Slats on the Ground |
| AMM | 27-80-00-866-005 | Retracting the Slats on the Ground |
| AMM | 27-84-53-000-001 | Removal of the Valve Blocks 25CV, 26CV of the Power Control Unit (Slat) |
| AMM | 27-84-53-000-002 | Removal of the Solenoid Valves of the Power Control Unit (Slat) |
| AMM | 27-84-53-000-003 | Removal of the Filters of the Valve Blocks |
| AMM | 27-84-53-400-001 | Installation of the Valve Blocks 25CV, 26CV of the Power Control Unit (Slat) |
| AMM | 27-84-53-400-002 | <pre>Installation of the Solenoid Valves of the Power Control Unit (Slat)</pre> |
| AMM | 27-84-53-400-003 | Installation of the Filters of the Valve Blocks |
| AMM | 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST F/CTL Page |
| ASM | 27-81/02 | |
| ASM | 27-81/03 | |

3. Fault Confirmation

A. Test

R

R

R

R

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- (1) Make sure that the Post Flight Report does not show any hydraulic system faults.
- (2) Move the slats (Ref. AMM TASK 27-80-00-866-004) and (Ref. AMM TASK 27-80-00-866-005).
- (a) Examine the SFCC, SLT ON GROUND FAULTS page for a PCU valve block message.
 - (3) If a valve block message is shown, or the A/C has had this fault before, do the fault isolation procedure.

4. Fault Isolation

A. Procedure.

CAUTION: DO NOT SHORT CIRCUIT THE WIRING TO THE SOLENOID VALVES. DAMAGE TO THE SFCC CAN OCCUR

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- (1) Do a check of the circuit resistance and the circuit isolation of the extend and retract solenoids on each slat system PCU valve block (25CV; 26CV) as follows:
 - (a) Get access to the electrical connector on each valve block (Ref. AMM TASK 27-84-53-000-001).
 - 1 At the connector receptacle on each valve block, use a MULTIMETER - STANDARD to measure the resistance values of the extend and retract solenoids (Ref. ASM 27-81/02) or (Ref. ASM 27-81/03):
 - for the extend solenoid measure between pins H and J
 - for the retract solenoid, measure between pins T and U.
 - The resistance values must be as follows:
 - for solenoid valves with Part No. 667C0000-02, between 71 Ohms and 84 Ohms.
 - for solenoid valves with Part No. 903A0000-01, between 53 Ohms and 60 Ohms.
 - for solenoid valves with Part No. 1106A0000-01 or 1111A0000-01, between 53 0hms and 60 0hms.
 - 3 Use a 45VDC Isolation Tester or a MEGOHMMETER 100 MOHMS -MEASURING VOLTAGE 45VDC to do a check of the extend and retract solenoid circuit isolation:
 - for the extend solenoid connect the pins H and J together
 - for the retract solenoid connect the pins T and U together.
 - Connect one test lead of the 45VDC Isolation Tester or of the MEGOHMMETER 100 MOHMS - MEASURING VOLTAGE 45VDC to the pins JH or TU and the other test lead to pin G (Ref. ASM 27-81/02) and (Ref. ASM 27-81/03):
 - 5 Supply a test signal for 5 seconds and then read the resistance value shown:
 - the resistance value must be more than 100 Megohms.
 - (b) If the results of the solenoid valve tests:
 - are **OK**, do step (**3**)
 - are not OK, do the next step.
- (2) Replace the applicable solenoid valve, (Ref. AMM TASK 27-84-53-000-002) and (Ref. AMM TASK 27-84-53-400-002).
 - if the fault continues, do the next step.
- (3) Interchange the SFCC1 and SFCC2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Do the test in Para. 3.A.(2):
 - if the fault stays in the same system, do step (5)
 - if the fault moves to the other system, do the next step.

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- (4) Replace the SFCC-1 (21CV) or the SFCC-2 (22CV) in the unserviceable system, (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Do the test in Para. 3.A.(2):
 if the fault continues, do the next step.
- (5) Examine and clean/replace as necessary the valve block filters, (Ref. AMM TASK 27-84-53-000-003) and (Ref. AMM TASK 27-84-53-400-003).
 - (a) Do the test in Para. 3.A.(2). Operate the slats many times during the test, to bleed the air from the system:if the fault continues, do the next step.
- (6) Replace the applicable VALVE BLOCK SLAT 1 (25CV) or VALVE BLOCK SLAT2 (26CV), (Ref. AMM TASK 27-84-53-000-001) and (Ref. AMM TASK 27-84-53-400-001):
 - if the fault continues, do the next step.
- (7) Do a check and repair as necessary, the aircraft wiring from the applicable SFCC ARINC tray interface to the valve block electrical connector (Ref. ASM 27-81/02) or (Ref. ASM 27-81/03).
 - (a) Do the test in Para. 3.A.(2).
- (8) At the MCDU get access to the SFCC SYSTEM STATUS page and make sure that the message NO FAULTS is shown (Ref. AMM TASK 31-32-00-860-006).
 - NOTE : More data on the SYSTEM STATUS page can be found in Page Block 301.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TROUBLE SHOOTING MANUAL

TASK 27-81-00-810-802

R SFCC Interface to One SLAT APPU or SLAT APPU Fault.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- APPU-L SLAT (31CV)
- APPU-R SLAT (32CV)
- A/C wiring between the SFCC 1 (2) ARINC tray interface and the flap APPU

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| ASM | 278106\$01 | | |
| ASM | 278107S01 | | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) | |
| AMM | 27-80-00-866-004 | Extending the Slats on the Ground | |
| AMM | 27-80-00-866-005 | Retracting the Slats on the Ground | |
| AMM | 27-81-18-000-001 | Removal of the Asymmetry-Position Pick-Off Unit 31CV (32CV) | |
| AMM | 27-81-18-400-001 | <pre>Installation of the Asymmetry-Position Pick-Off Unit 31CV (32CV)</pre> | |
| AMM | 27-84-00-710-001 | Operational Test of the Slat System | |

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3. Fault Confirmation

A. Table of the circuit breakers used in this procedure:

PANEL DESIGNATION IDENT. LOCATION R

49VU FLIGHT CONTROLS/SLT/CTL AND MONG/SYS1 121VU FLIGHT CONTROLS/SLT/CTL/SYS2

5CV 7CV **B**06 R21

R

- B. Reset and Initialization.
 - (1) At the circuit breakers.
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds.
 - (2) Move the slats (Ref. AMM TASK 27-80-00-866-004) (Ref. AMM TASK 27-80-00-866-005)
 - (a) Examine the UPPER ECAM and the SD FLT/CTL page for the fault warnings and system status.
 - (b) Access the SLT ON GROUND FAULTS page and do a check of the ground log.
 - (c) If an UPPER ECAM warning, SD FLT/CTL status and a ground log fault message, is displayed do the fault isolation.
 - (d) If the UPPER ECAM, SD FLT/CTL status and the SLT ON GROUND FAULTS log are clear, no further maintenance actions are required.

4. Fault Isolation

- A. Procedure.
 - (1) Set the MCDU to MENU MODE page 2 and access submenu <SLT SYSTEM DATA.
 - (a) Press the line key 1R <PPU.
 - (b) Do a check of the PPU DATA (DEG) page. Refer to page block 301 table 2 for APPU fault analysis.
 - (c) If the no data "xxxx.x" is shown.

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- (2) Swap SFCC 1 and SFCC 2 (Ref. AMM TASK 27-51-34-000-001) for (Ref. AMM TASK 27-51-34-400-001) do Para.2,3 and 4 only.
 - (a) Access the SLT ON GROUND FAULTS and do a check of the ground log.
- (3) If the fault moves with SFCC 1(2).
- (4) Install the SFCC 1 (2) in their initial locations.
- (5) Replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)) SFCC 1(2) Ref. Para.4.A.(2).
- (6) Do the steps at 4.A.(1).
 - (a) If DATA is shown, do step 3.B.(2).
 - (b) Access the FLP ON GROUND FUULTS and check that the ground log is clear.
- (7) If the fault does not move.
 - (a) On the APPU 31CV, (32CV) swap the electrical connectors 31CV-A and 31CV-B, (32CV-A and 32CV-B).
 - (b) If the fault moves to the other SFCC, go to step 4.A.(8).
 - (c) If the fault remains in the same circuit do step 4.A.(10).
- (8) Replace the APPU-L SLAT (31CV) (APPU-R SLAT (32CV)) (Ref. AMM TASK 27-81-18-000-001) (Ref. AMM TASK 27-81-18-400-001),
- (9) Do the operational test of the flaps system (Ref. AMM TASK 27-84-00-710-001)
- (10) Do a check of the A/C wiring between the SFCC 1 (2) ARINC tray interface and the flap APPU (Ref. ASM 278106S01) (Ref. ASM 278107S01) electrical connector.
- (11) If there is a wiring/interface fault do the repair.
- (12) Do the operational test of the slats system, reference 4.A.(9).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TROUBLE SHOOTING MANUAL

TASK 27-81-00-810-803

R SFCC Interface to SLT FPPU or SLAT FPPU Fault.

WARNING : PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:
- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- 28CV (28CV)
- A/C Wiring between the SFCC 1 (2) ARINC tray interface and the slat FPPU

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|---------------|-------------|
| ASM 278106S01 | |

| A S M | 210100301 | |
|-------|------------------|--|
| ASM | 278107\$01 | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-80-00-866-004 | Extending the Slats on the Ground |
| AMM | 27-80-00-866-005 | Retracting the Slats on the Ground |
| AMM | 27-81-19-000-001 | Removal of the Feed Back Position Pick-Off Unit |
| AMM | 27-81-19-400-001 | Installation of the Feed Back Position Pick-Off Unit |
| AMM | 27-84-00-710-001 | Operational Test of the Slat System |
| | | |

3. Fault Confirmation

A. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | | LOCATION |
|-------|---------------------------------------|-----|----------|
| 49٧0 | FLIGHT CONTROLS/SLT/CTL AND MONG/SYS1 | 5CV | B06 |
| 121VU | FLIGHT CONTROLS/SLT/CTL/SYS2 | 7CV | R21 |

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- B. Reset and Inialization.
 - (1) At the circuit breakers.
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds
 - (2) Move the slats.(Ref. AMM TASK 27-80-00-866-004) (Ref. AMM TASK 27-80-00-866-005)
 - (a) Examine the UPPER ECAM and the SD FLT/CTL page for the fault warnings and System status.
 - (b) Access the SLT ON GROUND FAULTS log and do a check of the ground log.
 - (c) If an UPPER ECAM warning, SD FLT/CTL status and a ground log fault message, is displayed do the Fault Isolation.
 - (d) If the UPPER ECAM, SD FLT/CTL status and the SLT ON GROUND FAULTS log are clear. No further maintenance actions are required.

4. Fault Isolation

- A. Procedure.
 - (1) Set the MCDU to MENU MODE and access submenu <SLT SYSTEM DATA
 - (a) Press the line key 1R <PPU.
 - (b) Do a check of the PPU DATA (DEG) page. Refer to page block 301 table 1 for FPPU fault analysis.
 - (c) If the no data "xxxx.x" is shown
 - (2) Swap SFCC 1 and SFCC 2 (Ref. AMM TASK 27-51-34-000-001) for (Ref. AMM TASK 27-51-34-400-001) do Para.2,3 and 4 only.
 - (a) Access the SLT ON GROUND FAULTS and do a check of the ground log.
 - (b) If the fault moves with SFCC 1(2).
 - (c) Install the SFCC 1 (2) in their initial locations.
 - (d) Replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)) SFCC 1(2) Ref. Para. 4.A.(2).

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- (3) Do the steps at 4.A.(1).
 - (a) If data is shown, do step 3.B.(2).
 - (b) Set the MENU MODE and access the FLP ON GROUND FUULTS and check that the ground log is clear.
- (4) If the fault does not move.
 - (a) On the FPPU 27CV, swap the electrical connectors 27CV-A and 27CV-B.
 - (b) If the fault moves to the other SFCC, go to step 4.A.(5).
 - (c) If the fault remains in the same circuit do step 4.A.(7).
- (5) Replace the 28CV (28CV) (Ref. AMM TASK 27-81-19-000-001) (Ref. AMM TASK 27-81-19-400-001),
- (6) Move the slats Ref. Para.3.B.(2).
- (7) Do a check of the A/C Wiring between the SFCC 1 (2) ARINC tray interface and the slat FPPU (Ref. ASM 278106S01) (Ref. ASM 278107S01) electrical connector.
- (8) If there is a wiring/interface fault do the repair.
- (9) Do the operational test of the slats system (Ref. AMM TASK 27-84-00-710-001)

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TROUBLE SHOOTING MANUAL

TASK 27-81-00-810-804

Command Sensor Unit (CSU) Fault or wiring to SFCC 1(2) CSU Indicated by Flap or Slat Channel.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

R

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- R CSU (51CV)
 - aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|-------|------------------|--|
| л м м | 27-51-17-000-001 | Removal of the Command Sensor Unit (CSU) (51CV) |
| AMM | | Installation of the Command Sensor Unit (CSU) (51CV) |
| AMM | | Removal of the SFCC (21CV,22CV) |
| AMM | | Installation of the SFCC (21CV,22CV) |
| AMM | 27-54-00-710-002 | Operational Test of the Flap and Slat Systems |
| | | |
| AMM | 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST F/CTL Page |
| | | - |
| ASM | 27-81/02 | |
| ASM | 27-81/03 | |

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3. Fault Confirmation

R

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R

A. Test

- (1) Do the operational test of the slats and flaps (Ref. AMM TASK 27-54-00-710-002). Do this not less than 5 times.
- (2) Get access to the SYSTEM REPORT/TEST F/CTL page (Ref. AMM TASK 31-32-00-860-006).
 - (a) Set the related SFCC 1 or SFCC 2, which gave the initial failure message.
- (b) Get access to the SYSTEM STATUS page:
 - If a CSU (51CV) failure message is shown, do the fault isolation procedure in Para. 4.A.
 - 2 If a different failure message is shown, do the trouble shooting procedure related to the failure message.
 - 3 If the fault does not occur again, do a check of the PFR:
 - <u>a</u> If the CSU (51CV) failure message is related to an ECAM warning, do the steps as given in Para 4.B.
 - <u>b</u> If the CSU (51CV) failure message is not related to an ECAM warning, no more action is necessary.

NOTE: It is necessary to RETURN to the F/CTL page and set the related SFCC again to update the SYSTEM STATUS page.

4. Fault Isolation

A. Procedure.

R (1) Interchange the SFCC 1 and the SFCC 2 (Ref. AMM TASK 27-51-34-000-R 001) and (Ref. AMM TASK 27-51-34-400-001).

(2) If the fault moves to the other SFCC, replace the defective SFCC-1 (21CV) or SFCC-2 (22CV).

(3) If the fault stays in the same SFCC, get access to the CSU and interchange the electrical connectors 51CV-A and 51CV-B (Ref. AMM TASK 27-51-17-000-001) and (Ref. AMM TASK 27-51-17-400-001).

(4) Do the test in Para 3.A.

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TROUBLE SHOOTING MANUAL (5) If the fault moves to the other SFCC, replace the CSU (51CV).

- R (6) If the fault stays in the initial SFCC, do a check and repair the R aircraft wiring between the related SFCC ARINC tray interface and the R related electrical connector 51CV-A or 51CV-B, (Ref. ASM 27-81/02) R and (Ref. ASM 27-81/03).
 - (7) Do the test in Para. 3.A.

B. Procedure

R

R R

R

R

- (1) Interchange the SFCC 1 and the SFCC 2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001) and dispatch the aircraft.
 - (2) If the fault moves to the other SFCC during the subsequent flights, replace the defective SFCC-1 (21CV) or SFCC-2 (22CV).
 - (3) If the fault occurs again at the same SFCC, replace the CSU (51CV) (Ref. AMM TASK 27-51-17-000-001) and (Ref. AMM TASK 27-51-17-400-001).
 - (4) During the subsequent flights, if the fault occurs again in the initial SFCC:
 - Do a check and repair the aircraft wiring between the related SFCC ARINC tray interface and the related electrical connector 51CV-A or 51CV-B, (Ref. ASM 27-81/02) or (Ref. ASM 27-81/03).
 - (5) Do the test in Para. 3.A.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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EFF:

ALL

TROUBLE SHOOTING MANUAL

TASK 27-81-00-810-805

Loss of SFCC 1 (2) Because of an A/C Pin Program Fault.

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - A/C wiring at the ARINC tray interface
- 2. Job Set-up Information
 - A. Fixtures, Tools, Test and Support Equipment

QTY DESIGNATION

No specific ARINC Connector Breakout Box

B. Referenced Information

REFERENCE **DESIGNATION**

ASM 278108S01

AMM 27-51-34-000-001 Removal of the SFCC (21CV,22CV)

AMM 27-51-34-400-001 Installation of the SFCC (21CV,22CV)

AMM 27-81-00-740-002 Bite Test of the Slat and Flap Control Computers

(Slat System)

Operational Test of the Slat System AMM 27-84-00-710-001

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3. Fault Confirmation

A. Test

- (1) Do a Bite Test of the applicable SFCC/slat system (Ref. AMM TASK 27-81-00-740-002).
- (2) If the test gives a message that includes PIN PROGRAM DISAGREE, do the fault isolation.

4. Fault Isolation

A. Procedure

- (1) Interchange the SFCC 1 and SFCC 2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001), do Para. 3. 4.A. and 4.B. of the installation procedure only.
 - (a) Do the test in Para. 3. A.
 - (b) If the fault moves with the SFCC 1(2).
 - (c) Replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)).
- (2) If the fault continues:
 - (a) Use the ARINC Connector Breakout Box and do a check of the applicable A/C wiring at the ARINC tray interface (Ref. ASM 278108S01).
 - (b) Repair the wiring/interface.
 - (c) Do the test in Para. 3. A.
- (3) Do the operational test of the SLAT system (Ref. AMM TASK 27-84-00-710-001).
- (4) Access the SLT ON GROUND FAULTS and make sure that there are no faults shown.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TROUBLE SHOOTING MANUAL

TASK 27-81-00-810-806

Loss of SLAT FPPU or Wiring/interface Fault to SFCC 1(2).

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - FPPU-SLAT (28CV)
 - aircraft wiring
- 2. Job Set-up Information
 - A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

No specific ARINC Connector Breakout Box

B. Referenced Information

Removal of the Feed Back Position Pick-Off Unit

Installation of the Feed Back Position Pick-Off Unit

AMM 27-81-19-000-001 AMM 27-81-19-400-001

ASM 27-81/06

ASM 27-81/07

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3. Fault Confirmation

A. Test

- (1) Do a BITE test on the SFCC 1 (2) (Ref. AMM TASK 27-81-00-740-002).
 - (a) If the message SLT FPPU 28CV OR WIRING TO SFCC is shown, do the fault isolation.

4. Fault Isolation

A. Procedure

- (1) Interchange the two SFCCs (Ref. AMM TASK 27-51-34-000-001) (Ref. AMM TASK 27-51-34-400-001).
- (2) Do the test in Para. 3 A.
- (3) If the fault moves with the SFCC:
 - (a) Replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV).
- (4) If the fault does not move with the SFCC:
 - (a) replace the FPPU-SLAT (28CV), (Ref. AMM TASK 27-81-19-000-001) and (Ref. AMM TASK 27-81-19-400-001).
- (5) If the fault continues:
 - (a) Use an ARINC Connector Breakout Box and do a check of the aircraft wiring, (Ref. ASM 27-81/06) and (Ref. ASM 27-81/07).
 - (b) Do the repair.
 - (c) Do the test in Para. 3. A.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

EFF: ALL

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TASK 27-81-00-810-807

Loss of SLAT LH/RH APPU or Wiring/interface to SFCC1 (2).

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- APPU-L SLAT (31CV)
- APPU-R SLAT (32CV)
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-81-00-740-002 | Bite Test of the Slat and Flap Control Computers (Slat System) |
| AMM | 27-81-18-000-001 | Removal of the Asymmetry-Position Pick-Off Unit 31CV (32CV) |
| AMM | 27-81-18-400-001 | <pre>Installation of the Asymmetry-Position Pick-Off Unit 31CV (32CV)</pre> |
| ASM | 27-81/06 | |

3. Fault Confirmation

A. Test.

- (1) Do a BITE test with the applicable SFCC (Ref. AMM TASK 27-81-00-740-002).
- (2) If a message that includes the APPU 31CV (32CV) or the SFCC is shown on the MCDU, do the fault isolation procedure.

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4. Fault Isolation

A. Procedure

- (1) Swop the SFCC 1 with SFCC 2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (3) If the fault does not move with the applicable SFCC:
 - (a) Replace the applicable APPU-L SLAT (31CV) APPU-R SLAT (32CV) (Ref. AMM TASK 27-81-18-000-001) (Ref. AMM TASK 27-81-18-400-001).
- (4) If the fault continues:
 - (a) Do a check of the aircraft wiring between the applicable SFCC and the related APPU (Ref. ASM 27-81/06).
 - (b) Do the repair.
 - (c) Do the test given in Para. 3.A.(1).

EFF: ALL

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TASK 27-81-00-810-808

SFCC 1 (2) or SLT PPU Power Fault. SFCC Generated SLT Power Fault.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- A/C wiring/interface between SFCC 1 (2) and all PPU.

(Slat System)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | RENCE | DESIGNATION |
|-----------|-----|------------------|--|
| | | | |
| | ASM | 275101801 | |
| | ASM | 275108\$01 | |
| | AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| | AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| | AMM | 27-81-00-740-002 | Bite Test of the Slat and Flap Control Computers |

3. Fault Confirmation

- A. SFCC System Exitation Power Test.
 - (1) Do a BITE test on the SFCC 1 (2) (Ref. AMM TASK 27-81-00-740-002). The fault data" PPU excitation power short circuit" is displayed.
 - (2) Do the fault isolation.

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4. Fault Isolation

A. Procedure

- (1) Swap the SFCC 1 and SFCC 2, (Ref. AMM TASK 27-51-34-000-001) for (Ref. AMM TASK 27-51-34-400-001) do Para.2,3 and 4 only.
 - (a) Access the SLT ON GROUND FAULTS and do a check of the ground log.
- (2) If the fault moves with SFCC 1(2).
- (3) Return the SFCC 1 (2) to their initial locations.
- (4) Replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)) Ref. Para.4.A.(1)>
- (5) Do the BITE test of the SFCC 1 (2) Ref. Step 3.A.(1).
- (6) If the fault continues, do a check of the A/C wiring/interface between SFCC 1 (2) and all PPU. (Ref. ASM 275101S01) (Ref. ASM 275108S01)
- (7) If there is a wiring/interface fault, do the repair.
- (8) Do the BITE Test.Ref 3.A.(1).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-81-00-810-810

Slat System Jam.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

1. Possible Causes

- POWER CONTROL UNIT (6001CM)
- BRAKE-L WING TIP (35CV)
- BRAKE-R WING TIP (36CV)
- Rotary Actuators
- Transmission Assembly
- Slat Track Rollers
- Pinions
- Curved Rack Gears
- PCU Hydraulic Motor

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 12-22-27-640-006 | Lubrication of all Slat Track Rollers, Pinion Bearings, Pinions and Rack Teeth | |
| AMM | 27-80-00-866-006 | Reset of the Torque Limiters of the Slat System on the Ground | |
| AMM | 27-81-51-000-001 | Removal of the Slat Wing-Tip Brake | |
| AMM | 27-81-51-400-001 | Installation of the Slat Wing-Tip Brake | |
| AMM | 27-84-00-200-001 | <pre>Detailed Visual Inspection of the Slat Transmission System</pre> | |
| AMM | 27-84-00-210-001 | Detailed Visual Inspection of the Slat Track Rollers, the Pinions and the Curved Rack Gears (As Far As Visible) | |
| AMM | 27-84-00-710-001 | Operational Test of the Slat System | |
| AMM | 27-84-49-000-001 | Removal of the Type B Actuators 6027CM(6077CM)/6029CM(6079CM)/6035CM (6085CM)/6039CM(6089CM)/6045CM(6095CM) | |
| AMM | 27-84-49-400-001 | <pre>Installation of the Type B Actuators 6027CM(6077CM)/6029CM(6079CM)/6035CM (6085CM)/6039CM(6089CM)/6045CM(6095CM)</pre> | |

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| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| | | | |
| AMM | 27-84-51-000-001 | Removal of the Power Control Unit 6001CM of the Slat System | |
| AMM | 27-84-51-400-001 | Installation of the Power Control Unit 6001CM of the Slat System | |
| AMM | 27-84-54-000-001 | Removal of the Hydraulic Motor of the Slat Power Control Unit (6001CM) with the Pressure-Off Brake and the Valve Block Assembly | |
| AMM | 27-84-54-400-001 | Installation of the Hydraulic Motor of the Slat Power Control Unit (6001CM) with the Pressure-Off Brake and the Valve Block Assembly | |
| AMM | 27-84-63-000-001 | Removal of the No. 1 Slat | |
| AMM | 29-10-00-863-001 | Pressurize the Green Hydraulic System | |
| AMM | 29-10-00-864-002 | Depressurize the Yellow Hydraulic System | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the slat system (Ref. AMM TASK 27-84-00-710-001):
 - if the slats do not move, but the left and right slat transmission shafts move freely, do the fault isolation procedure in Para. 4.A.(1)
 - if the slats do not move and one of the slat transmission shafts does not move freely, start the fault isolation procedure at Para. 4.A.(4).
- (2) If you did not find a fault during the operational test procedure, as a precaution:
 - (a) Replace those Rotary Actuators that have a torque limiter tripped (Ref. AMM 27-84-48 or 27-84-49).

NOTE: A torque limiter that tripped during a WTB reset is not at fault and does not need to be replaced.

4. Fault Isolation

A. Procedure.

(1) Do a check of the Position Pick-off Units (PPUs) on the Centralized Fault Display System (CFDS) and make a record of the APPU and FPPU synchro angles (Ref. AMM TASK 27-84-49-000-001) and (Ref. AMM TASK 27-84-49-400-001).

<u>NOTE</u>: This data will let you compare APPU and FPPU angles, before and after installation of a part of the slat transmission

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system. The difference in angles must be in the specified limits.

- (2) Move the slat control lever to a different applicable position and see if there is movement of the PCU (6001CM) output shafts:
 - if there is movement of the PCU output shafts, go to step (4)
 - if there is no movement of the PCU output shafts, do the next step.
- (3) Replace the POWER CONTROL UNIT (6001CM), (Ref. AMM TASK 27-84-51-000-001) and (Ref. AMM TASK 27-84-51-400-001).
- (4) Do the detailed visual inspection of the Transmission Assembly (Ref. AMM TASK 27-84-00-200-001), and the detailed visual inspection of the Slat Track Rollers, the Pinions and the Curved Rack Gears (Ref. AMM TASK 27-84-00-210-001). If necessary grease the items that have been cleaned for inspection. (Ref. AMM TASK 12-22-27-640-006)
 - (a) If it is not possible to move the slats for the visual inspection, move the slats manually (Ref. AMM TASK 27-84-63-000-001).
 - NOTE: The fault will be an internal fault of the slat actuator, or a fault that is inboard of the actuator (for example the slat pinion or the slat rack).
 - (b) Do the reset of the torque limiters (Ref. AMM TASK 27-80-00-866-006).
 - (c) If a fault is found, correct or repair as necessary (Ref. AMM chap 27).
- (5) Do the test in Para. 3.A:
 if the fault continues, do the next step.
- (6) Remove each transmission shaft, one at a time to do a check for friction in each component of the slat system, (Ref. AMM chap. 27) removal installation procedures:
 - (a) If a fault is found, correct or repair as necessary, (Ref. AMM chap. 27).
 - (b) Make sure you install all components removed.
- (7) Do the test in Para. 3.A:if the fault continues, do the next step.

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- (8) Disconnect the transmission shafts on each side of the WTB 35CV (36CV) (Ref. AMM TASK 27-81-51-000-001):
 - (a) Make sure the WTB is easily turned by hand.
 - if the WTB moves easily, connect up the transmission shafts (Ref. AMM TASK 27-81-51-400-001) and do step (9)
 - if the WTB is not easily turned by hand, or there is an incorrect noise, do the next step.
 - (b) Replace the WTB BRAKE-L WING TIP (35CV) or BRAKE-R WING TIP (36CV) (Ref. AMM TASK 27-81-51-000-001) and (Ref. AMM TASK 27-81-51-400-001).
- (9) Do the test in Para. 3.A:
 - if the fault continues, do the next step.
- (10) Set the CFDS MENU MODE and access the SYSTEM STATUS SLAT and make sure that

NO FAULTS is shown:

- if the fault continues, do the next step.
- (11) Do the test in Para. 3.A., as follows:
 - (a) At the cockpit overhead panel 40VU, make sure the Power Transfer Unit (PTU) is set to OFF.

NOTE : This is to make sure that only the slat system 2 PCU hydraulic motor operates.

- (b) Do the operational test of the slat system.
- (c) Record the time necessary to extend the slats and to retract the
- (d) Pressurise the green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
- (e) Make sure the PTU is set to OFF.
- (f) Depressurize the yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

<u>NOTE</u>: This is to make sure that only the slat system 1 hydraulic motor operates.

- (g) Do the operational test of the slat system.
- (h) Record the time necessary to extend the slats and to retract the slats
- (i) Replace the PCU Hydraulic Motor on the slower system (Ref. AMM TASK 27-84-54-000-001) and (Ref. AMM TASK 27-84-54-400-001).

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(12) Do the test in Para. 3.A.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-81-00-810-811

SLAT SYSTEM 1 (2) FAULT, No CFDS Message (normal mode)

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS

- THE FLIGHT CONTROL SURFACES

- THE LANDING GEAR AND THE RELATED DOORS

- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- VALVE BLOCK SLAT 1 (25CV)

- VALVE BLOCK SLAT 2 (26CV)
- SFCC-1 (21CV)
- SFCC-2 (22CV)
- RELAY-SLAT 1 FAULT (90CV)
- RELAY-SLAT 2 FAULT (92CV)
- transient fault
- aircraft wiring

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE

QTY DESIGNATION

No specific multimeter

B. Referenced Information

DESIGNATION

27-51-00-810-805 CSU Fault (51CV) or Fault in Wiring to SFCC 1 (2)

27-81-00-810-801 SFCC - Slat PCU Valveblock Fault Removal of the SFCC (21CV,22CV) AMM 27-51-34-000-001

AMM 27-51-34-400-001 Installation of the SFCC (21CV,22CV) AMM 27-84-00-710-001 Operational Test of the Slat System

AMM 31-32-00-860-006 Procedure to Get Access to the SYSTEM REPORT/TEST

F/CTL Page

AMM 31-60-00-860-001 EIS Start Procedure

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REFERENCE **DESIGNATION**

AMM 31-60-00-860-002 EIS Stop Procedure

ASM 27-81/02 ASM 27-81/03

3. Fault Confirmation

A. Fault Analysis

- (1) Do a check of the Post Flight Report (PFR):
 - if the ECAM Warning message SLAT SYS 1 (2) FAULT is shown without a related CFDS message and the slats operate correctly, do the next step.
- (2) Do the EIS Start Procedure (Ref. AMM TASK 31-60-00-860-001).
- (3) At an MCDU, get access to the SYSTEM REPORT/TEST page (Ref. AMM TASK 31-32-00-860-006).
 - (a) Set F/CTL and get access to the SFCC1 and SFCC 2 menus.
 - (b) For each SFFC, set SLT LAST LEG REP and do a check for one or more of the messages that follow:
 - SYSTEM STOP DUE TO LOW PRESSURE
 - DC POWER INTERRUPT
 - DC POWER BELOW 16V
 - SINGLE MOTOR OPERATION
 - LEVER OUT OF DETENT FOR MORE THAN 10 SEC

NOTE: These messages are shown in the Last Leg Report (LLR) to help with trouble shooting when the ECAM Warning message SLAT SYS 1 (2) FAULT is shown because of a transient fault.

- (c) From the check of the LLR:
 - if one or more of the applicable messages is shown, do the fault isolation in Para. 4.A.
 - if none of the applicable messages are shown, do the fault isolation procedure in Para. 4.B.

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4. Fault Isolation

R **ON A/C 201-225, 227-227, 229-275, 426-475, 551-599, 701-749,

A. Procedure

- (1) For the applicable message from the SFCC 1 (2) Slat LLR, do the related procedure step:
 - for SYSTEM STOP DUE TO LOW PRESSURE, do step (2)
 - for DC POWER INTERRUPT, do step (3)
 - for DC POWER BELOW 16V, do step (4)
 - for SINGLE MOTOR OPERATION, do step (5)

(2) SYSTEM STOP DUE TO LOW PRESSURE:

- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because of a hydraulic low pressure problem (green or blue), no more maintenance work is necessary
- if there is no apparent hydraulic system problem, do the next step.
- (a) Do the operational test of the slat system (Ref. AMM TASK 27-84-00-710-001).
 - if a permanent fault is found go to Page Block 101 and do the applicable fault isolation procedure
 - if there is no apparent fault with the slat operation, or the operation is intermittent, do the next step.
- (b) Do the trouble shooting procedure for the applicable VALVE BLOCK SLAT 1 (25CV) or VALVE BLOCK SLAT 2 (26CV), (Ref. TASK 27-81-00-810-801).

NOTE: When the hydraulic motor operates, the spool of the control valve is moved and flow occurs. This flow can push particles, in the hydraulic fluid, against the valve block filter and cause a blockage. If a blockage occurs, the flow decreases and the spool moves back. This movement of the spool is sensed by the related SFCC, which stops the applicable hydraulic motor. Flow then decreases and lets the particles become free from the filter. This removal of the blockage then increases the flow, which moves the spool. This movement of the spool is sensed by the related SFCC, which releases the applicable hydraulic motor. This causes the flow to increase to the condition where a blockage can occur again. This fault conditon can cause the slats to operate intermittently.

(3) DC POWER INTERRUPT:

- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because of a DC power interrupt, no more maintenance work is necessary
- if there is no apparent DC power problem, do step (6).

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NOTE: The message DC POWER INTERRUPT is shown in the LLR when the DC power is less than 14VDC for more than 40 msec.

(4) DC POWER BELOW 16V:

- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because the DC power is less than 16.5 VDC, no more maintenance work is necessary
- if there is no apparent DC power problem, do step (6).

NOTE: The message DC POWER BELOW 16V is shown in the LLR when the DC power is less than 16.5VDC, but more than 14VDC, for more than 20 msec.

(5) SINGLE MOTOR OPERATION:

- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because the slats operate momentarily on one motor only, no more maintenance work is necessary
- if there is no apparent slat motor problem, do step (6).
- (6) Make a record in the aircraft logbook to monitor the operation of the slat system during the next flight.

**ON A/C 276-299, 476-499, 503-549,

A. Procedure

- (1) For the applicable message from the SFCC 1 (2) Slat LLR, do the related procedure step:
 - for SYSTEM STOP DUE TO LOW PRESSURE, do step (2)
 - for DC POWER INTERRUPT, do step (3)
 - for DC POWER BELOW 16V, do step (4)
 - for SINGLE MOTOR OPERATION, do step (5)
 - for LEVER OUT OF DETENT FOR MORE THAN 10 SEC, do step (6)

(2) SYSTEM STOP DUE TO LOW PRESSURE:

- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because of a hydraulic low pressure problem (green or blue), no more maintenance work is necessary
- if there is no apparent hydraulic system problem, do the next step.
- (a) Do the operational test of the slat system (Ref. AMM TASK 27-84- 00-710-001).
 - if a permanent fault is found go to Page Block 101 and do the applicable fault isolation procedure
 - if there is no apparent fault with the slat operation, or the operation is intermittent, do the next step.
- (b) Do the trouble shooting procedure for the applicable VALVE BLOCK SLAT 1 (25CV) or VALVE BLOCK SLAT 2 (26CV), (Ref. TASK 27-81-00-810-801).

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NOTE: When the hydraulic motor operates, the spool of the control valve is moved and flow occurs. This flow can push particles, in the hydraulic fluid, against the valve block filter and cause a blockage. If a blockage occurs, the flow decreases and the spool moves back. This movement of the spool is sensed by the related SFCC, which stops the applicable hydraulic motor. Flow then decreases and lets the particles become free from the filter. This removal of the blockage then increases the flow, which moves the spool. This movement of the spool is sensed by the related SFCC, which releases the applicable hydraulic motor. This causes the flow to increase to the condition where a blockage can occur again. This fault conditon can cause the slats to operate intermittently.

(3) DC POWER INTERRUPT:

- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because of a DC power interrupt, no more maintenance work is necessary
- if there is no apparent DC power problem, do step (7).

NOTE : The message DC POWER INTERRUPT is shown in the LLR when the DC poweris less than 14VDC for more than 40 msec.

(4) DC POWER BELOW 16V:

- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because the DC power is less than 16.5 VDC, no more maintenance work is necessary
- if there is no apparent DC power problem, do step (7).

NOTE: The message DC POWER BELOW 16V is shown in the LLR when the DC power is less than 16.5VDC, but more than 14VDC, for more than 20 msec.

(5) SINGLE MOTOR OPERATION:

- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because the slats operate momentarily on one motor only, no more maintenance work is necessary
- if there is no apparent slat motor problem, do step (7)
- if the message LEVER OUT OF DETENT FOR MORE THAN 10 SEC is also shown on the LLR, do the next step.

(6) LEVER OUT OF DETENT FOR MORE THAN 10 SEC:

- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because the flap control lever is sensed out of detent by each system, do step (7)
- if the ECAM Warning SLAT SYS 1 (2) FAULT is shown because the flap control lever is sensed out of detent by one system only, do the next step.
- (a) Do a check of the CSU and its wiring to the SFCC, which identified the out of detent condition (Ref. TASK 27-51-00-810-805).

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EFF: 276-299, 476-499, 503-549,

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NOTE: When one system senses that the flap control lever is out of detent, but the other system senses a correct condition, then the fault is usually in the CSU.

(7) Make a record in the aircraft logbook to monitor the operation of the slat system during the next flight.

**ON A/C ALL

B. Procedure

- (1) If the ECAM warning SLAT SYS 1 (2) FAULT is shown, but there is no related CFDS message on the PFR, or in the SFCC 1 (2) Slat LLR, do step (2).
- (2) Interchange SFCC1 with SFCC 2, (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Do a check of the upper ECAM DU for the ECAM Warning SLAT SYS 1(2) FAULT:
 - if the fault moves to the opposite system, do step (3)
 - if the fault stays in the intial system, do step (4).
- (3) Replace the SFCC-1 (21CV) or SFCC-2 (22CV) identified in the ECAM Warning message shown in step (4)(a), (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001):
 - (a) Do a check of the upper ECAM DU for the ECAM Warning SLAT SYS 1 (2) FAULT:
 - if the message shows, do step (4)
 - if the message does not show, no more maintenance is necessary.
- (4) Remove the applicable slat fault relay 90CV or 92CV and use a multimeter to do a check at the base of the holder for a ground on pin Z and 28VDC on pin X:
 - if there is a ground on pin Z and 28VDC on pin X, do step (5)
 - if there is no ground on pin I, do step (4)
 - if there is no 28VDC on pin X, do step (6)
- (5) Replace the applicable slat fault relay:
 - for a SLAT SYS 1 FAULT message, replace RELAY-SLAT 1 FAULT (90CV)
 - for a SLAT SYS 2 FAULT message, replace RELAY-SLAT 2 FAULT (92CV).
 - (a) Do a check of the upper ECAM DU for the ECAM Warning SLAT SYS 1 (2) FAULT:
 - if the message is shows, do step (4)
 - if the message does not show, no more maintenance work is necessary.

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- (6) Do a check and repair as necessary the aircraft wiring between the applicable C/B and connector AA pin 2J of the SFCC mounting tray:
 - for relay 90CV, do the check from C/B 5CV and SFCC 1 (Ref. ASM 27-81/02)
 - for relay 92CV, do the check from C/B 7CV and SFCC 2 (Ref. ASM 27-81/03).
 - (a) Do the Operational Test of the Slat System (Ref. AMM TASK 27-84-00-710-001) and make sure that the ECAM Warning SLAT SYS 1(2) FAULT does not show on the upper ECAM DU.

5. Close-up

- A. Put the aircraft back to its initial configuration.
 - (1) Do the EIS Stop Procedure, if not done before (Ref. AMM TASK 31-60-00-860-002).
 - (2) Remove the ground support and maintenance equipment, the special and standard tools and all other items.

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TASK 27-81-00-810-812

Slat Menu Not Available On The CFDIU, Fault Related to the SFCC Arinc Output

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- RELAY-A/C ON GND (94CV)
- RELAY-A/C ON GND (96CV)
- PROX SNSR R L/G EXT 20GA
- PROX SNSR L L/G EXT 21GA
- PROX SNSR R L/G EXT 22GA
- PROX SNSR L L/G EXT 23GA
- aircraft wiring, installation and pin program wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|--|--|
| AMM | 27-51-00-740-002 | Bite Test of the Slat and Flap Control Computers |
| | 27-51-34-000-001 | (Flap System) Removal of the SFCC (21CV,22CV) |
| AMM ASM | 27-51-34-400-001 27-81/02 27-81/03 | Installation of the SFCC (21CV,22CV) |

3. Fault Confirmation

- A. Test
 - (1) Make sure that the flap channel 1 (2) is on.
 - (2) Do a BITE test of the applicable SFCC (Ref. AMM TASK 27-51-00-740-002).

4. Fault Isolation

- A. Procedure
 - (1) If the slat menu is not available:
 - Interchange the SFCC's and do again the test in Para. 3.A. on the SFCC-1 (21CV) and the SFCC-2 (22CV).
 - (2) If the fault moves to the other SFCC position, interchange the SFCC's back and replace the SFCC that has the fault (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).

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- (3) If the fault does not move to the other SFCC position, interchange the SFCC's back (refer to Para. (2)).
 - (a) Make sure that there are no landing gear system faults. Main landing gear shock absorber proximity sensor faults will cause these failures.
 - For SFCC 1 PROX SNSR R L/G EXT 20GA and PROX SNSR L L/G EXT 21GA
 - For SFCC 2 PROX SNSR R L/G EXT 22GA and PROX SNSR L L/G EXT 23GA
- (4) If there are landing gear faults, do the test in Para. 3.A.
- (5) If the fault continues:
 - (a) Interchange the RELAY-A/C ON GND (94CV) with the RELAY-A/C ON GND (96CV).
 - (b) Do the test in Para. 3.A. on the SFCC 1 and SFCC 2.
 - (c) If the fault moves to the other system, replace the relay in the system that has the fault.
 - (d) Do the test in Para. 3.A.
- (6) If the fault does not move to the other system, do a check of the aircraft wiring, installation and pin program wiring:
 - For SFCC 1 from C/B 5CV to the LGCIU 1 and from the RELAY A/C ON GND 94CV to the SFCC 1 (Ref. ASM 27-81/02).
 - For SFCC 2 from C/B 7CV to the LGCIU 2 and from the RELAY A/C ON GND 96CV to the SFCC 2 (Ref. ASM 27-81/03).
 - (a) If necessary, repair the defective items.
 - (b) Do the test in Para. 3.A.
- (7) If the fault continues, make sure that no installation pin program fault occurred (refer to the TSM 27-81-00-810-833).

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TASK 27-81-00-810-813

Slat System Asymmetry Fault.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

- 1. Possible Causes
 - slat transmission assembly
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| AMM | 27-80-00-869-004 | Reset of the Wing Tip Brake (WTB) of the Slat System on the Ground | |
| AMM | 27-81-00-740-002 | Bite Test of the Slat and Flap Control Computers (Slat System) | |
| AMM | 27-81-18-000-001 | Removal of the Asymmetry-Position Pick-Off Unit 31CV (32CV) | |
| AMM | 27-81-18-400-001 | <pre>Installation of the Asymmetry-Position Pick-Off Unit 31CV (32CV)</pre> | |
| AMM | 27-84-00-200-001 | Detailed Visual Inspection of the Slat Transmission System | |
| AMM | 27-84-00-710-001 | Operational Test of the Slat System | |

3. Fault Confirmation

- A. Procedure
 - (1) For the fault message, SLT 1 ASYMMETRY LH/RH. CHECK SLT MECH DRIVE.

 Access the MENU Mode and set it to SFCC 1.
 - (a) Go to submenu SYSTEM DATA SLAT.
 - (b) Press the line key 1L to set the PPU page.
 - (c) The SFCC transmits the LH and RH APPU data page(s) to the CFDS.

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- (d) The selected page is transmitted again every 5 seconds with refreshed data.
- (e) Refer to page block 301 table 2. The LH APPU and RH APPU Synchro Angles are shown as a decimal value.
- (f) If there is a difference between the LH and RH values, do the fault isolation.
 - A difference of more than 5.2 deg. generates an asymmetry fault message.
- (2) For the fault message, SLT 2 ASYMMETRY LH/RH. CHECK SLT MECH DRIVE. Do the step 3.A.(1) but substitute SFCC 2.

4. Fault Isolation

- A. Procedure.
 - (1) Do the BITE test (Ref. AMM TASK 27-81-00-740-002).
 - (a) Check that the BITE gives a "WTB,s set in this channel."
 - (b) Refer to the PPU DATA to identify the defective wing:
 - The APPU Data that is incremented from the set control lever position by more than 5.2 deg. shows the faulty wing. Refer to page block 301 table 3 for the control lever position to APPU DATA.
 - (2) Do the reset of the wing tip brakes (Ref. AMM TASK 27-80-00-869-004).
 - (3) Do the detailed visual inspection of the slat transmission assembly (Ref. AMM TASK 27-84-00-200-001).
 - (a) Repair/correct any failure found (Ref. AMM chap. 27).
 - (4) Do the operational test of the slat system, (Ref. AMM TASK 27-84-00-710-001).
 - (5) If the failure continues:
 - (a) Refer to (Ref. AMM TASK 27-81-18-000-001) Figure 401/Task 27-81-18-991-001 and identify the APPU.
 - (b) Do a check of the APPU ZERO DATUM settings.
 - (c) If the ZERO DATUM settings are not aligned. Do (Ref. AMM TASK 27-81-18-400-001).
 - (6) Set the CFDS MENU MODE and access the SYSTEM STATUS SLAT and make sure that NO FAULTS is shown.

EFF: ALL

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5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-81-00-810-814

Slat System Runaway.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

- 1. Possible Causes
 - Slat Transmission System
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| AMM | 27-80-00-869-004 | Reset of the Wing Tip Brake (WTB) of the Slat System on the Ground |
| AMM | 27-84-00-200-001 | Detailed Visual Inspection of the Slat Transmission System |
| AMM | 27-84-00-710-001 | Operational Test of the Slat System |

- 3. Fault Confirmation
 - A. For the fault confirmation do the fault isolation..
- 4. Fault Isolation
 - A. Procedure.
 - (1) Do the reset of the wing tip brakes (Ref. AMM TASK 27-80-00-869-004)
 - (2) Do the detailed inspection of the Slat Transmission System, (Ref. AMM TASK 27-84-00-200-001).
 - (a) Repair/correct any failure found (Ref. AMM chap. 27).
 - (3) Do the operational test of the slat system (Ref. AMM TASK 27-84-00-710-001).
 - (4) Set the CFDS MENU MODE and access the SYSTEM STATUS SLAT and make sure that NO FAULTS is shown.

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5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-81-00-810-815

Slat Overspeed Fault.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

1. Possible Causes

- BRAKE-L WING TIP (35CV)
- BRAKE-R WING TIP (36CV)
- slat transmission system
- ROTARY ACTUATOR

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| AMM | 27-80-00-866-004 | Extending the Slats on the Ground |
| AMM | 27-80-00-866-005 | Retracting the Slats on the Ground |
| AMM | 27-80-00-869-004 | Reset of the Wing Tip Brake (WTB) of the Slat System on the Ground |
| AMM | 27-81-51-000-001 | Removal of the Slat Wing-Tip Brake |
| AMM | 27-81-51-400-001 | Installation of the Slat Wing-Tip Brake |
| AMM | 27-84-00-200-001 | Detailed Visual Inspection of the Slat Transmission System |
| AMM | 27-84-00-710-001 | Operational Test of the Slat System |

3. Fault Confirmation

A. For the fault confirmation do the fault isolation.

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4. Fault Isolation

A. Procedure

- (1) Do the wing tip brake (WTB) reset procedure (Ref. AMM TASK 27-80-00-869-004)
- (2) Do the procedure on the wing identified by the fault message on the post flight report. If a wing is not identified, do the procedure on each wing.
- (3) Do the detailed visual inspection of the slat transmission system (Ref. AMM TASK 27-84-00-200-001) repair/correct any fault found. (Ref. AMM chap 27).
- (4) Do the operational test of the slat system (Ref. AMM TASK 27-84-00-710-001).
- (5) If the fault continues or no fault is found:
 - (a) Move the slats (Ref. AMM TASK 27-80-00-866-004) and (Ref. AMM TASK 27-80-00-866-005).
 - (b) If there is an incorrect noise at the WTB, replace the BRAKE-L WING TIP (35CV) or BRAKE-R WING TIP (36CV) (Ref. AMM TASK 27-81-51-000-001) and (Ref. AMM TASK 27-81-51-400-001).
 - (c) If there is no incorrect noise at the WTB, disconnect the transmission shafts on each side of the WTB (Ref. para (b)).
 - (d) Make sure that the WTB is easily turned, if it is not easily turned, replace the WTB (Ref. para (b)).

NOTE: The breakout torque of the WTB must not be more than 0.5

- (6) If no defects have been found during this procedure, as a precaution:
 - (a) Replace any ROTARY ACTUATOR that has been found to have its torque limiter tripped (Ref. AMM 27-84-48 or 27-84-49).

NOTE: Any torque limiter tripped during WTB reset can be ignored.

Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-81-00-810-817

Slat System Uncommanded Movement.

WARNING: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - POB Solenoid
 - Pressure-off Brake,
- 2. Job Set-up Information
 - A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

No specific

Multimeter

B. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-80-00-869-004 | Reset of the Wing Tip Brake (WTB) of the Slat System on the Ground |
| AMM | 27-81-00-710-001 | Operational Test of the Wing-Tip Brake and the Pressure-Off Brake |
| AMM | 27-84-52-000-001 | Removal of the Pressure-Off Brake of the Slat Power Control Unit |
| AMM | 27-84-52-400-001 | Installation of the Pressure-Off Brake of the Slat Power Control Unit |
| AMM | 27-84-53-000-001 | Removal of the Valve Blocks 25CV, 26CV of the Power Control Unit (Slat) |
| AMM | 27-84-53-000-002 | Removal of the Solenoid Valves of the Power Control Unit (Slat) |

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EFERENCE DESIGNATION

AMM 27-84-53-400-002

Installation of the Solenoid Valves of the Power
Control Unit (Slat)

ASM 27-81/03

- 3. Fault Confirmation
 - A. For the fault confirmation do the fault isolation.
- 4. Fault Isolation
 - A. Procedure
 - (1) Do the reset of the WTB's (Ref. AMM TASK 27-80-00-869-004).
 - (a) Do the operational test of the wing tip brake and the pressure-off brake (Ref. AMM TASK 27-81-00-710-001) to find the unserviceable system, then do the next step. CAUTION: DO NOT SHORT CIRCUIT THE WIRING TO THE SOLENOID VALVES. DAMAGE TO THE SFCC CAN OCCUR
 - (2) Get access to the electrical connector on each valve block (Ref. AMM TASK 27-84-53-000-001):
 - (a) At the connector receptacle, use a Multimeter to measure the resistance between pins K and L for each POB solenoid (Ref. ASM 27-81/03), which must be as follows:
 - for solenoid valves with Part No. 667C0000-02, between 71 Ohms and 84 Ohms
 - for solenoid valves with Part No. 903A0000-01, between 53 Ohms and 60 Ohms
 - for solenoid valves with Part No. 1106A0000-01 or 1111A0000-01, between 53 Ohms and 60 Ohms.
 - (b) If the resistance value:
 - is not correct, replace the unserviceable POB Solenoid, (Ref. AMM TASK 27-84-53-000-002) and (Ref. AMM TASK 27-84-53-400-002)
 - is correct, do the next step.
 - (3) Interchange SFCC-1 and SFCC-2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Do the test given in step (1)
 - if the fault moves to the opposite system, replace the SFCC-1 (21CV) or SFCC-2 (22CV) in the unserviceable system (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001)
 - if the fault stays in the same system, replace the Pressure-off Brake,, (Ref. AMM TASK 27-84-52-000-001) and (Ref. AMM TASK 27-84-52-400-001).

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(4) If the fault continues, replace the applicable POB Solenoid, (Ref. AMM TASK 27-84-53-000-002) and (Ref. AMM TASK 27-84-53-400-002).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-81-00-810-820

Slats Command Sensor Unit Failure.

- 1. Possible Causes
 - CSU (51CV)
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE

DESIGNATION

TSM 27-51-00-810-828

Flaps Command Sensor Unit Failure.

- 3. Fault Confirmation
 - A. Procedure.
 - (1) This fault has locked the wing tip brakes of the slat and flap system, no fault confirmation is necessary.
 - (a) Do the fault isolation.
- 4. Fault Isolation
 - A. Procedure.
 - (1) The cause of this fault is CSU (51CV) do (Ref. TSM TASK 27-51-00-810-828)

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TASK 27-81-00-810-821

Electrical Power to the SLT 1 WTB Monitored to Below 14Vdc. Electrical Power to the SLT 2 WTB Monitored to Below 14Vdc.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- A/C wiring/interface between SFCC 1 (2) and the WTB.

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|---------------|-------------|
| | |
| ASM 246812S01 | |

ASM 246812SU1

ASM 246813S01

ASM 278101S01

ASM 278108S01

AMM 27-51-34-000-001 Removal of the SFCC (21CV,22CV)
AMM 27-51-34-400-001 Installation of the SFCC (21CV,22CV)

AMM 27-81-00-740-002 Bite Test of the Slat and Flap Control Computers

(Slat System)

3. Fault Confirmation

A. Make sure that this(these) circuit breaker(s) is(are) closed:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|----------|------------------------------|--------|----------|
| 12 1 V U | FLIGHT CONTROLS/WTB/SLT/SYS2 | 11CV | P19 |
| 122VU | FLIGHT CONTROLS/WTB/SLT/SYS1 | 9CV | S06 |

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- B. SFCC System Bite WTB Power Test.
 - (1) Do a BITE test on the SFCC 1 (2) (Ref. AMM TASK 27-81-00-740-002). The fault data" WTB electrical power off" is displayed.
 - (2) Do the fault isolation.

4. Fault Isolation

- A. Procedure
 - (1) At the circuit breakers.
 - (a) Examine the C/B for integrity.
 - (b) Do a check of the A/C HOT BUS 28VDC Supply. (Ref. ASM 246812SO1) (Ref. ASM 246813SO1)
 - (c) If the fault is found at steps 4.A.(1)(a) and/or (b), do the repair and do the test at step 3.B.(1).
 - (2) If the fault continues.
 - (a) Swap the SFCC 1 and SFCC 2, (Ref. AMM TASK 27-51-34-000-001) for (Ref. AMM TASK 27-51-34-400-001) do Para.2,3. and 4 only.
 - (b) Access the SLT ON GROUND FAULTS and do a check of the ground log.
 - (c) If the fault moves with SFCC 1(2).
 - (d) Return the SFCC 1 (2) to their initial locations.
 - (e) Replace the unserviceable SFCC-1 (21CV) (SFCC-2 (22CV)) Ref. Para.4.A.(2)(a).
 - (3) Do the BITE test of the SFCC 1 (2) Ref. Para.3.A.(1).
 - (4) If the fault continues, do a check of the A/C wiring/interface between SFCC 1 (2) and the WTB. (Ref. ASM 278101S01) (Ref. ASM 278108S01)
 - (5) If there is a wiring/interface fault, do the repair.
 - (6) Do the BITE test.Ref 3.A.(1).

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-81-00-810-822

SLT LH WTB BLU (Blue) Solenoid 35CV or Open or Short Circuit to SFCC 1. SLT LH WTB GRN (Green) Solenoid 35CV or Open or Short Circuit to SFCC 2.

<u>WARNING</u>: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING : PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU

START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING GEAR.

1. Possible Causes

- WING TIP BRAKE (35CV)
- SFCC-1 (21CV)
- SFCC-2 (22CV)
- A/C wiring between the SFCC 1 ARINC tray interface and the electrical connector
- A/C wiring between the SFCC 2 ARINC tray interface and the electrical connector
- WTB Solenoid Valve

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

No specific 1 MULTIMETER - STANDARD

No specific 1 TESTER - INSULATION RESISTANCE

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B. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|---|
| | | | |
| R | | | |
| | AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| | AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| | AMM | 27-81-00-740-002 | Bite Test of the Slat and Flap Control Computers (Slat System) |
| | AMM | 27-81-51-000-001 | Removal of the Slat Wing-Tip Brake |
| | AMM | 27-81-51-000-004 | Removal of the Solenoid Valve from the Slat Wing-Tip Brake (WTB) |
| | AMM | 27-81-51-400-001 | Installation of the Slat Wing-Tip Brake |
| | AMM | 27-81-51-400-002 | Installation of the Solenoid Valve to the Slat Wing-Tip Brake (WTB) |
| R | ASM | 27-81/06 | |
| R | ASM | 27-81/07 | |

3. Fault Confirmation

- A. SFCC System Bite WTB Solenoid test
 - (1) Do a BITE test on the SFCC 1 (2) (Ref. AMM TASK 27-81-00-740-002). The fault data "LH WTB solenoid open circuit (disconnect)" is displayed, or the fault data "LH WTB solenoid short circuit" is displayed.
 - (2) Do the fault isolation.

4. Fault Isolation

A. Procedure

R

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<u>CAUTION</u>: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

- (1) Disconnect the electrical connectors for the LH WING TIP BRAKE (35CV) solenoids.
- (2) Do a check of the A/C wiring between the SFCC 1 ARINC tray interface and the electrical connector 35CVA (Blue Solenoid) (Ref. ASM 27-81/06).
 - (3) Do a check of the A/C wiring between the SFCC 2 ARINC tray interface and the electrical connector 35CVB (Green Solenoid) (Ref. ASM 27-81/07).
 - (4) If there is no continuity, repair the wiring/interface.

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- (5) If the A/C wiring is satisfactory, do a check of the circuit resistance and the circuit isolation of the fault indicated solenoid valve.
- (6) On the LH WTB, use the MULTIMETER STANDARD to do a check of the resistance between:
 - SFCC1 35CVA = LH Blue solenoid pins A and U (Ref. ASM 27-81/06)
 - SFCC2 35CVB = LH Green solenoid pins A and B (Ref. ASM 27-81/07).
 - (a) The resistance for the solenoid valve:
 - P/N 667C0000-02 must be between 71 ohms and 84 ohms
 - P/Ns 903A0000-01, 1106A0000-01 and 1111A0000-01 must be between 53 Ohms and 60 Ohms.
- (7) On the LH WTB Blue solenoid, do a check for circuit isolation as follows:
 - (a) Connect the pins A and B together.
 - (b) Connect one test lead of the TESTER INSULATION RESISTANCE to the pins AB and the other test lead to pin C.
 - (c) Supply a test signal for 5 seconds and read the shown resistance value.
 - (d) The resistance value must be more than 100 Megohms.

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- R (8) For the LH WTB Green solenoid, do the steps given in Para. (7) again.
- R (9) If the WING TIP BRAKE (35CV) does not give the correct results for one of the two tests given (Refer to Paras. 4.A.(4) and (5)):
 Replace the WTB Solenoid Valve (Ref. AMM TASK 27-81-51-000-004) and (Ref. AMM TASK 27-81-51-400-002).
- R (10) If the fault continues, replace the WING TIP BRAKE (35CV) (Ref. AMM TASK 27-81-51-000-001) and (Ref. AMM TASK 27-81-51-400-001).
- R (11) Interchange the SFCC 1 and the SFCC 2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- R (12) Get access to the SLT ON GROUND FAULTS and do a check of the ground log.
- R (13) If the fault moves with the SFCC 1(2), install the SFCC 1 (2) in their initial positions.
- R (14) Replace the unserviceable SFCC-1 (21CV) or the SFCC-2 (22CV), (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- R (15) Do the System BITE test as given in Para. 3.A.(1).

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R (16) Set the MCDU to MENU MODE and get access to the SLT ON GROUND FAULTS page. Make sure that the ground log is clear.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-81-00-810-823

SLT RH WTB BLU Solenoid 36CV or Open or Short Circuit to SFCC 1. SLT RH WTB GRN Solenoid 36CV or Open or Short Circuit to SFCC 2.

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING : MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

1. Possible Causes

- WING TIP BRAKE (36CV)
- SFCC-1 (21CV)
- SFCC-2 (22CV)
- A/C wiring between the SFCC 1 ARINC tray interface and the electrical connector
- A/C Wiring between the SFCC 2 ARINC tray interface and the electrical connector
- WTB Solenoid Valve

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

No specific 45VDC Isolation Tester
No specific 1 MULTIMETER - STANDARD

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B. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| ASM | 278106\$01 | |
| ASM | 278107\$01 | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-81-00-740-002 | Bite Test of the Slat and Flap Control Computers (Slat System) |
| AMM | 27-81-51-000-001 | Removal of the Slat Wing-Tip Brake |
| AMM | 27-81-51-000-004 | Removal of the Solenoid Valve from the Slat Wing-Tip Brake (WTB) |
| AMM | 27-81-51-400-001 | Installation of the Slat Wing-Tip Brake |
| AMM | 27-81-51-400-002 | Installation of the Solenoid Valve to the Slat Wing-Tip Brake (WTB) |

3. Fault Confirmation

- A. SFCC System Bite WTB solenoid test
 - (1) Do a BITE test on the SFCC 1 (2) (Ref. AMM TASK 27-81-00-740-002). The fault data "RH WTB solenoid open circuit (disconnect)" is displayed, or the fault data "RH WTB solenoid short circuit" is displayed.
 - (2) Do the fault isolation.

4. Fault Isolation

A. Procedure

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

- (1) Disconnect the electrical connector for the RH WING TIP BRAKE (36CV) solenoids.
- (2) Do a check of the A/C wiring between the SFCC 1 ARINC tray interface and the electrical connector (Ref. ASM 278106S01) 36CVA (Blue Solenoid).
- (3) Do a check of the A/C Wiring between the SFCC 2 ARINC tray interface and the electrical connector (Ref. ASM 278107S01) 36CVB (Green Solenoid).
- (4) If there is no continuity, repair the wiring/interface.

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- (5) If the A/C wiring is satisfactory, do a check of the circuit resistance and circuit isolation of the fault indicated solenoid valve.
- (6) On the RH WTB, use a MULTIMETER STANDARD to do a check of the resistance between:
 - SFCC1 36CVA RH Blue Solenoid Pins A and U (Ref. ASM 278106S01)
 - SFCC2 36CVB = RH Green Solenoid Pins A and B (Ref. ASM 278107S01).
 - (a) The resistance for the solenoid valve:
 - P/N 667C0000-02 must be between 71 ohms and 84 ohms
 - P/Ns 903A0000-01, 1106A0000-01 and 1111A0000-01 must be between 53 Ohms and 60 Ohms.
- (7) On the RH WTB Blue Solenoid, do a check for circuit isolation.
 - (a) For the BLUE Solenoid, connect the pins A and B together.
 - (b) Connect one test lead of the 45VDC Isolation Tester to the pins AB for the BLUE Solenoid. Connect the other test lead to pin C.
 - (c) Supply a test signal for 5 seconds and read the shown resistance value.
 - (d) The resistance value must be more than 100 Megohms.
 - (e) For the GREEN Solenoid, do the steps given in Para. (7) again.
- (8) If the WING TIP BRAKE (36CV) does not give the correct results for one of the two tests (Refer to Paras. 4.A.(6) or (7)):
 - Replace the WTB Solenoid Valve (Ref. AMM TASK 27-81-51-000-004) (Ref. AMM TASK 27-81-51-400-002).
- (9) If the fault continues:
 - Replace the WING TIP BRAKE (36CV) (Ref. AMM TASK 27-81-51-000-001) and (Ref. AMM TASK 27-81-51-400-001).
- (10) Interchange the SFCC 1 and SFCC 2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Get access to the SLT ON GROUND FAULTS and do a check of the ground log.
 - (b) If the fault moves with the SFCC 1(2), install the SFCC 1 (2) in their initial locations.
 - (c) Replace the unserviceable SFCC-1 (21CV) or SFCC-2 (22CV) (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (11) Do the System BITE test as given in Para 3.A.(1).

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(12) Set the MCDU to MENU MODE and access the SLT ON GROUND FAULTS page.

Make sure that the ground log is empty.

5. Close-up

- A. Remove the ground support and maintenance equipment, the special and standard tools and all other items.
- B. Put the aircraft back to its initial configuration.

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TASK 27-81-00-810-824

Slat Speed Commanded but Slat Half Speed Detected.

1. Possible Causes

- 25CV
- 26CV
- aircraft wiring
- POB SOLENOID
- Hydraulic Motor of the Slat PCU
- FILTERS

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE QTY DESIGNATION

No specific 45VDC Isolation Tester
No specific 1 MULTIMETER - STANDARD

B. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-84-00-710-001 | Operational Test of the Slat System | |
| AMM | 27-84-52-000-001 | Removal of the Pressure-Off Brake of the Slat Power Control Unit | |
| AMM | 27-84-52-400-001 | Installation of the Pressure-Off Brake of the Slat Power Control Unit | |
| AMM | 27-84-53-000-001 | Removal of the Valve Blocks 25CV, 26CV of the Power Control Unit (Slat) | |
| AMM | 27-84-53-000-002 | Removal of the Solenoid Valves of the Power Control Unit (Slat) | |
| AMM | 27-84-53-000-003 | Removal of the Filters of the Valve Blocks | |
| AMM | 27-84-53-400-001 | Installation of the Valve Blocks 25CV, 26CV of the Power Control Unit (Slat) | |
| AMM | 27-84-53-400-002 | Installation of the Solenoid Valves of the Power Control Unit (Slat) | |
| AMM | 27-84-53-400-003 | Installation of the Filters of the Valve Blocks | |
| AMM | 27-84-54-000-001 | Removal of the Hydraulic Motor of the Slat Power | |
| | | Control Unit (6001CM) with the Pressure-Off Brake and the Valve Block Assembly | |
| AMM | 27-84-54-400-001 | Installation of the Hydraulic Motor of the Slat Power Control Unit (6001CM) with the Pressure-Off Brake and the Valve Block Assembly | |

EFF: ALL

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REFERENCE DESIGNATION

ASM 27-81/03

3. Fault Confirmation

A. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|--------|---------------------------------------|--------|----------|
| 49VU | FLIGHT CONTROLS/SLT/CTL AND MONG/SYS1 | 5CV | в06 |
| 12 1VU | FLIGHT CONTROLS/SLT/CTL/SYS2 | 7CV | R21 |

- B. SFCC Reset and Initialization.
 - (1) At the circuit breakers.
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds.
 - (d) Check the UPPER ECAM and the SD FLT/CTL page for the fault warnings.
 - (e) Access the SLT ON GROUND FAULTS page and do a check of the ground log.
 - (f) If the ECAM warning and the ground log is clear:no further maintenance steps are necessary.
 - (g) If the ECAM warning and the ground log fault message stays displayed, do the fault isolation.

4. Fault Isolation

A. Procedure

(1) Do the operational test of the slats system (Ref. AMM TASK 27-84-00-710-001)

NOTE: For this operational test, it is necessary that the Power Transfer Unit (PTU) is in operation.

(2) During the test procedure in Para 4.A.(1), monitor the ECAM display for the fault indications.

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- (3) If the fault indication gives a slow extension or slow retraction without a hydraulic fault, isolate the defective PCU and compare the two motor speeds:
 - (a) Stop the SFCC 1 and move the slats. Measure the extension time.
 - (b) Energize the SFCC 1 and stop the SFCC 2.
 - (c) Move the slats and measure the extension time.

NOTE: The time difference shows the slowest system. The slowest system is the PCU with possible internal friction.

- (d) During the steps above, if one SFCC is energized and a slat extension starts but the slats do not move freely:
 Do a check of the POB solenoid circuit (refer to Para 4.A.(4)).
- (e) If the slats move freely, go to Para 4.A.(12).
- (4) Do a check of the POB electrical circuit:
 - (a) Refer to (Ref. AMM TASK 27-84-52-000-001) Figure 401/Task 27-84-52-991-001.
 - (b) Find the electrical connector for the valve-block 25CV or 26CV POB solenoids and release it.
 - (c) Do a check of the aircraft wiring from the SFCC ARINC tray interface to the POB solenoid electrical connectors 25CV-A/26CV-A (Ref. ASM 27-81/02) and (Ref. ASM 27-81/03).
 - (d) If there is a wiring/interface fault, do the repair.
- (5) If the A/C wiring is satisfactory, do a check of the circuit resistance and isolate the circuit of the fault related solenoid valve.
 - (a) On the valve-block use a MULTIMETER STANDARD and do a check of the resistance between:

For SFCC1 -25CV = POB pins L and K ASM/278102S01 For SFCC2 -26CV = POB pins L and K ASM/278103S01

- (b) The resistance for the POB solenoid:
 - P/N 667C0000-02 must be between 71 ohms and 84 ohms.
 - P/Ns 903A0000-01; 1106A0000-01 and 1111A0000-01 must be between 53 ohms and 60 ohms.

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- (6) On the valve-block, do a check for circuit isolation:
 - (a) For the POB solenoid, connect the pins L & K together.
 - (b) Connect one test lead of the 45VDC Isolation Tester to the pins LK and the other test lead to pin G.
 - (c) Supply a test signal for 5 seconds and read the shown resistance value.
 - (d) The resistance value must be more than 100 Megohms.
- (7) If the results of one of the two POB SOLENOID tests in Paras 4.A.(5) and (6) are unsatisfactory, replace the POB solenoid (Ref. AMM TASK 27-84-53-000-002) and (Ref. AMM TASK 27-84-53-400-002).
- (8) If the results of one of the two POB SOLENOID tests in Paras 4.A.(5) and (6) are satisfactory, replace the POB related to the defective channel (Ref. AMM TASK 27-84-52-400-001) and (Ref. AMM TASK 27-84-52-000-001).
- (9) Do the test in Para 4.A.(3) and if the slats do not move freely, replace the Hydraulic Motor of the Slat PCU (Ref. AMM TASK 27-84-54-000-001) and (Ref. AMM TASK 27-84-54-400-001).
- (10) If the tests in Paras 4.A.(2) and (3) are satisfactory, do the test given in Para 4.A.(1).
- (11) Set the MCDU to MENU MODE and get access to the SLT ON GROUND FAULTS page and make sure that the ground log is clear.
- (12) If the CFDS shows the same fault message, then the fault is with the PCU valve-block.
 - (a) Examine the valve-block FILTERS (Ref. AMM TASK 27-84-53-000-003) and (Ref. AMM TASK 27-84-53-400-003) and clean/replace the examined item.
 - (b) If the fault continues, do the test in Para 4.A.(1) and do a check of the SLT ON GROUND FAULTS page.
 - (c) Examine the valve-block 25CV and 26CV and replace the defective item (Ref. AMM TASK 27-84-53-000-001) and (Ref. AMM TASK 27-84-53-400-001).
 - (d) Do the test in Para 4.A.(1) and make sure that the ground log is clear.
 - (e) Do the SFCC 1 (2) reset (refer to Para 3.B.). Do a check of the EXT/RET electrical circuit.

EFF: ALL

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TASK 27-81-00-810-825

SFCC 1 SLT 1 no ADIRU 2 Data or SFCC 2 SLT 2 no ADIRU 2 Data.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - ADIRU-2 (1FP2)
 - aircraft wiring
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|---|---|--|
| AMM 27-51-34-000-00 AMM 27-51-34-400-00 AMM 31-32-00-860-00 | 1 Installation of the SFCC (21CV,22CV) | |
| AMM 34-12-34-000-00 AMM 34-12-34-400-00 ASM 27-81/08 | F/CTL Page 1 Removal of the ADIRU (1FP1, 1FP2, 1FP3) | |

3. Fault Confirmation

- A. Test
 - (1) At the MCDU aet the MENU MODE and get access to the SYSTEM REPORT/TEST F/CTL page. (Ref. AMM TASK 31-32-00-860-006).
 - (a) Get access to the SFCC 1 (2) SYSTEM DATA SLAT page and push the line key adjacent to the ARINC 429 INPUT STATUS indication:if the ARINC input status shows ADIRU 2 LABEL *** NO DATA, do
 - the Fault Isolation Procedure.

NOTE: Additional information on the ARINC 429 INPUT STATUS page can be found in Page Block 301.

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4. Fault Isolation

A. Procedure

- (1) Interchange the SFCC 1 (2) with SFCC 2 (1) (Ref. AMM TASK 27-51-34-000-001) (Ref. AMM TASK 27-51-34-400-001).
- (2) Do the test given in Para. 3.A:
 - (a) If the fault does not continue, replace the initial SFCC-1 (21CV) (SFCC-2 (22CV)) (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (b) If the fault continues, replace the ADIRU-2 (1FP2) (Ref. AMM TASK 34-12-34-000-001) and (Ref. AMM TASK 34-12-34-400-001).
- (3) Do the test given in Para. 3.A.if the fault continues, do the next step.
- (4) Do a check and repair the aircraft wiring (Ref. ASM 27-81/08).
- (5) Do the test given in Para. 3.A.

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TASK 27-81-00-810-826

SLT Channel No Cross Talk Between SFCC1 and SFFC2. Loss of Cross Computer Link or Faulty Data.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - aircraft wiring
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) | |
| AMM | 27-84-00-710-001 | Operational Test of the Slat System | |
| AMM | 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST F/CTL Page | |
| ASM | 27-81/08 | - | |

3. Fault Confirmation

A. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION | | | |
|--------|---------------------------------------|--------|----------|--|--|--|
| 49٧0 | FLIGHT CONTROLS/SLT/CTL AND MONG/SYS1 | 5CV | B06 | | | |
| 12 1VU | FLIGHT CONTROLS/SLT/CTL/SYS2 | 7CV | R21 | | | |

- B. SFCC Reset and Initialization.
 - (1) At the circuit breakers.
 - (a) Open the circuit breakers.
 - (b) Wait for 3 seconds and close the circuit breakers.
 - (c) Wait for 60 seconds and do the next step.
 - (2) At the MCDU set the SYSTEM REPORT/TEST FLT CTL page (Ref. AMM TASK 31-32-00-860-006):
 - (a) Set the page for the SFCC related to the slat channel which reported the loss of data.

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- (b) At the applicable SFCC1 (or SFCC2) SYSTEM STATUS SLAT page:
 - if the message SLT1 NO SFCC2 DATA (or SLT2 NO SFCC1 DATA) is shown, do the fault isolation procedure given in Para 4.A.
 - if a different message is shown, do the trouble shooting procedure related to this message.
 - if no message is shown , no further maintenance action is necessary.

4. Fault Isolation

A. Procedure

- (1) Interchange SFCC1 with SFCC2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (2) Do the test given in Para. 3.B.(2):
 - if the message stays in the same system, do step (5)
 - if the message moves to the opposite system, do the next step.
- (3) Replace the SFCC-1 (21CV) or SFCC-2 (22CV) in the slat channel which reported the loss of data (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001):
 - if the fault continues, do the next step.
- (4) Replace the opposite SFCC to that replaced in step (3):if the fault continues, do the next step.
- (5) Do a check and repair the aircraft wiring between SFCC1 and SFCC2 (Ref. ASM 27-81/08).
- (6) Do the operational test of the slats system (Ref. AMM TASK 27-84-00-710-001).

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TASK 27-81-00-810-827

Slat Position Indication Disagree

1. Possible Causes

- FWC-1 (1WW1)
- FWC-2 (1WW2)
- SLAT-PCU (6001CM)
- PPU-INSTRUMENTATION (IPPU) (4CN)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-54-51-000-001 | Removal of the Power Control Unit 6201CM of the Flap System | |
| AMM | 27-54-51-400-001 | Installation of the Power Control Unit 6201CM of the Flap System | |
| AMM | 27-85-11-000-001 | Removal of the Instrumentation Position Pick-Off Unit | |
| AMM | 27-85-11-400-001 | <pre>Installation of the Instrumentation Position Pick-Off Unit</pre> | |
| AMM | 31-53-34-000-001 | Removal of the Flight Warning Computer (FWC) (1WW1,1WW2) | |
| AMM | 31-53-34-400-001 | <pre>Installation of the Flight Warning Computer (FWC) (1WW1,1WW2)</pre> | |
| ASM | 27-85/01 | • | |

3. Fault Confirmation

A. Make sure of the apparently incorrect Slat/Flap position indications on the ECAM display.

4. Fault Isolation

- A. If the apparently incorrect Slat/Flap position indications show on the ECAM display.
 - Pull the circuit breaker of FWC 1 (1CN):
 - (1) If the fault does not continue:
 - Replace the FWC 1 (1WW1) FWC-1 (1WW1) (Ref. AMM TASK 31-53-34-000-001) and (Ref. AMM TASK 31-53-34-400-001).
 - Reset the circuit breaker of FWC 1 (1CN).

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- (a) If the fault continues:
 - Change the electrical connector 4CN-A with 4CN-B.
 - 1 If the fault does not continue:
 - Replace the PPU-INSTRUMENTATION (IPPU) (4CN) (Ref. AMM TASK 27-85-11-000-001) and (Ref. AMM TASK 27-85-11-400-001).
 - 2 If the fault continues:
 - Change back the electrical connector 4CN-A and 4CN-B
 - Do a check for 26VAC at the electrical connector 4CN-A/A,B.
 - a If the voltage is correct:
 - Do a check and repair the aircraft wiring from IPPU (4CN)
 A/C,D,E to the FWC 1 1 (1WW1) AA/13G,13H,13J
 - Do a check and repair the aircraft wiring from IPPU (4CN) B/C,D,E to the FWC 2 (1WW2) AD/13A,13B,13C (Ref. ASM 27-85/01).
 - b If the voltage is not correct:
 - Do a check and repair the aircraft wiring from IPPU (4CN)
 A/A,B to the circuit breaker (1CN) and the ground
 - Do a check and repair the aircraft wiring from IPPU (4CN) B/A,B to the circuit breaker (2CN) and the ground (Ref. ASM 27-85/01).
- (2) If the fault continues:
 - Pull the circuit breaker of FWC 1 (1CN) and FWC 2 (2CN):
 - (a) If the fault does not continue:
 - Replace the FWC-1 (1WW1) and FWC-2 (1WW2) (Ref. AMM TASK 31-53-34-000-001) and (Ref. AMM TASK 31-53-34-400-001).
 - Reset the circuit breaker of FWC 1 (1CN) and FWC 2 (2CN).
 - 1 If the fault continues:
 - Replace the PPU-INSTRUMENTATION (IPPU) (4CN) (Ref. AMM TASK 27-85-11-000-001) and (Ref. AMM TASK 27-85-11-400-001).
 - (b) If the fault continues:
 - replace the SLAT-PCU (6001CM) (Ref. AMM TASK 27-54-51-000-001) and (Ref. AMM TASK 27-54-51-400-001).

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TASK 27-81-00-810-828

EFCS Reports Loss Of Data From The SFCC 1 (2)

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE DESIGNATION

27-51-00-810-839

EFCS Identifies a Loss of Data from the SFCC-1 (2).

- 3. Fault Confirmation
 - A. Select MCDU MENU mode and set the CFDS then the A/C CURRENT STATUS or AVIONICS STATUS.
 - (1) Do a check of the STATUS report and look for an indicated SFCC-1 (21CV) or SFCC-2 (22CV) fault on SDAC, CFDIU, ELAC, FAC and SEC.
 - (2) If all these systems report an SFCC 1 (2) fault go to (Ref. TASK 27-51-00-810-839)
 - (3) The avionics systems TSM ATA references are:
 - SDAC, 31-54-00
 - CFDIU,32-31-00
 - ELAC 27 92 00.
 - FAC 22-69-00
 - SEC 27 92 00
 - (4) If only one of the avionic units report a fault, do the fault isolation procedure that is applicable to the LRU that reported the fault.
- 4. Fault Isolation
 - A. There is no further action required for this fault symptom.

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TASK 27-81-00-810-830

Slats - Flag Indication Not Correct

- 1. Possible Causes
 - IPPU-SLAT (4CN)
- 2. Job Set-up Information

Not Applicable

- 3. Fault Confirmation
 - A. Procedure
 - (1) Examine the post flight report for a CFDS fault message with the FIN 4CN A or 4CN B shown.
- 4. Fault Isolation
 - A. Procedure
 - (1) If the FIN 4CN A or 4CN B is shown:
 - (a) This is an IPPU-SLAT (4CN) fault.
 - (b) For the trouble-shooting procedure (Ref. 27 CFDS).

EFF: ALL

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TASK 27-81-00-810-831

Slats - Flap Menu Shows When Slat Menu is Selected on the CFDIU

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- RELAY-A/C ON GND (94CV)
- RELAY-A/C ON GND (96CV)
- PROX SNSR R L/G EXT 20GA
- PROX SNSR L L/G EXT 21GA
- PROX SNSR R L/G EXT 22GA
- PROX SNSR L L/G EXT 23GA
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION | | | |
|------|----------------------|--|--|--|--|
| АММ | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | | | |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) | | | |
| AMM | 27-81-00-740-002 | Bite Test of the Slat and Flap Control Computers (Slat System) | | | |
| _ | 27-81/02 27-81/03 | | | | |

3. Fault Confirmation

- A. Test
 - (1) Do a BITE test of the applicable SFCC (Ref. AMM TASK 27-81-00-740-002).

4. Fault Isolation

- A. Procedure
 - (1) If the flap menu comes into view when the slat menu is selected:
 - (a) Swop the SFCC's and repeat the test in Para. 3.A. on SFCC-1 (21CV) and SFCC-2 (22CV).
 - (2) If the fault has moved to the other SFCC position, swop the SFCC's back and replace the SFCC that has the fault (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).

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- (3) If the fault did not move to the other SFCC position, swop the SFCC's back Ref. Para. (2).
 - (a) Make sure that there are no landing gear system faults (Ref. ATA 32-31-00)

<u>NOTE</u>: Main landing gear shock absorber proximity sensor faults will cause this failure.

- For SFCC1 PROX SNSR R L/G EXT 20GA and PROX SNSR L L/G EXT 21GA
- For SFCC2 PROX SNSR R L/G EXT 22GA and PROX SNSR L L/G EXT 23GA
- (4) If there were any landing gear faults, do the test in Para. 3.A.
- (5) If the fault continues:
 - (a) Swop RELAY-A/C ON GND (94CV) with RELAY-A/C ON GND (96CV)
 - (b) Do the test in Para. 3.A. on SFCC1 and SFCC2.
 - (c) If the fault moves to the other system, replace the relay in the system that now has the fault.
 - (d) Do the test in Para. 3.A.
- (6) If the fault does not move to the other system, do a check of the aircraft wiring.
 - for SFCC1 from C/B 5CV to the LGCIU1 and from the RELAY A/C ON GND 94CV to SFCC1 (Ref. ASM 27-81/02).
 - for SFCC2 from C/B 7CV to the LGCIU2 and from the RELAY A/C ON GND 96CV to SFCC2 (Ref. ASM 27-81/03).
 - (a) Repair any defect found.
 - (b) Do the test in Para. 3.A.

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TASK 27-81-00-810-832

Slats - SFCC Slat Channel Failure

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-81-00-710-001 | Operational Test of the Wing-Tip Brake and the |
| | | Pressure-Off Brake |
| AMM | 27-81-00-740-002 | Bite Test of the Slat and Flap Control Computers |
| | | (Slat System) |
| AMM | 27-84-00-710-001 | Operational Test of the Slat System |
| AMM | 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST |
| | | F/CTL Page |

3. Fault Confirmation

- A. Fault monitor action.
 - (1) Possible causes of the SFCC 1 (2) reported fault are as follows:
 - (a) The non-validity of the synchro-excitation power generation.
 - (b) The SFCC primary/secondary internal power supply fault.
 - (c) Automatic integrity test detected fault conditions:
 - processor checks
 - ROM and RAM tests
 - processor I/O tests
 - consolidation logic tests.

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(d) A cross lane monitoring fault.

B. Procedure

- (1) Set the MCDU to the MENU MODE and access the LAST LEG REPORT for a list of fault messages (Ref. AMM TASK 31-32-00-860-006).
- (2) Do a BITE test with the applicable SFCC (Ref. AMM TASK 27-81-00-740-002).
- (3) If the MCDU shows a failure message, do the Fault Isolation procedure.

4. Fault Isolation

A. Procedure

- (1) Swop the SFCC-1 with the SFCC-2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (2) If the failure moves with the SFCC, replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV).
- (3) If the failure does not move with the SFCC or there is no fault detected, do the Operational Test of the Slat System (Ref. AMM TASK 27-84-00-710-001).
- (4) If a fault is detected, swop the SFCC-1 with the SFCC-2.
- (5) Do the Operational Test of the Slat System again.
- (6) If the fault moves with the SFCC, replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV).
- (7) If the fault does not move with the SFCC, refer to P. Block 101 for the related system trouble-shooting procedure.
- (8) If there is no fault detected, do the Operational Test of the Wing-Tip Brake and the Pressure-off Brake (Ref. AMM TASK 27-81-00-710-001).
- (9) If a fault is detected, swop the SFCC-1 with the SFCC-2.
- (10) Do the Operational Test of the Wing-Tip Brake and the Pressure-off Brake again.
- (11) If the fault moves with the SFCC, replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV).
- (12) If the fault does not move with the SFCC, refer to P. Block 101 for the related system trouble-shooting procedure.

EFF: ALL

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TASK 27-81-00-810-833

Slats - Pin Program Disagree Installation Fault

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | | | |
|-----------|------------------|--|--|--|--|
| | | | | | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) | | | |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) | | | |
| AMM | 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST F/CTL Page | | | |
| ASM | 27-81/08 | | | | |
| | | | | | |

3. Fault Confirmation

A. Test

- (1) Get access to the SYSTEM REPORT/TEST F/CTL (Ref. AMM TASK 31-32-00-860-006), press the line key for the applicable SFCC menu, and press the line key for SLT class 3 faults.
- (2) If you can get access to the SFCC menu, and SLT class 3 faults, the fault has gone. The system is also serviceable if "PIN PROGRAM DISAGREE INSTALLATION" is shown in class 3 faults, no further action is required. The fault has gone but it has been recorded.
- (3) If you cannot get access to the SFCC menu, do the fault isolation procedure.

4. Fault Isolation

A. Procedure

NOTE: During this procedure when you interchange, remove or install an SFCC, the AMM procedures (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001) must be used.

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- (1) If the message "pin prog disagree slt" is shown:
 - (a) Interchange the SFCC-1 (21CV) with SFCC-2 (22CV).
 - (b) Do the test in Para. 3. A. (1).
- (2) If the fault moves to the other SFCC position:
 - (a) Put the SFCC's back in their initial position.
 - (b) Replace the SFCC that has the fault.
 - (c) Do the test in Para. 3. A. (1).
- (3) If the fault does not move to the other SFCC position:
 - (a) Put the SFCC's back in their initial position.
 - (b) Do a check of the aircraft wiring at the SFCC slat channel (Ref. ASM 27-81/08).
 - (c) Repair any defect found.
 - (d) Do the test in Para. 3. A. (1).

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TASK 27-81-00-810-834

Slats - WTB Applied During APU Start With the Batteries

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

WARNING: MAKE SURE THAT THE TRAVEL RANGES OF THE FLIGHT CONTROL SURFACES ARE

CLEAR BEFORE YOU PRESSURIZE/DEPRESSURIZE A HYDRAULIC SYSTEM.

WARNING: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING

GEAR.

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| AMM | 27-80-00-869-004 | Reset of the Wing Tip Brake (WTB) of the Slat System |
| AMM | 27-81-00-740-002 | on the Ground Bite Test of the Slat and Flap Control Computers (Slat System) |

3. Fault Confirmation

- A. Test
 - (1) When you start the APU with the batteries, the warning message "F/CTL SLATS LOCKED" can show on the upper ECAM DU. Also, the Wing Tip Brakes (WTB) are applied.

NOTE: The ECAM message "F/CTL FLAPS LOCKED" can also show.

- 4. Fault Isolation
 - A. Procedure
 - (1) Do a reset of the WTBs of the Slat System (Ref. AMM TASK 27-80-00-869-004).
 - (2) Do a BITE test of the SFCC (Ref. AMM TASK 27-81-00-740-002):
 - If the test gives a fault message, do the trouble shooting procedure related to this message.

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TASK 27-81-00-810-835

Slats - SFCC TEST Gives the Message NO FAULTS BUT

- 1. Possible Causes
- 2. Job Set-up Information

Not Applicable

- 3. Fault Confirmation
 - A. Test
 - (1) Do Para. 4. if the SLATS SFCC TEST gives the message NO FAULTS BUT, with any of the messages that follow:
 - OTHER SFCC ARM SIGNAL NOT TESTED

or

- WTB SET
 - and/or
- NO WTB POWER
- LH WTB SOLENOID S/C (or O/C)
- RH WTB SOLENOID S/C (or O/C)
- LH APPU FAULT
- FPPU FAULT
- RH APPU FAULT
- 4. Fault Isolation
 - A. Procedure
 - (1) At the MCDU access the CFDS MENU then LAST LEG REPORT to see if a related fault message was given during normal system operation. The table that follows shows the relationship between the messages given during the SFCC TEST and normal mode, it also gives the related trouble shooting task. Do Para. 4.A. of the applicable task.

NOTE: A fault message given during normal mode will make sure that the fault identified during the SFCC TEST is correct. It will also give the FIN of the defective component.

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| SFCC TEST Message | CFDS LAST LEG REPORT MESSAGE | 27-81-00 | |
|--|--|----------|--|
| OTHER SFCC ARM SIGNAL NOT TESTED | SLT 1 (2) NO SFCC 2 (1) DATA | 826 | |
| NO WTB POWER | SLT 1 (2) C/B 9CV (11CV) | 821 | |
| | SLT LH WTB BLU (GRN) SOLENOID 35CV OR WIRING TO SLT 1 (2) | 822 | |
| RH WTB SOLENOID S/C (or O/C) | SLT RH WTB BLU (GRN) SOLENOID 36CV OR WIRING TO SLT 1 (2) | 823 | |
| LH APPU FAULT | LH SLT APPU 31CV OR WIRING TO SLT 1 (2) | 807 | |
| FPPU FAULT | SLT FPPU 28CV OR WIRING TO SLT 1 (2) | 806 | |
| RH APPU FAULT | RH SLT APPU 32CV OR WIRING TO SLT 1 (2) | 807 | |

 $\underline{\underline{\text{NOTE}}}$: The LAST LEG REPORT messages shown are for SFCC1, the items in () are for SFCC 2.

EFF: ALL

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TASK 27-81-00-810-836

Slats - SFCC 1 and SFCC 2 Show PCU Valveblock Fault Message (25CV, 26CV)

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING GEAR.

- 1. Possible Causes
 - flaps (and slats) control lever is out of detent
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE DESIGNATION

AMM 27-81-00-740-002

Bite Test of the Slat and Flap Control Computers (Slat System)

- 3. Fault Confirmation
 - A. Test
 - (1) At the ECAM Control Panel, push the STS P/BSW to show the status page on the lower ECAM DU:
 - if a SLATS status message is not shown, there is no slats fault
 - if a SLATS status message is shown, do the fault isolation procedure given in Para. 4.
- 4. Fault Isolation
 - A. Procedure
 - (1) Make sure that the flaps (and slats) control lever is in the correct detent and reset it if necessary:
 - if the SLATS status message has gone, there is no fault
 - if the SLATS status message stays, do the next step.

NOTE: When the flaps (and slats) control lever is out of detent,
SFCC1 and SFCC2 will find that the lever position and the
slats position (signal from the Valveblock PPU) disagree. The
SLT 1 (2) PCU VALVEBLOCK 25CV (26CV) message will then be

EFF: ALL

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given by each SFCC and the ECAM message SLATS FAULT will be shown. This flight control configuration error can be cleared by a reset of the flaps (and slats) control lever.

- (2) Do a BITE test of the SFCC1 and SFCC2 slats system (Ref. AMM TASK 27-81-00-740-002):
 - If the test gives a fault message, do the trouble shooting procedure related to this message.

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TASK 27-81-00-810-837

Slats - SFCC 1 (2) Gives PCU Valveblock 25CV (26CV) Valve Sensor Message

<u>WARNING</u>: PUT THE SAFETY DEVICES AND THE WARNING NOTICES IN POSITION BEFORE YOU START A TASK ON OR NEAR:

- THE FLIGHT CONTROLS
- THE FLIGHT CONTROL SURFACES
- THE LANDING GEAR AND THE RELATED DOORS
- COMPONENTS THAT MOVE.

<u>WARNING</u>: MAKE SURE THAT THE GROUND SAFETY-LOCKS ARE IN POSITION ON THE LANDING GEAR.

1. Possible Causes

- SFCC-1 (21CV)
- SFCC-2 (22CV)
- VALVE BLOCK SLAT 1 (25CV)
- VALVE BLOCK SLAT 2 (26CV)
- valve sensor
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| | | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-84-53-000-001 | Removal of the Valve Blocks 25CV, 26CV of the Power |
| | | Control Unit (Slat) |
| AMM | 27-84-53-400-001 | Installation of the Valve Blocks 25CV, 26CV of the Power Control Unit (Slat) |
| AMM | 31-32-00-860-006 | Procedure to Get Access to the SYSTEM REPORT/TEST |
| | 07 04400 | F/CTL Page |
| ASM | 27-81/02 | |
| ASM | 27-81/03 | |

3. Fault Confirmation

A. Test

- (1) At the MCDU, access the SYSTEM REPORT / TEST page and select F/CTL> (Ref. AMM TASK 31-32-00-860-006).
- (2) Select <SFCCX (where X is the No. of the applicable SFCC).

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- (3) Select <SFCC/TEST, to do the SFCC BITE test:
 - if the fault message SLT1 (2) PCU VALVEBLOCK 25CV (26CV) VALVE SENSOR 27-84-53 is shown, do the Fault Isolation Procedure given in Para. 4.

NOTE: This message is not a CFDS Normal Mode message and is only shown in SFCC reports.

4. Fault Isolation

A. Procedure

- (1) Interchange the SFCC1 and SFCC2 (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
- (2) Do the test given in Para. 3.A:
 - (a) If the fault goes, replace the initial SFCC-1 (21CV) or SFCC-2 (22CV), (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (b) If the fault continues, replace the applicable VALVE BLOCK SLAT 1 (25CV) or VALVE BLOCK SLAT 2 (26CV), (Ref. AMM TASK 27-84-53-000-001) and (Ref. AMM TASK 27-84-53-400-001).

NOTE: The valve sensor is not a Line Replaceable Unit (LRU) and it is necessary to replace the valve block.

(3) If the fault continues:

- (a) Do a check of the aircraft wiring and repair as necessary (Ref. ASM 27-81/02) or (Ref. ASM 27-81/03).
- (b) Do the test given in Para. 3.A.

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TASK 27-81-00-810-838

Slats - SFCC TEST Gives the Message PERFORMED WITH FAULT

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE

DESIGNATION

AMM 27-51-34-000-001 Removal of the SFCC (21CV,22CV) AMM 27-51-34-000-001 AMM 27-51-34-400-001

Installation of the SFCC (21CV,22CV)

- 3. Fault Confirmation
 - A. Test
 - (1) If the SLAT SFCC TEST gives the message PERFORMED WITH FAULT, do the fault isolation procedure given in Para. 4.
- 4. Fault Isolation
 - A. Procedure
 - (1) Replace the applicable SFCC-1 (21CV) or SFCC-2 (22CV), (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).

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TASK 27-81-00-810-839

Slats System 1 (2) Fault with the A-LOCK Flag Shown on the EWD When Retracting the Slats While the Aircraft is on the Ground

1. Possible Causes

- RELAY-A/C ON GND (94CV)
- RELAY-A/C ON GND (96CV)
- aircraft wiring

2. Job Set-up Information

A. Referenced Information

REFERENCE DESIGNATION

AMM 27-81-00-740-002 Bite Test of the Slat and Flap Control Computers (Slat System)

ASM 27-81/02
ASM 27-81/03

3. Fault Confirmation

A. Test

- (1) If the Post Flight Report shows the ECAM message SLAT SYS 1(2) FAULT and the A-LOCK legend (cyan) flashed during slat retraction on the ground, do the next step.
- (2) Do a BITE test of the applicable system SFCC slat channel (Ref. AMM TASK 27-81-00-740-002):
 - if the test completes, but gives a different maintenance message, do the trouble shooting procedure related to the maintenance message.
 - if you cannot access the test page, do the fault isolation procedure given in Para. 4.

NOTE: When the aircraft is on the ground, the A-LOCK legend can only show if the SFCC1 or SFCC2 slat channel is incorrectly in the flight mode. The legend will go off when the serviceable channel has fully retracted the slats (at half speed). It is not possible to access the slat test page when the related slat channel is in the flight mode.

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4. Fault Isolation

A. Procedure

- (1) Replace the applicable A/C ON GND relay:
 - for Slat 1 replace RELAY-A/C ON GND (94CV)
 - for Slat 2 replace RELAY-A/C ON GND (96CV).
- (2) Do the test given in Para. 3. A. (2):
 if the fault continues, do the next step.
- (3) Do a check of the aircraft wiring (Ref. ASM 27-81/02) or (Ref. ASM 27-81/03) and repair as necessary.
- (4) Do the test given in Para. 3. A. (2).

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TASK 27-81-00-810-840

Slats - WTB/POB Test Does Not Complete

- 1. Possible Causes
 - SFCC-1 (21CV)
 - SFCC-2 (22CV)
 - POWER CONTROL UNIT (6001CM)
 - aircraft wiring
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-51-34-000-001 | Removal of the SFCC (21CV,22CV) |
| AMM | 27-51-34-400-001 | Installation of the SFCC (21CV,22CV) |
| AMM | 27-81-00-710-001 | Operational Test of the Wing-Tip Brake and the Pressure-Off Brake |
| AMM | 27-84-51-000-001 | Removal of the Power Control Unit 6001CM of the Slat System |
| AMM | 27-84-51-400-001 | Installation of the Power Control Unit 6001CM of the Slat System |

3. Fault Confirmation

- A. Test
 - (1) Do an operational test of the wing-tip brake and the pressure-off brake (Ref. AMM TASK 27-81-00-710-001):
 - if the test does not complete in less than 2 minutes do the fault isolation procedure in Para. 4.
 - if the test is OK, no more maintenance work is necessary.

4. Fault Isolation

- A. Procedure
 - (1) Abort the test as follows:
 - (a) Reset the circuit breaker of the channel on test.
 - (2) Interchange the SFCCs (Ref. AMM TASK 27-51-34-000-001) and (Ref. AMM TASK 27-51-34-400-001).
 - (a) Do the test in Para. 3. A.
 - if the test is OK, do step (3)
 - if the test does not complete, do step (4).

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- (3) Replace the unserviceable SFCC-1 (21CV) or SFCC-2 (22CV) that was the source of the initial fault.
 - (a) Do the test in Para. 3. A.if the test does not complete, do the next step.
- (4) Replace the POWER CONTROL UNIT (6001CM) (Ref. AMM TASK 27-84-51-000-001) and (Ref. AMM TASK 27-84-51-400-001).
 - (a) Do the test in Para. 3. A:if the test does not complete, do the next step.
- (5) Do a check of the aircraft wiring between the applicable SFCC and the PCU:
 - do the repair.
 - (a) Do the test in Para. 3. A.

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SLATS ELECTRICAL CONTROL AND MONITORING - TASK SUPPORTING DATA

1. TABLE 1 R A. X-LINK DATA DISPLAY R (1) When on the submenu pages SYSTEM DATA FLAP or SLAT, the Line Key "1R" R "X LINK INPUT>" is pressed, the nominated SFCC transmits the following page to the CFDS. R R R SFCC- X X-LINK INPUT DATA R 1L BIT No. 1R R 15 21 27 32 ∞ R 2L R 2R R ∞ LABEL 23 3L ∞ xxxxxxxxxxx = no data = xxxxxxxxxx ∞ 3R R R ∞ LABEL 60 ∞ 1 0 1 0 1 0 = faulty data = 1 0 1 0 ∞ R 4L 4R ∞ LABEL 61 R R 5L ∞ 1 0 1 0 1 0 = faulty data = 1 0 1 0 ∞ 5R R R 6L ∞ <RETURN PRINT> ∞ R (2) LABEL 23 is transmitted as xxxxx- for no data. R (3) LABEL 60 is transmitted as 1 and 0 (no parity bit) for faulty data. (4) LABEL 61 is transmitted as 1 and 0 (no parity bit) for faulty data. R B. LABEL 023 SLAT/FLAP ATTACHMENT DATA Bit R Function R Number ∞ R ∞ Label Identifier R R ∞ SDI SFCC 1 SFCC 2 9 R 1 0 R 10 0 R 11 R ∞ Spare R 12 ∞ Spare R 13 ∞ Spare 14 R ∞ Spare 15 R ∞ Spare

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R

R

16

17

18

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∞ Spare

∞ Spare

∞ Spare

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```
Bit

    Function

   Number ∞
                              ∞ Spare
   20
R
         ∞ Data Field
                              ∞ Spare
   21
                              ∞ L Flap Attachment Failure
R
   22
                              ∞ L Flap Attachment Sensor Failure
   23
                              ∞ Echo of L Flap Attachment Failure
R
   24
                              ∞ Echo of L Flap Sensor Failure
R
   25
                              ∞ R Flap Attachment Failure
R
   26
                              ∞ R Flap Attachment Sensor Failure
   27
                              ∞ Echo of R Flap Attachment Failure
R
                              ∞ Echo of R Flap Sensor Failure
   28
R
   29
                              ∞ Flap Data Failure
R
R
R
   30
       ∞ SSM
   31
       ∞ SSM
R
R
         ∞ Parity
     C. LABEL 060 SYSTEM FAILURE INFORMATION
R
R
  Bit

    Function

  Number ∞
R
R
       ∞ Label Identifier
R
         ∞ SDI
R
R
   10
       ∞ SDI
   ______
R
R
   11
         ∞ Spare
   12
       ∞ Cross lane discrepancy
R
   13
       ∞ Spare
R
R
    14
         ∞ LH Asymmetry fault
    15
         ∞ RH Asymmetry fault
R
         ∞ Runaway fault
R
   16
    17
         ∞ End stop
R
    18
         ∞ FPPU Overspeed failure
R
   19
         ∞ LH APPU Overspeed failure
   20
       ∞ RH APPU Overspeed failure
R
   21
R

    □ Uncommanded movement

   22
R

    □ CSU Misadjustment detected

   23
R
         ∞ Cross computer arm wrap around
   24
R
         ∞ Spare
   25
         ∞ Spare
R
   26
R

    Spare

   27
R
         ∞ Spare
   28
         ∞ Spare
R
   29
         ∞ Spare
```

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```
Bit

    Function

  Number ∞
R
  30
      ∞ SSM
  31
       ∞ SSM
R
  32
       ∞ Parity
R
    D. LABEL 061 SYSTEM TEST DATA WORD 1
R
  Bit
R

    Function

  Number ∞
R
  ______
  1-8

    □ Label Identifier

R
R
      ∞ SDI
  10
      ∞ SDI
R
R
   11
R
      ∞ Spare
R
   12
       ∞ Spare
   13
       ∞ Spare
R
   14
       ∞ System Jam Failure
R
   15
R
      ∞ CSU Fault/CSU Out of Detent
   16
      R
      ∞ Valve Sensor Failure
   17
   18
R
       ∞ Valve Response Failure
   19
R
       ∞ Spare
   20
R
       ∞ Spare
   21
R

    Spare

   22
R
       ∞ Spare
   23
R
       ∞ Spare
   24
      ∞ Spare
R
   25
R
       ∞ Spare
   26
R
       ∞ Spare
   27
R

    Spare

   28
       ∞ Spare
R
   29
R
       ∞ Spare
R
  30
       ∞ SSM
       ∞ SSM
R
R
  32
       ∞ Parity
  ______
```

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E. LABEL 062 SYSTEM TEST DATA WORD 2 R Bit Function Number ∞ R ∞ Label Identifier R 9 R ∞ SDI 10 ∞ SDI R R ______ R 11 ∞ Spare 12 ∞ Spare R 13 ∞ Spare R 14 ∞ Actual CSU Position O R 15 ∞ Actual CSU Position 1 R R 16 ∞ Actual CSU Position 2 17 ∞ Actual CSU Position 3 R 18 R ∞ Actual CSU Position FULL 19 ∞ PRESSURE OFF BRAKE status (active low) 20 ∞ RETRACT (active low) R 21 EXTEND (active low) 22 ∞ Cross Computer WTB Arm R 23 R ∞ LH WTB Arm 24 ∞ RH WTB Arm R 25 ∞ Control Valve Half Speed Monitor Point reached R 26 ■ Lowspeed Threshold Command being performed 27 R Slat Alpha Lock engaged 28 ∞ Slat Baulk engaged R ∞ Flap relief engaged R 30 ∞ SSM 31 ∞ SSM R R ∞ Parity ______ R F. LABEL 063 FPPU DATA WORD R Bit ∞ Function Number ∞ R R ∞ Label Identifier R 9 ∞ SDI R ∞ SDI 10 R R 11 ∞ Spare R R 12 ∞ Spare 13 R ∞ Spare R

EFF: ALL

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```
Bit

    Function

   Number ∞
          ∞ FPPU Value (LS Bit)
    14
    15
R
    16
R
    17
R
    18
    19
R
    20
R
    21
R
    22
    23
R
R
    24
    25
          ∞ FPPU Value (MS Bit)
R
R
R
    26
          ∞ Spare
    27
          ∞ Spare
R
    28
          ∞ Spare
R
    29
          ∞ Spare
    30
R
          ∞ SSM
R
   31
        ∞ SSM
R
R
          ∞ Parity
R
R
      G. LABEL 064 LAPPU DATA WORD
R
   Bit

    Function

R
   Number ∞
R
         ∞ Label Identifier
R
R
          ∞ SDI
   10
         ∞ SDI
R
R
    11
          ∞ Spare
R
R
    12
          ∞ Spare
R
    13
          ∞ Spare
R
    14
          ∞ LAPPU Value (LS Bit)
R
    15
R
R
    16
    17
R
R
    18
    19
R
    20
R
    21
    22
```

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```
Bit

    Function

   Number ∞
    23
   24
R
    25
          ∞ LAPPU Value (MS Bit)
R
    26
R
          ∞ Spare
    27
          ∞ Spare
R
    28
          ∞ Spare
R
    29
          ∞ Spare
R
    30
R
         ∞ SSM
   31
R
         ∞ SSM
R
R
   32
         ∞ Parity
      H. LABEL 065 RAPPU DATA WORD
R
R
   Bit

    Function

   Number ∞
R
         ∞ Label Identifier
R
    9
R
        ∞ SDI
        ∞ SDI
   10
R
   11
R
          ∞ Spare
R
    12
         ∞ Spare
R
    13
          ∞ Spare
R
   14
R
          ∞ RAPPU Value (LS Bit)
    15
R
R
    16
    17
R
    18
R
    19
    20
R
    21
R
R
    22
    23
    24
R
    25
R
          ∞ RAPPU Value (MS Bit)
R
R
    26
          ∞ Spare
    27
R
          ∞ Spare
    28
R
          ∞ Spare
    29
          ∞ Spare
```

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```
Bit

    Function

   Number ∞
   30
        ∞ SSM
R
   31
        ∞ SSM
R
   32

    Parity

      J. LABEL 066 SPARE TEST DATA WORD
   Bit
        ∞ Function
R
R
  Number ∞
   1-8 ∞ Label Identifier
R
         ∞ SDI
   10
R
       ∞ SDI
R
R
   11-29 ∞ Spare
R
R
          ∞ SSM
   31
        ∞ SSM
R
R
   32
          ∞ Parity
```

2. TABLE 2

A. PPU DATA DISPLAY.

(1) When on the submenu pages SYSTEM DATA FLAP, the Line Key "1L" "PPU" is pressed, the named SFCC transmits the following page to the CFDS.

| | SFCC- X | | |
|---|--|--|---|
| | PPU DATA (DEG |) | |
| DATE: | UTC: | | 1R |
| LH APPU | FPPU | RH APPU | |
| XXX.X | XXX.X | XXX.X | 2R |
| ***HEX | ***HEX | ***HEX | |
| | | | 3R |
| | OTHER SFCC | | |
| LH APPU | FPPU | RH APPU | 4R |
| XXX.X | XXX.X | XXX.X | |
| ***HEX | ***HEX | ***HEX | 5R |
| <return< td=""><td></td><td>PRINT> </td><td></td></return<> | | PRINT> | |
| | DATE: LH APPU XXX.X ***HEX LH APPU XXX.X ***HEX | SFCC- X PPU DATA (DEG DATE: UTC: LH APPU FPPU XXX.X XXX.X ***HEX ***HEX OTHER SFCC LH APPU FPPU XXX.X XXX.X ***HEX ***HEX | SFCC- X PPU DATA (DEG) DATE: UTC: LH APPU FPPU RH APPU XXX.X XXX.X XXX.X ***HEX ***HEX ***HEX OTHER SFCC LH APPU FPPU RH APPU XXX.X XXX.X XXX.X ***HEX ***HEX |

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- (2) The XXX.X fields are replaced with the decimal value of the synchro angle.
- (3) The *** fields are replaced with the hexadecimal value of the synchro angle.
 - (4) If no data is available then the decimal value is replaced with XXX.X.

3. TABLE 3

R

R

- A. Slat Operating System.
 - (1) Mechanical and Electronic Interface Data.

| CONTROL LEVER POSITION | SURFACE ANGLE | SYHCHRO ANGLE APPU FPPU IPPU | | |
|------------------------|----------------|---------------------------------|-----|--|
| | Mech.Stop retr | -2.81 | deg | |
| 0 | 0 deg | 0 | deg | |
| 1 Auto | 18 deg | 222.77 | deg | |
| 1 Norm | 18 deg | 222.77 | deg | |
| 2 | 22 deg | 272.27 | deg | |
| 3 | 22 deg | 272.27 | deg | |
| FULL | 27 deg | 334.16 | deg | |
| | Mech. Stop ext | 336. 97 | dea | |

NOTE: The APPUs should agree within 0.45 deg. At position 0
APPU/FPPU should agree within 0.9 deg., at positions 1, 2, 3
and FULL, the APPU/FPPU should agree within 1.3 deg.

4. TABLE 4

- A. WTB RESET Page.
 - (1) When on the submenu pages SFCC-(1) (2) TEST/RESET the Line Key "1R" "WTB-RESET" is pressed, the named SFCC transmits the following page to the CFDS.

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| | SFCC- X | | | | | |
|------------|--|---------|--------|--------|----|--|
| | - | WTB=R | ESET | | | |
| 1L | CAUTION: | XXXX | WILL | MOVE | 1R | |
| | ENSURE | THAT | SURFAC | E | | |
| 2L | MOVEMENT | IS | POSSIB | LE | 2R | |
| | WITHOUT | DANGER | TO | | | |
| 3L | PERSONNEL | OR | | | 3R | |
| | AIRCRAFT | OR | | | | |
| 4L | MECHANICAL | SYSTEM | | | 4R | |
| | | | | | | |
| 5 l | < START WT | B RESET | | | 5R | |
| | | | | | | |
| 6 l | <return< td=""><td></td><td></td><td>PRINT></td><td></td></return<> | | | PRINT> | | |
| | | | | | 11 | |

- (2) In line 3 "CAUTION: XXXX WILL MOVE" the "XXXX" field is replaced with the the word FLAPS in the amber colour code.
- (3) When on the WTB RESET instruction page the key 5L "START WTB RESET" is pressed.
- (4) The related WTB relays in the SFCC are reset and the result is transmitted to the CFDS as

| | SFCC- X | j | |
|------------|--|--------|-------------|
| | WTB RESET | I | |
| 1L | | 1 | 1R |
| | PERFORMED | | |
| 2L | | ļ. | 2R |
| | | ! | |
| 3L | | | 3R |
| /1 | | ļ | / D |
| 4L | | | 4R |
| 5 l | | i | 5R |
| J (| | | J IX |
| 6 l | <return< td=""><td>PRINT></td><td></td></return<> | PRINT> | |
| | | | |

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5. TABLE 5

R

A. The DISCRETE I/P STATUS page diplay for the CSU Track Switch Bank A and B comparison checks.

SFCC=(1) or (2) ZZZZ DISCRETE I/P STATUS

CSU TRACK

SWITCH BANK A

SWITCH BANK B

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

DISCRETE I/P

XXXX XXXXX XXXXXXX XXXX

YYY YYYY YYYYY YYYY

AOG: * A/C:????? SGOI: ° <PRINT>

Explanation:

Where the * = SFCC 1 or 2 (dependent on the selection)

Where the ZZZZ is SLAT or FLAP

Where the XX-----XX is = FLAP RELIEF ENABLED.

or = FLAP RELIEF DISABLED.

or = FLAP RELIEF CODING FAIL.

Where the YY-----YY is = MAX FLAP 35 DEG (CMF).

or = MAX FLAP 40 DEG (IAE).

or = MAX FLAP CODING FAIL.

Where the $^{\circ}$ is function set (1) or function reset (0).

Where the % is a logic 1 or a logic 0 as given by the input circuit.

Where the ???? is = A320, A321 or FAIL depending on the Aircraft Type pin program in that channel.

Where AOG means aircraft on ground.

Where SGOI means system ground inhibit.

The CSU is monitored by both lanes of the associated SFCC.

Each lane receives 2 sets of the 5 switch tracks.

Each set has 5 detent patterns, two (2) adjacent switch tracks connected to return and four (4) OUT-OF- DETENT patterns (one of each track 2, 3, 4, and 5), connected to ground.

- B. The Discrete Input Word 1
 - (1) The Discrete Input Word 1 has the discrete inputs that follow.

R MSB LSB

A321 ∞ Bank 2 ∞ Bank 2 ∞ Bank 2 ∞ Bank 1 ∞ Bank 1 ∞ Bank 1 ∞ Bank 1 A/C Type∞ CSU ∞ CSU ∞ CSU ∞ CSU ∞ CSU ∞ CSU coding 1∞ Switch 4∞ Switch 5∞ Switch 2∞ Switch 4∞ Switch 3∞ Switch 2∞ Switch 1

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R (2) The table that follows gives a description of each discrete input.

| Bit | ∞ | Name | | | | | | ∞ | Desc | cription |
|-----|------------------|------|----|-------|-----|------|-----|----------|-------------|--|
| 0 | ∞ | BANK | 1 | CSU | SWI | TCH | 1 | ~ | The | first input from the CSU switch bank 1. |
| 1 | ∞ | BANK | 1 | csu | SWI | TCH | 2 | ∞ | The | second input from the CSU switch bank 1. |
| 2 | ∞ | BANK | 1 | csu | SWI | тсн | 3 | ∞ | The | third input from the CSU switch bank 1. |
| 3 | ∞ | BANK | 1 | csu | SWI | TCH | 4 | œ | The | fourth input from the CSU switch bank 1. |
| 4 | ∞ | BANK | 2 | CSU | SWI | TCH | 2 | ~ | The | second input from the CSU switch bank 2. |
| 5 | ∞ | BANK | 2 | csu | SWI | TCH | 5 | ∞ | The | fifth input from the CSU switch bank 2. |
| 6 | | BANK | 2 | csu | SWI | TCH | 4 | ∞ | The | fourth input from the CSU switch bank 2. |
| 7 | & & & & | A321 | Α, | /C T\ | /PE | CODI | ING | œ œ | SFCC A/C | Type Coding 1/2 shows the aircraft type the is installed on. Type Coding 1/2 reset = A321 Type Coding 1/2 reset = A320 |
| | | | | | | | | | | |

- C. The Discrete Input Word 2
 - (1) The Discrete Input Word 2 has the discrete inputs that follow.

(2) The table that follows gives a description of each discrete input.

| Rit | t ∞ N ame | ∞ Description |
|---------|-----------------------|---|
| | | |
| 0 | ∞ SPARE | · · · · · · · · · · · · · · · · · · · |
| 1 | ∞ BANK 1 CSU SWITCH 5 | ∞ The fifth input from the CSU switch bank 1. |
| 2 | ∞ SPARE | œ |
| 3 | ∞ SPARE | œ |
| 4 | ∞ 28V POWER SUPPLY | ∞ 28V power supply monitor. |
| 5 | ∞ SPARE | 00 |

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```
∞ Description
  ______
   7 ∞ AIRCRAFT ON GROUND
                             ∞ Used to show if the aircraft is in the air or
                            ∞ on the ground.
     D. The Discrete Input Word 3
        (1) The Discrete Input Word 3 has the discrete inputs that follow.
R
  MSB
                                                                       LSB
   ______
  SGOI
         ∞ Flap
                  ∞ Spare ∞ Engine ∞ Install-∞ Flap
                                                       ∞ A321 A/C∞ Engine
          ∞ Relief ∞ ∞ Mode ∞ ation ∞ Relief ∞ Type ∞ Mode
                       ∞ Coding 2∞ Coding 1∞ Coding 1∞ Coding 2∞ Coding 1
          ∞ Coding 2∞
R
        (2) The table that follows gives a description of each discrete input.
  Bit ∞ Name

    Description

   0 ∞ ENGINE MODE CODING 1 ∞ Engine Mode Coding 1/2 shows the engine type
                             ∞ installed on the aircraft.
                             ∞ Engine Mode Coding 1 set/Engine Mode Coding 2
                             ∞ reset = CFM engine

    □ Engine Mode Coding 1 reset/Engine Mode Coding 2

                             ∞ set = IAE engine
   1 ∞ A321 A/C TYPE CODING 2 ∞ A/C Type Coding 1/2 shows the aircraft type the
                             ∞ SFCC is installed on.
                             ∞ A/C Type Coding 1/2 reset = A321
                             ∞ A/C Type Coding 1/2 set = A320
   2 ∞ OPERATION MODE CODING ∞ Operation Mode Coding 1/2 shows the SFCC mode
                             ∞ of operation.
                             ∞ Operation Mode Coding 1 set/Operation Mode
                             ∞ Coding 2 reset = Flap Relief prevented
                             ∞ Operation Mode Coding 1 reset/Operation Mode
                             ∞ Coding 2 set = Flap Relief enabled
   3 ∞ INSTALLATION CODING 1 ∞ Installation Coding 1/2 shows the position in
                             ∞ which the SFCC is installed.

■ Installation Coding 1 set/Installation Coding 2

    reset = SFCC installation position 1

■ Installation Coding 1 reset/Installation Coding
                             ∞ 2 set = SFCC installation position 2
```

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| Bit | œ | Name | ∞ Description |
|-----|---------|---------------------------------|---|
| 4 | 8 8 8 8 | ENGINE MODE CODING 2 | <pre> ∞ Engine Mode Coding 1/2 shows the engine type ∞ installed on the aircraft. ∞ Engine Mode Coding 1 set/Engine Mode Coding 2 ∞ reset = CFM engine ∞ Engine Mode Coding 1 reset/Engine Mode Coding 2 ∞ set = IAE engine</pre> |
| 5 | ∞ | SPARE | ω |
| 6 | | OPERATION MODE CODING 2 | <pre> ∞ Operation Mode Coding 1/2 shows the SFCC mode ∞ of operation. ∞ Operation Mode Coding 1 set/Operation Mode ∞ Coding 2 reset = Flap Relief prevented ∞ Operation Mode Coding 1 reset/Operation Mode ∞ Coding 2 set = Flap Relief enabled</pre> |
| 7 | | SYSTEM GROUND OPERATION INHIBIT | □ Used to prevent system operation when the □ aircraft is on the ground. |

(1) The Discrete Input Word 4 has the discrete inputs that follow.

R MSB LSB ______ Bank 2 ∞ Spare ∞ Bank 2 ∞ Spare ∞ Spare ∞ PPU ∞ LVDT ∞ Install-∞ ∞ CSU ∞ ∞ ∞ Voltage ∞ Excit- ∞ ation Switch 1∞ ∞ Switch 3∞ ∞ ∞ ∞ ation ∞ Coding 2

(2) The table that follows gives a description of each discrete input. R

Bit ∞ Name Description 0 ∞ INSTALLATION CODING 2 ∞ Installation Coding 1/2 shows the position in ∞ which the SFCC is installed. ■ Installation Coding 1 set/Installation Coding 2 ∞ reset = SFCC installation position 1 ■ Installation Coding 1 reset/Installation Coding ∞ 2 set = SFCC installation position 2 ______ 1 ∞ LVDT EXCITATION 2 ∞ PPU EXCITATION ■ PPU excitation output monitor.

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| Bit | | Name | | | | | ∞ | Des | criptio | on | | | | | | |
|-----|-------|-------|---|-----|--------|---|---|-----|---------|-------|------|-----|-----|--------|------|----|
| 4 | | SPARI | Ē | | | | ∞ | | | | | | | | | |
| | | | | | SWITCH | | | | | • | | | | | | |
| | | SPARI | | | | | ∞ | | | | | | | | | |
| 7 | ∞ | BANK | 1 | csu | SWITCH | 1 | ∞ | The | first | input | from | the | csu | switch | bank | 2. |

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6. <u>Table 6.</u>

- A. SFCC SYSTEM DATA SLAT.
 - (1) System Data submenu page.

| | | SFCC 1 | | | | | | | | | |
|----|-----|--|-----|----|--|--|--|--|--|--|--|
| | | SYSTEM DATA SLAT | | | | | | | | | |
| 1L | ### | <ppu input="" x-link=""> </ppu> | ### | 1R | | | | | | | |
| 2L | ### | <pre><arinc 429="" input="" pre="" status<=""></arinc></pre> | ### | 2R | | | | | | | |
| 3L | ### | <pre><discrete inputs<="" pre=""></discrete></pre> | ### | 3R | | | | | | | |
| 4L | ### | | ### | 4R | | | | | | | |
| 5L | ### | | ### | 5R | | | | | | | |
| 6L | ### | <return td="" <=""><td>###</td><td>6R</td></return> | ### | 6R | | | | | | | |
| | | | | | | | | | | | |

(2) Slat Arinc Input Status page.

| | SFCC-* | | | | | | | | | | |
|---|--------|-------|------|------|------|-------|--|--|--|--|--|
| | SLAT | ARINC | INPU | STAT | US | - 1 | | | | | |
| ADRIU | 1 | | 0K | | | | | | | | |
| ADIRU | 2 | | *** | | (VIA | SLT) | | | | | |
| | LABEL | *** | NO | DATA | | | | | | | |
| | LABEL | *** | INV | DATA | | | | | | | |
| LGCIU | | | 0K | | | | | | | | |
| CFDIU | | | 0K | | | | | | | | |
| WRAPA | ROUND | | 0K | | | | | | | | |
| | | | | | | | | | | | |
| <retui< td=""><td>RN</td><td></td><td></td><td></td><td>PF</td><td>RINT></td></retui<> | RN | | | | PF | RINT> | | | | | |
| | | | | | | | | | | | |

7. TABLE 7

- A. SFCC MENU Selection.
 - (1) Set MENU MODE
 - (a) Set CFDS
 - (b) Set SYSTEM REPORT TEST
 - (c) Set F/CTL
 - (d) Set SFCC 1 or SFCC 2. The page that follows is displayed.

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| | | 1 | SFCC-* | 1 | | |
|----|-----|---|-----------------|------|-----|----|
| 1L | ### | <slt< td=""><td>LAST LEG REPORT</td><td>FLP> </td><td>###</td><td>1R</td></slt<> | LAST LEG REPORT | FLP> | ### | 1R |
| 2L | ### | <slt< td=""><td>PREV LEG REPORT</td><td>FLP> </td><td>###</td><td>2R</td></slt<> | PREV LEG REPORT | FLP> | ### | 2R |
| 3L | ### | <lru< td=""><td>IDENTIFICATION</td><td>- 1</td><td>###</td><td>3R</td></lru<> | IDENTIFICATION | - 1 | ### | 3R |
| 4L | ### | <slt< td=""><td>SYSTEM STATUS</td><td>FLP></td><td>###</td><td>4R</td></slt<> | SYSTEM STATUS | FLP> | ### | 4R |
| 5L | ### | <slt< td=""><td>CLASS 3 FAULTS</td><td>FLP></td><td>###</td><td>5R</td></slt<> | CLASS 3 FAULTS | FLP> | ### | 5R |
| 6L | ### | <pre><return< pre=""></return<></pre> | | - 1 | ### | 6R |
| | | | | I | | |
| 6L | ### | <return </return | | | ### | 6R |

(2) Set NEXT PAGE. The page that follows is displayed.

| | | | SFCC-* | | |
|----|-----|--|----------------------|--------|------------|
| 1L | ### | <slt< td=""><td>TEST/RESET FLP</td><td>> ###</td><td># 1R</td></slt<> | TEST/RESET FLP | > ### | # 1R |
| 2L | ### | <slt< td=""><td>SYSTEM DATA FLP</td><td>> ###</td><td># 2R</td></slt<> | SYSTEM DATA FLP | > ### | # 2R |
| 3L | ### | <slt< td=""><td>TROUB SH DATA FLP</td><td>> ###</td><td># 3R</td></slt<> | TROUB SH DATA FLP | > ### | # 3R |
| 4L | ### | <slt< td=""><td>ON GROUND FAULTS FLP</td><td>> ###</td><td>4 4 R</td></slt<> | ON GROUND FAULTS FLP | > ### | 4 4 R |
| 5L | ### | | | ### | <i>5</i> R |
| 6L | ### | <return< b=""></return<> | | ### | # 6R |
| | | | | | |
| | | | | - | |

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(3) Set TEST/RESET SLT>. The page that follows is displayed.

| | | SFCC-* | | |
|---|-----|---|-----|----|
| | | SLAT TEST/RESET | | |
| 1 | ### | <sfcc test="" wtb-reset=""> </sfcc> | ### | 1R |
| 2 | ### | <wtb pob="" td="" test="" <=""><td>###</td><td>2R</td></wtb> | ### | 2R |
| 3 | ### | <sfcc failure="" td="" test="" <=""><td>###</td><td>3R</td></sfcc> | ### | 3R |
| | | REPORT (MEMORY READ OUT) | | |
| 4 | ### | | ### | 4R |
| 5 | ### | | ### | 5R |
| 6 | ### | | ### | 6R |

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| (4) Set | <sfcc test.="" th="" the<=""><th>page that follow</th><th>ws is displayed</th><th>-</th></sfcc> | page that follow | ws is displayed | - |
|-------------|---|---|------------------------------------|---------------------|
| | | | SFCC-* SFCC TEST | |
| (a) | If the SFCC TES displayed. | T is satisfactory | y, the page tha | t follows is |
| If the X co | SFC SLAT SFC DATE:+++ ++ NO FAULTS mputer arm test OTHER SFCC ARM | C TEST UTC: ++++ is not done duri | ng the test, th | is message shows |

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(5) If the SFCC TEST finds the SFCC at fault the SFCC TEST results page is displayed as follows.

| | SFCC-* | 1 |
|--------|---|--------|
| | SLAT SFCC TEST | 1 |
| 1L ### | DATE:+++ ++ UTC: (time) | ### 1R |
| | PERFORMED WITH FAULT | |
| 2L ### | <fault data<="" td=""><td> ### 2R</td></fault> | ### 2R |
| 3L ### | | ### 3R |
| 4L ### | | ### 4R |
| 5L ### | | ### 5R |
| 6L ### | <return< td=""><td> ### 6R</td></return<> | ### 6R |

(6) Set FAULT DATA. The page that follows is displayed.

| | | | | | | | | | | | | | | | | - |
|--|----|----|----|----|-----|-----|----|-----|----------|----|-----|-----|---|----|-------|---|
| | | | | SI | FCO |)-1 | k | | | | | | | | | |
| | , | SL | ٩T | SI | FCO |) 1 | ГΕ | ST | | | | | | | | |
| DATE:+ | ++ | + | ++ | | | | ι | JT(| : | (1 | tin | ne) |) | | | |
| FAILUR | Ε | DA | ٩T | A | | | | | | | | | | | | |
| LANE | | 1 | : | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| 0/P | L | 1 | : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| C/S | L | 2 | : | 0 | 0 | | | | | | | | | | | |
| IP | | | : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| LANE | | 2 | : | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| 0/P | L | 2 | : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| C/S | Lâ | 2 | : | 0 | 0 | | | | | | | | | | | |
| ARINC | | | : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <retur< td=""><td>N</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>PF</td><td>RINT></td><td></td></retur<> | N | | | | | | | | | | | | | PF | RINT> | |
| | | | | | | | | | | | | | | | | |

NOTE: LANE 1 is Lane 1 test

- O/P L1 is Output test from lane 1
- C/S L1 is Common services and PCU test from lane 1
- I/P is Test of input discretes
 - LANE 2 is Lane 2 test
- O/P L2 is Output test from lane 2
- C/S L2 is Common services and PCU test from lane 2
- ARINC is Arinc test

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(7) If the SFCC-TEST is done and the SFCC periphery is not complete, an SFCC-TEST result page is transmitted to the CFDS to indicate the status. SLAT or FLAP is added to the title.

| | ù SFCC-* | ->ù |
|----|---|----------------|
| | ù SLAT SFCC TEST | ù |
| 1L | ###ù DATE: UTC: | ù### 1R |
| | ù no faults but | ù |
| 2L | ###ù* | ù### 2R |
| | ù | ù |
| 3L | ###ù** | ù### 3R |
| | ù | ù |
| 4L | ###ù | ù### 4R |
| | ù | ù |
| 5L | ###ù | ù### 5R |
| | ù | ù |
| 6L | ###ù <return< td=""><td>PRINT>ù### 6R</td></return<> | PRINT>ù### 6R |

SFCC test result page for SFCC periphery not complete, see Para (8).

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- (8) SFCC test result page for SFCC periphery not complete.
 - (a) "*" shows in case of X-computer arm test not being done during test, the message that follows is shown on line 5 and 6. 2L ###ùOTHER SFSS ARM SIGNAL ù ùNOT TESTED
 - (b) "**" shows the peripheral faults or system messages that are not complete.

| either | ù wtb set | ù |
|--------|-----------------------|---|
| and/or | ù no wtb power | ù |
| and/or | ùLH WTB SOLENOID X/X | ù |
| and/or | ùRH WTB SOLENOID X/X | ù |
| and/or | ù fppu fault | ù |
| and/or | ùLH APPU FAULT | ù |
| and/or | ùRH APPU FAULT | ù |

NOTE: X/X shows short circuit (S/C) or open circuit (O/C).

- (c) If more than one page is needed the "->" code is shown in the 24th character of line one of each SFCC test result page.
- (d) The results of previous SFCC-TEST (automatic integrity test and maintenance SFCC test) can be shown with "SFCC TEST FAILURE REPORT" selected from the TEST/RESET MENU key "3L".

8. TABLE 8

A. Table of ground circuits supplied from SFCC 1 (Refence ASM/278110S01).

| FIN | FUNCTION DESIGNATION | FLP POSITION |
|---------------|------------------------------|--|
| 2CE1 | ELAC 1 | SAP 1 SLATS RETRACTED |
| 101RH 1CC1 | CIDS DIRECTOR FAC 1 | SAP 3 SLATS >21' SAP 3 SLATS >21' |
| 1CE1 | SEC 1 | SAP 3 SLATS >21' |
| 2CE2 1CE2 | ELAC 2 SEC 2 | SAP 4 SLATS RETRACTED SAP 5 SLATS >21' |
| 103RH 1CE3 | CIDS 2 DIRECTOR SEC 3 | SAP 5 SLATS >21' SAP 5 SLATS >21' |
| 44QA | RELAY CTR TK PUMP 2 AUTO OFF | SAP 5 SLATS >21' SAP 6 SLATS >15' |
| 43QA | RELAY CTR TK PUMP 1 AUTO OFF | SAP 6 SLATS >15' |

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B. Table of ground circuits supplied from SFCC 2 (Refence ASM/278110S01).

| FIN | FUNCTION DESIGNATION | FLP POSITION |
|-------|------------------------------|-----------------------|
| 2CE1 | ELAC 1 | SAP 1 SLATS RETRACTED |
| 101RH | CIDS DIRECTOR | SAP 3 SLATS >21' |
| 1CE1 | SEC 1 | SAP 3 SLATS >21' |
| 2CE2 | ELAC 2 | SAP 4 SLATS RETRACTED |
| 1CE2 | SEC 2 | SAP 5 SLATS >21' |
| 1002 | FAC 2 | SAP 5 SLATS >21' |
| 103RH | CIDS 2 DIRECTOR | SAP 5 SLATS >21' |
| 1CE3 | SEC 3 | SAP 5 SLATS >21' |
| 44QA | RELAY CTR TK PUMP 2 AUTO OFF | SAP 6 SLATS >15' |
| 43QA | RELAY CTR TK PUMP 1 AUTO OFF | SAP 6 SLATS >15' |

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ELECTRICAL FLIGHT CONTROL SYSTEM (EFCS) - FAULT ISOLATION PROCEDURES

TASK 27-90-00-810-801

Failure of an Alternating Current Supply (ACS)

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE DESIGNATION

27-90-00-991-001

Fig. 201

- 3. Fault Confirmation
 - A. Not applicable, refer to the procedure that you did before.
- 4. Fault Isolation

(Ref. Fig. 201/TASK 27-90-00-991-001)

- A. Trouble shooting procedure for an ACS short circuit.

 Failure that the computer(s) which receives the ANI signal from the transducers (A, B, C) senses. This failure can be:
 - a short circuit in the winding of one of the transducers
 - or a short circuit in the wiring (ACS).

The procedure that you did before permitted to isolate possible failure causes:

- in the computer which supplies the transducers (A, B, C)
- or in the wiring (discontinuity).

NOTE: The computer(s) which supplies the transducers has been removed.

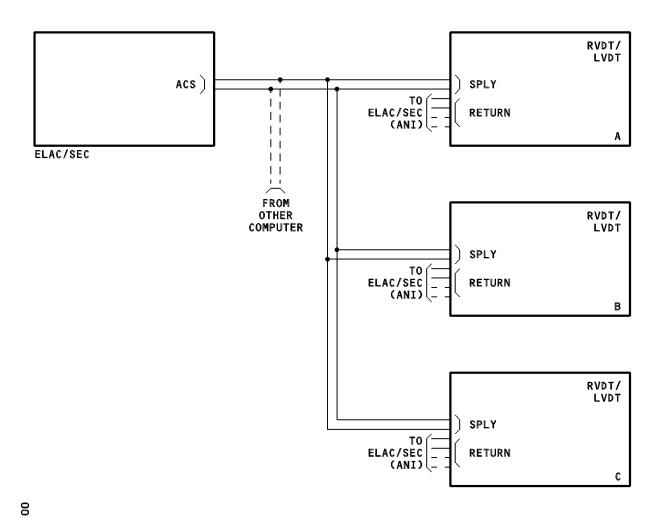
- (1) At the unit A, disconnect the electrical connector related to the ACS.
- (2) Do a check of the resistance and insulation of the LVDT/RVDT of the unit A.
 - (a) If the check is correct:
 - connect the electrical connector to the unit A
 - continue the trouble shooting.
 - (b) If the check is not correct:
 - replace the unit A or the LVDT/RVDT
 - connect the electrical connector to the unit A
 - refer to the procedure that you did before.

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ALTERNATING CURRENT SUPPLY (ACS) Figure 201/TASK 27-90-00-991-001

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2 AAMO

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- (3) At the unit B, disconnect the electrical connector related to the ACS.
- (4) Do a check of the resistance and insulation of the LVDT/RVDT of the unit A.
 - (a) If the check is correct:
 - connect the electrical connector to the unit B
 - continue the trouble shooting.
 - (b) If the check is not correct:
 - replace the unit B or the LVDT/RVDT
 - connect the electrical connector to the unit B
 - refer to the procedure that you did before.
- (5) At the unit C, disconnect the electrical connector related to the ACS.
- (6) Do a check of the resistance and insulation of the LVDT/RVDT of the unit C.
 - (a) If the check is correct:
 - connect the electrical connector to the unit C
 - continue, the trouble shooting.
 - (b) If the check is not correct:
 - replace the unit C or the LVDT/RVDT
 - connect the electrical connector to the unit C
 - refer to the procedure that you did before.

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TASK 27-90-00-810-802

Loss of the ACS2 Signal of the SEC1 COM Side

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the ACS2 signal from the SEC1 COM side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION | | | | |
|---|------------|--|---|--|--|--|--|
| R | AMM AMM | 0-00-810-801 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 27-94/02 | Failure of an Alternating Current Supply (ACS) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) | | | | |

- 3. Fault Confirmation
 - A. Test

Do the BITE Test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

- 4. Fault Isolation
 - A. If the test gives the maintenance messages:
 - L SPLR3 POS XDCR 31CE5
 - R SPLR3 POS XDCR 31CE6
 - remove the SEC1 (Ref. AMM TASK 27-94-34-000-001).
 - (1) At the SEC1 receptacle, do a check of the resistance and of the insulation between the pin AA/14F and the pin AA/14G (15 to 250 ohms) (Ref. ASM 27-94/02).
 - (a) If the resistance values are in the specified limits:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is less than 15 ohms (short circuit):
 - $\underline{1}$ Do the trouble shooting procedure (Ref. TASK 27-90-00-810-801).

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- Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (c) If the resistance value is more than 250 ohms:
 - 1 Do a check and repair the wiring of the ACS2 signal from the SEC1 COM side to the first terminal block (Ref. ASM 27-94/02).
 - 2 Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
- R B. Do the test given in para. 3.

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TASK 27-90-00-810-803

Loss of the ACS2 Signal of the SEC1 MON Side

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the ACS2 signal from the SEC1 MON side to the first terminal block
- Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | | | | | |
|----------------------|--|--|--|--|--|--|
| 27-90-00-810-801 | Failure of an Alternating Current Supply (ACS) | | | | | |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | | | | | |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | | | | | |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | | | | | |
| ASM 27-94/02 | | | | | | |
| | | | | | | |

- 3. Fault Confirmation
 - A. Test Do the BITE Test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

R

A. If the test gives the maintenance messages: L SPLR4 POS XDCR 31CE7

and

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R SPLR4 POS XDCR 31CE8

- remove the SEC1 (Ref. AMM TASK 27-94-34-000-001).
- (1) At the SEC1 receptacle, do a check of the resistance and of the insulation between the pin AD/10G and the pin AD/10H (15 to 250 ohms) (Ref. ASM 27-94/02).
 - (a) If the resistance values are in the specified limits: - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is less than 15 ohms:
 - Do the trouble shooting procedure (Ref. TASK 27-90-00-810-801).

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- 2 Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (c) If the resistance is more than 250 ohms:
 - 1 Do a check and repair the wiring of the ACS2 signal from the SEC1 MON side to the first terminal block (Ref. ASM 27-94/02).
 - 2 Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).

R

R B. Do the test given in para. 3.

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TASK 27-90-00-810-804

Loss of the ACS2 Signal of the SEC2 MON Side

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the ACS2 signal from the SEC2 MON side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|--|
| | |
| 27-90-00-810-801 | Failure of an Alternating Current Supply (ACS) |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-94/03 | |

- 3. Fault Confirmation
 - A. Test
 Do the BITE Test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

R

A. If the test gives the maintenance messages: L SPLR5 POS XDCR 31CE9

and

SROS

R SPLR5 POS XDCR 31CE10

- remove the SEC2 (Ref. AMM TASK 27-94-34-000-001).
- (1) At the SEC2 receptacle, do a check of the resistance and of the insulation between the pin AD/10H and the pin AD/10G (15 to 250 ohms) (Ref. ASM 27-94/03).
 - (a) If the resistance values are in the specified limits:replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is less than 15 ohms:
 - $\frac{1}{801}$ Do the trouble shooting procedure (Ref. TASK 27-90-00-810-801).

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- 2 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (c) If the resistance is more than 250 ohms:
 - 1 Do a check and repair the wiring of the ACS2 signal from the SEC2 MON side to the first terminal block (Ref. ASM 27-94/03).
 - 2 Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).

R

R B. Do the test given in para. 3.

EFF: ALL SROS

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TASK 27-90-00-810-805

Loss of the ACS2 Signal of the SEC3 COM side

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring of the ACS2 signal from the SEC3 COM side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | | DESIGNATION | |
|-----------|--------------|-----------|---|--|
| | 27-90-00-810 | -801 | Failure of an Alternating Current Supply (ACS) | |
| | AMM 27-94-3 | 4-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM 27-94-3 | 4-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> | |
| ł | AMM 27-96-0 | 0-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM 27-94/0 | 4 | - | |

- 3. Fault Confirmation
 - A. Test

R

Do the BITE Test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

- 4. Fault Isolation
 - A. If the test gives the maintenance messages:
 - L SPLR1 POS XDCR 31CE1

R SPLR1 POS XDCR 31CE2

- remove the SEC3 (Ref. AMM TASK 27-94-34-000-001).
- (1) At the SEC3 receptacle, do a check of the resistance and of the insulation between the pin AA/14F and the pin AA/14G (15 to 250 ohms) (Ref. ASM 27-94/04).
 - (a) If the resistance values are in the specified limits:
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is less than 15 ohms:
 - $\frac{1}{801}$ Do the trouble shooting procedure (Ref. TASK 27-90-00-810-

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- Replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (c) If the resistance is more than 250 ohms:
 - Do a check and repair the wiring of the ACS2 signal from the SEC3 COM side to the first terminal block (Ref. ASM 27-94/04).
 - 2 Install the SEC3 (Ref. AMM TASK 27-94-34-400-001).
- R B. Do the test given in para. 3.

EFF: ALL
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TASK 27-90-00-810-806

Loss of the ACS2 Signal of the SEC3 MON Side

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring of the ACS2 signal from the SEC3 MON side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | | DESIGNATION | |
|-----------|--------------|-----------|---|--|
| | 27-90-00-810 | -801 | Failure of an Alternating Current Supply (ACS) | |
| | AMM 27-94-3 | 4-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM 27-94-3 | 4-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> | |
| ł | AMM 27-96-0 | 0-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM 27-94/0 | 4 | - | |

- 3. Fault Confirmation
 - A. Test

R

Do the BITE Test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

- 4. Fault Isolation
 - A. If the test gives the maintenance messages:
 - L SPLR2 POS XDCR 31CE3

and

R SPLR2 POS XDCR 31CE4

- remove the SEC3 (Ref. AMM TASK 27-94-34-000-001).
- (1) At the SEC3 receptacle, do a check of the resistance and of the insulation between the pin AD/10H and the pin AD/10G (15 to 250 ohms) (Ref. ASM 27-94/04).
 - (a) If the resistance values are in the specified limits:
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is less than 15 ohms:
 - $\frac{1}{801}$ Do the trouble shooting procedure (Ref. TASK 27-90-00-810-

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- Replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (c) If the resistance is more than 250 ohms:
 - Do a check and repair the wiring of the ACS2 signal from the SEC3 MON side to the first terminal block (Ref. ASM 27-94/04).
 - 2 Install the SEC3 (Ref. AMM TASK 27-94-34-400-001).
- R B. Do the test given in para. 3.

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TASK 27-90-00-810-807

Loss of the ACS2 Signal of the ELAC1 COM Side

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the ACS2 signal from the ELAC1 COM side to the first terminal block
- Job Set-up Information
 - A. Referenced Information

REFERENCE DESIGNATION

27-90-00-810-801 AMM 27-93-34-000-001 Removal of the ELAC (2CE1,2CE2)
AMM 27-93-34-400-001 Installation of the ELAC (2CE1,2CE2)

Failure of an Alternating Current Supply (ACS)

ASM 27-93/02

- 3. Fault Confirmation
 - A. Test

Not applicable, you cannot confirm this fault on the ground.

- 4. Fault Isolation
 - A. If the POST FLIGHT REPORT (PFR) gives the maintenance messages: L B AIL POS XDCR 33CE3 and
 - R G AIL POS XDCR 33CE2
 - remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001).
 - (1) At the ELAC1 receptacle, do a check of the resistance and of the insulation between the pin AA/14A and the pin AA/14B (15 to 250 ohms) (Ref. ASM 27-93/02).
 - (a) If the resistance values are in the specified limits: - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (b) If the resistance is less than 15 ohms:
 - 1 Do the trouble shooting procedure (Ref. TASK 27-90-00-810-801).
 - 2 Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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- (c) If the resistance is more than 250 ohms:
 - Do a check and repair the wiring of the ACS2 signal from the ELAC1 COM side to the first terminal block (Ref. ASM 27-93/02).
 - 2 Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).

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TASK 27-90-00-810-808

Loss of the ACS2 Signal of the ELAC2 COM Side

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the ACS2 signal from the ELAC2 COM side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|--|
| | | | |
| | 27-9 | 0-00-810-801 | Failure of an Alternating Current Supply (ACS) |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-93/03 | · |
| | | | |

- 3. Fault Confirmation
 - A. Test

Do the BITE Test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

- 4. Fault Isolation
 - A. If the test gives the maintenance messages:

L G AIL POS XDCR 33CE1

and

R B AIL POS XDCR 33CE4

- remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001).
- (1) At the ELAC2 receptacle, do a check of the resistance and of the insulation between the pin AA/14A and the pin AA/14B (15 to 250 ohms) (Ref. ASM 27-93/03).
 - (a) If the resistance values are in the specified limits:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (b) If the resistance is less than 15 ohms:
 - $\underline{1}$ Do the trouble shooting procedure (Ref. TASK 27-90-00-810-801).

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- Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (c) If the resistance is more than 250 ohms:
 - Do a check and repair the wiring of the ACS2 signal from the ELAC2 COM side to the first terminal block (Ref. ASM 27-93/03).
 - 2 Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- R B. Do the test given in para. 3.

EFF: ALL

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TASK 27-90-00-810-809

Loss of the ACS2 Signal of the ELAC1 MON Side

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the ACS2 signal from the ELAC1 MON side to the first terminal block
- Job Set-up Information
 - A. Referenced Information

REFERENCE DESIGNATION

27-90-00-810-801 AMM 27-93-34-000-001 Removal of the ELAC (2CE1,2CE2)
AMM 27-93-34-400-001 Installation of the ELAC (2CE1,2CE2)

Failure of an Alternating Current Supply (ACS)

ASM 27-93/02

- 3. Fault Confirmation
 - A. Test

Not applicable, you cannot confirm this fault on the ground.

- 4. Fault Isolation
 - A. If the POST FLIGHT REPORT (PFR) gives the maintenance messages: L B AIL MODE XDCR 33CE3 OR INPUT OF ELAC1 and
 - R G AIL MODE XDCR 33CE4 OR INPUT OF ELAC1
 - remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001).
 - (1) At the ELAC1 receptacle, do a check of the resistance and of the insulation between the pin AD/2C and the pin AD/2D (15 to 250 ohms) (Ref. ASM 27-93/02).
 - (a) If the resistance values are in the specified limits: - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (b) If the resistance is less than 15 ohms:
 - 1 Do the trouble shooting procedure (Ref. TASK 27-90-00-810-801).
 - 2 Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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- (c) If the resistance is more than 250 ohms:
 - Do a check and repair the wiring of the ACS2 signal from the ELAC1 MON side to the first terminal block (Ref. ASM 27-93/02).
 - 2 Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).

EFF: ALL

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TASK 27-90-00-810-810

Loss of the ACS2 Signal of the ELAC2 MON Side

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the ACS2 signal from the ELAC2 MON side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|--------------------------------------|---|
| | | 0-00-810-801 27-93-34-000-001 | Failure of an Alternating Current Supply (ACS) Removal of the ELAC (2CE1,2CE2) |
| R | | 27-93-34-400-001 27-96-00-740-001 | <pre>Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning)</pre> |
| ĸ | | 27-93/03 | Bile lest of the Ercs (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test

Do the BITE Test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

- 4. Fault Isolation
 - A. If the test gives the maintenance messages: L G AIL MODE XDCR 33CE1 OR INPUT OF ELAC2

R G AIL MODE XDCR 33CE4 OR INPUT OF ELAC2

- remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001).
- (1) At the ELAC2 receptacle, do a check of the resistance and of the insulation between the pin AD/2C and the pin AD/2D (15 to 250 ohms) (Ref. ASM 27-93/03).
 - (a) If the resistance values are in the specified limits:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (b) If the resistance is less than 15 ohms:
 - $\frac{1}{801}$ Do the trouble shooting procedure (Ref. TASK 27-90-00-810-

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- Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (c) If the resistance is more than 250 ohms:
 - Do a check and repair the wiring of the ACS2 signal from the ELAC2 MON side to the first terminal block (Ref. ASM 27-93/03).
 - 2 Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- R B. Do the test given in para. 3.

EFF: ALL

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TASK 27-90-00-810-811

Loss of the ACS1 Signal of the ELAC1 COM Side

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SEC-1 (1CE1)
 - wiring of the ACS1 SPLY signal from the ELAC1 COM side to the MON side
 - wiring of the ACS1 SPLY COM signal from the ELAC1 MON side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| 27-90-00-810-80 AMM 27-93-34-00 AMM 27-93-34-40 AMM 27-94-34-00 AMM 27-94-34-40 AMM 27-96-00-70 ASM 27-93/07 | NO-001 Removal of the ELAC (2CE1,2CE2) NO-001 Installation of the ELAC (2CE1,2CE2) NO-001 Removal of the SEC (1CE1,1CE2,1CE3) NO-001 Installation of the SEC (1CE1,1CE2,1CE3) |

- 3. Fault Confirmation
 - A. Test

R

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the list below:

ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4

- (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001) and the SEC1 (Ref. AMM TASK 27-94-34-000-001).
- (2) At the ELAC1 receptacle, do a check of the resistance between the pin AD/6B and the pin AD/6C (Ref. ASM 27-93/07):
 - (a) If the resistance is less than 10 0hms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).

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- Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 3 Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is more than 10 0hms:
 - do a check of the wiring of the ACS1 SPLY signal from the ELAC1 COM side to the MON side (Ref. ASM 27-93/07):
 - . pins AA/13A and AA/13B to pins AA/8K and AA/8G of the ELAC1 COM side ${\cal A}$
 - pins AA/8H and AA/8J of the ELAC1 COM side to pins AD/6A and AD/6D of the ELAC1 MON side.
 - 1 If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001) and the SEC1 (Ref. AMM TASK 27-94-34-400-001).
 - a If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the wiring is correct:
 - <u>a</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - b Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
 - c If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY COM signal from the ELAC1 MON side to the first terminal block, pins AD/6B and AD/6C (Ref. ASM 27-93/07).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

R R

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TASK 27-90-00-810-812

Loss of the ACS1 Signal of the ELAC1 MON Side

1. Possible Causes

- ELAC-1 (2CE1)
- SEC-1 (1CE1)
- wiring of the ACS1 SPLY signal from the ELAC1 MON side to the COM side
- wiring of the ACS1 SPLY MON signal from the ELAC1 COM side to the first terminal block

2. Job Set-up Information

A. Referenced Information

| RE | FERENCE | DESIGNATION |
|------------------------|---|--|
| AM AM AM R AM | 7-90-00-810-801 IM 27-93-34-000-001 IM 27-93-34-400-001 IM 27-94-34-000-001 IM 27-94-34-400-001 IM 27-96-00-740-001 IM 27-93/07 | Failure of an Alternating Current Supply (ACS) Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the ground scanning gives at least two maintenance messages of the list below:

ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
ELAC1 OR WIRING FROM L ELEV POS MON XDCR
ELAC1 OR WIRING FROM R ELEV POS MON XDCR
ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2

(1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001) and the SEC1 (Ref. AMM TASK 27-94-34-000-001).

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- (2) At the ELAC1 receptacle, do a check of the resistance between the pin AB/7K and the pin AB/8K (Ref. ASM 27-93/07):
 - (a) If the resistance is less than 10 Ohms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 3 Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is more than 10 Ohms:
 - do a check of the wiring of the ACS1 SPLY signal from the ELAC1 MON side to the COM side (Ref. ASM 27-93/07):
 - pins AE/1J and AE/1K to pins AE/10B and AE/11B of ELAC1 MON side
 - pins AE/10A and AE/11A of the ELAC1 MON side to pins AB/7J and AB/8J of the ELAC1 COM side.
 - 1 If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001) and the SEC1 (Ref. AMM TASK 27-94-34-400-001).
 - a If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the wiring is correct:
 - <u>a</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - b Install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
 - c If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY MON signal from the ELAC1 COM side to the first terminal block, pins AB/7K and AB/8K (Ref. ASM 27-93/07).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

R

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TASK 27-90-00-810-813

Loss of the ACS1 of the ELAC1 COM and MON Sides

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SEC-1 (1CE1)

R

- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | DESIGNATION |
|--------|--|---|
| R R | 27-90-00-810-811 27-90-00-810-812 AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 | Loss of the ACS1 Signal of the ELAC1 COM Side Loss of the ACS1 Signal of the ELAC1 MON Side Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
- ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4

Second list:

- ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L ELEV POS MON XDCR
- ELAC1 OR WIRING FROM R ELEV POS MON XDCR
- ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
- ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
- (1) First case:

SROS

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-811).

EFF: ALL

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- (2) Second case:
 - Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-812).
- (3) Third case:
 - Combination of maintenance messages of the first and second lists:
 replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and
 (Ref. AMM TASK 27-93-34-400-001).
 NOTE: To help the trouble shooting of the ELAC in the workshop, p
 - NOTE: To help the trouble shooting of the ELAC in the workshop, put a label with the indication: "failure of internal relays K20 and K21".
 - (a) If the fault continues:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) (Ref. AMM TASK 27-94-34-400-001).
- R B. Do the test given in para. 3.

EFF : ALL

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TASK 27-90-00-810-814

Loss of the ACS1 Signal of the ELAC2 COM Side

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SEC-2 (1CE2)
 - wiring of the ACS1 SPLY signal from the ELAC2 COM side to the MON side
 - wiring of the ACS1 SPLY COM signal from the ELAC2 MON side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| 27-9 | 0-00-810-801 | Failure of an Alternating Current Supply (ACS) |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | 27-93/08 | . |

- 3. Fault Confirmation
 - A. Test

R

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the list below:

ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE

ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1

ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2

- (1) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001) and the SEC2 (Ref. AMM TASK 27-94-34-000-001).
- (2) At the ELAC2 receptacle, do a check of the resistance between the pin AD/6B and the pin AD/6C (Ref. ASM 27-93/08):
 - (a) If the resistance is less than 10 0hms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).

EFF: ALL **SROS**

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- Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 3 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is more than 10 0hms:
 - do a check of the wiring of the ACS1 SPLY signal from the ELAC2 COM side to the MON side (Ref. ASM 27-93/08):
 - . pins AA/13A and AA/13B to pins AA/8G and AA/8K of the ELAC2 COM side $\frac{1}{2}$
 - pins AA/8H and AA/8J of the ELAC2 COM side to pins AD/6A and AD/6D of the ELAC2 MON side.
 - 1 If the wiring is not correct:
 - repair it
 - install the ELAC2 (Ref. AMM TASK 27-93-34-400-001) and the SEC2 (Ref. AMM TASK 27-94-34-400-001).
 - a If the fault continues:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the wiring is correct:
 - <u>a</u> Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - b Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
 - c If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY COM signal from the ELAC2 MON side to the first terminal block, pins AD/6B and AD/6C (Ref. ASM 27-93/08).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

R R

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TASK 27-90-00-810-815

Loss of the ACS1 Signal of the ELAC2 MON Side

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SEC-2 (1CE2)
 - wiring of the ACS1 SPLY signal from the ELAC2 MON side to the COM side
 - wiring of the ACS1 SPLY MON signal from the ELAC2 COM side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|--------------------------------------|---|--|
| AMM | 90-00-810-801 27-93-34-000-001 | Failure of an Alternating Current Supply (ACS) Removal of the ELAC (2CE1,2CE2) | |
| | 27-93-34-400-001 27-94-34-000-001 | <pre>Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3)</pre> | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| | 27-96-00-740-001 27-93/08 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the list below:

ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE ELAC2 OR WIRING FROM L ELEV POS MON XDCR

ELAC2 OR WIRING FROM R ELEV POS MON XDCR

ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3

ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4

(1) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001) and the SEC2 (Ref. AMM TASK 27-94-34-000-001).

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- (2) At the ELAC2 receptacle, do a check of the resistance between the pin AB/7K and the pin AB/8K (Ref. ASM 27-93/08):
 - (a) If the resistance is less than 10 0hms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).
 - Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 3 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance value is more than 10 Ohms:
 - do a check of the wiring of the ACS1 SPLY signal from the ELAC2 MON side to the COM side (Ref. ASM 27-93/08):
 - . pins AE/1J and AE/1K to pins AE/11B and AE/10B of the ELAC2 MON side
 - pins AE/10A and AE/11A of the ELAC2 MON side to pins AB/8J and AB/7J of the ELAC2 COM side.
 - 1 If the wiring is not correct:
 - repair it
 - install the ELAC2 (Ref. AMM TASK 27-93-34-400-001) and the SEC2 (Ref. AMM TASK 27-94-34-400-001).
 - a If the fault continues:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the wiring is correct:
 - <u>a</u> Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - b Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
 - c If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY MON signal from the ELAC2 COM side to the first terminal block, pins AB/7K and AB/8K (Ref. ASM 27-93/08).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-90-00-810-816

Loss of the ACS1 of the ELAC2 COM and MON Sides

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SEC-1 (1CE1)

R

- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | DESIGNATION | |
|--------|--|---|--|
| R R | 27-90-00-810-814 27-90-00-810-815 AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 | Loss of the ACS1 Signal of the ELAC2 COM Side Loss of the ACS1 Signal of the ELAC2 MON Side Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
- ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2

Second list:

- ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L ELEV POS MON XDCR
- ELAC2 OR WIRING FROM R ELEV POS MON XDCR
- ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
- ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4
- (1) First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-814).

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(2) Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-815).

(3) Third case:

Combination of maintenance messages of the first and second lists: - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).

NOTE: To help the trouble shooting of the ELAC in the workshop, put a label with the indication: "failure of internal relays K20 and K21".

- (a) If the fault continues:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) (Ref. AMM TASK 27-94-34-400-001).
- R B. Do the test given in para. 3.

EFF: ALL **SROS**

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TASK 27-90-00-810-817

Loss of the ACS1 Signal of the SEC1 COM Side

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SEC-1 (1CE1)
 - wiring of the ACS1 SPLY XDCR signal from the SEC1 COM side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|--------------------------|--|--|--|
| R | AMM AMM AMM AMM | 0-00-810-801 27-93-34-000-001 27-93-34-400-001 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 27-94/07 | Failure of an Alternating Current Supply (ACS) Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test

SROS

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the list below:
 - SEC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
 - SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
 - SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4
 - (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001) and the SEC1 (Ref. AMM TASK 27-94-34-000-001).
 - (2) At the SEC1 receptacle, do a check of the resistance between the pin AA/12F and the pin AA/12G (Ref. ASM 27-94/07):
 - (a) If the resistance is less than 10 Ohms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).

EFF: ALL

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- Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is more than 10 Ohms:
 - Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 2 Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - 3 If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY XDCR signal from the SEC1 COM side to the first terminal block, pins AA/12F and AA/12G (Ref. ASM 27-94/07).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

R

R

EFF: ALL

SROS

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TROUBLE SHOOTING MANUAL

TASK 27-90-00-810-818

Loss of the ACS1 Signal of the SEC1 MON Side

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SEC-1 (1CE1)
 - wiring of the ACS1 SPLY XDCR signal from the SEC1 MON side to the COM side
 - wiring of the ACS1 SPLY MON signal from the SEC1 COM side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERE | NCE | DESIGNATION | |
|---|--|--|--|
| AMM 2' AMM 2' AMM 2' AMM 2' AMM 2' AMM 2' | 00-810-801 7-93-34-000-001 7-93-34-400-001 7-94-34-000-001 7-94-34-400-001 7-96-00-740-001 7-94/07 | Failure of an Alternating Current Supply (ACS) Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test

R

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the list below:
 - SEC1 OR WIRING FROM L ELEV POS MON XDCR
 - SEC1 OR WIRING FROM R ELEV POS MON XDCR
 - SEC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
 - SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
 - SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
 - (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001) and the SEC1 (Ref. AMM TASK 27-94-34-000-001).

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- (2) At the SEC1 receptacle, do a check of the resistance between the pin AB/9E and the pin AB/9F (Ref. ASM 27-94/07):
 - (a) If the resistance is less than 10 0hms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 3 Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is more than 10 Ohms:
 - do a check of the wiring of the ACS1 SPLY XDCR signal from the SEC1 MON side to the COM side: . pins AE/10E and AE/10D to pins AB/8E and AB/8F (Ref. ASM 27-94/07).
 - 1 If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001) and the SEC1 (Ref. AMM TASK 27-94-34-400-001).
 - a If the fault continues:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001)
 and (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the wiring is correct:
 - <u>a</u> Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - b Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - c If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY MON signal from the SEC1 COM side to the first terminal block, pins AB/9E and AB/9F (Ref. ASM 27-94/07).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

R R

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TROUBLE SHOOTING MANUAL

TASK 27-90-00-810-819

Loss of the ACS1 Signal of the ELAC1 COM Side and SEC1 COM Side

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SEC-1 (1CE1)
 - wiring of the ACS1 SPLY XDCR signal from the SEC1 COM side to the second terminal block
- Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------------|------------------|--|
| 27-90-00-810-801 | | Failure of an Alternating Current Supply (ACS) |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-94/07 | • |

- 3. Fault Confirmation
 - A. Test

SROS

R

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the list below:

L B ELEV POS XDCR 34CE3 COM E1/S1 : USE STBY XDCR R B ELEV POS XDCR 34CE4 COM E1/S1 : USE STBY XDCR THS ACTR XDCR2 9CE

- (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001) and the SEC1 (Ref. AMM TASK 27-94-34-000-001).
- (2) At the SEC1 receptacle, do a check of the resistance between the pin AA/12F and the pin AA/12G (Ref. ASM 27-94/07):
 - (a) If the resistance is less than 10 Ohms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).

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- 2 Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 3 Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is more than 10 Ohms:
 - 1 Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001). Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 3 If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY XDCR signal from the SEC1 COM side to the second terminal block, pins AA/12F and AA/12G (Ref. ASM 27-94/07).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

R R

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EFF:

ALL

TROUBLE SHOOTING MANUAL

TASK 27-90-00-810-820

Loss of the ACS1 Signal of the ELAC1 MON Side and SEC1 MON Side

1. Possible Causes

- ELAC-1 (2CE1)
- SEC-1 (1CE1)
- wiring of the ACS1 SPLY XDCR signal from the SEC1 MON side to the COM side
- wiring of the ACS1 SPLY XDCR COM signal from the SEC1 MON side to the second terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION | |
|--------------------------|--|--|--|
| AMM AMM AMM AMM | 0-00-810-801 27-93-34-000-001 27-93-34-400-001 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 27-94/07 | Failure of an Alternating Current Supply (ACS) Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

R

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the ground scanning gives at least two maintenance messages of the list below:
 - L ELEV POS MON XDCR OF ELAC1/SEC1
 - L G ELEV MODE XDCR 34CE1
 - R B ELEV POS MON XDCR OF ELAC1/SEC1
 - R Y ELEV MODE XDCR 34CE2
 - THS ACTR XDCR2 MON 9CE
 - (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001) and the SEC1 (Ref. AMM TASK 27-94-34-000-001).

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- (2) At the SEC1 receptacle, do a check of the resistance between the pin AB/9E and the pin AB/9F (Ref. ASM 27-94/07):
 - (a) If the resistance is less than 10 Ohms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).
 - 2 Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 3 Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is more than 10 Ohms:
 - 1 Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001). Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the fault continues: - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 3 If the fault continues:
 - Do a check of the wiring of the ACS1 SPLY XDCR signal from the SEC1 MON side to the COM side, pins AE/10D and AE/10E to pins AB/8F and AB/8E (Ref. ASM 27-94/07).
 - if the wiring is correct, continue the trouble shooting - if the wiring is not correct, repair the above wiring.
 - Do a check of the wiring of the ACS1 SPLY XDCR COM signal from the SEC1 MON side to the second terminal block, pins AB/9E and AB/9F (Ref. ASM 27-94/07).
 - if the wiring is correct, continue the trouble shooting - if the wiring is not correct, repair the above wiring.
 - c Do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

EFF: ALL

SROS

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27-90-00

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TASK 27-90-00-810-821

Loss of the ACS1 Signal of the SEC2 COM Side

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SEC-2 (1CE2)
 - wiring of the ACS1 SPLY XDCR signal from the SEC2 COM side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE DESIGNATION | DESIGNATION | |
|--|-------------|--|
| 27-90-00-810-801 Failure of an Alternating Current Su AMM 27-93-34-000-001 Removal of the ELAC (2CE1,2CE2) AMM 27-94-34-000-001 Removal of the SEC (1CE1,1CE2,1CE3) AMM 27-94-34-400-001 Installation of the SEC (1CE1,1CE2,1 AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanni ASM 27-94/08 | CE3) | |

- 3. Fault Confirmation
 - A. Test

SROS

R

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the list below:
 - SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
 - SEC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2
 - SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE
 - (1) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001) and the SEC2 (Ref. AMM TASK 27-94-34-000-001).
 - (2) At the SEC2 receptacle, do a check of the resistance between the pin AA/12F and the pin AA/12G (Ref. ASM 27-94/08):
 - (a) If the resistance is less than 10 Ohms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).

EFF: ALL

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- 2 Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 3 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is more than 10 Ohms:
 - 1 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 2 Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
 - 3 If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY XDCR signal from the SEC2 COM side to the first terminal block, pins AA/12F and AA/12G (Ref. ASM 27-94/08).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

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EFF: ALL

SROS

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TROUBLE SHOOTING MANUAL

TASK 27-90-00-810-822

Loss of the ACS1 Signal of the SEC2 MON Side

1. Possible Causes

- ELAC-2 (2CE2)
- SEC-2 (1CE2)
- wiring of the ACS1 SPLY XDCR signal from the SEC2 MON side to the COM side
- wiring of the ACS1 SPLY MON signal from the SEC2 COM side to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|---|---|
| 27-90-00-810-801 AMM 27-93-34-000-00 AMM 27-93-34-400-00 AMM 27-94-34-000-00 AMM 27-94-34-400-00 R AMM 27-96-00-740-00 ASM 27-94/08 | Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) |

3. Fault Confirmation

A. Test

SROS

R

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the ground scanning gives at least two maintenance messages of the list below:

SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3

SEC2 OR WIRING FROM L ELEV POS MON XDCR

SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4

SEC2 OR WIRING FROM R ELEV POS MON XDCR

SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

(1) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001) and the SEC2 (Ref. AMM TASK 27-94-34-000-001).

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- (2) At the SEC2 receptacle, do a check of the resistance between the pin AB/9E and the pin AB/9F (Ref. ASM 27-94/08):
 - (a) If the resistance is less than 10 0hms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).
 - Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 3 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is more than 10 Ohms:
 - do a check of the wiring of the ACS1 SPLY XDCR signal from the SEC2 MON side to the COM side: . pins AE/10E and AE/10D to pins AB/8E and AB/8F (Ref. ASM 27-94/08).
 - 1 If the wiring is not correct:
 - repair it
 - install the ELAC2 (Ref. AMM TASK 27-93-34-400-001) and the SEC2 (Ref. AMM TASK 27-94-34-400-001).
 - a If the fault continues:
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001)
 and (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the wiring is correct:
 - <u>a</u> Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - b Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
 - c If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY MON signal from the SEC2 COM side to the first terminal block, pins AB/9E and AB/9F (Ref. ASM 27-94/08).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

R R

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TROUBLE SHOOTING MANUAL

TASK 27-90-00-810-823

Loss of the ACS1 Signal of the ELAC2 COM Side and SEC2 COM Side

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SEC-2 (1CE2)
 - wiring of the ACS1 SPLY XDCR signal from the SEC2 COM side to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|--|--|--|
| 27-90-00-810-801 AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-94/08 | Failure of an Alternating Current Supply (ACS) Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test

R

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the list below:

L G ELEV POS XDCR 34CE1 COM E2/S2 : USE STBY XDCR R Y ELEV POS XDCR 34CE2 COM E2/S2 : USE STBY XDCR ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE

- (1) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001) and the SEC2 (Ref. AMM TASK 27-94-34-000-001).
- (2) At the SEC2 receptacle, do a check of the resistance between the pin AA/12F and the pin AA/12G (Ref. ASM 27-94/08):
 - (a) If the resistance is less than 10 0hms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).

EFF: ALL **SROS**

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- 2 Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 3 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (b) If the resistance is more than 10 Ohms:
 - 1 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001). Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the fault continues:
 - do a check and repair the wiring of the ACS1 SPLY XDCR signal from the SEC2 COM side to the first terminal block, pins AA/12F and AA/12G (Ref. ASM 27-94/08).
 - if the wiring is correct, do the failure of an alternating current supply (ACS) procedure (Ref. TASK 27-90-00-810-801).
- B. Do the test given in para. 3.

R

R

EFF: ALL **SROS**

27-90-00

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TROUBLE SHOOTING MANUAL

TASK 27-90-00-810-824

Loss of the ACS1 Signal of the ELAC2 MON Side and SEC2 MON Side

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SEC-2 (1CE2)
 - wiring of the ACS1 SPLY XDCR signal from the SEC2 MON side to the COM side
 - wiring of the ACS1 SPLY XDCR signal from the SEC2 COM side to the first

terminal block

- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| 27-90-00-810-801 AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-94/08 | Failure of an Alternating Current Supply (ACS) Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test

SROS

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the ground scanning gives at least two maintenance messages of the list below:
 - L B ELEV MODE XDCR 34CE3
 - L ELEV POS MON XDCR OF ELAC2/SEC2
 - R B ELEV MODE XDCR 34CE4
 - R Y ELEV POS MON XDCR OF ELAC2/SEC2
 - ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
 - SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE
 - (1) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001) and the SEC2 (Ref. AMM TASK 27-94-34-000-001).

EFF: ALL 27-90-00

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- (2) At the SEC2 receptacle, do a check of the resistance between the pin AB/9E and the pin AB/9F (Ref. ASM 27-94/08):
 - (a) If the resistance value is less than 10 Ohms:
 - 1 Do this procedure (Ref. TASK 27-90-00-810-801).
 - Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 3 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (b) If the resistance is more than 10 Ohms:
 - 1 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001). Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the fault continues:
 - <u>a</u> Do a check of the wiring of the ACS1 SPLY XDCR signal from the SEC2 MON side to the COM side, pins AE/10D and AE/10E to pins AB/8E and AB/8F (Ref. ASM 27-94/08).
 - if the wiring is correct, go to Para. b
 - if the wiring is not correct, repair the above wiring.
 - <u>b</u> Do a check and repair the wiring of the ACS1 SPLY XDCR signal from the SEC2 COM side to the first terminal block, pins AB/9E and AB/9F (Ref. ASM 27-94/08).
- B. Do the test given in para. 3.

27-90-00

TROUBLE SHOOTING MANUAL

TASK 27-90-00-810-826

Loss of the Normal Law due to Multiple Failures

- 1. Possible Causes
- 2. Job Set-up Information

Not Applicable

- 3. Fault Confirmation
 - A. Not applicable, you cannot confirm this fault on the ground.
- 4. Fault Isolation

R R

- A. Get access to the PREVIOUS LEGS REPORT in the EFCS1 MENU page.
 - (1) In the Previous Legs Report, retrieve the maintenance message linked to one of the following items:
 - SFCC
 - Radio Altimeter
 - Pedal Position from ELACs
 - (2) Associate to this message the F/CTL maintenance status (refer to a maintenance message to found the associated trouble shooting procedure) and repair.
 - (3) In the Post Flight Report, retrieve the maintenance message linked to the warning ALTN LAW.
 - (4) Associate to this warning the maintenance message. Do the trouble shooting procedure related to this maintenance message.

EFF: ALL 27-90-00

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SROS

TROUBLE SHOOTING MANUAL

CONTROL INPUTS INTERFACE AND POWER SUPPLY - FAULT ISOLATION PROCEDURES

TASK 27-92-00-810-803

Failure of the Accelerometer 1

- 1. Possible Causes
 - ACCLRM-1 (12CE1)
 - wiring of the power supply signal from the accelerometer 1 (12CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION |
|---|-----------|------------------------------|--|
| | AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer |
| | AMM | 27-92-16-400-001 | (12CE1,12CE2,12CE3,12CE4) Installation of the Flight Control Accelerometer |
| R | | 27-96-00-740-001 27-92/24 | (12CE1,12CE2,12CE3,12CE4) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ACCLRM 1 12CE1:
 - replace the ACCLRM-1 (12CE1), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the power supply signal from the accelerometer 1 (12CE1) to the first terminal block, (Ref. ASM 27-92/24).
 - B. Do the test given in Para. 3.

EFF: ALL 27-92-00

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TROUBLE SHOOTING MANUAL

TASK 27-92-00-810-804

Failure of the Accelerometer 2

1. Possible Causes

- ACCLRM-2 (12CE2)
- wiring of the power supply signal from the accelerometer 2 (12CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------------------|--|--|
| | AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| | AMM | 27-92-16-400-001 | Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| R | | 27-96-00-740-001 27-92/24 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: ACCLRM 2 12CE2
 - replace the ACCLRM-2 (12CE2), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the power supply signal from the accelerometer 2 (12CE2) to the first terminal block, (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

EFF: ALL 27-92-00

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TROUBLE SHOOTING MANUAL

TASK 27-92-00-810-805

Failure of the Accelerometer 3

- 1. Possible Causes
 - ACCLRM-3 (12CE3)
 - wiring of the power supply signal from the accelerometer 3 (12CE3) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------------------|--|--|
| | AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| | AMM | 27-92-16-400-001 | Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| R | | 27-96-00-740-001 27-92/24 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ACCLRM 3 12CE3
 - replace the ACCLRM-3 (12CE3), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the power supply signal from the accelerometer 3 (12CE3) to the first terminal block, (Ref. ASM 27-92/24).
 - B. Do the test given in Para. 3.

EFF: ALL 27-92-00

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TROUBLE SHOOTING MANUAL

TASK 27-92-00-810-806

Failure of the Accelerometer 4

1. Possible Causes

- ACCLRM-4 (12CE4)
- wiring of the power supply signal from the accelerometer 4 (12CE4) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------------------|--|--|
| | AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| | AMM | 27-92-16-400-001 | Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| R | | 27-96-00-740-001 27-92/24 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: ACCLRM 4 12CE4
 - replace the ACCLRM-4 (12CE4), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the power supply signal from the accelerometer 4 (12CE4) to the first terminal block, (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

EFF: ALL 27-92-00

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TROUBLE SHOOTING MANUAL

TASK 27-92-00-810-807

Failure of the Accelerometers 3 and 4

1. Possible Causes

- ACCLRM-3 (12CE3)
- ACCLRM-4 (12CE4)
- wiring of the power supply signal from the accelerometer (12CE3) to the first terminal block
- wiring of the power supply signal from the accelerometer (12CE4) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------------------|--|--|
| | AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| | AMM | 27-92-16-400-001 | Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| R | | 27-96-00-740-001 27-92/24 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance messages: ACCLRM 3 12CE3 ACCLRM 4 12CE4
 - replace the ACCLRM-3 (12CE3) and the ACCLRM-4 (12CE4), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the power supply signal from the accelerometer (12CE3) to the first terminal block and the wiring of the power supply signal from the accelerometer (12CE4) to the first terminal block, (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

EFF: ALL 27-92-00

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TROUBLE SHOOTING MANUAL

TASK 27-92-00-810-808

Failure of the Accelerometers 1 and 2

1. Possible Causes

- ACCLRM-1 (12CE1)
- ACCLRM-2 (12CE2)
- wiring of the power supply signal from the accelerometer 1 (12CE1) to the first terminal block
- wiring of the power supply signal from the accelerometer 2 (12CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| Λ M M | 27-92-16-000-001 | Removal of the Flight Control Accelerometer |
| Ann | 21-72-10-000-001 | (12CE1, 12CE2, 12CE3, 12CE4) |
| AMM | 27-92-16-400-001 | <pre>Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4)</pre> |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/24 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance messages:

ACCLRM 1 12CE1

and

ACCLRM 2 12CE2

- replace the ACCLRM-1 (12CE1) and the ACCLRM-2 (12CE2), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the power supply signal from the accelerometer 1 (12CE1) to the first terminal block and the wiring of the power supply signal from the accelerometer 2 (12CE2) to the first terminal block, (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

R

EFF: ALL **SROS**

27-92-00

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TROUBLE SHOOTING MANUAL

TASK 27-92-00-810-821

Failure of the Blue Hydraulic Pressure Switch (2151GN)

- 1. Possible Causes
- ELAC-1 (2CE1)
 - SEC-1 (1CE1)
 - PRESS SW-FLT CTL, B (2151GN)
 - wiring from the pressure switch (2151GN) pins A/A and A/B
 - 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|---|
| | 74 7 | 2 00 040 070 | |
| | 31-3 | 2-00-810-932 | Failure of the Discrete Links |
| R | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| R | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| R | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| R | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground |
| | | | Power Supply |
| | AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System |
| | AMM | 29-32-12-000-002 | Removal of the System Pressure Switch (2151GN) |
| | AMM | 29-32-12-400-002 | Installation of the System Pressure Switch (2151GN) |
| | ASM | 27-92/27 | |
| | | | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|-------|---|----------------|------------|
| _ | FLIGHT CONTROLS/FCDC1/SPLY FLIGHT CONTROLS/FCDC2/SPLY | 20CE1 20CE2 | B10 Q20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: B HYD PRESS SW1
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932)
 - . related to the DSI 18 discret input signal of the SEC 1,
 - related to the DSI 40 discret input signal of the ELAC 1 COM and ELAC
 2 COM (Ref. ASM 27-92/27)
 - open and close the circuit breakers 20CE1 and 20CE2.
- (1) If the fault continues:
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- R (3) If the fault continues:
 - replace the PRESS SW-FLT CTL, B (2151GN), (Ref. AMM TASK 29-32-12-000-002) and (Ref. AMM TASK 29-32-12-400-002).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - (a) If the fault continues:
 - do a check and repair the wiring from the pressure switch (2151GN) pins A/A and A/B, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - B. Do the BITE test given in Para. 3.

5. Close-up

R

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A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

EFF: ALL 27-92-00

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TASK 27-92-00-810-822

Failure of the Blue Hydraulic Pressure Switch (10CE1)

- 1. Possible Causes
- R ELAC-2 (2CE2)
 - SEC-2 (1CE2)
 - PRESS SW-B HYD, FLT CTL (10CE1)
 - wiring from the pressure switch (10CE1) pins A/A and A/B
 - 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION | |
|---|------------------|------------------|---|--|
| | 31-32-00-810-932 | | Failure of the Discrete Links | |
| | AMM | 27-92-17-000-003 | Removal of the Flight Control Pressure Switch (10CE1) | |
| | AMM | 27-92-17-400-003 | <pre>Installation of the Flight Control Pressure Switch (10CE1)</pre> | |
| R | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| R | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground Power Supply | |
| | AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| | ASM | 27-92/27 | , | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
 - B. Table of the circuit breakers used in this procedure:

| PANEL DESI | GNATION | IDENT. | LOCATION |
|------------|------------------------|--------|-------------|
| 49VU FLIG | HT CONTROLS/FCDC1/SPLY | 20CE1 | B10 |
| 121VU FLIG | HT CONTROLS/FCDC2/SPLY | 20CE2 | Q 20 |

C. Test

SROS

(1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

EFF: ALL

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TROUBLE SHOOTING MANUAL

4. Fault Isolation

- A. If the BITE test gives the maintenance message: B HYD PRESS SW2
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932)
 related to the DSI 17 discret input signal of the SEC 2 and the ELAC
 - . related to the DSI 40 discret input signal of the ELAC 1 COM and ELAC 2 MON (Ref. ASM 27-92/27)
 - open and close the circuit breakers 20CE1 and 20CE2.
- R (1) If the fault continues:
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- R (3) If the fault continues:
 - replace the PRESS SW-B HYD, FLT CTL (10CE1), (Ref. AMM TASK 27-92-17-000-003) and (Ref. AMM TASK 27-92-17-400-003).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - (a) If the fault continues:
 - do a check and repair the wiring from the pressure switch (10CE1) pins A/A and A/B, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - B. Do the BITE test given in Para. 3.

5. Close-up

R

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A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

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TROUBLE SHOOTING MANUAL

TASK 27-92-00-810-823

Failure of the Blue Hydraulic Pressure Transducer

1. Possible Causes

- PRESS XDCR-B (2065GN)
- wiring of the 28VDC signal from the pressure transducer (2065GN) to the first terminal block
- wiring of the DC SIGNAL from the pressure transducer (2065GN) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | 71 7 | 2 00 940 022 | Enilyse of the Angles Links | |
| | | 2-00-810-933 | Failure of the Analog Links | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground | |
| | | | Power Supply | |
| | AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| R | AMM | 29-32-11-000-002 | Removal of the Hydraulic Pressure Transducer (2065GN) | |
| R | AMM | 29-32-11-400-002 | Installation of the Hydraulic Pressure Transducer | |
| | | | (2065GN) | |
| | ASM | 27-92/28 | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
- B. Test

SROS

(1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance messages:
B HYD PRESS XMTR 2065GN
with
SDAC1 B HYD PRESS XMTR 2065GN
or
SDAC2 B HYD PRESS XMTR 2065GN

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- do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 4-3 analog input signal of the ELAC 2 MON and ELAC 1 MON (Ref. ASM 27-92/28).
- (1) If the fault continues:
 - replace the PRESS XDCR-B (2065GN), (Ref. AMM TASK 29-32-11-000-002) and (Ref. AMM TASK 29-32-11-400-002).
- (2) If the fault continues:
 - do a check and repair the wiring of the 28VDC signal from the pressure transducer (2065GN) to the first terminal block, (Ref. ASM 27-92/28).
- (3) If the fault continues:
 - do a check and repair the wiring of the DC SIGNAL from the pressure transducer (2065GN) to the first terminal block, (Ref. ASM 27-92/28).
- B. Do the BITE test given in Para. 3.

5. Close-up

A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

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EFF:

ALL

TROUBLE SHOOTING MANUAL

TASK 27-92-00-810-824

Failure of the Green Hydraulic Pressure Switch (1151GN)

- 1. Possible Causes
- R ELAC-1 (2CE1)
 - SEC-1 (1CE1)
 - PRESS SW-FLT CTL, G (1151GN)
 - wiring from the pressure switch (1151GN) pins A/A and A/B
 - 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|-------------|---------------------------------|--|--|
| R R R | AMM AMM | 2-00-810-932 27-93-34-000-001 27-93-34-400-001 27-94-34-000-001 27-94-34-400-001 | Failure of the Discrete Links Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM AMM AMM AMM AMM | 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 29-32-12-000-001 29-32-12-400-001 27-92/27 | BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System Removal of the System Pressure Switch (1151GN) Installation of the System Pressure Switch (1151GN) |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|--------|----------------------------|--------|------------|
| 49VU | FLIGHT CONTROLS/FCDC1/SPLY | 20CE1 | B10 |
| 12 1VU | FLIGHT CONTROLS/FCDC2/SPLY | 20CE2 | Q20 |

C. Test

SROS

(1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

EFF: ALL

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TROUBLE SHOOTING MANUAL

4. Fault Isolation

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- A. If the BITE test gives the maintenance message: G HYD PRESS SW1
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932)
 - related to the DSI 17 discret input signal of the SEC 1,
 - related to the DSI 42 discret input signal of the ELAC 1 COM and ELAC 2 COM (Ref. ASM 27-92/27)
 - open and close the circuit breakers 20CE1 and 20CE2.
- R (1) If the fault continues:
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (3) If the fault continues:
 - replace the PRESS SW-FLT CTL, G (1151GN), (Ref. AMM TASK 29-32-12-000-001) and (Ref. AMM TASK 29-32-12-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - (a) If the fault continues:
 - do a check and repair the wiring from the pressure switch (1151GN) pins A/A and A/B, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - B. Do the BITE test given in Para. 3.
 - 5. Close-up
 - A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

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TASK 27-92-00-810-825

Failure of the Green Hydraulic Pressure Switch (10CE2)

- 1. Possible Causes
- ELAC-2 (2CE2)
- SEC-2 (1CE2)
- SEC-3 (1CE3)
 - PRESS SW-G HYD, FLT CTL (10CE2)
 - wiring from the pressure switch (10CE2) pins A/A and A/B
 - 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | Failure of the Discrete Links Removal of the Flight Control Pressure Switch (10CE2) Installation of the Flight Control Pressure Switch | |
|---|-----------|------------------|--|--|
| | | | | |
| | | | (10CE2) | |
| R | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| R | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 29-10-00-863-001 | Pressurize the Green Hydraulic System | |
| | AMM | 29-10-00-864-001 | Depressurize the Green Hydraulic System | |
| | ASM | 27-92/27 | | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|-------|----------------------------|--------|-------------|
| 49VU | FLIGHT CONTROLS/FCDC1/SPLY | 20CE1 | B10 |
| 121VU | FLIGHT CONTROLS/FCDC2/SPLY | 20CE2 | Q 20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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TROUBLE SHOOTING MANUAL

4. Fault Isolation

R

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- A. If the BITE test gives the maintenance message: G HYD PRESS SW2
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932)
 - . related to the DSI 18 discret input signal of the SEC 2 and SEC 3,
 - related to the DSI 42 discret input signal of the ELAC 1 MON and ELAC 2 MON (Ref. ASM 27-92/27)
 - open and close the circuit breakers 20CE1 and 20CE2.
- (1) If the fault continues:
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (3) If the fault continues:
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (4) If the fault continues:
 - replace the PRESS SW-G HYD, FLT CTL (10CE2), (Ref. AMM TASK 27-92-17-000-001) and (Ref. AMM TASK 27-92-17-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - (a) If the fault continues:
 - do a check and repair the wiring from the pressure switch (10CE2) pins A/A and A/B, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - B. Do the BITE test given in Para. 3.

5. Close-up

A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

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TASK 27-92-00-810-826

Failure of the Green Hydraulic Pressure Transducer

1. Possible Causes

- PRESS XDCR-G (1065GN)
- wiring of the 28VDC signal from the pressure transducer (1065GN) to the first terminal block
- wiring of the DC SIGNAL from the pressure transducer (1065GN) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|--------------|------------------|---|--|
| | 31 _3 | 2-00-810-933 | Failure of the Analog Links | |
| | | | <u>-</u> | |
| | | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 29-10-00-863-001 | Pressurize the Green Hydraulic System | |
| | AMM | 29-10-00-864-001 | Depressurize the Green Hydraulic System | |
| R | AMM | 29-32-11-000-001 | Removal of the Hydraulic Pressure Transducer (1065GN) | |
| R | AMM | 29-32-11-400-001 | Installation of the Hydraulic Pressure Transducer | |
| | ASM | 27-92/28 | (1065GN) | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance messages:

G HYD PRESS XMTR 1065GN

with

SDAC1 G HYD PRESS XMTR 1065GN

or

SDAC2 G HYD PRESS XMTR 1065GN

- do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 4-4 analog input signal of the ELAC 1 MON and ELAC 2 MON (Ref. ASM 27-92/28).

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- (1) If the fault continues:
 - replace the PRESS XDCR-G (1065GN), (Ref. AMM TASK 29-32-11-000-001) and (Ref. AMM TASK 29-32-11-400-001).
- (2) If the fault continues:
 - do a check and repair the wiring of the 28VDC signal from the pressure transducer (1065GN) to the first terminal block, (Ref. ASM 27-92/28).
- (3) If the fault continues:
 - do a check and repair the wiring of the DC SIGNAL from the pressure transducer (1065GN) to the first terminal block, (Ref. ASM 27-92/28).
- B. Do the BITE test given in Para. 3.

5. Close-up

A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

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TASK 27-92-00-810-827-A

Failure of the Yellow Hydraulic Pressure Switch (10CE3)

- 1. Possible Causes
 - PRESS SW-Y HYD, FLT CTL (10CE3)
 - wiring from the pressure switch (10CE3) pins A/A and A/B
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE DESIGNATION | |
|---|-------|
| | |
| AMM 27-92-17-000-002 Removal of the Flight Control Pressure Switch (1 | OCE3) |
| AMM 27-92-17-400-002 Installation of the Flight Control Pressure Swit (10CE3) | ch |
| AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning) | |
| AMM 29-10-00-863-002 Pressurize the Yellow Hydraulic System | |
| AMM 29-10-00-864-002 Depressurize the Yellow Hydraulic System ASM 27-92/27 | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|--------|----------------------------|--------|------------|
| 49VU | FLIGHT CONTROLS/FCDC1/SPLY | 20CE1 | В10 |
| 12 1VU | FLIGHT CONTROLS/FCDC2/SPLY | 20CE2 | Q20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: Y HYD PRESS SW1
 - replace the PRESS SW-Y HYD, FLT CTL (10CE3), (Ref. AMM TASK 27-92-17-000-002) and (Ref. AMM TASK 27-92-17-400-002).
 - open and close the circuit breakers 20CE1 and 20CE2.

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(1) If the fault continues:

- do a check and repair the wiring from the pressure switch (10CE3) pins A/A and A/B, (Ref. ASM 27-92/27).
- open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the BITE test given in Para. 3.

5. Close-up

R

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A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

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TASK 27-92-00-810-828-A

Failure of the Yellow Hydraulic Pressure Switch (3151GN)

- 1. Possible Causes
- R ELAC-2 (2CE2)
- R SEC-2 (1CE2)
- R SEC-3 (1CE3)
- R SEC-1 (1CE1)
 - PRESS SW-FLT CTL, Y (3151GN)
 - wiring from the pressure switch (3151GN) pins A/A and A/B
 - 2. Job Set-up Information
 - A. Referenced Information

| R AMI | FERENCE | Failure of the Discrete Links | |
|-------|--------------------------------------|--|--|
| R AMI | -32-00-810-932 4 27-93-34-000-001 | | |
| R AM | M 27-93-34-400-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) | |
| R AM | 4 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | M 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AM | M 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AM | M 29-10-00-863-002 | Pressurize the Yellow Hydraulic System | |
| AM | M 29-10-00-864-002 | Depressurize the Yellow Hydraulic System | |
| AM | M 29-32-12-000-003 | Removal of the System Pressure Switch (3151GN) | |
| AM | M 29-32-12-400-003 | Installation of the System Pressure Switch (3151GN) | |
| AS | M 27-92/27 | | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|-------|---|----------------|------------|
| _ | FLIGHT CONTROLS/FCDC1/SPLY FLIGHT CONTROLS/FCDC2/SPLY | 20CE1 20CE2 | B10 Q20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

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- A. If the BITE test gives the maintenance message: Y HYD PRESS SW2
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932)
 - . related to the DSI 19 discret input signal of the SEC 2 and SEC 3,
 - related to the DSI 32 discret input signal of the ELAC 1 MON and ELAC 2 MON (Ref. ASM 27-92/27)
 - open and close the circuit breakers 20CE1 and 20CE2.
- (1) If the fault continues:
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (3) If the fault continues:
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (4) If the fault continues:
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (5) If the fault continues:
 - replace the PRESS SW-FLT CTL, Y (3151GN), (Ref. AMM TASK 29-32-12-000-003) and (Ref. AMM TASK 29-32-12-400-003).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - (a) If the fault continues:
 - do a check and repair the wiring from the pressure switch (3151GN) pins A/A and A/B, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - B. Do the BITE test given in Para. 3.

Close-up

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

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TASK 27-92-00-810-829

Failure of the Yellow Hydraulic Pressure Transducer

1. Possible Causes

- PRESS XDCR-Y (3065GN)
- wiring of the 28VDC signal from the pressure transducer (3065GN) to the first terminal block
- wiring of the DC SIGNAL from the pressure transducer (3065GN) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|--|--|
| | 31-3 | 2-00-810-933 | Failure of the Analog Links | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 29-10-00-863-002 | Pressurize the Yellow Hydraulic System | |
| | AMM | 29-10-00-864-002 | Depressurize the Yellow Hydraulic System | |
| R | AMM | 29-32-11-000-003 | Removal of the Hydraulic Pressure Transducer (3065GN) | |
| R | AMM | 29-32-11-400-003 | Installation of the Hydraulic Pressure Transducer (3065GN) | |
| | ASM | 27-92/28 | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance messages:

Y HYD PRESS XMTR 3065GN

with

SDAC1 Y HYD PRESS XMTR 3065GN

or

SDAC2 Y HYD PRESS XMTR 3065GN

 do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 4-5 analog input signal of the ELAC 1 MON and ELAC 2 MON (Ref. ASM 27-92/28).

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- (1) If the fault continues:
 - replace the PRESS XDCR-Y (3065GN), (Ref. AMM TASK 29-32-11-000-003) and (Ref. AMM TASK 29-32-11-400-003).
- (2) If the fault continues:
 - do a check and repair the wiring of the 28VDC signal from the pressure transducer (3065GN) to the first terminal block, (Ref. ASM 27-92/28).
- (3) If the fault continues:
 - do a check and repair the wiring of the DC SIGNAL from the pressure transducer (3065GN) to the first terminal block, (Ref. ASM 27-92/28).
- B. Do the BITE test given in Para. 3.

5. Close-up

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

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TASK 27-92-00-810-830

Loss of the Side Stick Priority Signal

1. Possible Causes

- ELAC-1 (2CE1)
- SEC-1 (1CE1)
- ELAC-2 (2CE2)
- SEC-2 (1CE2)
- SEC-3 (1CE3)
- RELAY-TAKEOVER & PRIORITY 1 (47CE1)
- wiring
- P/BSW-TAKEOVER & PRIORITY, CAPT (8CE1)
- P/BSW-TAKEOVER & PRIORITY, F/O (8CE2)
- RELAY-TAKEOVER & PRIORITY 2 (47CE2)

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|--------|------|------------------|---|
| | IPC | 279208 | |
| R R | AMM | 27-92-41-000-011 | Removal of the Pushbutton Switch-Takeover and Priority (8CE1,8CE2) |
| R R | AMM | 27-92-41-400-011 | <pre>Installation of the Pushbutton Switch-Takeover and Priority (8CE1, 8CE2)</pre> |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-96-00-710-003 | Operational Test of the Side Stick Priority |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-92/17 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick priority (Ref. AMM TASK 27-96-00-710-003).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the tests give the maintenance message CHECK PRIORITY WIRING:
 - do the tests given in Para. 3. with only the SEC 1 and the ELAC 1 engaged for the operational test of the side stick priority.
 - (1) If the tests give the above maintenance message again:
 - (a) Remove the ELAC 1 (Ref. AMM TASK 27-93-34-000-001).
 - (b) Do the same tests again.
 - 1 If the tests do not give the maintenance message: - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-400-001).
 - $\underline{2}$ If the tests give the above maintenance message again:
 - Install the ELAC 1 (Ref. AMM TASK 27-93-34-400-001).
 - Remove the SEC 1 (Ref. AMM TASK 27-94-34-000-001).
 - (c) Do the same tests again.
 - If the tests do not give the maintenance message:

 Replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-400-001).
 - If the tests give the above maintenance message again:
 Do a check of the insulation of the DSIs 29, 30, 35, 36 of ELAC 1 and SEC 1 (Ref. ASM 27-92/17).
 - a If the wiring is correct, see Para (2)
 - b If the wiring is not correct, repair it.
 - (2) do the tests given in Para. 3. with action on the CAPT takeover and priority pushbutton switch for the operational test of the side stick priority.
 - (a) If the tests give the maintenance message CHECK PRIORITY WIRING:
 - do the tests given in Para. 3. with action on the F/O takeover and priority pushbutton switch for the operational test of the side stick priority.
 - $\underline{\mathbf{1}}$ If the tests give the above maintenance message again:
 - replace the RELAY-TAKEOVER & PRIORITY 1 (47CE1) (Ref. IPC 279208).
 - a If the fault continues:
 - do a check and repair the wiring from the relay (47CE1) pins A/1, 2, X, Z to the first terminal block and from pin A/A to the ground terminal (Ref. ASM 27-92/17).

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- 2 If the tests do not give a maintenance message:
 - replace the P/BSW-TAKEOVER & PRIORITY, CAPT (8CE1) (Ref. AMM TASK 27-92-41-000-011) and (Ref. AMM TASK 27-92-41-400-011).
 - a If the fault continues:
 - do a check and repair the wiring from the pushbutton switch (8CE1) pins 1, 2, 3, 4 to the first terminal block (Ref. ASM 27-92/17).
- (b) If the tests do not give a maintenance message:
 - replace the P/BSW-TAKEOVER & PRIORITY, F/O (8CE2) (Ref. AMM TASK 27-92-41-000-011) and (Ref. AMM TASK 27-92-41-400-011).
 - 1 If the fault continues:
 - do a check and repair the wiring from the pushbutton switch (8CE2) pins 1, 2, 3, 4 to the first terminal block (Ref. ASM 27-92/17).
- (3) If the tests do not give a maintenance message:
 - do the tests given in Para. 3. with only the SEC 2, the SEC 3 and the ELAC 2 engaged with action on the CAPT takeover and priority pushbutton switch for the operational test of the side stick priority.
 - (a) If the tests give the maintenance message CHECK PRIORITY WIRING:
 Remove the ELAC 2 (Ref. AMM TASK 27-93-34-000-001)
 - 1 Do the same tests again;
 - If the tests do not give the maintenance message: Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-400-001).
 - If the tests give the above maintenance message again: Install the ELAC 2 (Ref. AMM TASK 27-93-34-400-001) Remove the SEC (Ref. AMM TASK 27-94-34-000-001)
 - 2 Do the same tests again.
 - If the tests do not give the maintenance message:
 Replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-400-001).
 - If the tests give the above maintenance message again: Replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) (Ref. AMM TASK 27-94-34-400-001).
 - 3 Do the same tests again.
 - If the tests give the above message maintenance again:
 Do a check of the insulation of the DSIs 29, 30, 35, 36 of ELAC 2, SEC 2, SEC 3 (Ref. ASM 27-92/17).
 - If the wiring is correct, see para (4)
 - If the wiring is not correct, repair it.
 - 4 Do the same test again.

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- (4) If the tests give the maintenance message CHECK PRIORITY WIRING:
 - Do the tests given in Para. 3. with action on the F/O takeover and priority pushbutton switch for the operational test of the side stick priority.
 - (a) If the tests give the above maintenance message again:
 - Replace the RELAY-TAKEOVER & PRIORITY 2 (47CE2) (Ref. IPC 279208).
 - 1 If the fault continues:
 - do a check and repair the wiring from the relay (47CE2) pins A/1, 2, X, Z to the first terminal block and from pin A/A to the ground terminal (Ref. ASM 27-92/17).
 - 2 If the tests do not give a maintenance message:
 - replace the P/BSW-TAKEOVER & PRIORITY, CAPT (8CE1) (Ref. AMM TASK 27-92-41-000-011) and (Ref. AMM TASK 27-92-41-400-011).
 - a If the fault continues:
 - do a check and repair the wiring from the pushbutton switch (8CE1) pins 5, 6, 7, 8 to the first terminal block (Ref. ASM 27-92/17).
 - (b) If the tests do not give a maintenance message:
 - replace the P/BSW-TAKEOVER & PRIORITY, F/O (8CE2) (Ref. AMM TASK 27-92-41-000-011) and (Ref. AMM TASK 27-92-41-400-011).
 - 1 If the fault continues:
 - do a check and repair the wiring from the pushbutton switch (8CE2) pins 5, 6, 7, 8 to the first terminal block (Ref. ASM 27-92/17).
- B. Do the tests given in Para. 3.

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TASK 27-92-00-810-834

Unwanted Side Stick Indication on Primary Flight Display

- 1. Possible Causes
 - LGCIU-1 (5GA1)
 - DMC-1 (1WT1)
 - LGCIU-2 (5GA2)
 - DMC-2 (1WT2)
 - wiring
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 31-63-34-000-001 | Removal of the DMC (1WT1,1WT2,1WT3) | |
| AMM | 31-63-34-400-001 | Installation of the DMC (1WT1,1WT2,1WT3) | |
| AMM | 32-31-71-000-001 | Removal of the LGCIU (5GA1, 5GA2) | |
| AMM | 32-31-71-400-001 | Installation of the LGCIU (5GA1, 5GA2) | |
| AWM | 31-62-24 | · | |

- 3. Fault Confirmation
 - A. Test
 - (1) Not applicable, you cannot confirm this fault on ground.
- 4. Fault Isolation
 - A. If the side stick indication is shown in flight on CAPT PFD:
 - replace the LGCIU-1 (5GA1) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring between LGCIU1 pin AB/2F and DMC1 pin AB/2J (Ref. AWM 31-62-24).
 - (2) If the fault continues:
 - replace the DMC-1 (1WT1) (Ref. AMM TASK 31-63-34-000-001) and (Ref. AMM TASK 31-63-34-400-001).

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- B. If the side stick indication is shown in flight on F/O PFD:
 - replace the LGCIU-2 (5GA2) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).
 - (1) If the fault continues:

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- do a check and repair the wiring between LGCIU2 pin AB/2F and DMC2 pin AB/2J (Ref. AWM 31-62-24).
- (2) If the fault continues:
 - replace the DMC-2 (1WT2) (Ref. AMM TASK 31-63-34-000-001) and (Ref. AMM TASK 31-63-34-400-001).

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ELAC SYSTEM (ELEVATOR AILERON COMPUTER) - FAULT ISOLATION PROCEDURES

TASK 27-93-00-810-801

Loss of the Roll Signal on the CAPT Side Stick for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SSTU-ROLL CTL, CAPT (4CE1)
 - wiring from the ELAC 1 (2CE1) to the SSTU (4CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| RI | EFERENCE | DESIGNATION | |
|--------|------------------------------------|--|--|
| Al | MM 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| Al | MM 27-92-41-400-002 | <pre>Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4)</pre> | |
| Al | MM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| Al | MM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| Al | MM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | MM 27-96-00-740-001 SM 27-92/12 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, CAPT (4CE1), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).

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- (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 1 (2CE1) to the SSTU (4CE1), (Ref. ASM 27-92/12).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-93-00-810-802

Loss of the Roll Signal on the F/O Side Stick for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SSTU-ROLL CTL, F/O (4CE2)
 - wiring from the ELAC 1 (2CE1) to the SSTU (4CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/12 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, F/O (4CE2), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 1 (2CE1) to the SSTU (4CE2) (Ref. ASM 27-92/12).

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B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-93-00-810-803

Loss of the Pitch Signal on the CAPT Side Stick for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SSTU-PITCH CTL, CAPT (4CE3)
 - wiring from the ELAC 1 (2CE1) to the SSTU (4CE3)
- 2. Job Set-up Information
 - A. Referenced Information

| | DESIGNATION | |
|------------------|--|--|
| 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| 27-92/14 | - | |
| | 27-93-34-400-001 27-96-00-710-020 27-96-00-740-001 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR INPUT OF CAPT PITCH CTL SSTU 4CE3
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-PITCH CTL, CAPT (4CE3), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 1 (2CE1) to the SSTU (4CE3) (Ref. ASM 27-92/14).

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

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TASK 27-93-00-810-804

Loss of the Pitch Signal on the F/O Side Stick for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SSTU-PITCH CTL, F/O (4CE4)
 - wiring from the ELAC 1 (2CE1) to the SSTU (4CE4)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/14 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR INPUT OF F/O PITCH CTL SSTU 4CE4
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-PITCH CTL, F/O (4CE4), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 1 (2CE1) to the SSTU (4CE4) (Ref. ASM 27-92/14).

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

27-93-00

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TASK 27-93-00-810-805

Loss of the Roll Signal on the CAPT Side Stick for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SSTU-ROLL CTL, CAPT (4CE1)
 - wiring from the ELAC 2 (2CE2) to the SSTU (4CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/12 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR INPUT OF CAPT ROLL CTL SSTU 4CE1
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, CAPT (4CE1), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 2 (2CE2) to the SSTU (4CE1) (Ref. ASM 27-92/12).

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

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TASK 27-93-00-810-806

Loss of the Roll Signal on the F/O Side Stick for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SSTU-ROLL CTL, F/O (4CE2)
 - wiring from the ELAC 2 (2CE2) to the SSTU (4CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION | |
|------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/12 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR INPUT OF F/O ROLL CTL SSTU 4CE2
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, F/O (4CE2), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 2 (2CE2) to the SSTU (4CE2) (Ref. ASM 27-92/12).

EFF: ALL 27-93-00

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-807

Loss of the Pitch Signal on the CAPT Side Stick for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SSTU-PITCH CTL, CAPT (4CE3)
 - wiring from the ELAC 2 (2CE2) to the SSTU (4CE3)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-92/14 | _ | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR INPUT OF CAPT PITCH CTL SSTU 4CE3
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-PITCH CTL, CAPT (4CE3), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 2 (2CE2) to the SSTU (4CE3) (Ref. ASM 27-92/14).

EFF: ALL 27-93-00

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
SROS

27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-808

Loss of the Pitch Signal on the F/O Side Stick for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - SSTU-PITCH CTL, F/O (4CE4)
 - wiring from the ELAC 2 (2CE2) to the SSTU (4CE4)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/14 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR INPUT OF F/O PITCH CTL SSTU 4CE4
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-PITCH CTL, F/O (4CE4), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 2 (2CE2) to the SSTU (4CE4) (Ref. ASM 27-92/14).

EFF: ALL 27-93-00

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
SROS

27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-809

Failure of the CAPT Roll Control SSTU

1. Possible Causes

- SSTU-ROLL CTL, CAPT (4CE1)
- control rods, bellcranks and input levers of the transducer unit

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION |
|---|-----------|------------------|--|
| R | AMM | 27-92-41-000-001 | Removal of the Side Stick Assembly 19VU (18VU) |
| | AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| R | AMM | 27-92-41-400-001 | Installation of the Side Stick Assembly 19VU (18VU) |
| | AMM | 27-92-41-400-002 | <pre>Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4)</pre> |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: CAPT ROLL CTL SSTU 4CE1
 - remove the CAPT side stick assembly (Ref. AMM TASK 27-92-41-000-001).
 - (1) Examine the control rods, bellcranks and input levers of the transducer unit and take the corrective actions if necessary.
 - (2) If no mechanical problems:
 - replace the SSTU-ROLL CTL, CAPT (4CE1), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (3) Install the CAPT side stick assembly (Ref. AMM TASK 27-92-41-400-001).

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
SROS

27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-810

Failure of the F/O Roll Control SSTU

- 1. Possible Causes
 - SSTU-ROLL CTL, F/O (4CE2)
 - control rods, bellcranks and input levers of the transducer unit
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|--|--|
| R | AMM | 27-92-41-000-001 | Removal of the Side Stick Assembly 19VU (18VU) | |
| | AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| R | AMM | 27-92-41-400-001 | Installation of the Side Stick Assembly 19VU (18VU) | |
| | AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: F/O ROLL CTL SSTU 4CE2
 - remove the F/O side stick assembly (Ref. AMM TASK 27-92-41-000-001).
 - (1) Examine the control rods, bellcranks and input levers of the transducer unit and take the corrective actions if necessary.
 - (2) If no mechanical problems:
 - replace the SSTU-ROLL CTL, F/O (4CE2), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (3) Install the F/O side stick assembly (Ref. AMM TASK 27-92-41-400-001).
 - B. Do the operational test and the BITE test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-811

Failure of the CAPT Pitch Control SSTU

1. Possible Causes

- SSTU-PITCH CTL, CAPT (4CE3)
- control rods, bellcranks and input levers of the transducer unit

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|--|--|
| R | AMM | 27-92-41-000-001 | Removal of the Side Stick Assembly 19VU (18VU) | |
| | AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| R | AMM | 27-92-41-400-001 | Installation of the Side Stick Assembly 19VU (18VU) | |
| | AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: CAPT PITCH CTL SSTU 4CE3
 - remove the CAPT side stick assembly (Ref. AMM TASK 27-92-41-000-001).
 - (1) Examine the control rods, bellcranks and input levers of the transducer unit and take the corrective actions if necessary.
 - (2) If no mechanical problems:
 - replace the SSTU-PITCH CTL, CAPT (4CE3), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (3) Install the CAPT side stick assembly (Ref. AMM TASK 27-92-41-400-001).

EFF: ALL 27-93-00

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
SROS

27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-812

Failure of the F/O Pitch Control SSTU

- 1. Possible Causes
 - SSTU-PITCH CTL, F/O (4CE4)
 - control rods, bellcranks and input levers of the transducer unit
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|--|--|
| R | AMM | 27-92-41-000-001 | Removal of the Side Stick Assembly 19VU (18VU) | |
| | AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| R | AMM | 27-92-41-400-001 | Installation of the Side Stick Assembly 19VU (18VU) | |
| | AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: F/O PITCH CTL SSTU 4CE4
 - remove the F/O side stick assembly (Ref. AMM TASK 27-92-41-000-001).
 - (1) Examine the control rods, bellcranks and input levers of the transducer unit and take the corrective actions if necessary.
 - (2) If no mechanical problems:
 - replace the SSTU-PITCH CTL, F/O (4CE4), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (3) Install the F/O side stick assembly (Ref. AMM TASK 27-92-41-400-001).
 - B. Do the operational test and the BITE test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-813

Loss of Signal on the Left Pedals for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - XDCR UNIT-PEDAL POS, L (25CE1)
 - wiring from the ELAC 2 (2CE2) to the transducer unit (25CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|---|--|
| AMM | 27-24-00-710-001 | Operational Test of the Rudder Hydraulic Actuation | |
| AMM | 27-92-15-000-001 | Removal of the Pedal Position Transducer Unit (25CE1,25CE2) | |
| AMM | 27-92-15-400-001 | <pre>Installation of the Pedal Position Transducer Unit (25CE1,25CE2)</pre> | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| | 27-96-00-740-001 27-92/23 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the rudder hydraulic actuation (Ref. AMM TASK 27-24-00-710-001).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR INPUT OF L PEDALS XDCR UNIT 25CE1
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the XDCR UNIT-PEDAL POS, L (25CE1), (Ref. AMM TASK 27-92-15-000-001) and (Ref. AMM TASK 27-92-15-400-001).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 2 (2CE2) to the transducer unit (25CE1), (Ref. ASM 27-92/23).

EFF: ALL 27-93-00

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-814

Loss of Signal on the Right Pedals for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - XDCR UNIT-PEDAL POS, R (25CE2)
 - wiring from the ELAC 2 (2CE2) to the transducer unit (25CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|---|--|
| AMM | 27-24-00-710-001 | Operational Test of the Rudder Hydraulic Actuation | |
| AMM | 27-92-15-000-001 | Removal of the Pedal Position Transducer Unit (25CE1,25CE2) | |
| AMM | 27-92-15-400-001 | <pre>Installation of the Pedal Position Transducer Unit (25CE1,25CE2)</pre> | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| | 27-96-00-740-001 27-92/23 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the rudder hydraulic actuation (Ref. AMM TASK 27-24-00-710-001)
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR INPUT OF R PEDALS XDCR UNIT 25CE2
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the XDCR UNIT-PEDAL POS, R (25CE2), (Ref. AMM TASK 27-92-15-000-001) and (Ref. AMM TASK 27-92-15-400-001).
 - (2) If the fault continues:
 - do a check and repair the wiring from the ELAC 2 (2CE2) to the transducer unit (25CE2), (Ref. ASM 27-92/23).

EFF: ALL 27-93-00

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
SROS

27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-815

Loss of the Accelerometer 1 Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - ACCLRM-1 (12CE1)
 - wiring of the ANI 4-1 signal from the ELAC 1 (2CE1) to the accelerometer (12CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|--|--|
| | AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| | AMM | 27-92-16-400-001 | Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-92/24 | | |
| | | | | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC1 COM OR WIRING FROM ACCLRM1 12CE1 or

ELAC1 MON OR WIRING FROM ACCLRM1 12CE1

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - replace the ACCLRM-1 (12CE1), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
- (2) If the fault continues:
 - do a check and repair the wiring of the ANI 4-1 signal from the ELAC 1 (2CE1) to the accelerometer (12CE1) ELAC 1 COM part or MON part as shown in the maintenance message (Ref. ASM 27-92/24).

EFF: ALL 27-93-00

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B. Do the test given in Para.3.

EFF: ALL SROS 27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-816

Loss of the Accelerometer 2 Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - ACCLRM-2 (12CE2)
 - wiring of the ANI 4-2 signal from the ELAC 1 (2CE1) to the accelerometer 2 (12CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) |
| AMM | 27-92-16-400-001 | <pre>Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4)</pre> |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/24 | |

- 3. Fault Confirmation
 - A. Test

R

R

R

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

NOTE: If the circuit breakers 21CE1 and 22CE are open for the aircraft dispatch in MMEL conditions (SEC1 deactivated), it is not necessary to do the trouble-shooting procedure.

 $\ensuremath{\text{\textbf{A.}}}$ If the BITE test gives the maintenance message:

ELAC 1 COM OR WIRING FROM ACCLRM 2 12CE2

or

ELAC 1 MON OR WIRING FROM ACCLRM 2 12CE2

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - replace the ACCLRM-2 (12CE2), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).

EFF: ALL

27-93-00

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- (2) If the fault continues:
 - do a check and repair the wiring of the ANI 4-2 signal from the ELAC 1 (2CE1) to the accelerometer 2 (12CE2) ELAC 1 COM part or MON part as shown in the maintenance message (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

EFF: ALL
SROS

27-93-00

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TASK 27-93-00-810-817

Loss of the Accelerometer 3 Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - ACCLRM-3 (12CE3)
 - wiring of the ANI 4-1 signal from the ELAC 2 (2CE2) to the accelerometer 3
 (12CE3)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------------------|--|--|
| | AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| | AMM | 27-92-16-400-001 | Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| R | | 27-96-00-740-001 27-92/24 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC 2 COM OR WIRING FROM ACCLRM 3 12CE3

ELAC 2 MON OR WIRING FROM ACCLRM 3 12CE3

- replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - replace the ACCLRM-3 (12CE3), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
- (2) If the fault continues:
 - do a check and repair the wiring of the ANI 4-1 signal from the ELAC 2 (2CE2) to the accelerometer 3 (12CE3) ELAC 2 COM part or MON part as shown in the maintenance message (Ref. ASM 27-92/24).

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B. Do the test given in Para. 3.

EFF: ALL

27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-818

Loss of the Accelerometer 4 Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - ACCLRM-4 (12CE4)
 - wiring of the ANI 4-2 signal from the ELAC 2 (2CE2) to the accelerometer 4 (12CE4)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| AMM 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) |
| AMM 27-92-16-400-001 | <pre>Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4)</pre> |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-92/24 | |

- 3. Fault Confirmation
 - A. Test

R R

R

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - NOTE: If the circuit breaker 21CE2 is open for the aircraft dispatch in MMEL conditions (SEC2 deactivated), it is not necessary to do the trouble-shooting procedure.
 - A. If the BITE test gives the maintenance message: ELAC 2 COM OR WIRING FROM ACCLRM 4 12CE4

or

ELAC 2 MON OR WIRING FROM ACCLRM 4 12CE4

- replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - replace the ACCLRM-4 (12CE4), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).

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- (2) If the fault continues:
 - do a check and repair the wiring of the ANI 4-2 signal from the ELAC 2 (2CE2) to the accelerometer 4 (12CE4) ELAC 2 COM part or MON part as shown in the maintenance message (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-819

Loss of the Blue Hydraulic Pressure Switch Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the LOW BLUE PRESS signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| R - | REFERENCE | | DESIGNATION | |
|-----------------------|----------------|--|---|--|
| Al Al R Al R | MM MM MM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-003 29-10-00-864-003 27-92/27 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Blue Hydraulic System with a Ground Power Supply Depressurize the Blue Hydraulic System | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
 - B. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR WIRING FROM B HYD PRESS SW1

or

ELAC1 OR WIRING FROM B HYD PRESS SW2

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the LOW BLUE PRESS signal from the ELAC 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (the COM part is for the maintenance message ELAC 1 OR WIRING FROM B HYD PRESS SW 1 and the

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MON part is for the maintenance message ELAC 1 OR WIRING FROM B HYD PRESS SW 2) (Ref. ASM 27-92/27).

B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-820

Loss of the Blue Hydraulic Pressure Switch Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the LOW BLUE PRESS signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| R - | REFERENCE | | DESIGNATION | |
|-----------------------|----------------|--|---|--|
| Al Al R Al R | MM MM MM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-003 29-10-00-864-003 27-92/27 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Blue Hydraulic System with a Ground Power Supply Depressurize the Blue Hydraulic System | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC 2 OR WIRING FROM B HYD PRESS SW1

or

ELAC 2 OR WIRING FROM B HYD PRESS SW2

- replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the LOW BLUE PRESS signal from the ELAC 2 (2CE2) to the first terminal block, COM or MON part as shown in the maintenance message (the COM part is for the maintenance message ELAC 2 OR WIRING FROM B HYD PRESS SW 1 and the

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MON part is for the maintenance message ELAC 2 OR WIRING FROM B HYD PRESS SW 2) (Ref. ASM 27-92/27).

B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-821

Loss of the Blue Hydraulic Pressure Transducer Signal for the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the ANI 4-3 signal from the ELAC 1 (2CE1) COM and MON parts to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REF | ERENCE | DESIGNATION | |
|------------|--|---|--|
| AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-003 29-10-00-864-003 27-92/28 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Blue Hydraulic System with a Ground Power Supply Depressurize the Blue Hydraulic System | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - ELAC1 OR WIRING FROM B HYD PRESS XMTR 2065GN
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ANI 4-3 signal from the ELAC 1 (2CE1) COM and MON parts to the first terminal block, (Ref. ASM 27-92/28).
- B. Do the test given in Para. 3.

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A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-822

Loss of the Blue Hydraulic Pressure Transducer Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the ANI 4-3 signal from the ELAC 2 (2CE2) COM and MON parts to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|--|---|--|
| | | 27-93-34-000-001 27-93-34-400-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-93-34-400-001 27-96-00-740-001 29-10-00-863-003 | BITE Test of the EFCS (Ground Scanning) Pressurize the Blue Hydraulic System with a Ground | |
| R | AMM | 29-10-00-864-003 27-92/28 | Power Supply Depressurize the Blue Hydraulic System | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: ELAC2 OR WIRING FROM B HYD PRESS XMTR 2065GN
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ANI 4-3 signal from the ELAC 2 (2CE2) COM and MON parts to the first terminal block, (Ref. ASM 27-92/28).
- B. Do the test given in Para. 3.

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A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

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TASK 27-93-00-810-823

Loss of the Green Hydraulic Pressure Switch Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the LOW GREEN PRESS signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION | |
|---|-------------------|--|--|--|
| R | AMM AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 27-92/27 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR WIRING FROM G HYD PRESS SW1

ELAC1 OR WIRING FROM G HYD PRESS SW2

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the LOW GREEN PRESS signal from the ELAC 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (the COM part is for the maintenance message ELAC 1 OR WIRING FROM G HYD PRESS SW 1 and the

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MON part is for the maintenance message ELAC 1 OR WIRING FROM G HYD PRESS SW 2) (Ref. ASM 27-92/27).

B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

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TASK 27-93-00-810-824

Loss of the Green Hydraulic Pressure Switch Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the LOW GREEN PRESS signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION | |
|---|-------------------|--|--|--|
| R | AMM AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 27-92/27 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR WIRING FROM G HYD PRESS SW1

ELAC2 OR WIRING FROM G HYD PRESS SW2

- replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the LOW GREEN PRESS signal from the ELAC 2 (2CE2) to the first terminal block, COM or MON part as shown in the maintenance message (the COM part is for the maintenance message ELAC 2 OR WIRING FROM G HYD PRESS SW 1 and the

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MON part is for the maintenance message ELAC 2 OR WIRING FROM G HYD PRESS SW 2) (Ref. ASM 27-92/27).

B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-825

Loss of the Green Hydraulic Pressure Transducer Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the ANI 4-4 signal from the ELAC 1 (2CE1) COM and MON parts to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|-------------------|--|--|
| AMM AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 27-92/28 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR WIRING FROM G HYD PRESS XMTR 1065GN
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ANI 4-4 signal from the ELAC 1 (2CE1) COM and MON parts to the first terminal block, (Ref. ASM 27-92/28).
 - B. Do the test given in Para. 3.

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A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-826

Loss of the Green Hydraulic Pressure Transducer Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the ANI 4-4 signal from the ELAC 2 (2CE2) COM and MON parts to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|-------------------|--|--|
| AMM AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 27-92/28 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR WIRING FROM G HYD PRESS XMTR 1065GN
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ANI 4-4 signal from the ELAC 2 (2CE2) COM and MON parts to the first terminal block, (Ref. ASM 27-92/28).
 - B. Do the test given in Para. 3.

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A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-827

Loss of the Yellow Hydraulic Pressure Switch Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the LOW YELLOW PRESS signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION | | |
|---|-------------------|--|--|--|--|
| R | AMM AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-002 29-10-00-864-002 27-92/27 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Yellow Hydraulic System Depressurize the Yellow Hydraulic System | | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR WIRING FROM Y HYD PRESS SW1

ELAC1 OR WIRING FROM Y HYD PRESS SW2

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the LOW YELLOW PRESS signal from the ELAC 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (the COM part is for the maintenance message ELAC1 OR WIRING FROM Y HYD PRESS SW 1 and the

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MON part is for the maintenance message ELAC1 OR WIRING FROM Y HYD PRESS SW 2) (Ref. ASM 27-92/27).

B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

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TASK 27-93-00-810-828

Loss of the Yellow Hydraulic Pressure Switch Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the LOW YELLOW PRESS signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION | | |
|---|-------------------|--|--|--|--|
| R | AMM AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-002 29-10-00-864-002 27-92/27 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Yellow Hydraulic System Depressurize the Yellow Hydraulic System | | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR WIRING FROM Y HYD PRESS SW1

ELAC2 OR WIRING FROM Y HYD PRESS SW2

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the LOW YELLOW PRESS signal from the ELAC 2 (2CE2) to the first terminal block, COM or MON part as shown in the maintenance message (the COM part is for the maintenance message ELAC 2 OR WIRING FROM Y HYD PRESS SW 1 and the

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MON part is for the maintenance message ELAC 2 OR WIRING FROM Y HYD PRESS SW 2) (Ref. ASM 27-92/27).

B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-829

Loss of the Yellow Hydraulic Pressure Transducer Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the ANI 4-5 signal from the ELAC 1 (2CE1) COM and MON parts to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|-------------------|--|--|
| R | AMM AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-002 29-10-00-864-002 27-92/28 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Yellow Hydraulic System Depressurize the Yellow Hydraulic System |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR WIRING FROM Y HYD PRESS XMTR 3065GN
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ANI 4-5 signal from the ELAC 1 (2CE1) COM and MON parts to the first terminal block, (Ref. ASM 27-92/28).
 - B. Do the test given in Para. 3.

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| 5. | C. | I٥ | SP | -u | n |
|----------|----|----|----|----|---|
| <i>-</i> | | · | Ju | u | ν |

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

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TASK 27-93-00-810-830

Loss of the Yellow Hydraulic Pressure Transducer Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the ANI 4-5 signal from the ELAC 2 (2CE2) COM and MON parts to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION | |
|---|-------------------|--|--|--|
| R | AMM AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 29-10-00-863-002 29-10-00-864-002 27-92/28 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Pressurize the Yellow Hydraulic System Depressurize the Yellow Hydraulic System | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: ELAC2 OR WIRING FROM Y HYD PRESS XMTR 3065GN
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ANI 4-5 signal from the ELAC 2 (2CE2) COM and MON parts to the first terminal block, (Ref. ASM 27-92/28).
- B. Do the test given in Para. 3.

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| 5. | C. | I٥ | SP | -u | n |
|----------|----|----|----|----|---|
| <i>-</i> | | · | Ju | u | ν |

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-831

Loss of the Left Aileron Changeover Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the DSI 11 signal (COM and MON parts) from the ELAC 2 to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|--------|------------|------------------------------|---|--|
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| | AMM | 27-93-34-400-001 | · | |
| | | | Installation of the ELAC (2CE1,2CE2) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| R R | AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground Power Supply | |
| | AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| | AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump | |
| | AMM | 29-23-00-864-001 | Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU | |
| | AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the Electric Pump | |
| | AMM ASM | 29-24-00-864-001 27-92/36 | Depressurize the Yellow Hydraulic System | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-863-003), (Ref. AMM TASK 29-23-00-863-001), (Ref. AMM TASK 29-24-00-863-001).
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-864-003), (Ref. AMM TASK 29-23-00-864-001), (Ref. AMM TASK 29-24-00-864-001).

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4. Fault Isolation

- A. If the test gives the maintenance message: CHECK L AIL CHANGE OVER
 - do a check of the wiring of the DSI 11 signal (COM and MON parts) from the ELAC 2 to the first terminal block, (Ref. ASM 27-92/36). If there is no continuity:
 - repair the wiring from the ELAC 2 to the first terminal block.
 - (1) If the fault continues:
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-832

Loss of the Right Aileron Changeover Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DSI 14 signal (COM and MON parts), from the ELAC 2 to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|--------|-----------|------------------|---|--|
| | | | | |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| R R | AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground Power Supply | |
| | AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| | AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump | |
| | AMM | 29-23-00-864-001 | Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU | |
| | AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the Electric Pump | |
| | AMM | 29-24-00-864-001 | Depressurize the Yellow Hydraulic System | |
| | ASM | 27-92/36 | | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-863-003), (Ref. AMM TASK 29-23-00-863-001), (Ref. AMM TASK 29-24-00-863-001).
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - C. Put the aircraft back to its initial configuration.
 - (1) Depressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-864-003), (Ref. AMM TASK 29-23-00-864-001), (Ref. AMM TASK 29-24-00-864-001).

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4. Fault Isolation

- A. If the test gives the maintenance message: CHECK R AIL CHANGE OVER
 - do a check of the wiring of the DSI 14 signal (COM and MON parts), from the ELAC 2 to the first terminal block, (Ref. ASM 27-92/36). If there is no continuity:
 - repair the wiring from the ELAC 2 to the first terminal block.
 - (1) If the fault continues:
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-833

Loss of the THS Command Transducer Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- command position transducer
- wiring of the XDCR COM SPLY signal from the THS actuator (9CE) to the first terminal block
- wiring of the XDCR COM V1, V2 signals from the THS actuator (9CE) to the ELAC 2 (2CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|--|
| | |
| 27-90-00-810-814 | Loss of the ACS1 Signal of the ELAC2 COM Side |
| 27-90-00-810-815 | Loss of the ACS1 Signal of the ELAC2 MON Side |
| 27-90-00-810-816 | Loss of the ACS1 of the ELAC2 COM and MON Sides |
| 27-90-00-810-823 | Loss of the ACS1 Signal of the ELAC2 COM Side and |
| | SEC2 COM Side |
| AMM 27-44-56-000-001 | Removal of the Position Transducer from the THS |
| | Actuator 9CE |
| AMM 27-44-56-400-001 | Installation of the Position Transducer to the THS |
| | Actuator 9CE |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-022 | Operational Test of the THS Actuator Electrical |
| | Control (Activation for BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/13 | |
| · - | |

3. Fault Confirmation

A. Test

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(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 2.

- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE - refer to Para. Fault Isolation.

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(b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
- ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 Second list:
- ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L ELEV POS MON XDCR
- ELAC2 OR WIRING FROM R ELEV POS MON XDCR
- ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
- ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-814).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-815).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-816).

(c) If the ground scanning gives at least two maintenance messages of the list below:

ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE L G ELEV MODE XDCR 34CE1 COM E2/S2:USE STBY XDCR

R Y ELEV MODE XDCR 34CE2 COM E2/S2:USE STBY XDCR

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-823).

4. Fault Isolation

A. If the BITE test gives the maintenance message:

ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE

- replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - replace the command position transducer, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
- (2) If the fault continues:
 - do a check of the wiring of the XDCR COM SPLY signal from the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-93/13).
 - (a) If there is no continuity, repair the wiring.

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- (b) If there is continuity:
 - do a check and repair the wiring of the XDCR COM V1, V2 signals from the THS actuator (9CE) to the ELAC 2 (2CE2), (Ref. ASM 27-93/13).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-834

Loss of the THS Monitor Transducer Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- monitor position transducer
- command position transducer
- wiring of the XDCR MON SPLY signal from the THS actuator (9CE) to the first terminal block
- wiring of the XDCR MON V1, V2 signals from the THS actuator (9CE) to the ELAC 2 (2CE2)
- wiring of the XDCR COM V1, V2 signals from the THS actuator (9CE) to the ELAC 2 (2CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|--|
| | |
| 27-90-00-810-814 | Loss of the ACS1 Signal of the ELAC2 COM Side |
| 27-90-00-810-815 | Loss of the ACS1 Signal of the ELAC2 MON Side |
| 27-90-00-810-816 | Loss of the ACS1 of the ELAC2 COM and MON Sides |
| 27-90-00-810-824 | Loss of the ACS1 Signal of the ELAC2 MON Side and |
| | SEC2 MON Side |
| AMM 27-44-56-000-001 | Removal of the Position Transducer from the THS |
| | Actuator 9CE |
| AMM 27-44-56-400-001 | Installation of the Position Transducer to the THS |
| | Actuator 9CE |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-022 | Operational Test of the THS Actuator Electrical |
| | Control (Activation for BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/13 | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 2.

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- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
- ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 Second list:
- ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L ELEV POS MON XDCR
- ELAC2 OR WIRING FROM R ELEV POS MON XDCR
- ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
- ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-814).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-815).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-816).

(c) If the ground scanning gives at least two maintenance messages of the list below:

ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE

L ELEV POS MON XDCR OF ELAC2/SEC2

R Y ELEV POS MON XDCR OF ELAC2/SEC2

L B ELEV MODE XDCR 34CE3

R Y ELEV MODE XDCR 34CE4

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-824).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the monitor position transducer, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (2) If the fault continues:
 - replace the command position transducer, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (3) If the fault continues:
 - do a check of the wiring of the XDCR MON SPLY signal from the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-93/13).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check of the wiring of the XDCR MON V1, V2 signals from the THS actuator (9CE) to the ELAC 2 (2CE2), (Ref. ASM 27-93/13).
 - do a check and repair the wiring of the XDCR COM V1, V2 signals from the THS actuator (9CE) to the ELAC 2 (2CE2), (Ref. ASM 27-93/13).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-835

Loss of the Servo Motor 1 Signal on the THS Actuator for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)

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- pitch trim actuator
- R wiring of the ANO 3 signal from the ELAC 2 (2CE2) to the ELAC 2 (2CE2)
 - wiring of the command signal from the THS actuator (9CE) to the ELAC 2
 (2CE2)
 - 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE | |
| | | | |
| AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE | |
| | | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-93/13 | | |
| | AMM AMM AMM AMM | AMM 27-44-57-000-001 AMM 27-44-57-400-001 AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-710-022 AMM 27-96-00-740-001 | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 2.

(2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

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- A. If the BITE test gives the maintenance message: ELAC 2 OR OUTPUT TO THS ACTR SERVO MOT 1 9CE
 - replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the pitch trim actuator, (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001).
 - (2) If the fault continues:
 - do a check of the wiring of the ANO 3 signal from the ELAC 2 (2CE2) to the ELAC 2 (2CE2), (Ref. ASM 27-93/13).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check and repair the wiring of the command signal from the THS actuator (9CE) to the ELAC 2 (2CE2), (Ref. ASM 27-93/13).

B. Do the tests given in Para. 3.

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TASK 27-93-00-810-836

Incorrect Position of the THS for the ELAC 2

1. Possible Causes

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- ELAC-2 (2CE2)
- electronic module N°1 of the pitch trim actuator
- monitor position transducer of the THS actuator
- command position transducer of the THS actuator
 - RLY-ELAC 2 SPLY (53CE)
 - RLY-PITCH TRIM ACTR MOT 1 SPLY (36CE1)
 - wiring from the relay (36CE1) pin A/X2 to the ground
 - wiring from the relay (36CE1) to the ELAC 2 (2CE2)
 - wiring from the THS actuator (9CE) pin D/E to the ground
 - wiring from the relay (36CE1) to the THS actuator (9CE)
 - wiring from the relay (36CE1) to the relay (53CE)
 - wiring from the relay (53CE) pin A/B3 to the C/B (19CE1)
 - wiring of the XDCR MON MOT 1 (V1, V2) signal
- wiring of the XDCR COM MOT 1 (V1, V2) signal

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|--------------------------------------|--|--|
| | | |
| IPC 27920803 | | |
| AMM 27-44-56-000-001 | Removal of the Position Transducer from the THS Actuator 9CE | |
| AMM 27-44-56-400-001 | Installation of the Position Transducer to the THS Actuator 9CE | |
| AMM 27-44-57-000-002 | Removal of the Electronic Modules of the Pitch Trim Actuator | |
| AMM 27-44-57-400-002 | Installation of the Electronic Modules of the Pitch Trim Actuator | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| AMM 27-96-00-740-001 ASM 27-93/13 | BITE Test of the EFCS (Ground Scanning) | |

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3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 2.

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message:

THS ACTR POS ERROR 9CE OF ELAC2

- replace the ELAC-2 (2CE2), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - replace the electronic module N°1 of the pitch trim actuator, (Ref. AMM TASK 27-44-57-000-002) and (Ref. AMM TASK 27-44-57-400-002).
- (2) If the fault continues:
 - replace the monitor position transducer of the THS actuator, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
- R (3) If the fault continues:
 - replace the command position transducer of the THS actuator, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
- R (4) If the fault continues:
 - replace the RLY-ELAC 2 SPLY (53CE) (Ref. IPC 27920803).
- R (5) If the fault continues:
 - replace the RLY-PITCH TRIM ACTR MOT 1 SPLY (36CE1) (Ref. IPC 27920803).
- R (6) If the fault continues:
 - do a check of the wiring from the relay (36CE1) pin A/X2 to the ground, (Ref. ASM 27-93/13).
 - do a check of the wiring from the relay (36CE1) to the ELAC 2 (2CE2), from the pin A/X1 to the pin AD/15J (Ref. ASM 27-93/13).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check of the wiring from the THS actuator (9CE) pin D/E to the ground, (Ref. ASM 27-93/13).
 - do a check of the wiring from the relay (36CE1) to the THS actuator (9CE) from the pin A/A1 to the pin D/F (Ref. ASM 27-93/13).

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- 1 If there is no continuity, repair the wiring.
- If there is continuity:
 - do a check of the wiring from the relay (36CE1) to the relay (53CE) from the pin A/A2 to the pin A/B2 (Ref. ASM 27-93/13).
 - do a check of the wiring from the relay (53CE) pin A/B3 to the C/B (19CE1) (Ref. ASM 27-93/13).
 - a If there is no continuity, repair the wiring.
 - b If there is continuity:
 - do a check and repair the wiring of the XDCR MON MOT 1 (V1, V2) signal, from the THS actuator (9CE) to the ELAC 2 (2CE2) (Ref. ASM 27-93/13).
 - do a check and repair the wiring of the XDCR COM MOT 1 (V1, V2) signal, from the THS actuator (9CE) to the ELAC 2 (2CE2) (Ref. ASM 27-93/13).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-837

Failure of the THS Actuator Servo Motor 1

1. Possible Causes

- RELAY-PITCH TRIM ACTUATOR MOTOR 1 SPLY (36CE1)
- ELAC-2 (2CE2)

R

- Electronic module 1
- wiring of the K3-1 signal from the ELAC 2 (2CE2) to the first terminal block
- wiring of the DSI-49 signal from the ELAC 2 (2CE2) to the ELAC 2 (2CE2)
- wiring of the enable signal from the THS actuator (9CE) to the ELAC 2
 (2CE2)
- wiring from the relay (36CE1) to the ELAC 2 (2CE2) and to the THS actuator (9CE)
- wiring of the fault signal from the THS actuator to the ELAC 2 (2CE2)
- pich trim actuator

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|--------|------------|------------------------------|--|--|
| | IPC | 27920803 | | |
| R R | AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE | |
| | AMM | 27-44-57-000-002 | Removal of the Electronic Modules of the Pitch Trim Actuator | |
| R R | AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE | |
| | AMM | 27-44-57-400-002 | Installation of the Electronic Modules of the Pitch Trim Actuator | |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| | AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| | AMM ASM | 27-96-00-740-001 27-93/13 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 2.

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(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: Wait 60 seconds before you start the BITE test.

4. Fault Isolation

- A. If the BITE test gives the maintenance message: THS ACTR SERVO MOT1 9CE
 - (1) Remove the RELAY-PITCH TRIM ACTUATOR MOTOR 1 SPLY (36CE1) (Ref. IPC 27920803).
 - (2) Do a check of the resistance between pins X1 and X2 of the relay.
 - (a) If the resistance is less than 280 ohms:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 1 SPLY (36CE1)
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (b) If the resistance is more than 400 ohms:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 1 SPLY (36CE1).
 - (c) If the resistance is between 280 and 400 ohms:
 - install the RELAY-PITCH TRIM ACTUATOR MOTOR 1 SPLY (36CE1)
 - see Para (3).
 - (3) If the fault continues:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (4) If the fault continues:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 1 SPLY (36CE1) (Ref. IPC 27920803).
 - (5) If the fault continues:
 - replace the Electronic module 1 (Ref. AMM TASK 27-44-57-000-002)
 and (Ref. AMM TASK 27-44-57-400-002).
 - (6) If the fault continues:
 - do a check of the wiring of the K3-1 signal from the ELAC 2 (2CE2) to the first terminal block, COM part and MON part, (Ref. ASM 27-93/13).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check of the wiring of the DSI-49 signal from the ELAC 2 (2CE2) to the ELAC 2 (2CE2), COM part and MON part (Ref. ASM 27-93/13).
 - 1 If there is no continuity, repair the wiring.

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- 2 If there is continuity:
 - do a check of the wiring of the enable signal from the THS actuator (9CE) to the ELAC 2 (2CE2) (Ref. ASM 27-93/13).
 - a If there is no continuity, repair the wiring.
 - b If there is continuity:
 - do a check and repair the wiring from the relay (36CE1) to the ELAC 2 (2CE2) and to the THS actuator (9CE) and wiring of the fault signal from the THS actuator to the ELAC 2 (2CE2) (Ref. ASM 27-93/13).
- (7) If the fault continues:
- R (a) Replace the pich trim actuator (Ref. AMM TASK 27-44-57-000-001) R (Ref. AMM TASK 27-44-57-400-001).
 - B. Do the tests given in Para. 3.

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TASK 27-93-00-810-838

Failure of the THS Command Transducer 2

1. Possible Causes

- Command Position Transducer
- wiring of the XDCR COM SPLY signal from the THS actuator (9CE) to the first terminal block
- wiring of the XDCR COM V1, V2 signals from the THS actuator (9CE) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|---------------|--|--|--|
| | | | Loss of the ACS1 Signal of the ELAC1 COM Side and SEC1 COM Side | |
| | 31-3 | 2-00-810-933 | Failure of the Analog Links | |
| | AMM | 27-44-56-000-001 | Removal of the Position Transducer from the THS Actuator 9CE | |
| | AMM | 27-44-56-400-001 | Installation of the Position Transducer to the THS Actuator 9CE | |
| | AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| ₹ | | 27-96-00-740-001 27-93/12 27-94/12 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

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(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 1.

- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: THS ACTR XDCR2 9CE

- refer to Para. Fault Isolation.

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(b) If the ground scanning gives at least two maintenance messages of the list below:

L B ELEV POS XDCR 34CE3 COM E1/S1 : USE STBY XDCR R B ELEV POS XDCR 34CE4 COM E1/S1 : USE STBY XDCR THS ACTR XDCR2 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-819).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: THS ACTR XDCR2 9CE
 - replace the Command Position Transducer, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 2-3 analog input signal of the ELAC 1 and SEC 1 (Ref. ASM 27-93/12) and (Ref. ASM 27-94/12).
 - (2) If the fault continues:
 - do a check of the wiring of the XDCR COM SPLY signal from the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-93/12).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check and repair the wiring of the XDCR COM V1, V2 signals from the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-93/12).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-839

Loss of the THS Command Transducer Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring from the ANI 2-3 XDCR COM signal of the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | DESIGNATION | |
|---|--|--|--|
| | 27-90-00-810-811 27-90-00-810-812 27-90-00-810-813 AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-710-022 | Loss of the ACS1 Signal of the ELAC1 COM Side Loss of the ACS1 Signal of the ELAC1 MON Side Loss of the ACS1 of the ELAC1 COM and MON Sides Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Operational Test of the THS Actuator Electrical | |
| R | AMM 27-96-00-740-001 ASM 27-93/12 | Control (Activation for BITE Test) BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 1.

- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
- ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 Second list:
- ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE

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- ELAC1 OR WIRING FROM L ELEV POS MON XDCR
- ELAC1 OR WIRING FROM R ELEV POS MON XDCR
- ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
- ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-811).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-812).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-813).

4. Fault Isolation

 $\ensuremath{\text{\textbf{A.}}}$ If the BITE test gives the maintenance message:

ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring from the ANI 2-3 XDCR COM signal of the ELAC 1 (2CE1) to the first terminal block, (Ref. ASM 27-93/12).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-840

Failure of the THS Monitor Transducer 2

1. Possible Causes

- monitor position transducer
- command position transducer
- wiring of the XDCR MON SPLY signal from the THS actuator (9CE) to the first terminal block
- wiring of the XDCR MON V1, V2 signals from the THS actuator (9CE) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|---------------|------------------|--|--|
| | | Loss of the ACS1 Signal of the ELAC1 MON Side and SEC1 MON Side | |
| 31-3 | 2-00-810-933 | Failure of the Analog Links | |
| AMM | 27-44-56-000-001 | Removal of the Position Transducer from the THS Actuator 9CE | |
| AMM | 27-44-56-400-001 | Installation of the Position Transducer to the THS Actuator 9CE | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-93/12 | G | |
| ASM | 27-94/12 | | |

3. Fault Confirmation

A. Test

R

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 1.

- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: THS ACTR XDCR2 MON 9CE - refer to Para. Fault Isolation.

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- (b) If the ground scanning gives at least two maintenance messages of the list below:
 - L ELEV POS MON XDCR OF ELAC1/SEC1
 - L G ELEV MODE XDCR 34CE1
 - R B ELEV POS MON XDCR OF ELAC1/SEC1
 - R Y ELEV MODE XDCR 34CE2
 - THS ACTR XDCR2 MON 9CE
 - do this trouble shooting procedure (Ref. TASK 27-90-00-810-820).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: THS ACTR XDCR2 MON 9CE
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 2-3 analog input signal of the ELAC 1 and SEC 1 (Ref. ASM 27-93/12) and (Ref. ASM 27-94/12).
 - (1) If the fault continues:
 - replace the monitor position transducer, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (2) If the fault continues:
 - replace the command position transducer, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (3) If the fault continues:
 - do a check of the wiring of the XDCR MON SPLY signal from the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-93/12).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check and repair the wiring of the XDCR MON V1, V2 signals from the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-93/12).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-841

Loss of the THS Monitor Transducer Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring from the ANI 2-3 XDCR MON signal of the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION | |
|-------|------------------|--|--|
| 27-9 | 0-00-810-811 | Loss of the ACS1 Signal of the ELAC1 COM Side | |
| 27-9 | 0-00-810-812 | Loss of the ACS1 Signal of the ELAC1 MON Side | |
| 27-9 | 0-00-810-813 | Loss of the ACS1 of the ELAC1 COM and MON Sides | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| R AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-93/12 | - | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 1.

- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
- ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 Second list:
- ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE

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- ELAC1 OR WIRING FROM L ELEV POS MON XDCR
- ELAC1 OR WIRING FROM R ELEV POS MON XDCR
- ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
- ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-811).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-812).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-813).

4. Fault Isolation

 $\ensuremath{\text{\textbf{A.}}}$ If the BITE test gives the maintenance message:

ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring from the ANI 2-3 XDCR MON signal of the ELAC 1 (2CE1) to the first terminal block, (Ref. ASM 27-93/12).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-842

Failure of the THS Actuator Servo Motor 2

1. Possible Causes

- pitch trim actuator
- wiring of the command signal from the THS actuator (9CE) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------------------|--|
| AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE |
| AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) |
| | 27-96-00-740-001 27-93/12 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 1.

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message:

THS ACTR SERVO MOT2 9CE

- replace the pitch trim actuator, (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the command signal from the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-93/12).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-843

Loss of the Servo Motor 2 Signal on the THS Actuator for the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the ANO 3 signal from the ELAC 1 (2CE1) to the ELAC 1 (2CE1)
- wiring of the K12-1 and 2 signal from the ELAC 1 (2CE1) to the ELAC 1 (2CE1)
- wiring of the K12-1B and 2B signals from the ELAC 1 (2CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|------------|--|---|--|
| R | AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-710-022 27-96-00-740-001 27-93/12 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 1.

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message:

ELAC1 OR WIRING TO THS ACTR SERVO MOT 2 9CE

- replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check of the wiring of the ANO 3 signal from the ELAC 1 (2CE1) to the ELAC 1 (2CE1), (Ref. ASM 27-93/12).
 - (a) If there is no continuity, repair the wiring.

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- (b) If there is continuity:
 - do a check of the wiring of the K12-1 and 2 signal from the ELAC 1 (2CE1) to the ELAC 1 (2CE1), (Ref. ASM 27-93/12).
 - 1 If there is no continuity, repair the wiring.
 - 2 If there is continuity:
 - do a check and repair the wiring of the K12-1B and 2B signals from the ELAC 1 (2CE1) to the first terminal block, (Ref. ASM 27-93/12).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-844

Incorrect Position of the THS for the ELAC 1

1. Possible Causes

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- ELAC-1 (2CE1)
- electronic module N°2 of the picth trim actuator
- monitor position transducer of the THS actuator
- command position transducer of the THS actuator
 - RLY-PITCH TRIM ACTR MOT 2 SPLY (36CE2)
 - wiring from the relay (36CE2) pin A/X2 to the ground
 - wiring from the relay (36CE2) to the ELAC 1 (2CE1)
 - wiring from the relay (36CE2) to the SEC 1 (1CE1)
 - wiring from the THS actuator (9CE) pin B/M to the ground
 - wiring from the relay (36CE2) to the THS actuator (9CE)
 - wiring from the relay (36CE2) A/A2 to the C/B (19CE2)
 - wiring from the XDCR MON MOT 2 (V1, V2) signal
- R wiring from the XDCR COM MOT 2 (V1, V2) signal

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION | |
|------------|------------------------------|--|--|
| IPC | 27920803 | | |
| AMM | 27-44-56-000-001 | Removal of the Position Transducer from the THS Actuator 9CE | |
| AMM | 27-44-56-400-001 | Installation of the Position Transducer to the THS Actuator 9CE | |
| AMM | 27-44-57-000-002 | Removal of the Electronic Modules of the Pitch Trim Actuator | |
| AMM | 27-44-57-400-002 | Installation of the Electronic Modules of the Pitch Trim Actuator | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| AMM ASM | 27-96-00-740-001 27-93/12 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 1.

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(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - THS ACTR POS ERROR 9CE OF ELAC1
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the electronic module N°2 of the picth trim actuator, (Ref. AMM TASK 27-44-57-000-002) and (Ref. AMM TASK 27-44-57-400-002).
 - (2) If the fault continues:
 - replace the monitor position transducer of the THS actuator, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
- R (3) If the fault continues:

R

R

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- replace the command position transducer of the THS actuator, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
- (4) If the fault continues :
 - replace the RLY-PITCH TRIM ACTR MOT 2 SPLY (36CE2) (Ref. IPC 27920803)
- R (5) If the fault continues:
 - do a check of the wiring from the relay (36CE2) pin A/X2 to the ground (Ref. ASM 27-93/12).
 - do a check of the wiring from the relay (36CE2) to the ELAC 1 (2CE1), from the pin A/X1 to the pin AD/15J (Ref. ASM 27-93/12).
 - do a check of the wiring from the relay (36CE2) to the SEC 1 (1CE1), from the pin A/X1 to the pin AE/13E (Ref. ASM 27-93/12).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check of the wiring from the THS actuator (9CE) pin B/M to the ground, (Ref. ASM 27-93/12).
 - do a check of the wiring from the relay (36CE2) to the THS actuator (9CE) from the pin A/A1 to the pin B/K (Ref. ASM 27-93/12).
 - 1 If there is no continuity, repair the wiring.
 - 2 If there is continuity:
 - do a check of the wiring from the relay (36CE2) A/A2 to the C/B (19CE2) (Ref. ASM 27-93/12).
 - a If there is no continuity, repair the wiring.

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- **b** If there is continuity:
 - do a check and repair the wiring from the XDCR MON MOT 2 (V1, V2) signal, of the THS actuator (9CE) to the ELAC 1 (2CE1) (Ref. ASM 27-93/12).
 - do a check and repair the wiring from the XDCR COM MOT 2
 (V1, V2) signal, of the THS actuator (9CE) to the ELAC 1
 (2CE1) (Ref. ASM 27-93/12).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-845

Failure of the THS Actuator Servo Motor 2 for the ELAC 1

1. Possible Causes

- RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2)
- ELAC-1 (2CE1)
- R SEC-1 (1CE1)
 - RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2)
 - Electronic Module 2
 - wiring of K3-1 signal from the ELAC 1 (2CE1) to the first terminal block
 - wiring of the DSI-49 signal from the ELAC 1 (2CE1) to the ELAC 1 (2CE1)
 - wiring of the K3-1B signal from the ELAC 1 (2CE1) to the first terminal block
 - wiring of the relay (36CE2) to the ELAC 1 (2CE1) and to the THS actuator (9CE)
 - wiring of the fault signal from the ELAC 1 (2CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | 32-00-810-932 | Failure of the Discrete Links | |
| 31-3 | 32-00-810-933 | Failure of the Analog Links | |
| IPC | 27920803020 | | |
| AMM | 27-44-57-000-002 | Removal of the Electronic Modules of the Pitch Trim Actuator | |
| AMM | 27-44-57-400-002 | Installation of the Electronic Modules of the Pitch Trim Actuator | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical | |
| | | Control (Activation for BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-93/12 | • | |
| ASM | 27-93/13 | | |
| ASM | 27-94/12 | | |
| ASM | 27-94/13 | | |

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3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the ELAC 1.

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: Wait 60 seconds before you start the BITE test.

4. Fault Isolation

- A. If the BITE test gives the maintenance message: THS ACTR SERVO MOT2 9CE OF ELAC1
 - (1) Remove the RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2) (Ref. IPC 27920803020).
 - (2) Do a check of the resistance between pin X1 and X2 of the relay.
 - (a) if the resisance is less than 280 ohms:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2).
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) (Ref. AMM TASK 27-93-34-400-001).
 - (b) If the resistance is more than 400 ohms:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2).
 - (c) If the resistance is between 280 and 400 ohms:
 - install the RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2)
 - see Para (3).
 - (3) If the fault continues:
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (4) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DSI 24 discret input signal of the ELAC 1 and SEC 1 (Ref. ASM 27-93/12) (Ref. ASM 27-94/12) (Ref. ASM 27-94/13) and
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 2-3 analog input signal of the ELAC 1 and SEC 1 (Ref. ASM 27-93/12) and (Ref. ASM 27-94/12).
 - (5) If the fault continues:
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

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- R (6) If the fault continues:
 - replace the RELAY-PITCH TRIM ACTUATOR MOTOR 2 SPLY (36CE2) Ref. IPC 27920803.
- R (7) If the fault continues:
 - replace the Electronic Module 2, (Ref. AMM TASK 27-44-57-000-002) and (Ref. AMM TASK 27-44-57-400-002).
- R (8) If the fault continues:
 - do a check of the wiring of K3-1 signal from the ELAC 1 (2CE1) to the first terminal block COM part and MON part (Ref. ASM 27-93/12).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check of the wiring of the DSI-49 signal from the ELAC 1 (2CE1) to the ELAC 1 (2CE1) COM part and MON part (Ref. ASM 27-93/12).
 - 1 If there is no continuity, repair the wiring.
 - 2 If there is continuity:
 - do a check of the wiring of the K3-1B signal from the ELAC 1 (2CE1) to the first terminal block, (Ref. ASM 27-93/12).
 - a If there is no continuity, repair the wiring.
 - b If there is continuity:
 - do a check and repair the wiring of the relay (36CE2) to the ELAC 1 (2CE1) and to the THS actuator (9CE), wiring of the fault signal from the ELAC 1 (2CE1) to the first terminal block, (Ref. ASM 27-93/12).
 - B. Do the tests given in Para. 3.

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TASK 27-93-00-810-846

Loss of the ADR 1 BUS 3 for the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the DGI O6 signal from the ELAC 1 (2CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|--|--|
| | | |
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs | |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator | |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM 27-92/50 | | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message:

ELAC1 COM OR BUS3 FROM ADR1

OL

ELAC1 MON OR BUS3 FROM ADR1

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 06 signal from the ELAC
 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-92/50).

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| R R | (2) | <pre>If the fault continues: do the following trouble shooting procedures.</pre> |
|--------|--------|---|
| R R | | (a) Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator (Ref. TASK 34-11-00-810-870) |
| R R | | (b) Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD (Ref. TASK 34-13-00-810-998) |
| R R | | (c) Different Angle of Attack Value on the three ADIRUs (Ref. TASK 34-11-00-810-861). |
| | B Do s | the test given in Pasa 3 |

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TASK 27-93-00-810-847

Loss of the ADR 1 BUS 2 for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the DGI 07 signal from the ELAC 2 (2CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|--------------------------------------|--|--|
| 7/ // 00 0/0 0// | | |
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs | |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator | |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-740-001 ASM 27-92/52 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - ELAC2 COM OR BUS2 FROM ADR1
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 07 signal from the ELAC
 2 (2CE2) to the first terminal block, COM part only (Ref. ASM 27-92/52).

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| R | (2) | If the fault continues: |
|---|------|--|
| R | | - do the following trouble shooting procedures. |
| R | | (a) Airspeed Discrepancy on the PFD or on the Standby Airspeed |
| R | | Indicator (Ref. TASK 34-11-00-810-870) |
| R | | (b) Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| R | | (Ref. TASK 34-13-00-810-998) |
| R | | (c) Different Angle of Attack Value on the three ADIRUs (Ref. TASK |
| R | | 34-11-00-810-861). |
| | B Do | the test given in Para 3 |

B. Do the test given in Para. 3

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TASK 27-93-00-810-848

Loss of the ADR 2 BUS 3 for the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the DGI 07 signal from the ELAC 1 (2CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|--------------------------------------|--|--|
| | | |
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs | |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator | |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-740-001 ASM 27-92/50 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

R

4. Fault Isolation

- A. If the BITE test gives the maintenance message: ADR2 OR BUS3 TO ELAC1
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 07 signal from the ELAC
 1 (2CE1) to the first terminal block, MON part only (Ref. ASM 27-92/50).

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| R | (2) | If the fault continues: |
|---|--------|--|
| R | | - do the following trouble shooting procedures. |
| R | | (a) Airspeed Discrepancy on the PFD or on the Standby Airspeed |
| R | | Indicator (Ref. TASK 34-11-00-810-870) |
| R | | (b) Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| R | | (Ref. TASK 34-13-00-810-998) |
| R | | (c) Different Angle of Attack Value on the three ADIRUs (Ref. TASK |
| R | | 34-11-00-810-861). |
| | B 00 1 | the test given in Page 7 |

B. Do the test given in Para. 3.

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TASK 27-93-00-810-849

Loss of the ADR 2 BUS 2 for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the DGI 07 signal from the ELAC 2 (2CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|--------------------------------------|--|--|
| 7/ // 00 0/0 0// | | |
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs | |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator | |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-740-001 ASM 27-92/52 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

R

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - ELAC2 MON OR BUS2 FROM ADR2
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 07 signal from the ELAC
 2 (2CE2) to the first terminal block, MON part only (Ref. ASM 27-92/52).

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| R R | (2) | <pre>If the fault continues: do the following trouble shooting procedures.</pre> |
|--------|--------|---|
| R R | | (a) Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator (Ref. TASK 34-11-00-810-870) |
| R R | | (b) Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD (Ref. TASK 34-13-00-810-998) |
| R R | | (c) Different Angle of Attack Value on the three ADIRUs (Ref. TASK 34-11-00-810-861). |
| | B Do s | the test given in Pasa 3 |

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TASK 27-93-00-810-850

Loss of the ADR 3 BUS 3 for the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the DGI 07 signal from the ELAC 1 (2CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|--------------------------------------|--|--|
| | | |
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs | |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator | |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-740-001 ASM 27-92/50 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

R

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - ELAC1 COM OR BUS3 FROM ADR3
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 07 signal from the ELAC
 1 (2CE1) to the first terminal block, COM part only (Ref. ASM 27-92/50).

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| R | (2) | If the fault continues: |
|---|-------|--|
| R | | - do the following trouble shooting procedures. |
| R | | (a) Airspeed Discrepancy on the PFD or on the Standby Airspeed |
| R | | Indicator (Ref. TASK 34-11-00-810-870) |
| R | | (b) Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| R | | (Ref. TASK 34-13-00-810-998) |
| R | | (c) Different Angle of Attack Value on the three ADIRUs (Ref. TASK |
| R | | 34-11-00-810-861). |
| | B. Do | the test given in Para. 3. |

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TASK 27-93-00-810-851

Loss of the ADR 3 BUS 2 for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the DGI O6 signal from the ELAC 2 (2CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--------------------------------------|--|
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-740-001 ASM 27-92/52 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

R

4. Fault Isolation

A. If the BITE test gives the maintenance message:

ELAC2 COM OR BUS2 FROM ADR3

or

ELAC2 MON OR BUS2 FROM ADR3

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 06 signal from the ELAC 2 (2CE2) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-92/52).

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| R | (2) | If the fault continues: |
|---|------|--|
| R | | - do the following trouble shooting procedures. |
| R | | (a) Airspeed Discrepancy on the PFD or on the Standby Airspeed |
| R | | Indicator (Ref. TASK 34-11-00-810-870) |
| R | | (b) Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| R | | (Ref. TASK 34-13-00-810-998) |
| R | | (c) Different Angle of Attack Value on the three ADIRUs (Ref. TASK |
| R | | 34-11-00-810-861). |
| | R Do | the test given in Para 3 |

B. Do the test given in Para. 3.

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TASK 27-93-00-810-852

Loss of the IR 1 BUS 3 for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGI 02 signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|------------|--|--|--|
| R | AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-92/50 | | |

- 3. Fault Confirmation
 - A. Test

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- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 COM OR BUS3 FROM IR1 $\,$

ELAC1 MON OR BUS3 FROM IR1

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 02 signal from the ELAC
 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-92/50).

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B. Do the test given in Para. 3.

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TASK 27-93-00-810-853

Loss of the IR 1 BUS 2 for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGI 03 signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|------------|--|--|--|
| R | AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 27-92/52 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 COM OR BUS2 FROM IR1
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 03 signal from the ELAC
 2 (2CE2) to the first terminal block, COM part only (Ref. ASM 27-92/52).
 - B. Do the test given in Para. 3.

EFF: ALL 27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-854

Loss of the IR 2 BUS 3 for the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- ADIRU-2 (1FP2)
- wiring of the DGI 03 signal from the ELAC 1 (2CE1) to the first terminal block
- wiring of the INERTIAL REFERENCE OUTPUT BUS 3 from the ADIRU2 (1FP2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| 31-32-00-810-934 AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 AMM 34-12-34-000-001 AMM 34-12-34-400-001 ASM 27-92/50 | Failure of the Digital Links Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) Removal of the ADIRU (1FP1, 1FP2, 1FP3) Installation of the ADIRU (1FP1, 1FP2, 1FP3) |

3. Fault Confirmation

A. Test

R

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message:

IR2 OR BUS3 TO ELAC1

and on the upper ECAM DU, the INOP SYS CAT 3 DUAL warning does not come into view:

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 03 signal from the ELAC
 1 (2CE1) to the first terminal block, MON part only (Ref. ASM 27-92/50).

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B. If the BITE test gives the maintenance message: IR2 or BUS3 to ELAC1

and on the upper ECAM DU, the INOP SYS CAT 3 DUAL warning comes into view:

- replace the ADIRU-2 (1FP2) (Ref. AMM TASK 34-12-34-000-001) and (Ref. AMM TASK 34-12-34-400-001).
- (1) If the fault continues:
 - (a) Remove the ADIRU2.
 - (b) Do a check of the wiring of the INERTIAL REFERENCE OUTPUT BUS 3 from the ADIRU2 (1FP2) to the first terminal block.
 - 1 If there is no continuity:
 - a Repair it.
 - b Install the ADIRU2.
 - 2 If there is continuity:
 - a Install the ADIRU2.
 - <u>b</u> Do the trouble shooting procedure that follows (Ref. TASK 31-32-00-810-934).
- C. Do the test given in Para. 3.

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TASK 27-93-00-810-855

Loss of the IR 2 BUS 2 for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGI 03 signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|------------|--|--|--|
| R | AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 27-92/52 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC2 MON OR BUS2 FROM IR2

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 03 signal from the ELAC
 2 (2CE2) to the first terminal block, MON part only (Ref. ASM 27-92/52).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-856

Loss of the IR 3 BUS 3 for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGI 03 signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-92/50 | | |

- 3. Fault Confirmation
 - A. Test

SROS

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC1 COM OR BUS3 FROM IR3

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 03 signal from the ELAC
 1 (2CE1) to the first terminal block COM part only (Ref. ASM 27-92/50).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-857

Loss of the IR 3 BUS 2 for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGI 02 signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|------------|--|--|--|
| R | AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 27-92/52 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test

SROS

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 COM OR BUS2 FROM IR3

ELAC2 MON OR BUS2 FROM IR3

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 02 signal from the ELAC
 2 (2CE2) to the first terminal block COM or MON part as shown in the maintenance message (Ref. ASM 27-92/52).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-858

Loss of the Signal of the Left Blue Elevator-Servocontrol Position-Transducer by the ELAC ${\bf 1}$

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the POS XDCR COM (ANI 2-1) signal from the ELAC 1 (2CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | DESIGNATION | |
|---|--|---|--|
| | 27-90-00-810-811 | Loss of the ACS1 Signal of the ELAC1 COM Side | |
| | 27-90-00-810-812 27-90-00-810-813 | Loss of the ACS1 Signal of the ELAC1 MON Side Loss of the ACS1 of the ELAC1 COM and MON Sides | |
| | AMM 27-93-34-000-001 AMM 27-93-34-400-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) | |
| | AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| R | AMM 27-96-00-740-001 ASM 27-93/07 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
- ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 Second list:
- ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L ELEV POS MON XDCR

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- ELAC1 OR WIRING FROM R ELEV POS MON XDCR
- ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
- ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-811).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-812).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-813).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC 1 OR WIRING FROM L B ELEV POS XDCR 34CE3

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR COM (ANI 2-1) signal from the ELAC 1 (2CE1) to the first terminal block (Ref. ASM 27-93/07).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-859

Loss of the Signal of the Left Elevator Position-Transducer (MON) by the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the POS XDCR MON (ANI 2-1) signal from the ELAC 1 (2CE1) MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|----------------------------|--|---|--|
| | 27-9 27-9 AMM AMM | 0-00-810-811 0-00-810-812 0-00-810-813 27-93-34-000-001 27-93-34-400-001 27-96-00-710-020 | Loss of the ACS1 Signal of the ELAC1 COM Side Loss of the ACS1 Signal of the ELAC1 MON Side Loss of the ACS1 of the ELAC1 COM and MON Sides Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| R | | 27-96-00-740-001 27-93/07 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC1 OR WIRING FROM L ELEV POS MON XDCR - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
- ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 Second list:
- ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L ELEV POS MON XDCR
- ELAC1 OR WIRING FROM R ELEV POS MON XDCR

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- ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
- ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
- <u>1</u> First case: Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-811).
- Second case: Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-812).
- Third case: Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-813).

4. Fault Isolation

- A. If the test gives the maintenance message: ELAC1 OR WIRING FROM L ELEV POS MON XDCR
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR MON (ANI 2-1) signal from the ELAC 1 (2CE1) MON part to the first terminal block (Ref. ASM 27-93/07).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-860

Loss of the Signal of the Left Blue Elevator-Servocontrol Servovalve by the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- SERVO CTL-L ELEVATOR, OUTBD B (34CE3)
- servovalve
- wiring of the L ELEV SV (ANO 1) signal from the ELAC 1 (2CE1) COM part, pins AB/2E, 2D to the ELAC 1 COM part, pins AA/2H, 2G
- wiring from the ELAC 1 (2CE1) COM part to the MON part
- wiring from the ELAC 1 (2CE1) MON part, pins AD/3C, 4C to the first terminal block
- wiring of the LVDT SV SPLY signal
- wiring of the LVDT POS (ANI 3-1) signal

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|------------|------------------------------|--|--|
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control | |
| AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve | |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control | |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM ASM | 27-96-00-740-001 27-93/07 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

ALL

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

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R

- A. If the test gives the maintenance message: ELAC 1 COM OR WIRING TO L B ELEV SERVO VLV 34CE3
- R replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
 - (2) If the fault continues:
- R (a) Do a check of the wiring of the L ELEV SV (ANO 1) signal from the ELAC 1 (2CE1) COM part, pins AB/2E, 2D to the ELAC 1 COM part, pins AA/2H, 2G (Ref. ASM 27-93/07):
 - if there is continuity see Para. (b)
 - if there is no continuity repair the above wiring.
 - (b) Do a check of the wiring from the ELAC 1 (2CE1) COM part to the MON part from pins AA/2J, 2K to pins AD/3A, 4A (Ref. ASM 27-93/07):
 - if there is continuity see Para. (c)
 - if there is no continuity repair the above wiring.
 - (c) Do a check of the wiring from the ELAC 1 (2CE1) MON part, pins AD/3C, 4C to the first terminal block (Ref. ASM 27-93/07).
 - if there is continuity see Para. (d)
 - if there is no continuity repair the above wiring.
 - (d) Do a check of the wiring of the LVDT SV SPLY signal, from the servocontrol (34CE3) to the first terminal block (Ref. ASM 27-93/07).
 - if there is continuity see Para. (e)
 - if there is no continuity repair the above wiring.
 - (e) Do a check of the wiring of the LVDT POS (ANI 3-1) signal, from the ELAC 1 (2CE1) MON part to the servocontrol (34CE3) (Ref. ASM 27-93/07).
 - if there is continuity see Para. (3)
 - if there is no continuity repair the above wiring.
- R (3) Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-R 34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - B. Do the test given in Para. 3.

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TASK 27-93-00-810-861

Loss of the Signal of the Left Blue Elevator-Servocontrol Servovalve by the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- XDCR UNIT-ELEV POS, L (49CE1)
- SERVO CTL-L ELEVATOR, OUTBD B (34CE3)
- servovalve
- wiring of the POS XDCR (ANI 3-1) signal from the ELAC 1 (2CE1) to the first terminal block
- wiring of the POS XDCR MON signal from the transducer unit (49CE1) to the ELAC 1 (2CE1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|---------------|------------------|--|--|
| | | Failure of the Analog Links | |
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control | |
| AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve | |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control | |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve | |
| AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 | |
| AMM | 27-92-13-400-001 | Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2 | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-93/07 | • | |
| ASM | 27-94/07 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the test gives the maintenance message: ELAC 1 MON OR WIRING TO L B ELEV SERVO VLV 34CE3
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 3-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (1) If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - (a) replace the XDCR UNIT-ELEV POS, L (49CE1) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - (3) If the fault continues:
 - (a) Replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
 - (4) If the fault continues:
 - (a) Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001)
 - (5) If the fault continues:
 - (a) do a check of the wiring of the POS XDCR (ANI 3-1) signal from the ELAC 1 (2CE1) to the first terminal block (Ref. ASM 27-93/07).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Repair the wiring of the POS XDCR MON signal from the transducer unit (49CE1) to the ELAC 1 (2CE1) (Ref. ASM 27-93/07).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-862

Loss of the Signal of the Left Blue Elevator-Servocontrol Mode-Transducer by the ELAC $\mathbf 2$

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the MODE XDCR (ANI 7-1) signal from the ELAC 2 (2CE2) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 27-90-00-810-814 | Loss of the ACS1 Signal of the ELAC2 COM Side |
| 27-90-00-810-815 | Loss of the ACS1 Signal of the ELAC2 MON Side |
| 27-90-00-810-816 | Loss of the ACS1 of the ELAC2 COM and MON Sides |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/08 | _ |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
- ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 Second list:
- ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L ELEV POS MON XDCR

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- ELAC2 OR WIRING FROM R ELEV POS MON XDCR
- ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
- ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-814).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-815).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-816).

4. Fault Isolation

- A. If the test gives the maintenance message: ELAC 2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the MODE XDCR (ANI 7-1) signal from the ELAC 2 (2CE2) MON part to the first terminal block (Ref. ASM 27-93/08).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-863

Failure of the Left Blue Elevator Servocontrol Actuator Solenoid Valve

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- RELAY-THS MOT 3 INHIBITION 1 (51CE)
- RELAY-THS MOT 3 INHIBITION 2 (52CE)
- ELAC-2 (2CE2)
- SERVO CTL-L ELEVATOR, OUTBD B (34CE3)
- solenoid valve of the servocontrol 34CE3
- wiring of the SOL VLV1 signal from the servocontrol (34CE3) to the ELAC2 (2CE2)
- wiring from the ELAC2 (2CE2) COM part to the ELAC2 COM part
- wiring from the ELAC2 (2CE2) COM part to the ELAC2 MON part
- wiring from the ELAC2 (2CE2) MON part pins AE/13A and AE/10C to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| IPC 2 | 27920803 | | |
| AMM 2 | 27-34-51-000-001 | Removal of the Elevator Servo Control | |
| AMM 2 | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator | |
| | | Solenoid Valve | |
| AMM 2 | 27-34-51-400-001 | Installation of the Elevator Servo Control | |
| AMM 2 | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator | |
| | | Solenoid Valve | |
| AMM 2 | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 2 | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 2 | 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | | (Activation for the BITE Test) | |
| AMM 2 | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM 2 | 27-93/08 | | |
| | | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the tests give the maintenance message L B ELEV MODE VLV 34CE3:
 - (1) Remove RELAY-THS MOT 3 INHIBITION 1 (51CE) and RELAY-THS MOT 3 INHIBITION 2 (52CE) (Ref. IPC 27920803).
 - (2) Do a check of the resistance between pins X1 and X2 of the relays.
 - (a) If the resistance is less than 280 ohms:
 - replace the RELAY-THS MOT 3 INHIBITION 1 (51CE) and/or RELAY-THS MOT 3 INHIBITION 2 (52CE).
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001), (Ref. AMM TASK 27-93-34-400-001).
 - (b) If the resistance is more than 400 ohms:
 - replace the RELAY-THS MOT 3 INHIBITION 1 (51CE) and/or RELAY-THS MOT 3 INHIBITION 2 (52CE).
 - (c) If the resistance is between 280 and 400 ohms:
 - install the RELAY-THS MOT 3 INHIBITION 1 (51CE) and RELAY-THS MOT 3 INHIBITION 2 (52CE).
 - see Para (3).
 - (3) If the fault continues:
 - (4) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001).
 - (5) At the ELAC2 receptacle, do a check of the resistance between the pin AB/14J and the pin AE/14A (Ref. ASM 27-93/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 0hms:
 - at the outboard elevator servocontrol (34CE3), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - a Replace the solenoid valve of the servocontrol 34CE3 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the outboard elevator servocontrol (34CE3) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:

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- . Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
- Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- If the resistance values are in the specified limits:
 Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE3) to the ELAC2 (2CE2), from the pin C/K to the pin AB/14J and from the pin C/L to the pin AE/14A (Ref. ASM 27-93/08):
 - \underline{b} Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is more than 100 Ohms:
 - at the outboard elevator servocontrol (34CE3), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - \underline{a} Replace the solenoid valve of the servocontrol 34CE3 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the outboard elevator servocontrol (34CE3) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE3) to the ELAC2 (2CE2), from the pin C/K to the pin AB/14J and from the pin C/L to the pin AE/14A (Ref. ASM 27-93/08):
 - b Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).

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- (c) If the resistance values are in the specified limits:
 See Para. (6).
- (6) At the ELAC 2 receptacle, do a check of the insulation between pin AB/14J (pin AE/14A) and the ground (Ref. ASM 27-93/08).

NOTE: The resistance must be more than 100 Megohms.

- (a) If the resistance is more than 100 Megohms:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 1 If the fault continues:
 - replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - 2 If the fault continues:
 - replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - do a check of the wiring from the ELAC2 (2CE2) COM part to the ELAC2 COM part, from the pin AB/13J to the pin AB/12F (Ref. ASM 27-93/08):
 - a If the wiring is correct, see Para. 4
 - b If the wiring is not correct:
 - repair it
 - install the ELAC2 (Ref. AMM TASK 27-93-34-400-001)
 - do a check of the wiring from the ELAC2 (2CE2) COM part to the ELAC2 MON part, from the pin AB/12E to the pin AE/10D (Ref. ASM 27-93/08):
 - a If the wiring is correct, see Para. 5
 - b If the wiring is not correct:
 - repair it
 - install the ELAC2 (Ref. AMM TASK 27-93-34-400-001)
 - 5 do a check and repair the wiring from the ELAC2 (2CE2) MON part pins AE/13A and AE/10C to the first terminal block (Ref. ASM 27-93/08):
 - 6 Install the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is less than 100 Megohms:
 - at the SERVO CTL-L ELEVATOR, OUTBD B (34CE3), do a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground.

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- 1 If the resistance is less than 100 Megohms:
 - replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>a</u> Do again a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground. If the resistance is less than 100 Megohms:
 - . Replace the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance is more than 100 Megohms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-L ELEVATOR, OUTBD B (34CE3) to the ELAC-2 (2CE2)
 - b Replace the ELAC-2 (2CE2).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-864

Loss of the Signal of the Left Green Elevator-Servocontrol Position-Transducer by the ELAC $\mathbf 2$

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the POS RVDT COM (ANI 2-1) signal from the ELAC 2 (2CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 27-90-00-810-814 | Loss of the ACS1 Signal of the ELAC2 COM Side |
| 27-90-00-810-815 | Loss of the ACS1 Signal of the ELAC2 MON Side |
| 27-90-00-810-816 | Loss of the ACS1 of the ELAC2 COM and MON Sides |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/08 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
- ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 Second list:
- ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L ELEV POS MON XDCR

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- ELAC2 OR WIRING FROM R ELEV POS MON XDCR
- ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
- ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-814).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-815).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-816).

4. Fault Isolation

- A. If the test gives the maintenance message: ELAC 2 OR WIRING FROM L G ELEV POS XDCR 34CE1
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the POS RVDT COM (ANI 2-1) signal from the ELAC 2 (2CE2) to the first terminal block (Ref. ASM 27-93/08).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-865

Loss of the Signal of the Left Elevator Position Transducer (MON) by the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the POS RVDT MON (ANI 2-1) signal from the ELAC 2 (2CE2) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 27-90-00-810-814 | Loss of the ACS1 Signal of the ELAC2 COM Side |
| 27-90-00-810-815 | Loss of the ACS1 Signal of the ELAC2 MON Side |
| 27-90-00-810-816 | Loss of the ACS1 of the ELAC2 COM and MON Sides |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/08 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC2 OR WIRING FROM L ELEV POS MON XDCR - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
- ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 Second list:
- ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L ELEV POS MON XDCR
- ELAC2 OR WIRING FROM R ELEV POS MON XDCR

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- ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
- ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-814).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-815).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-816).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC 2 OR WIRING FROM L ELEV POS MON XDCR

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the POS RVDT MON (ANI 2-1) signal from the ELAC 2 (2CE2) MON part to the first terminal block (Ref. ASM 27-93/08).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-866

Loss of the Signal of the Left Green Elevator-Servocontrol Servovalve by the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- SERVO CTL-L ELEVATOR, INBD G (34CE1)
- servovalve
- wiring of the L ELEV SV (ANO 1) signal from the ELAC 2 (2CE2) COM part, pins AB/2E, 2D to the ELAC 2 COM part, pins AA/2H, 2G
- wiring from the ELAC 2 (2CE2) COM part to the MON part
- wiring from the ELAC 2 (2CE2) MON part, pins AD/3C, 4C to the first terminal block
- wiring of the SV XDCR SPLY signal
- wiring of the POS XDCR (ANI 3-1) signal

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|------------------------------|--|
| | | |
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-93/08 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

| R | | | |
|------------------|----|--------------|--|
| R R R | Α. | ELAC - re | he test gives the maintenance message: 2 COM OR WIRING TO L G ELEV SERVO VLV 34CE1 place the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. M TASK 27-93-34-400-001). |
| R R R | | (1) | If the fault continues: - replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003). |
| R | | (2) | If the fault continues: |
| R R R R | | | (a) Do a check of the wiring of the L ELEV SV (ANO 1) signal from the ELAC 2 (2CE2) COM part, pins AB/2E, 2D to the ELAC 2 COM part, pins AA/2H, 2G (Ref. ASM 27-93/08): if there is continuity see Para. (b) if there is no continuity repair the above wiring. |
| R R R | | | (b) Do a check of the wiring from the ELAC 2 (2CE2) COM part to the MON part from pins AA/2J, 2K to pins AD/3A, 4A (Ref. ASM 27-93/08): if there is continuity see Para. (c) if there is no continuity repair the above wiring. |
| R R R | | | (c) Do a check of the wiring from the ELAC 2 (2CE2) MON part, pins AD/3C, 4C to the first terminal block (Ref. ASM 27-93/08). if there is continuity see Para. (d) if there is no continuity repair the above wiring. |
| R R | | | (d) Do a check of the wiring of the SV XDCR SPLY signal, from the servocontrol (34CE1) to the first terminal block (Ref. ASM 27- 93/08). |
| R R | | | if there is continuity see Para. (e)if there is no continuity repair the above wiring. |
| R R | | | (e) Do a check of the wiring of the POS XDCR (ANI 3-1) signal, from the ELAC 2 (2CE2) MON part to the servocontrol (34CE1) (Ref. ASM 27-93/08). |
| R R | | | if there is continuity see Para. (3)if there is no continuity repair the above wiring. |
| R R R | | | Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001). |

B. Do the test given in Para. 3.

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TASK 27-93-00-810-867

Loss of the Signal of the Green Elevator-Servocontrol Servovalve by the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- XDCR UNIT-ELEV POS, L (49CE1)
- SERVO CTL-L ELEVATOR, INBD G (34CE1)
- ANI 3-X analog input signal of the ELAC MON and SEC MON
- servovalve
- wiring of the LVDT POS (ANI 3-1) signal from the ELAC 2 (2CE2) to the first terminal block
- wiring of the POS RVDT MON signal from the transducer unit (49CE1) to the ELAC 2 (2CE2)

2. Job Set-up Information

A. Referenced Information

| | 31-32-00-810-933 AMM 27-34-51-000-001 | | DESIGNATION |
|--------|--|--------------------------------------|--|
| | | | Failure of the Analog Links Removal of the Elevator Servo Control Removal of the Elevator Servo Control Actuator Servo |
| | AMM AMM | 27-34-51-400-001 27-34-51-400-003 | Valve Installation of the Elevator Servo Control Installation of the Elevator Servo Control Actuator Servo Valve |
| R R | AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| R R | AMM | 27-92-13-400-001 | Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-93/08 | |
| | ASM | 27-94/08 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the test gives the maintenance message: ELAC 2 MON OR WIRING TO L G ELEV SERVO VLV 34CE1
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 3-X analog input signal of the ELAC MON and SEC MON (Ref. ASM 27-93/08) and (Ref. ASM 27-94/08).
 - (1) If the fault continues:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - (a) replace the XDCR UNIT-ELEV POS, L (49CE1) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - (3) If the fault continues:
 - (a) Replace the servovalve, (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
 - (4) If the fault continues:
 - (a) Replace the servocontrol SERVO CTL-L ELEVATOR, INBD G (34CE1), (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - (5) If the fault continues:
 - (a) do a check of the wiring of the LVDT POS (ANI 3-1) signal from the ELAC 2 (2CE2) to the first terminal block (Ref. ASM 27-93/08).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Repair the wiring of the POS RVDT MON signal from the transducer unit (49CE1) to the ELAC 2 (2CE2) (Ref. ASM 27-93/08).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-868

Loss of the Left Green Elevator-Servocontrol Mode-Transducer by the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the MODE XDCR (ANI 7-1) signal from the ELAC 1 (2CE1) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 27-90-00-810-811 | Loss of the ACS1 Signal of the ELAC1 COM Side |
| 27-90-00-810-812 | Loss of the ACS1 Signal of the ELAC1 MON Side |
| 27-90-00-810-813 | Loss of the ACS1 of the ELAC1 COM and MON Sides |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/07 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
- ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 Second list:
- ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L ELEV POS MON XDCR
- ELAC1 OR WIRING FROM R ELEV POS MON XDCR

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- ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
- ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-811).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-812).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-813).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC 1 OR WIRING TO L G ELEV MODE XDCR 34CE1

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the MODE XDCR (ANI 7-1) signal from the ELAC 1 (2CE1) MON part to the first terminal block (Ref. ASM 27-93/07).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-869

Failure of the Left Green Elevator Servocontrol Actuator Solenoid Valve

<u>CAUTION</u>: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-L ELEVATOR, INBD G (34CE1)
- ELAC-1 (2CE1)
- solenoid valve of the servocontrol 34CE1
- wiring of the SOL VLV1 signal from the servocontrol (34CE1) to the ELAC1 (2CE1)
- wiring from the ELAC1 (2CE1) COM part to the ELAC1 COM part
- wiring from the ELAC1 (2CE1) COM part to the ELAC1 MON part
- wiring from the ELAC1 (2CE1) MON part pins AE/13A and AE/10C to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION | |
|------------|------------------------------|--|--|
| | 27 7/ 54 000 004 | Daniel of the Flancker Control | |
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control | |
| AMM | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator Solenoid Valve | |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control | |
| AMM | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator Solenoid Valve | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM ASM | 27-96-00-740-001 27-93/07 | BITE Test of the EFCS (Ground Scanning) | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC2 pushbutton switch (on this pushbutton switch, the OFF legend comes on).

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(2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the tests give the maintenance message L G ELEV MODE VLV 34CE1:
 - (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001).
 - (2) At the ELAC1 receptacle, do a check of the resistance between the pin AB/14J and the pin AE/14A (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 0hms:
 - at the inboard elevator servocontrol (34CE1), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE1 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the inboard elevator servocontrol (34CE1) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits:
 Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE1) to the ELAC1 (2CE1), from the pin C/K to the pin AB/14J and from the pin C/L to the pin AE/14A (Ref. ASM 27-93/07):
 - <u>b</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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- (b) If the resistance is more than 100 Ohms:
 - at the inboard elevator servocontrol (34CE1), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE1 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the inboard elevator servocontrol (34CE1) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE1) to the ELAC1 (2CE1), from the pin C/K to the pin AB/14J and from the pin C/L to the pin AE/14A (Ref. ASM 27-93/07):
 - b Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- (c) If the resistance values are in the specified limits:
 See Para.(3).
- (3) At the ELAC 1 receptacle, do a check of the insulation between pin AB/14J (pin AE/14A) and the ground.

NOTE: The resistance must be more than 100 Megohms.

- (a) If the resistance is more than 100 Megohms:
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - If the fault continues: Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - If the fault continues: Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

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- do a check of the wiring from the ELAC1 (2CE1) COM part to the ELAC1 COM part, from the pin AB/13J to the pin AB/12F (Ref. ASM 27-93/07):
 - a If the wiring is correct, see Para. 4
 - b If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001)
- do a check of the wiring from the ELAC1 (2CE1) COM part to the ELAC1 MON part, from the pin AB/12E to the pin AE/10D (Ref. ASM 27-93/07):
 - a If the wiring is correct, see Para. 5_
 - b If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001)
- 5 do a check and repair the wiring from the ELAC1 (2CE1) MON part pins AE/13A and AE/10C to the first terminal block (Ref. ASM 27-93/07):
- 6 Install the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is less than 100 Megohms:
 - at the SERVO CTL-L ELEVATOR, INBD G (34CE1), do a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground.
 - 1 If the resistance is less than 100 Megohms: Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground. If the resistance is less than 100 Megohms:
 - . Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the resistance is more than 100 Megohms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-L ELEVATOR, INBD G (34CE1) to the ELAC-1 (2CE1).
 - <u>b</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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B. Do the test given in Para. 3.

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TASK 27-93-00-810-870

Loss of the Signal of the Left Green Elevator-Servocontrol Solenoid Valve by the ELAC 1

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-L ELEVATOR, INBD G (34CE1)
- ELAC-1 (2CE1)
- ELAC-2 (2CE2)
- solenoid valve of the servocontrol 34CE1
- wiring of the SOL VLV1 signal from the servocontrol (34CE1) to the ELAC1 (2CE1)
- wiring from the ELAC1 (2CE1) COM part to the ELAC1 COM part
- wiring from the ELAC1 (2CE1) COM part to the ELAC1 MON part
- wiring from the ELAC1 (2CE1) MON part pins AE/13A and AE/10C to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| AMM | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator Solenoid Valve |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator Solenoid Valve |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-93/07 | |
| ASM | 27-93/08 | |

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3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 2 pushbutton switch (on this pushbutton switch the OFF legend comes on).

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the tests give the maintenance message ELAC1 OR WIRING TO L G ELEV SOL VLV 34CE1:
 - (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001).
 - (2) At the ELAC1 receptacle, do a check of the resistance between the pin AB/14J and the pin AE/14A (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the inboard elevator servocontrol (34CE1), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - a Replace the solenoid valve of the servocontrol 34CE1 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the inboard elevator servocontrol (34CE1) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE1) to the ELAC1 (2CE1), from the pin C/K to the pin AB/14J and from the pin C/L to the pin AE/14A (Ref. ASM 27-93/07):
 - \underline{b} Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is more than 100 Ohms:
 - at the inboard elevator servocontrol (34CE1), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE1 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the inboard elevator servocontrol (34CE1) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE1) to the ELAC1 (2CE1), from the pin C/K to the pin AB/14J and from the pin C/L to the pin AE/14A (Ref. ASM 27-93/07):
 - b Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- (c) If the resistance values are in the specified limits: - See Para.(3).
- (3) At the ELAC 1 receptacle, do a check of the insulation between pin AB/14J (pin AE/14A) and the ground.

NOTE: The resistance must be more than 100 Megohms.

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- (a) If the resistance is more than 100 Megohms:
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - If the fault continues: Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - 2 If the fault continues: Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - do a check of the wiring from the ELAC1 (2CE1) COM part to the ELAC1 COM part, from the pin AB/13J to the pin AB/12F (Ref. ASM 27-93/07):
 - a If the wiring is correct, see Para. 4
 - b If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001)
 - do a check of the wiring from the ELAC1 (2CE1) COM part to the ELAC1 MON part, from the pin AB/12E to the pin AE/10D (Ref. ASM 27-93/07):
 - a If the wiring is correct, see Para. 5
 - b If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001)
 - 5 do a check and repair the wiring from the ELAC1 (2CE1) MON part pins AE/13A and AE/10C to the first terminal block (Ref. ASM 27-93/07):
 - 6 Remove the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001).
 - 7 Do a check of the wiring from the ELAC-1 (2CE1) COM part to the ELAC-2 (2CE2) MON part, from pin AB/12C to pin AE/10F (Ref. ASM 27-93/07):
 - if there is continuity, see Para. 8_
 - if there is no continuity, repair the above wiring.
 - 8 Do a check and repair the wiring from the ELAC-2 (2CE2) MON part pin AE/10C to the first terminal block (Ref. ASM 27-93/08).
 - $\underline{9}$ Install the ELAC-1 (2CE1) and the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-400-001).

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- (b) If the resistance is less than 100 Megohms:
 - at the SERVO CTL-L ELEVATOR, INBD G (34CE1), do a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground.
 - 1 If the resistance is less than 100 Megohms: Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground. If the resistance is less than 100 Megohms: Replace the SERVO CTL-L ELEVATOR, INBD G (34CE1) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the resistance is more than 100 Megohms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-L ELEVATOR, INBD G (34CE1) to the ELAC-1 (2CE1).
 - <u>b</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-871

Loss of the Signal of the Right Blue Elevator-Servocontrol Position-Transducer by the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the POS XDCR COM (ANI 2-2) signal from the ELAC 1 (2CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 27-90-00-810-811 | Loss of the ACS1 Signal of the ELAC1 COM Side |
| 27-90-00-810-812 | Loss of the ACS1 Signal of the ELAC1 MON Side |
| 27-90-00-810-813 | Loss of the ACS1 of the ELAC1 COM and MON Sides |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/07 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
- ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 Second list:
- ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L ELEV POS MON XDCR

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- ELAC1 OR WIRING FROM R ELEV POS MON XDCR
- ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
- ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-811).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-812).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-813).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR COM (ANI 2-2) signal from the ELAC 1 (2CE1) to the first terminal block (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-872

Loss of the Signal of the Right Elevator Position Transducer (MON) by the ELAC ${\bf 1}$

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the POS RVDT MON (ANI 2-2) signal from the ELAC 1 (2CE1) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 27-90-00-810-811 | Loss of the ACS1 Signal of the ELAC1 COM Side |
| 27-90-00-810-812 | Loss of the ACS1 Signal of the ELAC1 MON Side |
| 27-90-00-810-813 | Loss of the ACS1 of the ELAC1 COM and MON Sides |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/07 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC1 OR WIRING FROM R ELEV POS MON XDCR - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of

First list:

the two lists below:

- ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
- ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 Second list:
- ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L ELEV POS MON XDCR

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- ELAC1 OR WIRING FROM R ELEV POS MON XDCR
- ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
- ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-811).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-812).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-813).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC1 OR WIRING FROM R ELEV POS MON XDCR

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the POS RVDT MON (ANI 2-2) signal from the ELAC 1 (2CE1) MON part to the first terminal block (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-873

Loss of the Signal of the Right Blue Elevator-Servocontrol Servovalve by the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- SERVO CTL-R ELEVATOR, OUTBD B (34CE4)
- servovalve
- wiring of the R ELEV SV (ANO 2) signal from the ELAC 1 (2CE1) COM part, pins AB/2J, 2H to the ELAC 1 COM part, pins AA/3H, 3G
- wiring from the ELAC 1 (2CE1) COM part to the MON part
- wiring from the ELAC 1 (2CE1) MON part, pins AD/3D, 4D to the first terminal block
- wiring of the LVDT SV SPLY signal
- wiring of the LVDT POS (ANI 3-2) signal

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION | |
|------|------------------|--|--|
| | | | |
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control | |
| AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve | |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control | |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-93/07 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

R

| R R R | ELAC 1 - repla | test gives the maintenance message: COM OR WIRING TO R B ELEV SERVO VLV 34CE4 ace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. TASK 27-93-34-400-001). |
|------------------|-------------------|--|
| R R R | – r | the fault continues: replace the servovalve (Ref. AMM TASK 27-34-51-000-008) (Ref. AMM TASK 27-34-51-400-003). |
| R | (2) If | the fault continues: |
| R R R R | (a) | Do a check of the wiring of the R ELEV SV (ANO 2) signal from the ELAC 1 (2CE1) COM part, pins AB/2J, 2H to the ELAC 1 COM part, pins AA/3H, 3G (Ref. ASM 27-93/07): - if there is continuity see Para. (b) - if there is no continuity repair the above wiring. |
| R R | (b) | Do a check of the wiring from the ELAC 1 (2CE1) COM part to the MON part from pins AA/3J, 3K to pins AD/3B, 4B (Ref. ASM 27-93/07): |
| R R | | if there is continuity see Para. (c)if there is no continuity repair the above wiring. |
| R R R | (c) | Do a check of the wiring from the ELAC 1 (2CE1) MON part, pins AD/3D, 4D to the first terminal block (Ref. ASM 27-93/07). - if there is continuity see Para. (d) - if there is no continuity repair the above wiring. |
| R R | (d) | Do a check of the wiring of the LVDT SV SPLY signal, from the servocontrol (34CE4) to the first terminal block (Ref. ASM 27-93/07). |
| R R | | if there is continuity see Para. (e)if there is no continuity repair the above wiring. |
| R R | (e) | Do a check of the wiring of the LVDT POS (ANI 3-2) signal, from the ELAC 1 (2CE1) MON part to the servocontrol (34CE4) (Ref. ASM 27-93/07). |
| R R | | if there is continuity see Para. (3)if there is no continuity repair the above wiring. |
| R R R | | olace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-51-000-001) and (Ref. AMM TASK 27-34-51-400-001). |

B. Do the tests given in Para. 3.

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TASK 27-93-00-810-874

Loss of the Signal of the Right Blue Elevator-Servocontrol Servovalve by the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- XDCR UNIT-ELEV POS, R (49CE2)
- SERVO CTL-R ELEVATOR, OUTBD B (34CE4)
- servovalve
- wiring of the LVDT POS (ANI 3-2) signal from the ELAC 1 (2CE1) to the first terminal block
- wiring of the POS RVDT MON signal from the transducer unit (49CE2) to the ELAC 1 (2CE1)

2. Job Set-up Information

A. Referenced Information

| | 31-32-00-810-933 | | DESIGNATION |
|--------|------------------|------------------|---|
| | | | Failure of the Analog Links |
| | AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| | AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve |
| | AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| | AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| R R | AMM | 27-92-13-000-001 | Removal of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| R R | AMM | 27-92-13-400-001 | <pre>Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2</pre> |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | ASM | 27-93/07 | |
| | ASM | 27-94/07 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the test gives the maintenance message: ELAC 1 MON OR WIRING TO R B ELEV SERVO VLV 34CE4
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 3-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (1) If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - (a) replace the XDCR UNIT-ELEV POS, R (49CE2) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - (3) If the fault continues:
 - (a) Replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
 - (4) If the fault continues:
 - (a) Replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - (5) If the fault continues:
 - (a) do a check of the wiring of the LVDT POS (ANI 3-2) signal from the ELAC 1 (2CE1) to the first terminal block (Ref. ASM 27-93/07).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Repair the wiring of the POS RVDT MON signal from the transducer unit (49CE2) to the ELAC 1 (2CE1) (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-875

Loss of the Right Blue Elevator-Servocontrol Mode-Transducer by the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the MODE XDCR (ANI 7-2) signal from the ELAC 2 (2CE2) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|---|--|
| | | |
| 27-90-00-810-814 | Loss of the ACS1 Signal of the ELAC2 COM Side | |
| 27-90-00-810-815 | Loss of the ACS1 Signal of the ELAC2 MON Side | |
| 27-90-00-810-816 | Loss of the ACS1 of the ELAC2 COM and MON Sides | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | (Activation for the BITE Test) | |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM 27-93/08 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
- ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 Second list:
- ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L ELEV POS MON XDCR
- ELAC2 OR WIRING FROM R ELEV POS MON XDCR

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- ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
- ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-814).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-815).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-816).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the MODE XDCR (ANI 7-2) signal from the ELAC 2 (2CE2) MON part to the first terminal block (Ref. ASM 27-93/08).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-876

Failure of the Right Blue Elevator Servocontrol Actuator Solenoid Valve

<u>CAUTION</u>: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- RELAY-THS MOT 3 INHIBITION 1 (51CE)
- RELAY-THS MOT 3 INHIBITION 2 (52CE)
- ELAC-2 (2CE2)
- SERVO CTL-R ELEVATOR, OUTBD B (34CE4)
- solenoid valve of the servocontrol 34CE4
- wiring of the SOL VLV1 signal from the servocontrol (34CE4) to the ELAC2 (2CE2)
- wiring from the ELAC2 (2CE2) COM part to the ELAC2 COM part
- wiring from the ELAC2 (2CE2) COM part to the ELAC2 MON part
- wiring from the ELAC2 (2CE2) MON part pins AE/13B and AE/12C to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| IPC | 27920803 | |
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| AMM | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator |
| | | Solenoid Valve |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator |
| | | Solenoid Valve |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | | (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
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| | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the tests give the maintenance message R B ELEV MODE VLV 34CE4:
 - (1) Remove the RELAY-THS MOT 3 INHIBITION 1 (51CE) and RELAY-THS MOT 3 INHIBITION 2 (52CE) (Ref. IPC 27920803).
 - (2) Do a check of the resistance and insulation of the relays.
 - NOTE: The resistance of the winding (pins X1 and X2) must be between 280 and 400 ohms; the insulation must be more than 500 KiloOhms.
 - (a) If the resistance and the insulation are in the specified limits:
 - replace the RELAY-THS MOT 3 INHIBITION 1 (51CE) and/or RELAY-THS MOT 3 INHIBITION 2 (52CE) (Ref. IPC 27920803).
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001), (Ref. AMM TASK 27-93-34-400-001).
 - (b) If the resistance is more than the specified limits:
 - replace the RELAY-THS MOT 3 INHIBITION 1 (51CE) and/or RELAY-THS MOT 3 INHIBITION 2 (52CE).
 - (c) If the resistance and the insulation are between the specified limits:
 - install the RELAY-THS MOT 3 INHIBITION 1 (51CE) and RELAY-THS MOT 3 INHIBITION 2 (52CE)
 - see Para (3).
 - (3) If the fault continues:
 - (4) Remove the ELAC2 (Ref. AMM TASK 27-93-34-000-001).
 - (5) At the ELAC2 receptacle, do a check of the resistance between the pin AB/14K and the pin AE/14B (Ref. ASM 27-93/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the outboard elevator servocontrol (34CE4), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE4 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).

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- Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the outboard elevator servocontrol (34CE4) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE4) to the ELAC2 (2CE2), from the pin C/K to the pin AB/14K and from the pin C/L to the pin AE/14B (Ref. ASM 27-93/08):
 - <u>b</u> Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is more than 100 Ohms:
 - at the outboard elevator servocontrol (34CE4), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/08).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE4 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the outboard elevator servocontrol (34CE4) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - <u>a</u> Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE4) to the ELAC2 (2CE2), from the pin C/K

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to the pin AB/14K and from the pin C/L to the pin AE/14B (Ref. ASM 27-93/08):

- b Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- (c) If the resistance values are in the specified limits: - See Para.(6).
- (6) At the ELAC 2 receptacle, do a check of the insulation between pin AB/14K (pin AE/14B) and the ground.

NOTE: The resistance must be more than 100 Megohms.

- (a) If the resistance is more than 100 Megohms:
 - Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 1 If the fault continues: Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - 2 If the fault continues: Replace the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - do a check of the wiring from the ELAC2 (2CE2) COM part to the ELAC2 COM part, from the pin AB/13K to the pin AB/13F (Ref. ASM 27-93/08):
 - a If the wiring is correct, see Para. 4
 - b If the wiring is not correct:
 - repair it
 - install the ELAC2 (Ref. AMM TASK 27-93-34-400-001)
 - do a check of the wiring from the ELAC2 (2CE2) COM part to the ELAC2 MON part, from the pin AB/13E to the pin AE/12D (Ref. ASM 27-93/08):
 - a If the wiring is correct, see Para. 5
 - b If the wiring is not correct:
 - repair it
 - install the ELAC2 (Ref. AMM TASK 27-93-34-400-001)
 - 5 do a check and repair the wiring from the ELAC2 (2CE2) MON part pins AE/13B and AE/12C to the first terminal block (Ref. ASM 27-93/08):
 - 6 Install the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-400-001).

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- (b) If the resistance is less than 100 Megohms:
 - at the SERVO CTL-R ELEVATOR, OUTBD B (34CE4), do a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground.
 - 1 If the resistance is less than 100 Megohms:
 - Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground. If the resistance is less than 100 Megohms:

 Replace theSERVO CTL-R ELEVATOR, OUTBD B (34CE4) (Ref. AMM TASK 27-34-51-000-001)
 Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-
 - 001) and (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the resistance is more than 100 Megohms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-R ELEVATOR, OUTBD B (34CE4) to the ELAC-2 (2CE2).
 - <u>b</u> Replace theELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-877

Loss of the Signal of the Right Yellow Elevator-Servocontrol Position-Transducer by the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the POS XDCR COM (ANI 2-2) signal from the ELAC 2 (2CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|---|--|
| | | |
| 27-90-00-810-814 | Loss of the ACS1 Signal of the ELAC2 COM Side | |
| 27-90-00-810-815 | Loss of the ACS1 Signal of the ELAC2 MON Side | |
| 27-90-00-810-816 | Loss of the ACS1 of the ELAC2 COM and MON Sides | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | (Activation for the BITE Test) | |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM 27-93/08 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
- ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 Second list:
- ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L ELEV POS MON XDCR

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- ELAC2 OR WIRING FROM R ELEV POS MON XDCR
- ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
- ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-814).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-815).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-816).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the POS XDCR COM (ANI 2-2) signal from the ELAC 2 (2CE2) to the first terminal block (Ref. ASM 27-93/08).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-878

Loss of the Signal of the Right Elevator Position Transducer (MON) by the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the POS RVDT MON (ANI 2-2) signal from the ELAC 2 (2CE2) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 27-90-00-810-814 | Loss of the ACS1 Signal of the ELAC2 COM Side |
| 27-90-00-810-815 | Loss of the ACS1 Signal of the ELAC2 MON Side |
| 27-90-00-810-816 | Loss of the ACS1 of the ELAC2 COM and MON Sides |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly |
| | (Activation for the BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-93/08 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC2 OR WIRING FROM R ELEV POS MON XDCR - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of

First list:

the two lists below:

- ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L G ELEV POS XDCR 34CE1
- ELAC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 Second list:
- ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
- ELAC2 OR WIRING FROM L ELEV POS MON XDCR

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- ELAC2 OR WIRING FROM R ELEV POS MON XDCR
- ELAC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
- ELAC2 OR WIRING FROM R Y ELEV MODE XDCR 34CE4
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-814).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-815).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-816).

4. Fault Isolation

A. If the test gives the maintenance message: ELAC2 OR WIRING FROM R ELEV POS MON XDCR

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

- (1) If the fault continues:
 - do a check and repair the wiring of the POS RVDT MON (ANI 2-2) signal from the ELAC 2 (2CE2) MON part to the first terminal block (Ref. ASM 27-93/08).
- B. Do the tests given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-879

Loss of the Signal of the Right Yellow Elevator Servocontrol Servovalve by the ${\tt ELAC}$ 2

1. Possible Causes

- ELAC-2 (2CE2)
- SERVO CTL-R ELEVATOR, INBD Y (34CE2)
- servovalve
- wiring of the R ELEV SV (ANO 2) signal from the ELAC 2 (2CE2) COM part, pins AB/2J, 2H to the ELAC 2 COM part, pins AA/3H, 3G
- wiring from the ELAC 2 (2CE2) COM part to the MON part
- wiring from the ELAC 2 (2CE2) MON part, pins AD/3D, 4D to the first terminal block
- wiring of the LVDT SV SPLY signal
- wiring of the LVDT POS (ANI 3-2) signal

2. Job Set-up Information

A. Referenced Information

| REFERENCE DESIGNATION | | DESIGNATION |
|-----------------------|------------------|--|
| | | |
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| AMM | 27-34-51-000-008 | Removal of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-34-51-400-003 | Installation of the Elevator Servo Control Actuator Servo Valve |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-93/08 | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

R

| R R R | Α. | ELA(| he test gives the maintenance message: 2 COM OR WIRING TO R Y ELEV SERVO VLV 34CE2 place the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. M TASK 27-93-34-400-001). |
|------------------|----|------|--|
| R R R | | (1) | If the fault continues: - replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003). |
| R | | (2) | If the fault continues: |
| R R R R | | | (a) Do a check of the wiring of the R ELEV SV (ANO 2) signal from the ELAC 2 (2CE2) COM part, pins AB/2J, 2H to the ELAC 2 COM part, pins AA/3H, 3G (Ref. ASM 27-93/08): if there is continuity see Para. (b) if there is no continuity repair the above wiring. |
| R R | | | (b) Do a check of the wiring from the ELAC 2 (2CE2) COM part to the MON part from pins AA/3J, 3K to pins AD/3B, 4B (Ref. ASM 27- 93/08): |
| R R | | | if there is continuity see Para. (c)if there is no continuity repair the above wiring. |
| R R R | | | (c) Do a check of the wiring from the ELAC 2 (2CE2) MON part, pins AD/3D, 4D to the first terminal block (Ref. ASM 27-93/08). - if there is continuity see Para. (d) - if there is no continuity repair the above wiring. |
| R R | | | (d) Do a check of the wiring of the LVDT SV SPLY signal, from the servocontrol (34CE2) to the first terminal block (Ref. ASM 27-93/08). |
| R R | | | if there is continuity see Para. (e)if there is no continuity repair the above wiring. |
| R R | | | (e) Do a check of the wiring of the LVDT POS (ANI 3-2) signal, from the ELAC 2 (2CE2) MON part to the servocontrol (34CE2) (Ref. ASI 27-93/08). |
| R R | | | if there is continuity see Para. (3)if there is no continuity repair the above wiring. |
| R R R | | (3) | Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001). |

B. Do the tests given in Para. 3.

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TASK 27-93-00-810-880

Loss of the Signal of the Right Yellow Elevator-Servocontrol Servovalve by the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- XDCR UNIT-ELEV POS, R (49CE2)
- SERVO CTL-R ELEVATOR, INBD Y (34CE2)
- servovalve
- wiring of the LVDT POS (ANI 3-2) signal from the ELAC 2 (2CE2) to the first terminal block
- wiring of the POS RVDT MON signal from the transducer unit (49CE2) to the ELAC 2 (2CE2)

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|-------------|-------------------|--|--|
| R | AMM AMM AMM | 2-00-810-933 27-34-51-000-001 27-34-51-000-008 27-34-51-400-001 27-34-51-400-003 | Failure of the Analog Links Removal of the Elevator Servo Control Removal of the Elevator Servo Control Actuator Servo Valve Installation of the Elevator Servo Control Installation of the Elevator Servo Control Actuator Servo Valve Removal of the Elevator Position Transducer-Unit |
| R R R | AMM | 27-92-13-400-001 | 49CE1, 49CE2 Installation of the Elevator Position Transducer-Unit 49CE1, 49CE2 |
| | AMM | 27-93/07 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Operational Test of the Side Stick Assembly (Activation for the BITE Test) BITE Test of the EFCS (Ground Scanning) |

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3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message: ELAC 2 MON OR WIRING TO R Y ELEV SERVO VLV 34CE2
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-933) related to the ANI 3-X analog input signal of the ELAC COM and SEC COM (Ref. ASM 27-93/07) and (Ref. ASM 27-94/07).
 - (1) If the fault continues:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - (a) replace the XDCR UNIT-ELEV POS, R (49CE2) (Ref. AMM TASK 27-92-13-000-001) and (Ref. AMM TASK 27-92-13-400-001).
 - (3) If the fault continues:
 - (a) Replace the servovalve (Ref. AMM TASK 27-34-51-000-008) and (Ref. AMM TASK 27-34-51-400-003).
 - (4) If the fault continues:
 - (a) Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - (5) If the fault continues:
 - (a) do a check of the wiring of the LVDT POS (ANI 3-2) signal from the ELAC 2 (2CE2) to the first terminal block (Ref. ASM 27-93/08).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Repair the wiring of the POS RVDT MON signal from the transducer unit (49CE2) to the ELAC 2 (2CE2) (Ref. ASM 27-93/08).
- B. Do the tests given in Para. 3.



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TASK 27-93-00-810-881

Loss of the Right Yellow Elevator-Servocontrol Mode-Transducer by the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the MODE XDCR (ANI 7-2) signal from the ELAC 1 (2CE1) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|---|--|
| | | |
| 27-90-00-810-811 | Loss of the ACS1 Signal of the ELAC1 COM Side | |
| 27-90-00-810-812 | Loss of the ACS1 Signal of the ELAC1 MON Side | |
| 27-90-00-810-813 | Loss of the ACS1 of the ELAC1 COM and MON Sides | |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM 27-96-00-710-020 | Operational Test of the Side Stick Assembly | |
| | (Activation for the BITE Test) | |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM 27-93/07 | | |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2 - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the two lists below:

First list:

- ELAC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L B ELEV POS XDCR 34CE3
- ELAC1 OR WIRING FROM R B ELEV POS XDCR 34CE4 Second list:
- ELAC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
- ELAC1 OR WIRING FROM L ELEV POS MON XDCR
- ELAC1 OR WIRING FROM R ELEV POS MON XDCR

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- ELAC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1
- ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2
- 1 First case:

Combination of maintenance messages of the first list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-811).

2 Second case:

Combination of maintenance messages of the second list, do this trouble shooting procedure (Ref. TASK 27-90-00-810-812).

3 Third case:

Combination of maintenance messages of the first and second lists, do this trouble shooting procedure (Ref. TASK 27-90-00-810-813).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the MODE XDCR (ANI 7-2) signal from the ELAC 1 (2CE1) MON part to the first terminal block (Ref. ASM 27-93/07).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-882

Failure of the Right Yellow Elevator Servocontrol Actuator Solenoid valve

CAUTION: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-R ELEVATOR, INBD Y (34CE2)
- ELAC-1 (2CE1)
- solenoid valve of the servocontrol 34CE2
- wiring of the SOL VLV1 signal from the servocontrol (34CE2) to the ELAC1 (2CE1)
- wiring from the ELAC1 (2CE1) COM part to the ELAC1 COM part
- wiring from the ELAC1 (2CE1) COM part to the ELAC1 MON part
- wiring from the ELAC1 (2CE1) MON part pins AE/13B and AE/12C to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|------------------------------|--|
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control |
| AMM | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator Solenoid Valve |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control |
| AMM | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator Solenoid Valve |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| AMM ASM | 27-96-00-740-001 27-93/07 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (Activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC2 pushbutton switch (on this pushbutton switch, the OFF legend comes on).

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(2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the tests give the maintenance message R Y ELEV MODE VLV 34CE2:
 - (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001).
 - (2) At the ELAC1 receptacle, do a check of the resistance between the pin AB/14K and the pin AE/14B (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the inboard elevator servocontrol (34CE2), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE2 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the inboard elevator servocontrol (34CE2) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits:
 Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE2) to the ELAC1 (2CE1), from the pin C/K to the pin AB/14K and from the pin C/L to the pin AE/14B (Ref. ASM 27-93/07):
 - <u>b</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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- (b) If the resistance is more than 100 Ohms:
 - at the inboard elevator servocontrol (34CE2), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE2 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the inboard elevator servocontrol (34CE2) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE2) to the ELAC1 (2CE1), from the pin C/K to the pin AB/14K and from the pin C/L to the pin AE/14B (Ref. ASM 27-93/07):
 - b Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- (c) If the resistance values are in the specified limits:
 See Para. (3).
- (3) At the ELAC 1 receptacle, do a check of the insulation between pin AB/14K (pin AE/14B) and the ground.

NOTE: The resistance must be more than 100 Megohms.

- (a) If the resistance is more than 100 Megohms:
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 1 If the fault continues: . Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - If the fault continues: Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).

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- do a check of the wiring from the ELAC1 (2CE1) COM part to the ELAC1 COM part, from the pin AB/13K to the pin AB/13F (Ref. ASM 27-93/07):
 - a If the wiring is correct, see Para. 4
 - b If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001)
- do a check of the wiring from the ELAC1 (2CE1) COM part to the ELAC1 MON part, from the pin AB/13E to the pin AE/12D (Ref. ASM 27-93/07):
 - a If the wiring is correct, see Para. 5_
 - b If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001)
- 5 do a check and repair the wiring from the ELAC1 (2CE1) MON part pins AE/13B and AE/12C to the first terminal block (Ref. ASM 27-93/07):
- 6 Install the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is less than 100 Megohms:
 - at the SERVO CTL-R ELEVATOR, INBD Y (34CE2), do a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground.
 - 1 If the resistance is less than 100 Megohms: Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>a</u> Do again a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground. If the resistance is less than 100 Megohms:

. Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27--34--51--000--001) and (Ref. AMM TASK 27--34--51--400--

001).
. Replace the ELAC-1 (2CE1) (Ref.

- . Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance is more than 100 Megohms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-R ELEVATOR, INBD Y (34CE2) to the ELAC-1 (2CE1).
 - <u>b</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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B. Do the test given in Para. 3.

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TASK 27-93-00-810-883

Loss of the Signal of the Right Yellow Elevator-Servocontrol Solenoid Valve by the ELAC 1

<u>CAUTION</u>: DO NOT SWAP FLIGHT CONTROL COMPUTERS. IF THERE IS A SHORT CIRCUIT, YOU WILL CAUSE DAMAGE TO A SERVICEABLE COMPUTER WHEN YOU SWAP THEM.

1. Possible Causes

- SERVO CTL-R ELEVATOR, INBD Y (34CE2)
- ELAC-1 (2CE1)
- ELAC-2 (2CE2)
- solenoid valve of the servocontrol 34CE2
- wiring of the SOL VLV1 signal from the servocontrol (34CE2) to the ELAC1 (2CE1)
- wiring from the ELAC1 (2CE1) COM part to the ELAC1 COM part
- wiring from the ELAC1 (2CE1) COM part to the ELAC1 MON part
- wiring from the ELAC1 (2CE1) MON part pins AE/13B and AE/12C to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION | |
|------|------------------|--|--|
| AMM | 27-34-51-000-001 | Removal of the Elevator Servo Control | |
| AMM | 27-34-51-000-005 | Removal of the Elevator Servo Control Actuator Solenoid Valve | |
| AMM | 27-34-51-400-001 | Installation of the Elevator Servo Control | |
| AMM | 27-34-51-400-004 | Installation of the Elevator Servo Control Actuator Solenoid Valve | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-93/07 | | |
| ASM | 27-93/08 | | |

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3. Fault Confirmation

A. Test

(1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).

NOTE: Before you start the operational test procedure, release the FLT CTL/ELAC 2 pushbutton switch (on this pushbutton switch the OFF legend comes on).

(2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the tests give the maintenance message ELAC1 OR WIRING TO R Y ELEV SOL VLV 34CE2:
 - (1) Remove the ELAC1 (Ref. AMM TASK 27-93-34-000-001).
 - (2) At the ELAC1 receptacle, do a check of the resistance between the pin AB/14K and the pin AE/14B (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- (a) If the resistance is less than 40 Ohms:
 - at the inboard elevator servocontrol (34CE2), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - a Replace the solenoid valve of the servocontrol 34CE2 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - <u>b</u> Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the inboard elevator servocontrol (34CE2) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE2) to the ELAC1 (2CE1), from the pin C/K to the pin AB/14K and from the pin C/L to the pin AE/14B (Ref. ASM 27-93/07):
 - \underline{b} Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (b) If the resistance is more than 100 Ohms:
 - at the inboard elevator servocontrol (34CE2), do a check of the resistance of the solenoid valve between the pin C/K and the pin C/L (Ref. ASM 27-93/07).

NOTE: The resistance must be between 40 and 100 Ohms.

- 1 If the resistance values are out of the specified limits:
 - Replace the solenoid valve of the servocontrol 34CE2 (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the resistance of the solenoid valve between the pin C/K and the pin C/L of the inboard elevator servocontrol (34CE2) (40 to 100 0hms).
 - If the resistance values are out of the specified limits:
 Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - . Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance values are in the specified limits: Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- 2 If the resistance values are in the specified limits:
 - Repair the wiring of the SOL VLV1 signal from the servocontrol (34CE2) to the ELAC1 (2CE1), from the pin C/K to the pin AB/14K and from the pin C/L to the pin AE/14B (Ref. ASM 27-93/07):
 - b Install the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- (c) If the resistance values are in the specified limits:See Para. (3).
- (3) At the ELAC 1 receptacle, do a check of the insulation between pin AB/14K (pin AE/14B) and the ground.

NOTE: The resistance must be more than 100 Megohms.

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- (a) If the resistance is more than 100 Megohms:
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - Replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - If the fault continues:

 Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005)
 and (Ref. AMM TASK 27-34-51-400-004).
 - If the fault continues: Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - do a check of the wiring from the ELAC1 (2CE1) COM part to the ELAC1 COM part, from the pin AB/13K to the pin AB/13F (Ref. ASM 27-93/07):
 - a If the wiring is correct, see Para. 4
 - b If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001)
 - do a check of the wiring from the ELAC1 (2CE1) COM part to the ELAC1 MON part, from the pin AB/13E to the pin AE/12D (Ref. ASM 27-93/07):
 - a If the wiring is correct, see Para. 5
 - b If the wiring is not correct:
 - repair it
 - install the ELAC1 (Ref. AMM TASK 27-93-34-400-001)
 - 5 do a check and repair the wiring from the ELAC1 (2CE1) MON part pins AE/13B and AE/12C to the first terminal block (Ref. ASM 27-93/07):
 - 6 Remove the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001)
 - 7 Do a check of the wiring from the ELAC-1 (2CE1) COM part to the ELAC-2 (2CE2) MON part, from pin AB/13C to pin AE/12F (Ref. ASM 27-93/07).
 - if there is continuity, see Para. 8_
 - if there is no continuity, repair the above wiring.
 - 8 Do a check and repair the wiring from the ELAC-2 (2CE2) MON part pin AE/12C to the first terminal block (Ref. ASM 27-93/08).
 - 9 Install the ELAC-1 (2CE1) and the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-400-001).

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- (b) If the resistance is less than 100 Megohms:
 - at the SERVO CTL-R ELEVATOR, INBD Y (34CE2), do a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground.
 - 1 If the resistance is less than 100 Megohms: Replace the solenoid valve (Ref. AMM TASK 27-34-51-000-005) and (Ref. AMM TASK 27-34-51-400-004).
 - Do again a check of the insulation of the solenoid valve between pin C/K (pin C/L) and the ground. If the resistance is less than 100 Megohms:
 . Replace the SERVO CTL-R ELEVATOR, INBD Y (34CE2) (Ref. AMM TASK 27-34-51-000-001) and (Ref. AMM TASK 27-34-51-400-001).
 - Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the resistance is more than 100 Megohms:
 - <u>a</u> Repair the wiring of the solenoid valve signal from the SERVO CTL-R ELEVATOR, INBD Y (34CE2) to the ELAC-1 (2CE1).
 - <u>b</u> Replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-884

Loss of the RA 1 Bus for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGI 10 signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFE | RENCE | DESIGNATION | |
|--|------|------------------|---|--|
| | | | | |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-92/52 | | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

RA1 OR BUS TO ELAC2

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the ELAC
 2 (2CE2) to the first terminal block, COM part only (Ref. ASM 27-92/52).
- B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-885

Loss of the RA 1 BUS for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGI 10 signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|--|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/50 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: RA1 OR BUS TO ELAC1
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the ELAC
 1 (2CE1) to the first terminal block COM part only (Ref. ASM 27-92/50).
 - B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-886

Loss of the RA 2 BUS for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGI 10 signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|--|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/52 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: RA2 OR BUS TO ELAC2
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the ELAC
 2 (2CE2) to the first terminal block MON part only (Ref. ASM 27-92/52).
 - B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-887

Loss of the RA 2 BUS for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGI 10 signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|--|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/50 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: RA2 OR BUS TO ELAC1
 - replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the ELAC
 1 (2CE1) to the first terminal block MON part only (Ref. ASM 27-92/50).
 - B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-888

Loss of the FMGC 1 Bus for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGI 04 signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|--------------------------------|--|
| | 93-34-000-001 93-34-400-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) |
| | 96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 COM OR BUS FROM FMGC1 $\,$

ELAC1 MON OR BUS FROM FMGC1

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 04 signal from the ELAC
 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-92/50).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-889

Loss of the FMGC 1 Bus for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGI 04 signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|--------------------------------------|--|
| | 27-93-34-000-001 27-93-34-400-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) |
| | 27-96-00-740-001 27-92/52 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 COM OR BUS FROM FMGC1

ELAC2 MON OR BUS FROM FMGC1

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 04 signal from the ELAC
 2 (2CE2) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-92/52).
- B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-890

Loss of the FMGC 2 Bus for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGI 05 signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|--|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/50 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 COM OR BUS FROM FMGC2

ELAC1 MON OR BUS FROM FMGC2

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 05 signal from the ELAC
 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-92/50).
- B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-891

Loss of the FMGC 2 Bus for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGI 05 signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|--|--|
| AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/52 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: $\ensuremath{\mathsf{ELAC2}}$ COM OR BUS FROM FMGC2

ELAC2 MON OR BUS FROM FMGC2

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 05 signal from the ELAC
 2 (2CE2) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-92/52).
- B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-892

Loss of the SFCC 1 Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the DGI 11 signal from the ELAC 2 (2CE2) to the first terminal block
- wiring of the SLATS RETRACTED (DSI 26) signal from the ELAC 2 (2CE2) to the SFCC 1 (21CV)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | RENCE | DESIGNATION | |
|-----------|--------------------------|--|--|--|
| | AMM AMM ASM ASM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 27-92/42 27-92/52 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |
| | TSM | 27-51-00-810-839 | EFCS Identifies a Loss of Data from the SFCC-1 (2). | |

3. Fault Confirmation

A. Test

R

R

R

R

R

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: ELAC2 OR WIRING FROM SFCC1
 - LEACE ON WINING INON SICCI
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
- (a) Do a check and repair the wiring of the DGI 11 signal from the ELAC 2 (2CE2) to the first terminal block, COM part only (Ref. ASM 27-92/52).
 - (b) Do a check and repair the wiring of the SLATS RETRACTED (DSI 26) signal from the ELAC 2 (2CE2) to the SFCC 1 (21CV) (Ref. ASM 27-92/42).

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R (c) Do this trouble shooting procedure (Ref. TSM TASK 27-51-00-810-R 839).

B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-893

Loss of the SFCC 1 Signal for the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the DGI 11 signal from the ELAC 1 (2CE1) to the first terminal block
- wiring of the SLATS RETRACTED (DSI 26) signal from the ELAC 1 (2CE1) to the SFCC 1 (21CV)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|--|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/42 ASM 27-92/50 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |
| TSM 27-51-00-810-839 | EFCS Identifies a Loss of Data from the SFCC-1 (2). | |

3. Fault Confirmation

A. Test

R

R

R

R

R

SROS

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: ELAC1 OR WIRING FROM SFCC1
 - LEACT OR WIRING TROM STOCT
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
- (a) Do a check and repair the wiring of the DGI 11 signal from the ELAC 1 (2CE1) to the first terminal block, COM part only (Ref. ASM 27-92/50).
 - (b) Do a check and repair the wiring of the SLATS RETRACTED (DSI 26) signal from the ELAC 1 (2CE1) to the SFCC 1 (21CV) (Ref. ASM 27-92/42).

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R (c) Do this trouble shooting procedure (Ref. TSM TASK 27-51-00-810-R 839).

B. Do the test given in Para. 3.

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-894

Loss of the SFCC 2 Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the DGI 11 signal from the ELAC 2 (2CE2) to the first terminal
- wiring of the SLATS RETRACTED (DSI 26) signal from the ELAC 2 (2CE2) to the SFCC 2 (22CV)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-92/42 | • | |
| ASM | 27-92/52 | | |
| TSM | 27-51-00-810-839 | EFCS Identifies a Loss of Data from the SFCC-1 (2). | |

3. Fault Confirmation

A. Test

R

R

R

R

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: ELAC2 OR WIRING FROM SFCC2

 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
- (a) Do a check and repair the wiring of the DGI 11 signal from the ELAC 2 (2CE2) to the first terminal block, MON part only (Ref. R ASM 27-92/52).
 - (b) Do a check and repair the wiring of the SLATS RETRACTED (DSI 26) signal from the ELAC 2 (2CE2) to the SFCC 2 (22CV) (Ref. ASM 27-92/42).

EFF: ALL

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R (c) Do this trouble shooting procedure (Ref. TSM TASK 27-51-00-810-R 839).

B. Do the test given in Para. 3.

EFF: ALL

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TASK 27-93-00-810-895

Loss of the SFCC 2 Signal for the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the DGI 11 signal from the ELAC 1 (2CE1) to the first terminal block
- wiring of the SLATS RETRACTED (DSI 26) signal from the ELAC 1 (2CE1) to the SFCC 2 (22CV)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-92/42 | _ | |
| ASM | 27-92/50 | | |
| TSM | 27-51-00-810-839 | EFCS Identifies a Loss of Data from the SFCC-1 (2). | |

3. Fault Confirmation

A. Test

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(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message:

ELAC1 OR WIRING FROM SFCC2

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
- (a) Do a check and repair the wiring of the DGI 11 signal from the ELAC 1 (2CE1) to the first terminal block, MON part only (Ref. ASM 27-92/50).
 - (b) Do a check and repair the wiring of the SLATS RETRACTED (DSI 26) signal from the ELAC 1 (2CE1) to the SFCC 2 (22CV) (Ref. ASM 27-92/42).

EFF: ALL

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R (c) Do this trouble shooting procedure (Ref. TSM TASK 27-51-00-810-R 839).

B. Do the test given in Para. 3.

EFF: ALL

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TASK 27-93-00-810-896

Failure of the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- RELAY-ELAC 1 ANN SPLY (40CE1)
- FCDC-1 (3CE1)
- FCDC-2 (3CE2)
- ELAC-2 (2CE2)
- wiring of the RLY ELAC FAULT signal from the relay to the ELAC 1
- wiring of the RLY ELAC FAULT signal from the relay to the ELAC 1.
- RLY- ELAC 1 ANN SPLY (40CE1)
- wiring of the DSI 4/1 (ELAC1 FAILED) signals
- wiring of the DGO O1 signal
- wiring of the DGO O4 signal
- wiring of the DGO O5 signal
- wiring of the DGI 04 signalwiring of the DGI 05 signal
- wiring of the DSO 06 signal
- wiring of the ELAC DECONNECTED IN THE RACK signal
- wiring of the DSI 06 signal
- wiring of the DSI 09 signal
- wiring of the DSI 07 signal
- wiring of the DSI 10 signal
- wiring of the DSI 13 signal
- wiring of the DSI 17 signal
- wiring of the PIN PROGRAM ELAC1 signal
- wiring of the PWR SPLY + 28VDC signal
- wiring of the PWR SPLY GND signal
- wiring of the CTL + 28VDC and ELAC1 ENGAGED (DSI 50) signals
- wiring from the pushbutton switch (6CE1) pin A/C3 to the first terminal block
- P/BSW-FLT CTL/ELAC 1 (6CE1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| 31-32-00-810-932 31-32-00-810-934 IPC 27920802 IPC 27920803 | Failure of the Discrete Links Failure of the Digital Links |
| AMM 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power |
| AMM 27-93-00-710-001 | Operational Test of the Elevator and Aileron Computers (ELACs) |

EFF: ALL

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| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-95-34-000-001 | Removal of the FCDC (3CE1,3CE2) |
| AMM | 27-95-34-400-001 | Installation of the FCDC (3CE1,3CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/02 | |
| ASM | 27-92/03 | |
| ASM | 27-92/32 | |
| ASM | 27-92/40 | |
| ASM | 27-92/44 | |
| ASM | 27-92/49 | |
| ASM | 27-92/50 | |
| ASM | 27-92/52 | |
| ASM | 27-95/04 | |
| ASM | 27-95/05 | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) Make sure that the hydraulic systems are depressurized.
 - (3) On the overhead panel 23VU:
 - release the FLT CTL/ELAC 1 pushbutton switch (the OFF legend of the FLT CTL/ELAC1 pushbutton switch comes on).
 - (4) On the overhead panel 23VU:
 - push the FLT CTL/ELAC 1 pushbutton switch (the OFF legend of the FLT CTL/ELAC1 pushbutton switch goes off).
 - NOTE: In case of a reset of the ELAC 1 with the circuit breaker, the supply breaking must be more than 5 seconds.
 - NOTE : If the ELAC FAULT warning disappears after several resets, replace the computer.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

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- A. If the test confims the fault:
 - Do the operational test of the ELACs (Ref. AMM TASK 27-93-00-710-001)
 to make sure that the ELAC 1 servoes its associated surfaces.
 - (1) If the flight controls move according to the ELAC 1 servoing:
 - (a) Remove the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001).
 - (b) At the ELAC 1 receptacle, do a check of the resistance between pin AB/11J and pin AE/14C (Ref. ASM 27-92/03).
 - 1 If the resistance is less than 280 ohms:
 - Remove the RELAY-ELAC 1 ANN SPLY (40CE1) (Ref. IPC 27920803).
 - b Do a check of the resistance of the relay between pin X1 and pin X2 (Ref. ASM 27-92/03).
 - If the resistance is less than 280 ohms:
 - . replace the RELAY-ELAC 1 ANN SPLY (40CE1) (Ref. IPC 27920803)
 - . replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY ELAC FAULT signal from the relay to the ELAC 1 (Ref. ASM 27-92/03)
 - . install the relay
 - . replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the resistance is more than 400 ohms:
 - a Remove the relay 40CE1.
 - <u>b</u> Do a check of the resistance of the relay between pins X1 and X2 (Ref. ASM 27-92/03).
 - If the resistance is more than 400 ohms:
 - . replace the RELAY-ELAC 1 ANN SPLY (40CE1) (Ref. IPC 27920803)
 - install the ELAC 1 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - . do a check and repair the wiring of the RLY ELAC FAULT signal from the relay to the ELAC 1. (Ref. ASM 27-92/03)
 - . install the relay
 - . install the ELAC 1 (Ref. AMM TASK 27-93-34-400-001).
 - 3 If the resistance is between 280 and 400 ohms:
 - a Remove the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001).
 - if the warning ELAC1 stays:

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- install the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-400-001).
- . continue the trouble shooting at Para. b .
- if the warning ELAC1 goes off, replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- install the ELAC 1 (Ref. AMM TASK 27-93-34-400-001).
- \underline{b} Remove the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001).
 - if the warning ELAC1 stays:
 - install the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-400-001).
 - . continue the trouble shooting at Para. c .
 - if the warning ELAC1 goes off, replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - install the ELAC 1 (Ref. AMM TASK 27-93-34-400-001).
- \underline{c} Remove the RLY- ELAC 1 ANN SPLY (40CE1) (Ref. IPC 27920803).
 - if the warning ELAC1 stays:
 - . install the RLY-ELAC 1 ANN SPLY (40CE1) (Ref. IPC 27920803).
 - . continue the trouble shooting at Para. d .
 - if the warning ELAC1 goes off, replace the RLY-ELAC 1 ANN SPLY (40CE1) (Ref. IPC 27920803).
 - install the ELAC 1 (Ref. AMM TASK 27-93-34-400-001).
- <u>d</u> Do a check and repair the wiring of the DSI 4/1 (ELAC1 FAILED) signals from the FCDC1 (3CE1) and the FCDC2 (3CE2) to the RLY-ELAC 1 ANN SPLY (40CE1) (Ref. ASM 27-95/04) and (Ref. ASM 27-95/05).
- e Intall the ELAC1 (Ref. AMM TASK 27-93-34-400-001).
- (2) If the flight controls do not move according to the ELAC 1 servoing:
 replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and
 (Ref. AMM TASK 27-93-34-400-001).
 - (a) If the fault continues:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (b) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932)
 related to the DSO 06 discret output signal of the ELAC 1 (Ref. ASM 27-92/49).
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the DGO 01 digital output signal of the ELAC 1 (Ref. ASM 27-92/50).

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- (c) If the fault continues:
 - Do a check of the wiring of the DGO 01 signal from the ELAC1 (2CE1) COM part to the MON part (DGI 09) and MON part (DGO 01) to the COM part (DGI 09) (Ref. ASM 27-92/50).
 - if the wiring is correct, see Para. 2.
 - if the wiring is not correct, repair the above wiring.
 - 2 Do a check of the wiring of the DGO 04 signal from the ELAC1 (2CE1) COM part to the MON part (DGI 01) and MON part (DGO 04) to the COM part (DGI 01) (Ref. ASM 27-92/50).
 - if the wiring is correct, see Para. 3_.
 - if the wiring is not correct, repair the above wiring.
 - Do a check of the wiring of the DGO 05 signal from the ELAC2 (2CE2) COM part to the ELAC1 (2CE1) COM part (DGI 15) (Ref. ASM 27-92/52).
 - if the wiring is correct, see Para. 4.
 - if the wiring is not correct, repair the above wiring.
 - Do a check of the wiring of the DGO 05 signal from the ELAC2 (2CE2) MON part to the ELAC1 (2CE1) MON part (DGI 15) (Ref. ASM 27-92/52).
 - if the wiring is correct, see Para. 5.
 - if the wiring is not correct, repair the above wiring.
 - $\underline{5}$ Do a check of the wiring of the DGI 04 signal from the ELAC1 (2CE1) MON part to the COM part (Ref. ASM 27-92/50).
 - if the wiring is correct, see Para. 6.
 - if the wiring is not correct, repair the above wiring.
 - $\underline{6}$ Do a check of the wiring of the DGI 05 signal from the ELAC1 (2CE1) MON part to the COM part (Ref. ASM 27-92/50).
 - if the wiring is correct, see Para. 7_.
 - if the wiring is not correct, repair the above wiring.
 - 7 Do a check of the wiring of the DSO 06 signal from the ELAC1 (2CE1) COM part to the MON part (DSI 48) and MON part (DSO 06) to the COM part (DSI 48) (Ref. ASM 27-92/49).
 - if the wiring is correct, see Para. 8.
 - if the wiring is not correct, repair the above wiring.
 - 8 Do a check of the wiring of the ELAC DECONNECTED IN THE RACK signal from the ELAC1 (2CE1) COM part and MON part to the ground terminal (Ref. ASM 27-92/40).
 - if the wiring is correct, see Para. 9.
 - if the wiring is not correct, repair the above wiring.
 - 9 Do a check of the wiring of the DSI 06 signal from the ELAC1 (2CE1) COM part to the MON part (Ref. ASM 27-92/32).
 - if the wiring is correct, see Para. 10_.
 - if the wiring is not correct, repair the above wiring.

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- <u>10</u> Do a check of the wiring of the DSI 09 signal from the ELAC1 (2CE1) COM part to the MON part (Ref. ASM 27-92/32).
 - if the wiring is correct, see Para. 11.
 - if the wiring is not correct, repair the above wiring.
- 11 Do a check of the wiring of the DSI 07 signal from the ELAC1 (2CE1) COM part to the MON part (Ref. ASM 27-92/44).
 - if the wiring is correct, see Para. 12.
 - if the wiring is not correct, repair the above wiring.
- Do a check of the wiring of the DSI 10 signal from the ELAC1 (2CE1) COM part to the MON part (Ref. ASM 27-92/44).
 - if the wiring is correct, see Para. 13.
 - if the wiring is not correct, repair the above wiring.
- 13 Do a check of the wiring of the DSI 13 signal from the ELAC1 (2CE1) COM part to the MON part (Ref. ASM 27-92/44).
 - if the wiring is correct, see Para. 14.
 - if the wiring is not correct, repair the above wiring.
- Do a check of the wiring of the DSI 17 signal from the ELAC1 (2CE1) COM part to the MON part (Ref. ASM 27-92/44).
 - if the wiring is correct, see Para. 15.
 - if the wiring is not correct, repair the above wiring.
- Do a check of the wiring of the PIN PROGRAM ELAC1 signal from the ELAC1 (2CE1) COM part and MON part to the ground terminal (Ref. ASM 27-92/40).
- (d) If the fault continues:
 - 1 Do a check of the wiring of the PWR SPLY + 28VDC signal from the ELAC1 (2CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/02).
 - if there is continuity, see Para. 2.
 - if there is no continuity repair the above wiring.
 - Do a check of the wiring of the PWR SPLY GND signal from the ELAC1 (2CE1) COM part and MON part to the ground terminal (Ref. ASM 27-92/02).
 - if there is continuity, see Para. 3.
 - if there is no continuity, repair the above wiring.
 - Do a check of the wiring of the CTL + 28VDC and ELAC1 ENGAGED (DSI 50) signals from the ELAC1 (2CE1) COM part and MON part to the pushbutton switch (6CE1) (Ref. ASM 27-92/02).
 - if there is continuity, see Para. 4.
 - if there is no continuity, repair the above wiring.
 - Do a check of the wiring from the pushbutton switch (6CE1) pin A/C3 to the first terminal block (Ref. ASM 27-92/02).
 - if there is continuity, see Para. 5_.

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- if there is no continuity, repair the above wiring.
- 5 Replace the P/BSW-FLT CTL/ELAC 1 (6CE1) (Ref. IPC 27920802).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-897

Loss of the Racking Inputs Signal for the ELAC1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the ELAC DISCONNECTED IN THE RACK signal
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/40 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 RACKING INPUTS
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ELAC DISCONNECTED IN THE RACK signal from the ELAC1 (2CE1) COM and MON part to the ground terminal (Ref. ASM 27-92/40).
- 5. Close-up
 - A. Do the test given in Para. 3.

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TASK 27-93-00-810-898

Loss of Pin Programming Inputs Signal for the ELAC1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the PIN PROGRAM ELAC1 signal
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/40 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 SDI INPUTS
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the PIN PROGRAM ELAC1 signal from the ELAC1 (2CE1) COM and MON part to the ground terminal (Ref. ASM 27-92/40).
- 5. Close-up
 - A. Do the test given in Para. 3.

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TASK 27-93-00-810-899

Loss of the ELAC 2 BUS Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - ELAC-2 (2CE2)
 - wiring of the DGO 05 signal from the ELAC 2 (2CE2) COM part to the ELAC 1 (2CE1)
 - wiring of the DGO 05 signal from the ELAC 2 (2CE2) MON part to the ELAC 1 (2CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/52 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR BUS FROM ELAC2
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - (a) Do a check of the wiring of the DGO O5 signal from the ELAC 2 (2CE2) COM part to the ELAC 1 (2CE1) (Ref. ASM 27-92/52).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (b).
 - (b) Do a check and repair the wiring of the DGO O5 signal from the ELAC 2 (2CE2) MON part to the ELAC 1 (2CE1) (Ref. ASM 27-92/52).

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B. Do the test given in Para. 3.

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TASK 27-93-00-810-901

Failure of the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- RELAY-ELAC 2 ANN SPLY (40CE2)
- FCDC-1 (3CE1)
- FCDC-2 (3CE2)
- ELAC-1 (2CE1)
- SSTU-ROLL CTL, CAPT (4CE1)
- SSTU-ROLL CTL, F/O (4CE2)
- wiring of the RLY ELAC FAULT signal from the relay to the ELAC $\mathbf 2$
- wiring of the RLY ELAC FAULT signal from the relay to the ELAC 2.
- wiring of the DSI 4/2 (ELAC2 FAILED) signals
- wiring of the DGO O1 signal
- wiring of the DGO O4 signal
- wiring of the DGO O5 signal
- wiring of the DGI 04 signal
- wiring of the DGI 05 signal
- wiring of the DSO 06 signal
- wiring of the ELAC DECONNECTED IN THE RACK signal
- wiring of the DSI 07 signal
- wiring of the DSI 10 signal
- wiring of the DSI 13 signal
- wiring of the DSI 17 signal
- wiring of the PIN PROGRAM ELAC2 signal
- wiring of the PWR SPLY + 28VDC signal
- wiring of the PWR SPLY GND signal
- wiring of the CTL + 28VDC and ELAC2 ENGAGED (DSI 50) signals
- wiring from the pushbutton switch (6CE2) pin A/C3 to the first terminal block
- P/BSW-FLT CTL/ELAC 2 (6CE2)

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | DESIGNATION |
|---|----------------------|---|
| _ | 27 27 22 242 247 | |
| R | 27-93-00-810-947 | False ELAC Warning due to Faulty Yellow Hydraulic |
| R | | Pressure Switch |
| | 31-32-00-810-932 | Failure of the Discrete Links |
| | 31-32-00-810-934 | Failure of the Digital Links |
| | | raiture of the vigital Links |
| | IPC 27920802 | |
| | IPC 27920803 | |
| | AMM 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power |

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| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM | 27-92-41-400-002 | <pre>Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4)</pre> |
| AMM | 27-93-00-710-001 | Operational Test of the Elevator and Aileron Computers (ELACs) |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-95-34-000-001 | Removal of the FCDC (3CE1,3CE2) |
| AMM | 27-95-34-400-001 | <pre>Installation of the FCDC (3CE1,3CE2)</pre> |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/02 | |
| ASM | 27-92/03 | |
| ASM | 27-92/40 | |
| ASM | 27-92/44 | |
| ASM | 27-92/49 | |
| ASM | 27-92/50 | |
| ASM | 27-92/52 | |
| ASM | 27-95/04 | |
| ASM | 27-95/05 | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) Make sure that the hydraulic systems are depressurized.
 - (3) On the overhead panel 24VU:
 - release the FLT CTL/ELAC 2 pushbutton switch (the OFF legend of the FLT CTL/ELAC 2 pushbutton switch comes on).
 - (4) On the overhead panel 24VU:
 - push the FLT CTL/ELAC 2 pushbutton switch (the OFF legend of the FLT CTL/ELAC 2 pushbutton switch goes off).

NOTE : In case of a reset of the ELAC2 with the circuit breaker, the supply breaking must be more than 5 seconds.

NOTE: If the ELAC FAULT warning disappears after several resets, replace the computer.

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B. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: If the ground scanning does not give the maintenance message ELAC2, do the trouble shooting procedure (Ref. TASK 27-93-00-810-947).

4. Fault Isolation

- A. If the test confirms the fault:
 - Do the operational test of the ELACs (Ref. AMM TASK 27-93-00-710-001) to make sure that the ELAC 2 servoes its associated surfaces.
 - (1) If the flight controls move according to the ELAC 2 servoing:
 - (a) Remove the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001).
 - (b) At the ELAC 2 receptacle, do a check of the resistance between pin AB/11J and pin AE/14C (Ref. ASM 27-92/03).
 - 1 If the resistance is less than 280 ohms:
 - \underline{a} Remove the RELAY-ELAC 2 ANN SPLY (40CE2) (Ref. IPC 27920803).
 - \underline{b} Do a check of the resistance of the relay between pin X1 and pin X2 (Ref. ASM 27-92/03).
 - If the resistance is less than 280 ohms:
 - . replace the RELAY-ELAC 2 ANN SPLY (40CE2) (Ref. IPC 27920803)
 - . replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY ELAC FAULT signal from the relay to the ELAC 2 (Ref. ASM 27-92/03)
 - . install the relay
 - . replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-400-001).
 - 2 If the resistance is more than 400 ohms:
 - a Remove the relay 40CE2.
 - \underline{b} Do a check of the resistance of the relay between pins X1 and X2 (Ref. ASM 27-92/03).
 - If the resistance is more than 400 ohms:
 - . replace the RELAY-ELAC 2 ANN SPLY (40CE2) (Ref. IPC 27920803)
 - . install the ELAC 2 (Ref. AMM TASK 27-93-34-400-001).
 - If the resistance is between 280 and 400 ohms:

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- . do a check and repair the wiring of the RLY ELAC FAULT signal from the relay to the ELAC 2. (Ref. ASM 27-92/03)
- . install the relay
- . install the ELAC 2 (Ref. AMM TASK 27-93-34-400-001).
- 3 If the resistance is between 280 and 400 ohms:
 - a Remove the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001).
 - if the warning ELAC2 stays:
 - . install the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-400-001).
 - continue the trouble shooting at Para. b
 - if the warning ELAC2 goes off, replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - install the ELAC 2 (Ref. AMM TASK 27-93-34-400-001).
 - \underline{b} Remove the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001).
 - if the warning ELAC2 stays:
 - . install the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-400-001).
 - . continue the trouble shooting at Para. c .
 - if the warning ELAC2 goes off, replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - install the ELAC 2 (Ref. AMM TASK 27-93-34-400-001).
 - \underline{c} Remove the RELAY-ELAC 2 ANN SPLY (40CE2) (Ref. IPC 27920803).
 - if the warning ELAC2 stays:
 - . install the RLY-ELAC 2 ANN SPLY (40CE2) (Ref. IPC 27920803).
 - . continue the trouble shooting at Para. d .
 - if the warning ELAC2 goes off, replace the RLY-ELAC 2 ANN SPLY (40CE2) (Ref. IPC 27920803).
 - install the ELAC 2 (Ref. AMM TASK 27-93-34-400-001).
 - Do a check and repair the wiring of the DSI 4/2 (ELAC2 FAILED) signals from the FCDC1 (3CE1) and the FCDC2 (3CE2) to the RLY-ELAC 2 ANN SPLY (40CE2) (Ref. ASM 27-95/04) and (Ref. ASM 27-95/05).
 - e Install the ELAC2 (Ref. AMM TASK 27-93-34-400-001).
- (2) If the flight controls do not move according to the ELAC 2 servoing:
 replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and
 (Ref. AMM TASK 27-93-34-400-001).
 - (a) If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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- (b) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DSO 06 discret output signal of the ELAC 2 (Ref. ASM 27-92/49).
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the DGO 01 digital output signal of the ELAC 2 (Ref. ASM 27-92/52)
- (c) If the fault continues:
 - Do a check of the wiring of the DGO 01 signal from the ELAC2 (2CE2) COM part to the MON part (DGI 09) and MON part (DGO 01) to the COM part (DGI 09) (Ref. ASM 27-92/52).
 - if the wiring is correct, see Para. 2.
 - if the wiring is not correct, repair the above wiring.
 - 2 Do a check of the wiring of the DGO 04 signal from the ELAC2 (2CE2) COM part to the MON part (DGI 01) and MON part (DGO 04) to the COM part (DGI 01) (Ref. ASM 27-92/52).
 - if the wiring is correct, see Para. 3.
 - if the wiring is not correct, repair the above wiring.
 - Do a check of the wiring of the DGO 05 signal from the ELAC 1 (2CE1) COM part to the ELAC 1 (2CE1) COM part (DGI 15) (Ref. ASM 27-92/52)
 - if the wiring is correct, see Para. 4_.
 - if the wiring is not correct, repair the above wiring.
 - Do a check of the wiring of the DGO 05 signal from the ELAC1 (2CE1) MON part to the ELAC1 (2CE1) MON part (DGI 15) (Ref. ASM 27-92/50)
 - if the wiring is correct, see Para. 5.
 - if the wiring is not correct, repair the above wiring.
 - Do a check of the wiring of the DGI 04 signal from the ELAC2 (2CE2) MON part to the COM part (Ref. ASM 27-92/52)
 - if the wiring is correct, see Para. 6.
 - if the wiring is not correct, repair the above wiring.
 - On a check of the wiring of the DGI O5 signal from the ELAC2 (2CE2) MON part to the COM part (Ref. ASM 27-92/52)
 - if the wiring is correct, see Para. 7.
 - if the wiring is not correct, repair the above wiring.
 - On a check of the wiring of the DSO 06 signal from the ELAC2 (2CE2) COM part to the MON part (DSI 48) and MON part (DSO 06) to the COM part (DSI 48) (Ref. ASM 27-92/49).
 - if the wiring is correct, see Para. 8.
 - if the wiring is not correct, repair the above wiring.

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- <u>8</u> Do a check of the wiring of the ELAC DECONNECTED IN THE RACK signal from the ELAC2 (2CE2) COM part and MON part to the ground terminal (Ref. ASM 27-92/40).
 - if the wiring is correct, see Para. 9.
 - if the wiring is not correct, repair the above wiring.
- 9 Do a check of the wiring of the DSI 07 signal from the ELAC2 (2CE2) COM part to the MON part (Ref. ASM 27-92/44).
 - if the wiring is correct, see Para. 10.
 - if the wiring is not correct, repair the above wiring.
- 10 Do a check of the wiring of the DSI 10 signal from the ELAC2 (2CE2) COM part to the MON part (Ref. ASM 27-92/44).
 - if the wiring is correct, see Para. 11.
 - if the wiring is not correct, repair the above wiring.
- 11 Do a check of the wiring of the DSI 13 signal from the ELAC2 (2CE2) COM part to the MON part (Ref. ASM 27-92/44).
 - if the wiring is correct, see Para. 12.
 - if the wiring is not correct, repair the above wiring.
- Do a check of the wiring of the DSI 17 signal from the ELAC2 (2CE2) COM part to the MON part (Ref. ASM 27-92/44).
 - if the wiring is correct, see Para. 13.
 - if the wiring is not correct, repair the above wiring.
- Do a check of the wiring of the PIN PROGRAM ELAC2 signal from the ELAC2 (2CE2) COM part and MON part to the ground terminal (Ref. ASM 27-92/40).
- 14 Replace the SSTU-ROLL CTL, CAPT (4CE1) and SSTU-ROLL CTL, F/O (4CE2) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
- (d) If the fault continues:
 - Do a check of the wiring of the PWR SPLY + 28VDC signal from the ELAC2 (2CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/02).
 - if there is continuity, see Para. 2.
 - if there is no continuity repair the above wiring.
 - 2 Do a check of the wiring of the PWR SPLY GND signal from the ELAC2 (2CE2) COM part and MON part to the ground terminal (Ref. ASM 27-92/02).
 - if there is continuity, see Para. 3.
 - if there is no continuity, repair the above wiring.
 - Do a check of the wiring of the CTL + 28VDC and ELAC2 ENGAGED (DSI 50) signals from the ELAC2 (2CE2) COM part and MON part to the pushbutton switch (6CE2) (Ref. ASM 27-92/02).
 - if there is continuity, see Para. 4_.

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- if there is no continuity, repair the above wiring.
- $\frac{4}{\text{A/C3}}$ Do a check of the wiring from the pushbutton switch (6CE2) pin A/C3 to the first terminal block (Ref. ASM 27-92/02).
 - if there is continuity, see Para. 5_.
 - if there is no continuity, repair the above wiring.
- 5 Replace the P/BSW-FLT CTL/ELAC 2 (6CE2) (Ref. IPC 27920802).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-902

Loss of the Racking Inputs Signal for the ELAC2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the ELAC DISCONNECTED IN THE RACK signal
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/40 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 RACKING INPUTS:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the ELAC DISCONNECTED IN THE RACK signal from the ELAC2 (2CE2) COM and MON part to the ground terminal (Ref. ASM 27-92/40).
 - B. Do the test given in Para. 3.

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TASK 27-93-00-810-903

Loss of Pin Programming Inputs Signal for the ELAC2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the PIN PROGRAM ELAC2 signal
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/40 | • |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 SDI INPUTS
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the PIN PROGRAM ELAC2 signal from the ELAC2 (2CE2) COM and MON part to the ground terminal (Ref. ASM 27-92/40).
- 5. Close-up
 - A. Do the test given in Para. 3.

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TASK 27-93-00-810-904

Loss of the ELAC 1 BUS Signal for the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- ELAC-1 (2CE1)
- wiring of the DGO 05 signal from the ELAC 1 (2CE1) COM part to the ELAC 2 (2CE2)
- wiring of the DGO 05 signal from the ELAC 1 (2CE1) MON part to the ELAC 2 (2CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/50 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: ELAC2 OR BUS FROM ELAC1
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) If the fault continues:
 - (a) Do a check of the wiring of the DGO 05 signal from the ELAC 1 (2CE1) COM part to the ELAC 2 (2CE2) (Ref. ASM 27-92/50).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (b).
 - (b) Do a check and repair the wiring of the DGO O5 signal from the ELAC 1 (2CE1) MON part to the ELAC 2 (2CE2) (Ref. ASM 27-92/50).

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B. Do the test given in Para. 3.

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TASK 27-93-00-810-905

Loss of the BUS 2 Signal of the ELAC 1 detected by FCDCs

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGO O2 signal from the ELAC 1 (2CE1) to the first terminal block
- Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 31-32-00-810-934 | Failure of the Digital Links |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-92/50 | • |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC1 COM BUS2

or

ELAC1 MON BUS2

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) to the DGO O2 digital output signal of the ELAC 1 COM and MON (Ref. ASM 27-92/50).
- (2) If the fault continues:
 - do a check and repair the wiring of the DGO O2 signal from the ELAC 1 (2CE1) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-92/50).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-907

Loss of the BUS 2 Signal of the ELAC 2 detected by FCDCs

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGO O2 signal from the ELAC 2 (2CE2) to the first terminal block
- Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 31-32-00-810-934 | Failure of the Digital Links |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-92/52 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC2 COM BUS2

or

ELAC2 MON BUS2

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) to the DGO O2 digital output signal of the ELAC 2 COM and MON (Ref. ASM 27-92/52).
- (2) If the fault continues:
 - do a check and repair the wiring of the DGO O2 signal from the ELAC 2 (2CE2) to the first terminal block, COM or MON part as shown in the maintenance message (Ref. ASM 27-92/52).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-909

Loss of the SEC 2 BUS Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGI 14 signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|--|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/54 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR BUS FROM SEC2
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 14 signal from the ELAC
 1 (2CE1) to the first terminal block (Ref. ASM 27-92/54).
 - B. Do the test given in Para. 3.

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TASK 27-93-00-810-910

Loss of the SEC 2 BUS Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGI 14 signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/54 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR BUS FROM SEC2
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 14 signal from the ELAC
 2 (2CE2) to the first terminal block (Ref. ASM 27-92/54).
 - B. Do the test given in Para. 3.

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TASK 27-93-00-810-911

Loss of the SEC 1 BUS Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGI 14 signal from the ELAC 1 (2CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/53 | · |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 OR BUS FROM SEC1
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 14 signal from the ELAC
 1 (2CE1) to the first terminal block (Ref. ASM 27-92/53).
 - B. Do the test given in Para. 3.

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TASK 27-93-00-810-912

Loss of the SEC 1 BUS Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring of the DGI 14 signal from the ELAC 2 (2CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|--|--|
| AMM AMM | 27-93-34-000-001 27-93-34-400-001 27-96-00-740-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/53 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC2 OR BUS FROM SEC1
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 14 signal from the ELAC 2 (2CE2) to the first terminal block (Ref. ASM 27-92/53).
 - B. Do the test given in Para. 3.

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TASK 27-93-00-810-913

Loss of the FCDC 2 BUS 4 Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - FCDC-2 (3CE2)
 - wiring of the DGI 12 signal from the ELAC 1 (2CE1) MON part to the FCDC 2 (3CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| AMM 27-93-34-000-001 Removal of the ELAC (2CE1,2CE2) AMM 27-93-34-400-001 Installation of the ELAC (2CE1,2CE2) AMM 27-95-34-000-001 Removal of the FCDC (3CE1,3CE2) AMM 27-95-34-400-001 Installation of the FCDC (3CE1,3CE2) AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning) | REFERENCE | DESIGNATION |
|--|--|--|
| ASM 21-73/US | AMM 27-93-34-400-001 AMM 27-95-34-000-001 AMM 27-95-34-400-001 | <pre>Installation of the ELAC (2CE1,2CE2) Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2)</pre> |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC1 MON OR BUS4 FROM FCDC2

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (2) If the fault continues:
 - do a check and repair the (Ref. ASM 27-95/03) wiring of the DGI 12 signal from the ELAC 1 (2CE1) MON part to the FCDC 2 (3CE2).
- B. Do the test given in Para. 3.

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EFF:

ALL

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-914

Loss of the FCDC 1 BUS 6 Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - FCDC-1 (3CE1)
 - wiring of the DGI 12 signal from the ELAC 2 (2CE2) MON part to the FCDC 1 (3CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | |
|--|---|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-95-34-000-001 AMM 27-95-34-400-001 AMM 27-96-00-740-001 ASM 27-95/02 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC2 MON OR BUS6 FROM FCDC1

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (2) If the fault continues:
 - do a check and repair the (Ref. ASM 27-95/02) wiring of the DGI 12 signal from the ELAC 2 (2CE2) MON part to the FCDC 1 (3CE1).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-915

Loss of the FCDC 2 BUS 5 Signal for the ELAC 2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - FCDC-2 (3CE2)
 - wiring of the DGI 12 signal from the ELAC 2 (2CE2) COM part to the FCDC 2 (3CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-95-34-000-001 AMM 27-95-34-400-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) |
| AMM 27-96-00-740-001 ASM 27-95/03 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC2 MON OR BUS5 FROM FCDC2

- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (1) If the fault continues:
 - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (2) If the fault continues:
 - do a check and repair the wiring of the DGI 12 signal from the ELAC 2 (2CE2) COM part to the FCDC 2 (3CE2) (Ref. ASM 27-95/03).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-916

Loss of the FCDC 1 BUS 3 Signal for the ELAC 1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring of the DGI 12 signal from the ELAC 1 (2CE1) COM part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-95/02 | <u>-</u> |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: ELAC1 MON OR BUS3 FROM FCDC1
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 12 signal from the ELAC
 1 (2CE1) COM part to the first terminal block (Ref. ASM 27-95/02).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-917

Loss of the Pitch Change Over Signal by the SEC1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - ELAC-1 (2CE1)

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- wiring of the PITCH NOT AVAIL IN ELAC2 (DSI11 and DSI22) signals
- wiring of the PITCH NOT AVAIL IN ELAC1 (DSI10 and DSI26) signals
- wiring of the L ELEV NOT AVAIL IN SEC2 (DSI13 and DSI27) signals
- wiring of the R ELEV NOT AVAIL IN SEC2 (DSI15 and DSI23) signals
- wiring of the L ELEV NOT AVAIL IN SEC1 (DSI05) signal
- wiring of the R ELEV NOT AVAIL IN SEC1 (DSI06) signal
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|-----------|-------------|
| | |

AMM 27-93-34-000-001 27-93-34-400-001 AMM 27-94-34-000-001 AMM AMM 27-94-34-400-001 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning) AMM ASM 27-92/32 27-92/33 ASM ASM 27-92/34

Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3)

3. Fault Confirmation

A. Test

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(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message CHECK PITCH CHANGE OVER OF SEC1:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the PITCH NOT AVAIL IN ELAC2 (DSI11 and DSI22) signals from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/32):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring of the PITCH NOT AVAIL IN ELAC1 (DSI10 and DSI26) signals from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/33):
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Do a check of the wiring of the L ELEV NOT AVAIL IN SEC2 (DSI13 and DSI27) signals from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/34):
 - if there is continuity, see Para. (d)
 - if there is no continuity, repair the above wiring.
 - (d) Do a check of the wiring of the R ELEV NOT AVAIL IN SEC2 (DSI15 and DSI23) signals from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/34):
 - if there is continuity, see Para. (e)
 - if there is no continuity, repair the above wiring.
 - (e) Do a check of the wiring of the L ELEV NOT AVAIL IN SEC1 (DSIO5) signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/35):
 - if there is continuity, see Para. (f)
 - if there is no continuity, repair the above wiring.
 - (f) Do a check and repair the wiring of the R ELEV NOT AVAIL IN SEC1 (DSIO6) signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/35).
 - (2) If the fault continues:

R

- replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- B. Do the test given in Para. 3.

EFF: ALL

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TASK 27-93-00-810-918

Loss of the Pitch Change Over Signal by the SEC2

1. Possible Causes

- SEC-2 (1CE2)
- SEC-1 (1CE1)
- wiring of the PITCH NOT AVAIL IN ELAC2 (DSI10 and DSI26) signals
- wiring of the PITCH NOT AVAIL IN ELAC1 (DSI11 and DSI22) signals
- wiring of the L ELEV NOT AVAIL IN SEC1 (DSI13 and DSI27) signals
- wiring of the R ELEV NOT AVAIL IN SEC1 (DSI15 and DSI23) signals
- wiring of the L ELEV NOT AVAIL IN SEC2 (DSIO5) signal
- wiring of the R ELEV NOT AVAIL IN SEC2 (DSIO6) signal

2. Job Set-up Information

A. Referenced Information

------REFERENCE DESIGNATION

DESIGNATION

31-32-00-810-932 Failure of the Discrete Links
AMM 27-94-34-000-001 Removal of the SEC (1CE1,1CE2,1CE3)
AMM 27-94-34-400-001 Installation of the SEC (1CE1,1CE2,1CE3)
BITE Test of the EFCS (Ground Scanning)

ASM 27-92/32

ASM 27-92/33 ASM 27-92/34

1011 27 72/34

ASM 27-92/35

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message CHECK PITCH CHANGE OVER OF SEC2:
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) (Ref. AMM TASK 27-94-34-400-001).

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- (2) If the fault continues:
 - (a) do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) to the DSI 11 and DSI 22 discret input signal of the SEC 1 COM and MON (Ref. ASM 27-92/32).
- (3) If the fault continues:
 - (a) Do a check of the wiring of the PITCH NOT AVAIL IN ELAC2 (DSI10 and DSI26) signals from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/32):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring of the PITCH NOT AVAIL IN ELAC1 (DSI11 and DSI22) signals from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/33):
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Do a check of the wiring of the L ELEV NOT AVAIL IN SEC1 (DSI13 and DSI27) signals from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/35):
 - if there is continuity, see Para. (d)
 - if there is no continuity, repair the above wiring.
 - (d) Do a check of the wiring of the R ELEV NOT AVAIL IN SEC1 (DSI15 and DSI23) signals from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/35):
 - if there is continuity, see Para. (e)
 - if there is no continuity, repair the above wiring.
 - (e) Do a check of the wiring of the L ELEV NOT AVAIL IN SEC2 (DSI05) signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/34):
 - if there is continuity, see Para. (f)
 - if there is no continuity, repair the above wiring.
 - (f) Do a check and repair the wiring of the R ELEV NOT AVAIL IN SEC2 (DSIO6) signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/34).
- B. Do the test given in Para. 3.

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-919

Loss of the Side Stick Priority Signal for One ELAC

1. Possible Causes

- ELAC-1 (2CE1)
- ELAC-2 (2CE2)
- wiring of the STICK PRIORITY CAPT (DSI35) and STICK PRIORITY F/O (DSI36) signals

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|--|--|
| AMM AMM | | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) Operational Test of the Side Stick Priority BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick priority (Ref. AMM TASK 27- 96-00-710-003).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the tests give the maintenance message CHECK PRIORITY WIRING:
 - do the tests given in Para. 3. with only the ELAC1 engaged for the operational test of the side stick priority.
 - (1) If the tests give the above maintenance message again:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the STICK PRIORITY CAPT (DSI35) and STICK PRIORITY F/O (DSI36) signals from the ELAC1 (2CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/17).

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- (2) If the tests do not give a maintenance message:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the STICK PRIORITY CAPT (DSI35) and STICK PRIORITY F/O (DSI36) signals from the ELAC2 (2CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/17).
- B. Do the tests given in Para. 3.

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TASK 27-93-00-810-920

Disagree between the Emergency Power Supply Discretes on the ELAC1 or ELAC2 or SEC1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SEC-1 (1CE1)
 - ELAC-2 (2CE2)
 - wiring of the LOSS OF NORMAL SPLY ON 2PP (DSI53) signal
 - wiring of the SEC1 IN EMERGENCY PWR SPLY (DSI3) signal
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the Electric Pump | |
| AMM | 29-24-00-864-001 | Depressurize the Yellow Hydraulic System | |
| ASM | 27-92/02 | , | |

- 3. Fault Confirmation
 - A. Job Set-up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-24-00-863-001).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | T. LOCATION | |
|-------|---------------------------------|--------|-------------|--|
| 49VU | FLIGHT CONTROLS/ELAC1/NORM/SPLY | 15CE1 | B11 | |
| 49VU | FLIGHT CONTROLS/SEC1/NORM/SPLY | 21CE1 | в08 | |
| 121VU | FLIGHT CONTROLS/THS ACTR/MOT1 | 19CE1 | Q16 | |

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C. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: Open the circuit breakers FLT CTL/ELAC1/NORM/SPLY (15CE1) and FLT CTL/THS ACTR/MOT1 (19CE1) before you start the ground scanning.

4. Fault Isolation

R

- R A. If the BITE test gives the maintenance message EMER DISCRETE DISAGREE:
 - do the test given in Para. 3. (ignore the NOTE):
 - . with the ELAC1 engaged only
 - . with the circuit breaker FLT CTL/ELAC1/NORM/SPLY (15CE1) open
 - . with the circuit breaker FLT CTL/THS ACTR/MOT1 (19CE1) open
 - (1) If the test gives the above maintenance message again:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the LOSS OF NORMAL SPLY ON 2PP (DSI53) signal from the ELAC1 (2CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/02).
 - (2) If the test does not give a maintenance message:
 - do the test given in Para. 3. (ignore the NOTE):
 - . with the SEC1 engaged only
 - . with the circuit breaker FLT CTL/THS ACTR/MOT1 (19CE1) open
 - . with the circuit breaker FLT CTL/SEC1/NORM/SPLY (21CE1) open
 - (a) If the test gives the maintenance message EMER DISCRETE DISAGREE: - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - If the fault continues:
 - do a check and repair the wiring of the SEC1 IN EMERGENCY PWR SPLY (DSI3) signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/02).
 - (b) If the test does not give a maintenance message:

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- replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- 1 If the fault continues:
 - do a check and repair the wiring of the LOSS OF NORMAL SPLY ON 2PP (DSI53) signal from the ELAC2 (2CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/02).
- B. Do the test given in Para. 3.

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| <i>-</i> | | · | Ju | u | ν |

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-24-00-864-001).

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TASK 27-93-00-810-921

Loss of the LGCIU 1 Discrete Inputs for the ELAC

1. Possible Causes

- PROX SNSR-R L/G EXT, SYS 1 (20GA) - PROX SNSR-L L/G EXT, SYS 1 (21GA) - PROX SNSR-NLG EXT, SYS 1 (24GA)
 - ELAC-2 (2CE2)
 - LGCIU-1 (5GA1)
 - ELAC-1 (2CE1)
 - wiring from the ELAC 2 (2CE2) to the LGCIU 1 (5GA1)
 - wiring from the ELAC 1 (2CE1) to the LGCIU 1 (5GA1)

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | | |
|-------------|-----------|------------------|--|--|--|
| | | | | | |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) | | |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) | | |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | | |
| | AMM | 32-31-71-000-001 | Removal of the LGCIU (5GA1, 5GA2) | | |
| | AMM | 32-31-71-400-001 | Installation of the LGCIU (5GA1, 5GA2) | | |
| R R R | AMM | 32-31-73-000-001 | Removal of the Proximity-Sensors 9GA(8GA), 11GA(10GA), 27GA(26GA), 29GA(28GA), 15GA(14GA), 17GA(16GA), 21GA(20GA), 23GA(22GA), 33GA(32GA), 35GA(34GA) | | |
| R R R | AMM | 32-31-73-000-005 | Removal of the NLG Proximity-Sensors 12GA, 13GA, 18GA, 19GA, 24GA, 25GA, 30GA, 31GA, 37GA (36GA), 39GA (38GA) | | |
| R R R | AMM | 32-31-73-400-001 | <pre>Installation of the Proximity-Sensors 9GA(8GA), 11GA(10GA), 27GA(26GA), 29GA(28GA), 15GA(14GA), 17GA(16GA), 21GA(20GA), 23GA(22GA), 33GA(32GA)</pre> | | |
| R R R | AMM | 32-31-73-400-005 | Installation of the NLG Proximity-Sensors 12GA, 13GA, 18GA, 19GA, 24GA, 25GA, 30GA, 31GA, 37GA (36GA), 39GA (38GA) | | |
| | ASM | 27-92/43 | | | |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

A. Table of the circuit breakers used in this procedure:

PANEL DESIGNATION IDENT. LOCATION

49VU FLIGHT CONTROLS/ELAC1/NORM/SPLY 15CE1 B11
105VU FLIGHT CONTROLS/ELAC2/STBY SPLY 16CE2 A02
105VU FLT CTL/ELAC1/STBY SPLY 16CE1 A01
121VU FLIGHT CONTROLS/ELAC2/NORM/SPLY 15CE2 R20

- - C. If the BITE test gives the maintenance message: CHECK LGCIU1 DISC INPUTS
 - replace the PROX SNSR-R L/G EXT, SYS 1 (20GA) (Ref. AMM TASK 32-31-73-000-001) and (Ref. AMM TASK 32-31-73-400-001).
 - (1) If the fault continues:
 - replace the PROX SNSR-L L/G EXT, SYS 1 (21GA) (Ref. AMM TASK 32-31-73-000-001) (Ref. AMM TASK 32-31-73-400-001).
 - (2) If the fault continues:
 - replace the PROX SNSR-NLG EXT, SYS 1 (24GA) (Ref. AMM TASK 32-31-73-000-005) (Ref. AMM TASK 32-31-73-400-005).
 - (3) If the fault continues:
 - open the circuit breaker (15CE1) on the panel 49VU and the circuit breaker (16CE1) on the panel 105VU and do the test given in Para.
 - (4) Close the circuit breakers (15CE1) and (16CE1).
 - (5) Open the circuit breaker (15CE2) on the panel 121VU and the circuit breaker (16CE2) on the panel 105VU and do the test given in Para. 3.
 - (6) Close the circuit breakers (15CE2) and (16CE2).
 - (a) If the message is shown only when the circuit breakers (15CE1) and (16CE1) are open:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 1 If the fault continues:
 - replace the LGCIU-1 (5GA1) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).

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- 2 If the fault continues:
 - do a check and repair the wiring from the ELAC 2 (2CE2) to the LGCIU 1 (5GA1) (Ref. ASM 27-92/43).
- (b) If the message is shown only when the circuit breakers (15CE2) and (16CE2) are open:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 1 If the fault continues:
 - replace the LGCIU-1 (5GA1) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).
 - 2 If the fault continues:
 - do a check and repair the wiring from the ELAC 1 (2CE1) to the LGCIU 1 (5GA1) (Ref. ASM 27-92/43).
- (c) If the message is shown when the circuit breakers (15CE1), (16CE1) are open then, when the circuit breakers (15CE2), (16CE2) are open:
 - replace the LGCIU-1 (5GA1) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).
- D. Do the test given in Para. 3.

EFF: ALL

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GA319/A320/A321

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-922

Loss of the LGCIU 2 Discrete Inputs for the ELAC

1. Possible Causes

- R PROX SNSR-R L/G EXT, SYS 2 (22GA)
 R PROX SNSR-L L/G EXT, SYS 2 (23GA)
 R PROX SNSR-NLG EXT, SYS 2 (25GA)
 - ELAC-2 (2CE2)
 - LGCIU-2 (5GA2)
 - ELAC-1 (2CE1)
 - wiring from the ELAC 2 (2CE2) to the LGCIU 2 (5GA2)
 - wiring from the ELAC 1 (2CE1) to the LGCIU 2 (5GA2)

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION |
|---|-----------|------------------|---|
| | | | |
| | AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| | AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | AMM | 32-31-71-000-001 | Removal of the LGCIU (5GA1, 5GA2) |
| | AMM | 32-31-71-400-001 | Installation of the LGCIU (5GA1, 5GA2) |
| R | AMM | 32-31-73-000-001 | Removal of the Proximity-Sensors 9GA(8GA), |
| R | | | 11GA(10GA), 27GA(26GA), 29GA(28GA), 15GA(14GA), |
| R | | | 17GA(16GA), 21GA(20GA), 23GA(22GA), 33GA(32GA), |
| R | | | 35GA(34GA) |
| R | AMM | 32-31-73-000-005 | Removal of the NLG Proximity-Sensors 12GA, 13GA, |
| R | | | 18GA, 19GA, 24GA, 25GA, 30GA, 31GA, 37GA (36GA), 39GA |
| R | | | (38GA) |
| R | AMM | 32-31-73-400-001 | Installation of the Proximity-Sensors 9GA(8GA), |
| R | | | 11GA(10GA), 27GA(26GA), 29GA(28GA), 15GA(14GA), |
| R | | | 17GA(16GA), 21GA(20GA), 23GA(22GA), 33GA(32GA) |
| R | AMM | 32-31-73-400-005 | Installation of the NLG Proximity-Sensors 12GA, 13GA, |
| R | | | 18GA, 19GA, 24GA, 25GA, 30GA, 31GA, 37GA (36GA), 39GA |
| R | | | (38GA) |
| | ASM | 27-92/43 | |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

EFF: ALL

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4. Fault Isolation

A. Table of the circuit breakers used in this procedure:

PANEL DESIGNATION IDENT. LOCATION

49VU FLIGHT CONTROLS/ELAC1/NORM/SPLY 15CE1 B11
105VU FLIGHT CONTROLS/ELAC2/STBY SPLY 16CE2 A02
105VU FLT CTL/ELAC1/STBY SPLY 16CE1 A01
121VU FLIGHT CONTROLS/ELAC2/NORM/SPLY 15CE2 R20

- R B. If the test doesn't confirm the fault or if the maintenance message CHECK LGCIU2 DISC INPUTS was shown after landing gear free-fall extension: no maintenance action is necessary.
 - C. If the BITE test gives the maintenance message: CHECK LGCIU2 DISC INPUTS
 - replace the PROX SNSR-R L/G EXT, SYS 2 (22GA) (Ref. AMM TASK 32-31-73-000-001) (Ref. AMM TASK 32-31-73-400-001).
 - (1) If the fault continues:
 - replace the PROX SNSR-L L/G EXT, SYS 2 (23GA) (Ref. AMM TASK 32-31-73-000-001) (Ref. AMM TASK 32-31-73-400-001).
 - (2) If the fault continues:
 - replace the PROX SNSR-NLG EXT, SYS 2 (25GA) (Ref. AMM TASK 32-31-73-000-005) (Ref. AMM TASK 32-31-73-400-005).
 - (3) If the fault continues:
 - open the circuit breaker (15CE1) on the panel 49VU and the circuit breaker (16CE1) on the panel 105VU and do the test given in Para.
 3.
 - (4) Close the circuit breakers (15CE1) and (16CE1).
 - (5) Open the circuit breaker (15CE2) on the panel 121VU and the circuit breaker (16CE2) on the panel 105VU and do the test given in Para. 3.
 - (6) Close the circuit breakers (15CE2) and (16CE2).
 - (a) If the message is shown only when the circuit breakers (15CE1) and (16CE1) are open:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 1 If the fault continues:
 - replace the LGCIU-2 (5GA2) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).

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- 2 If the fault continues:
 - do a check and repair the wiring from the ELAC 2 (2CE2) to the LGCIU 2 (5GA2) (Ref. ASM 27-92/43).
- (b) If the message is shown only when the circuit breakers (15CE2) and (16CE2) are open:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - 1 If the fault continues:
 - replace the LGCIU-2 (5GA2) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).
 - 2 If the fault continues:
 - do a check and repair the wiring from the ELAC 1 (2CE1) to the LGCIU 2 (5GA2) (Ref. ASM 27-92/43).
- (c) If the message is shown when the circuit breakers (15CE1), (16CE1) are open then, when the circuit breakers (15CE2), (16CE2) are open:
 - replace the LGCIU-2 (5GA2) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).
- D. Do the test given in Para. 3.

R

SROS

EFF: ALL 27-93-00

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-928

Failure of Two IRs

- 1. Possible Causes
- 2. Job Set-up Information

| _ | _ | - | | | - 4 | - | | | |
|----|-----|-----|-----|-----|-----|----|-----|----|----|
| Α_ | Re1 | ter | `en | ced | Inf | nn | mat | ٦. | on |

REFERENCE **DESIGNATION**

AMM 34-14-00-740-001 Interface Test of the IR

- 3. Fault Confirmation
 - A. Test Not applicable.
- 4. Fault Isolation
 - A. This warning is shown after a double IR failure.

To do the trouble shooting refer to the POST FLIGHT REPORT and start the trouble shooting from the first NAV IR FAULT warning and its related maintenance message.

After this step, on the upper ECAM DU the F/CTL IR DISAGREE will go out of view and be replaced by NAV IR FAULT warning with a related message. Do the Interface test of the IR (Ref. AMM TASK 34-14-00-740-001).

Do the trouble shooting procedure related to this maintenance message.

EFF: ALL **27-93-00**

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-929

Failure of Two ADRs

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|------------------|---|
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |

INTERFACE TEST of the ADR

3. Fault Confirmation

AMM 34-13-00-740-002

R R

R R

R

R

R

R

- A. Test Not applicable.
- 4. Fault Isolation
 - A. This warning is shown after a double ADR failure.

To do the trouble shooting refer to the POST FLIGHT REPORT and start the trouble shooting from the first NAV ADR FAULT warning and its related maintenance message.

After this step, on the upper ECAM DU the F/CTL ADR DISAGREE will go out of view and be replaced by NAV ADR FAULT warning with a related message.

- (1) Do the Interface test of the ADR (Ref. AMM TASK 34-13-00-740-002):
 - Do the trouble shooting procedure related to this maintenance message.
 - If you do not find any maintenance message and if an airspeed discrepancy is reported by the pilot, do the trouble shooting procedure (Ref. TASK 34-13-00-810-998).

procedure (Ref. TASK 34-13-00-810-998).

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-930

Loss of the Pitch Change Over Signal by the ELAC 2

1. Possible Causes

- ELAC-2 (2CE2)
- wiring of the PITCH AXIS OK (DSO 01) signal from the ELAC 2 COM part to the MON part (DSI 29)
- wiring of the PITCH AXIS OK (DSO 09) signal from the ELAC 2 COM part to the MON part (DSI 12)
- wiring of the PITCH AXIS OK (DSO 01) signal from the ELAC 2 MON part to the COM part (DSI 29)
- wiring of the PITCH AXIS OK (DSO 09) signal from the ELAC 2 MON part to the COM part (DSI 12)

2. Job Set-up Information

A. Referenced Information

REFERENCE DESIGNATION

31-32-00-810-932 Failure of the Discrete Links

31-32-00-810-932 Failure of the Discrete Links

AMM 27-93-34-000-001 Removal of the ELAC (2CE1,2CE2)

AMM 27-93-34-400-001 Installation of the ELAC (2CE1,2CE2)

AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

ASM 27-92/32

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message CHECK PITCH CHANGE OVER WIRING OF ELAC2:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the:
 - PITCH AXIS OK (DSO 01) signal ELAC 2 COM part (Ref. ASM 27-92/32)
 - PITCH AXIS OK (DSO 09) signal ELAC 2 COM part (Ref. ASM 27-92/32)

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EFF: ALL

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- PITCH AXIS OK (DSO 01) signal ELAC 2 MON part (Ref. ASM 27-92/32)
- PITCH AXIS OK (DSO 09) signal ELAC 2 MON part (Ref. ASM 27-92/32)
- (2) If the fault continues:
 - (a) Do a check of the wiring of the PITCH AXIS OK (DSO 01) signal from the ELAC 2 COM part to the MON part (DSI 29) (Ref. ASM 27-92/32).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring of the PITCH AXIS OK (DSO 09) signal from the ELAC 2 COM part to the MON part (DSI 12) (Ref. ASM 27-92/32).
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Do a check of the wiring of the PITCH AXIS OK (DSO 01) signal from the ELAC 2 MON part to the COM part (DSI 29) (Ref. ASM 27-92/32).
 - if there is continuity, see Para. (d)
 - if there is no continuity, repair the above wiring.
 - (d) Do a check and repair the wiring of the PITCH AXIS OK (DSO 09) signal from the ELAC 2 MON part to the COM part (DSI 12) (Ref. ASM 27-92/32).
- B. Do the test given in Para. 3.

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EFF:

ALL

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-931

Loss of the Pitch Change Over Signal by the ELAC 1

1. Possible Causes

- ELAC-1 (2CE1)
- wiring of the PITCH AXIS OK (DSO 09) signal from the ELAC 1 COM part to the MON part (DSI 12)
- wiring of the PITCH AXIS OK (DSO 09) signal from the ELAC 1 MON part to the COM part (DSI 12)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | | |
|--|--|--|--|
| 31-32-00-810-932 AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/33 | Failure of the Discrete Links Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message CHECK PITCH CHANGE OVER WIRING OF ELAC1:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the:
 - PITCH AXIS OK (DSO 09) signal ELAC 1 COM part (Ref. ASM 27-92/33)
 - PITCH AXIS OK (DSO 09) signal ELAC 1 MON part (Ref. ASM 27-92/33)

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EFF:

ALL

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- (2) If the fault continues:
 - (a) Do a check of the wiring of the PITCH AXIS OK (DSO 09) signal from the ELAC 1 COM part to the MON part (DSI 12) (Ref. ASM 27-92/33).
 - if there is continuity, see para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the PITCH AXIS OK (DSO 09) signal from the ELAC 1 MON part to the COM part (DSI 12) (Ref. ASM 27-92/33).
- B. Do the test given in Para. 3.

EFF: ALL 27-93-00

TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-932

Loss of the YAW DAMPER Signal from the FAC 1/2 to the ELAC1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - wiring
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | | |
|--|--|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/37 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | | |

3. Fault Confirmation

A. Test

Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

- 4. Fault Isolation
 - A. If the test gives the maintenance message ELAC1 OR WIRING FROM FAC 1/2:
 replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring
 - from the ELAC1 (2CE1) pin AA/11E to the first terminal block
 - . from the ELAC1 (2CE1) pin AA/8E to the first terminal block
 - . from the ELAC1 (2CE1) pin AE/8H to the first terminal block
 - . from the ELAC1 (2CE1) pin AE/7K to the first terminal block (Ref. ASM 27-92/37).
 - **B.** Test

Do the test given in Para. 3.A.

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TROUBLE SHOOTING MANUAL

TASK 27-93-00-810-933

Loss of the YAW DAMPER signal from the FAC 1/2 to the ELAC2

- 1. Possible Causes
 - ELAC-2 (2CE2)
 - wiring
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION | | |
|--|--|--|--|
| AMM 27-93-34-000-001 AMM 27-93-34-400-001 AMM 27-96-00-740-001 ASM 27-92/37 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) BITE Test of the EFCS (Ground Scanning) | | |

3. Fault Confirmation

A. Test

Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

- 4. Fault Isolation
 - A. If the test gives the maintenance message ELAC2 OR WIRING FROM FAC 1/2:
 replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring
 - from the ELAC2 (2CE2) pin AA/11E to the first terminal block
 - . from the ELAC2 (2CE2) pin AA/8E to the first terminal block
 - . from the ELAC2 (2CE2) pin AE/8H to the first terminal block
 - . from the ELAC2 (2CE2) pin AE/7K to the first terminal block (Ref. ASM 27-92/37).
 - **B.** Test

Do the test given in Para. 3.A.

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R **ON A/C 201-225, 227-227, 229-254, 276-299, 426-450, 476-499, 503-549, R 551-599, 701-749,

TASK 27-93-00-810-934

Failure of the ELAC1 at the AP Engagement

1. Possible Causes

- FMGC-1 (1CA1)
- ELAC-1 (2CE1)
- FMGC-2 (1CA2)
- SSTU-ROLL CTL, F/O (4CE2)
- SSTU-PITCH CTL, F/O (4CE4)
- SSTU-ROLL CTL, CAPT (4CE1)
- SSTU-PITCH CTL, CAPT (4CE3)
- wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 31-32-00-810-932 | Failure of the Discrete Links |
| 31-32-00-810-934 | Failure of the Digital Links |
| AMM 22-83-34-000-001 | Removal of the FMGC (1CA1,1CA2) |
| AMM 22-83-34-400-001 | Installation of the FMGC (1CA1,1CA2) |
| AMM 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the |
| | External Power |
| AMM 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM 27-92-41-400-002 | Installation of the Transducer Units |
| | (4CE1,4CE2,4CE3,4CE4) |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| AMM 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground |
| | Power Supply |
| AMM 29-10-00-864-003 | Depressurize the Blue Hydraulic System |
| AMM 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow |
| | Hydraulic System through the PTU with the Electric |
| | Pump |
| AMM 29-23-00-864-001 | Depressurize the Green and Yellow Hydraulic Systems |
| | after Operation of the PTU |
| AMM 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the |
| | Electric Pump |
| AMM 29-24-00-864-001 | Depressurize the Yellow Hydraulic System |
| AMM 34-10-00-860-004 | IR Alignment Procedure |
| ASM 22-82/06 | |
| ASM 22-85/03 | |

EFF: 201-225, 227-227, 229-254, 276-299, 426-450, 476-499, 503-549, 551-599, 701-749,

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EFERENCE DESIGNATION

ASM 22-86/02 ASM 27-92/44 ASM 27-92/50

3. Fault Confirmation

A. Job Set-Up

- (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
- (2) On the overhead panel 20VU:
 - on the ADIRS CDU, set the OFF/NAV/ATT selector switches to NAV and align the IRs (Ref. AMM TASK 34-10-00-860-004).
- (3) On the overhead panel 23VU:
 - make sure that the FLT CTL/ELAC1 and FLT CTL/SEC1 pushbutton switches are pushed (on these pushbutton switches, the OFF legend is off).
- (4) On the overhead panel 24VU:
 - make sure that the FLT CTL/SEC2 and FLT CTL/SEC3 pushbutton switches are pushed (on these pushbutton switches, the OFF and FAULT legends are off).
- (5) On the overhead panel 24VU:
 - release the FLT CTL/ELAC2 pushbutton switch (on this pushbutton switch, the OFF legend comes on).
- (6) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-863-003), (Ref. AMM TASK 29-23-00-863-001), (Ref. AMM TASK 29-24-00-863-001).

B. Test

- (1) On the FCU:
 - push the AP1 pushbutton switch to engage the AP1
 - push the AP2 pushbutton switch to engage the AP2.
- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- (3) Depressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-864-003), (Ref. AMM TASK 29-23-00-864-001), (Ref. AMM TASK 29-24-00-864-001).

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4. Fault Isolation

- A. If the F/CTL ELAC1 FAULT warning comes into view 1 second after the AP1 engagement:
 - (1) Replace the FMGC-1 (1CA1) (Ref. AMM TASK 22-83-34-000-001) and (Ref. AMM TASK 22-83-34-400-001).
 - (2) If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (3) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DSI 07 and DSI 13 signals of the ELAC1 (2CE1) (Ref. ASM 27-92/44).

If you find a defect:

- repair it
- do the test given in Para. 3.

If you do not find any defect, continue the trouble shooting.

- (4) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the DGI 04 Bus of the ELAC1 (2CE1) (Ref. ASM 27-92/50), (Ref. ASM 22-86/02).

If you find a defect:

- repair it
- do the test given in Para. 3.

If you do not find any defect, continue the trouble shooting.

- (5) If the fault continues:
 - (a) Do a check of the wiring of the DSO 07 signal from the ELAC1 (2CE1) COM part and MON part to the FMGC1 (1CA1) (Ref. ASM 27-92/44)
 - if there is continuity see Para. (b)
 - if there is no continuity repair the above wiring.
 - (b) Do a check of the wiring of the DSI 07 signal from the ELAC1 (2CE1) COM part and MON part to the FMGC1 (1CA1) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).
 - if there is continuity see Para. (c)
 - if there is no continuity repair the above wiring.
 - (c) Do a check of the wiring of the DSI 13 signal from the ELAC1 (2CE1) COM part and MON part to the FMGC1 (1CA1) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).
 - if there is continuity see Para. (5)
 - if there is no continuity repair the above wiring.

EFF: 201-225, 227-227, 229-254, 276-299, 426-450, 476-499, 503-549, 551-599, 701-749,

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- (d) Do a check and repair the wiring of the DGI 04 Bus from the ELAC1 (2CE1) COM part and MON part to the FMGC1 (1CA1) (Ref. ASM 27-92/50), (Ref. ASM 22-86/02).
- **B.** If the F/CTL ELAC1 FAULT warning comes into view 1 second after the AP2 engagement:
 - (1) Replace the FMGC-2 (1CA2) (Ref. AMM TASK 22-83-34-000-001) and (Ref. AMM TASK 22-83-34-400-001).
 - (2) If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (3) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DSI 10 and DSI 17 signals of the ELAC1 (2CE1) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).

If you find a defect:

- repair it
- do the test given in Para. 3.

If you do not find any defect, continue the trouble shooting.

- (4) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the DGI 05 Bus of the ELAC1 (2CE1) (Ref. ASM 27-92/50), (Ref. ASM 22-82/06).

If you find a defect:

- repair it
- do the test given in Para. 3.

If you do not find any defect, continue the trouble shooting.

- (5) If the fault continues:
 - (a) Do a check of the wiring of the DSO 08 signal from the ELAC1 (2CE1) COM part and MON part to the FMGC2 (1CA2) (Ref. ASM 27-92/44)
 - if there is continuity see Para. (b)
 - if there is no continuity repair the above wiring.
 - (b) Do a check of the wiring of the DSI 10 signal from the ELAC1 (2CE1) COM part and MON part to the FMGC2 (1CA2) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).
 - if there is continuity see Para. (c)
 - if there is no continuity repair the above wiring.
 - (c) Do a check of the wiring of the DSI 17 signal from the ELAC1 (2CE1) COM part and MON part to the FMGC2 (1CA2) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).
 - if there is continuity see Para. (d)

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- if there is no continuity repair the above wiring.
- (d) Do a check and repair the wiring of the DGI 05 Bus from the ELAC1 (2CE1) COM part and MON part to the FMGC2 (1CA2) (Ref. ASM 27-92/50), (Ref. ASM 22-86/02).
- C. If the F/CTL ELAC1 FAULT warning comes into view 5 seconds after the AP engagement:
 - (1) On the CAPT side stick, push and hold the takeover and priority pushbutton switch:
 - (a) On the panel 131VU, on the SIDE STICK PRIORITY/CAPT annunciator light, if the green CAPT legend comes on:
 - replace the SSTU-ROLL CTL, F/O (4CE2) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - 1 If the fault continues:
 - replace the SSTU-PITCH CTL, F/O (4CE4) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (b) On the panel 131VU, on the SIDE STICK PRIORITY/CAPT annunciator light, if the green CAPT legend does not come on:
 - replace the SSTU-ROLL CTL, CAPT (4CE1) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - 1 If the fault continues:
 - replace the SSTU-PITCH CTL, CAPT (4CE3) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
- D. Do the test given in Para. 3.

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TASK 27-93-00-810-935

Failure of the ELAC2 at the AP Engagement

1. Possible Causes

- FMGC-1 (1CA1)
- ELAC-2 (2CE2)
- FMGC-2 (1CA2)
- SSTU-ROLL CTL, F/O (4CE2)
- SSTU-PITCH CTL, F/O (4CE4)
- SSTU-ROLL CTL, CAPT (4CE1)
- SSTU-PITCH CTL, CAPT (4CE3)
- wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 31-32-00-810-932 | Failure of the Discrete Links |
| 31-32-00-810-934 | Failure of the Digital Links |
| AMM 22-83-34-000-001 | Removal of the FMGC (1CA1,1CA2) |
| AMM 22-83-34-400-001 | Installation of the FMGC (1CA1,1CA2) |
| AMM 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the |
| | External Power |
| AMM 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM 27-92-41-400-002 | Installation of the Transducer Units |
| | (4CE1,4CE2,4CE3,4CE4) |
| AMM 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| AMM 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground |
| | Power Supply |
| AMM 29-10-00-864-003 | Depressurize the Blue Hydraulic System |
| AMM 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow |
| | Hydraulic System through the PTU with the Electric |
| | Pump |
| AMM 29-23-00-864-001 | Depressurize the Green and Yellow Hydraulic Systems |
| | after Operation of the PTU |
| AMM 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the |
| | Electric Pump |
| AMM 29-24-00-864-001 | Depressurize the Yellow Hydraulic System |
| AMM 34-10-00-860-004 | IR Alignment Procedure |
| ASM 22-82/06 | |
| ASM 22-85/03 | |
| ASM 22-86/02 | |
| ASM 27-92/44 | |
| ASM 27-92/52 | |

EFF: 201-225, 227-227, 229-254, 276-299, 426-450, 476-499, 503-549, 551-599, 701-749,

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3. Fault Confirmation

- A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 20VU:
 - on the ADIRS CDU, set the OFF/NAV/ATT selector switches to NAV and align the IRs (Ref. AMM TASK 34-10-00-860-004).
 - (3) On the overhead panel 23VU:
 - make sure that the FLT CTL/SEC1 pushbutton switch is pushed (on this pushbutton switch, the OFF legend is off).
 - (4) On the overhead panel 24VU:
 - make sure that the FLT CTL/ELAC2, FLT CTL/SEC2 and FLT CTL/SEC3
 pushbutton switches are pushed (on these pushbutton switches, the
 OFF legends are off).
 - (5) On the overhead panel 23VU:
 - release the FLT CTL/ELAC1 pushbutton switch (on this pushbutton switch, the OFF legend comes on).
 - (6) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-863-003), (Ref. AMM TASK 29-23-00-863-001), (Ref. AMM TASK 29-24-00-863-001).
- B. Test
 - (1) On the FCU:
 - push the AP1 pushbutton switch to engage the AP1
 - push the AP2 pushbutton switch to engage the AP2.
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (3) Depressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-864-003), (Ref. AMM TASK 29-23-00-864-001), (Ref. AMM TASK 29-24-00-864-001).

4. Fault Isolation

- A. If the F/CTL ELAC2 FAULT warning comes into view 1 second after the AP1 engagement:
 - (1) Replace the FMGC-1 (1CA1) (Ref. AMM TASK 22-83-34-000-001) and (Ref. AMM TASK 22-83-34-400-001).
 - (2) If the fault continues:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

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- (3) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DSI 07 and DSI 13 signals of the ELAC2 (2CE2) (Ref. ASM 27-92/44).

If you find a defect:

- repair it
- do the test given in Para. 3.

If you do not find any defect, continue the trouble shooting.

- (4) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the DGI 04 Bus of the ELAC2 (2CE2) (Ref. ASM 27-92/52), (Ref. ASM 22-86/02).

If you find a defect:

- repair it
- do the test given in Para. 3.

If you do not find any defect, continue the trouble shooting.

- (5) If the fault continues:
 - (a) Do a check of the wiring of the DSO 07 signal from the ELAC2 (2CE2) COM part and MON part to the FMGC1 (1CA1) (Ref. ASM 27-92/44)
 - if there is continuity see Para. (b)
 - if there is no continuity repair the above wiring.
 - (b) Do a check of the wiring of the DSI 07 signal from the ELAC2 (2CE2) COM part and MON part to the FMGC1 (1CA1) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).
 - if there is continuity see Para. (c)
 - if there is no continuity repair the above wiring.
 - (c) Do a check of the wiring of the DSI 13 signal from the ELAC2 (2CE2) COM part and MON part to the FMGC1 (1CA1) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).
 - if there is continuity see Para. (5)
 - if there is no continuity repair the above wiring.
 - (d) Do a check and repair the wiring of the DGI 04 Bus from the ELAC2 (2CE2) COM part and MON part to the FMGC1 (1CA1) (Ref. ASM 27-92/52), (Ref. ASM 22-86/02).
- B. If the F/CTL ELAC2 FAULT warning comes into view 1 second after the AP2 engagement:
 - (1) Replace the FMGC-2 (1CA2) (Ref. AMM TASK 22-83-34-000-001) and (Ref. AMM TASK 22-83-34-400-001).

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- (2) If the fault continues:
 - replace the ELAC-2 (2CE2) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
- (3) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DSI 10 and DSI 17 signals of the ELAC2 (2CE2) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).

If you find a defect:

- repair it
- do the test given in Para. 3.

If you do not find any defect, continue the trouble shooting.

- (4) If the fault continues:
 - (a) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the DGI 05 Bus of the ELAC2 (2CE2) (Ref. ASM 27-92/52), (Ref. ASM 22-82/06).

If you find a defect:

- repair it
- do the test given in Para. 3.

If you do not find any defect, continue the trouble shooting.

- (5) If the fault continues:
 - (a) Do a check of the wiring of the DSO 08 signal from the ELAC2 (2CE2) COM part and MON part to the FMGC2 (1CA2) (Ref. ASM 27-92/44)
 - if there is continuity see Para. (b)
 - if there is no continuity repair the above wiring.
 - (b) Do a check of the wiring of the DSI 10 signal from the ELAC2 (2CE2) COM part and MON part to the FMGC2 (1CA2) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).
 - if there is continuity see Para. (c)
 - if there is no continuity repair the above wiring.
 - (c) Do a check of the wiring of the DSI 17 signal from the ELAC2 (2CE2) COM part and MON part to the FMGC2 (1CA2) (Ref. ASM 27-92/44), (Ref. ASM 22-85/03).
 - if there is continuity see Para. (d)
 - if there is no continuity repair the above wiring.
 - (d) Do a check and repair the wiring of the DGI 05 Bus from the ELAC2 (2CE2) COM part and MON part to the FMGC2 (1CA2) (Ref. ASM 27-92/52), (Ref. ASM 22-86/02).

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- C. If the F/CTL ELAC2 FAULT warning comes into view 5 seconds after the AP engagement:
 - (1) On the CAPT side stick, push and hold the takeover and priority pushbutton switch:
 - (a) On the panel 131VU, on the SIDE STICK PRIORITY/CAPT annunciator light, if the green CAPT legend comes on:
 - replace the SSTU-ROLL CTL, F/O (4CE2) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - 1 If the fault continues:
 - replace the SSTU-PITCH CTL, F/O (4CE4) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (b) On the panel 131VU, on the SIDE STICK PRIORITY/CAPT annunciator light, if the green CAPT legend does not come on:
 - replace the SSTU-ROLL CTL, CAPT (4CE1) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - 1 If the fault continues:
 - replace the SSTU-PITCH CTL, CAPT (4CE3) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
- D. Do the test given in Para. 3.

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TASK 27-93-00-810-937

Failure of the Roll Side Stick Transducer Unit Potentiometer or of the R ${\sf G}$ Aileron Servocontrol

- 1. Possible Causes
 - SSTU-ROLL CTL, CAPT (4CE1)
 - SSTU-ROLL CTL, F/O (4CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| 27-10-00-810-819 | Failure of the Right Green Aileron Servo Control Position Transducer |
| 27-10-00-810-820 | Loss of the Right Green Aileron Position Transducer Signal for the ELAC 1 |
| 27-10-00-810-821 | Loss of the Servovalve Signal for the Right Green Aileron Servo Control |
| 27-10-00-810-823 | Failure of the Right Green Aileron Servo Control Servovalve |
| 27-10-00-810-824 | Failure of the Right Green Aileron Servo Control Solenoid Valve |
| 27-10-00-810-825 | Loss of the Right Aileron Changeover Signal for the ELAC 1 |
| AMM 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM 29-10-00-863-001 | Pressurize the Green Hydraulic System |

3. Fault Confirmation

A. Test

Not applicable, you cannot confirm this fault on the ground.

4. Fault Isolation

- A. With Green hydraulic system pressurized (Ref. AMM TASK 29-10-00-863-001), on the F/CTL page of the Lower ECAM DU, if the R AIL G servocontrol indication is amber:
 - do this trouble shooting procedure (Ref. TASK 27-10-00-810-819).
 - (1) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.

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- (2) On the upper ECAM DU, if the F/CTL AIL SERVO FAULT warning stays in view:
 - do this trouble shooting procedure (Ref. TASK 27-10-00-810-820).
- (3) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
- (4) On the upper ECAM DU, if the F/CTL AIL SERVO FAULT warning stays in view:
 - do this trouble shooting procedure (Ref. TASK 27-10-00-810-821).
- (5) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
- (6) On the upper ECAM DU, if the F/CTL AIL SERVO FAULT warning stays in view.
 - do this trouble shooting procedure (Ref. TASK 27-10-00-810-823).
- (7) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
- (8) On the upper ECAM DU, if the F/CTL AIL SERVO FAULT warning stays in
 - do this trouble shooting procedure (Ref. TASK 27-10-00-810-824).
- (9) On the panel 23VU, release and push the FLT CTL/ELAC 1 pushbutton switch.
- (10) On the upper ECAM DU, if the F/CTL AIL SERVO FAULT warning stays in
 - do this trouble shooting procedure (Ref. TASK 27-10-00-810-825).
- B. With Green hydraulic system pressurized (Ref. AMM TASK 29-10-00-863-001), on the F/CTL page of the lower ECAM DU, if the R AIL G servocontrol indication is not amber:
 - replace the SSTU-ROLL CTL, CAPT (4CE1) and SSTU-ROLL CTL, F/O (4CE2) (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).

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TASK 27-93-00-810-939

Failure of the Roll Side Stick Transducer Unit Potentiometer

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SSTU-ROLL CTL, CAPT (4CE1)
 - SSTU-ROLL CTL, F/O (4CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|--------------------------------------|--|
| AMM AMM | 27-92-41-000-002 27-92-41-400-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM AMM | 27-93-34-000-001 27-93-34-400-001 | Removal of the ELAC (2CE1,2CE2) Installation of the ELAC (2CE1,2CE2) |

- 3. Fault Confirmation
 - A. Test
 - (1) Not applicable, you cannot confirm this fault on the ground.
- 4. Fault Isolation
 - A. If the post flight report gives the maintenance message: ELAC1
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).

NOTE: During the subsequent flights make sure that the fault does not occur again. If this message is shown again replace, the SSTU-ROLL CTL, CAPT (4CE1) and the SSTU-ROLL CTL, F/O (4CE2), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).

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TASK 27-93-00-810-941

Rudder Pedals not Locked in AP Mode

1. Possible Causes

- FMGC-1 (1CA1)
- RELAY-RUDDER ARTF FEEL 1 (15CA1)
- FMGC-2 (1CA2)
- RELAY-RUDDER ARTF FEEL 2 (15CA2)
- SOLENOID-RUDDER ARTF FEEL (16CA)
- wiring of the RUDDER LOCK COM and RUDDER LOCK MON signals from the FMGC1 to the relay (15CA1)
- wiring from the relay (15CA1) to the first terminal block
- wiring of the RUDDER LOCK COM and RUDDER LOCK MON signals from the FMGC2 to the relay (15CA2)
- wiring from the relay (15CA2) to the first terminal block
- C/B AUTO FLT/RUDDER/ARTF/FEEL (14CA)
- wiring from the circuit breaker (14CA) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| IPC | 22840801 | |
| IPC | 22840802 | |
| AMM | 22-10-00-710-002 | Operational Test of Autopilot Disengagement and Locking Devices of the Side Stick Controller and Rudder Pedals |
| AMM | 22-83-34-000-001 | Removal of the FMGC (1CA1,1CA2) |
| AMM | 22-83-34-400-001 | Installation of the FMGC (1CA1,1CA2) |
| AMM | 27-23-17-000-001 | Removal of the Artificial Feel Unlocking Solenoid 16CA |
| AMM | 27-23-17-400-001 | Installation of the Artificial Feel Unlocking Solenoid 16CA |
| ASM | 22-85/01 | |

3. Fault Confirmation

A. Test

Do the operational test of autopilot disengagement and locking devices of the side stick controller and rudder pedals (Ref. AMM TASK 22-10-00-710-002).

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4. Fault Isolation

A. Table of the circuit breakers used in this procedure:

PANEL DESIGNATION

IDENT. LOCATION

121VU AUTO FLT/RUDDER/ARTF/FEEL

14CA N17

- B. If the rudder pedals are not locked with AP1 engaged:
 - (1) Replace the FMGC-1 (1CA1) (Ref. AMM TASK 22-83-34-000-001) and (Ref. AMM TASK 22-83-34-400-001).
 - (2) If the fault continues:
 - replace the RELAY-RUDDER ARTF FEEL 1 (15CA1) (Ref. IPC 22840802).
 - (3) If the fault continues:
 - do a check of the wiring of the RUDDER LOCK COM and RUDDER LOCK MON signals from the FMGC1 to the relay (15CA1) (Ref. ASM 22-85/01).
 - do a check and repair the wiring from the relay (15CA1) to the first terminal block, pins A/A1 and A/A2 to the terminal block 1871VT (Ref. ASM 22-85/01).
- C. If the rudder pedals are not locked with AP2 engaged:
 - (1) Replace the FMGC-2 (1CA2) (Ref. AMM TASK 22-83-34-000-001) and (Ref. AMM TASK 22-83-34-400-001).
 - (2) If the fault continues:
 - replace the RELAY-RUDDER ARTF FEEL 2 (15CA2) (Ref. IPC 22840802).
 - (3) If the fault continues:
 - do a check of the wiring of the RUDDER LOCK COM and RUDDER LOCK MON signals from the FMGC2 to the relay (15CA2) (Ref. ASM 22-85/01).
 - do a check and repair the wiring from the relay (15CA2) to the first terminal block, pins A/A1 and A/A2 to the terminal block 1871VT (Ref. ASM 22-85/01).
- D. If the rudder pedals are not locked with AP1 then AP2 engaged:
 - (1) Replace the SOLENOID-RUDDER ARTF FEEL (16CA) (Ref. AMM TASK 27-23-17-000-001) and (Ref. AMM TASK 27-23-17-400-001).
 - (2) If the fault continues:
 - replace the C/B AUTO FLT/RUDDER/ARTF/FEEL (14CA) (Ref. IPC 22840801)
 - (3) If the fault continues:
 - do a check and repair the wiring from the circuit breaker (14CA) to the first terminal block, pin 2 to the terminal block 1871VT (Ref. ASM 22-85/01).

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E. Do the test given in para. 3.

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TASK 27-93-00-810-942

Side Stick not Locked in AP Mode

1. Possible Causes

- SOLENOID-PITCH & ROLL LOCK, CAPT (12CA1)
- SOLENOID-PITCH & ROLL LOCK, F/O (12CA2)
- RELAY-STICK LOCK 1/CAPT (21CA)
- RELAY-STICK LOCK 1/F/O (23CA)
- RELAY-STICK LOCK 2/CAPT (22CA)
- RELAY-STICK LOCK 2/F/O (24CA)
- FMGC-1 (1CA1)
- FMGC-2 (1CA2)
- CAPT side stick assembly
- wiring from the solenoid (12CA1) to the first terminal block
- wiring from the solenoid (12CA1) to the ground
- F/O side stick assembly
- wiring from the solenoid (12CA2) to the first terminal block
- wiring from the solenoid (12CA2) to the ground
- wiring from the relay (21CA) to the first terminal block
- wiring from the relay (23CA) to the first terminal block
- wiring from the relay (22CA) to the first terminal block
- wiring from the relay (24CA) to the first terminal block
- C/B AUTO FLT/STICK/LOCK (13CA)
- wiring from the circuit breaker (13CA) to the first terminal block
- wiring of the STICK LOCK COM and STICK LOCK MON signals from the FMGC1 to the first terminal block
- wiring of the STICK LOCK COM and STICK LOCK MON signals from the FMGC2 to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| IPC | 22840802 | | |
| AMM | | Operational Test of Autopilot Disengagement and Locking Devices of the Side Stick Controller and Rudder Pedals | |
| AMM | 22-83-34-000-001 | Removal of the FMGC (1CA1,1CA2) | |
| AMM | 22-83-34-400-001 | Installation of the FMGC (1CA1,1CA2) | |
| AMM | 27-92-41-000-001 | Removal of the Side Stick Assembly 19VU (18VU) | |
| AMM | 27-92-41-000-004 | Removal of the Solenoid (12CA1,12CA2) | |
| AMM | 27-92-41-400-001 | Installation of the Side Stick Assembly 19VU (18VU) | |
| AMM | 27-92-41-400-004 | Installation of the Solenoid (12CA1,12CA2) | |
| ASM | 22-84/08 | · | |
| ASM | 22-85/01 | | |

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3. Fault Confirmation

A. Test

Do the operational test of autopilot disengagement and locking devices of the side stick controller and rudder pedals (Ref. AMM TASK 22-10-00-710-002).

4. Fault Isolation

A. Table of the circuit breakers used in this procedure:

PANEL DESIGNATION IDENT. LOCATION

121VU AUTO FLT/STICK/LOCK 13CA N16

- B. If the CAPT side stick is not locked with AP1 then AP2 engaged:
 - (1) Replace the CAPT side stick assembly (Ref. AMM TASK 27-92-41-000-001) and (Ref. AMM TASK 27-92-41-400-001).
 - (2) If the fault continues:
 - replace the SOLENOID-PITCH & ROLL LOCK, CAPT (12CA1) (Ref. AMM TASK 27-92-41-000-004) and (Ref. AMM TASK 27-92-41-400-004).
 - (3) If the fault continues:
 - do a check of the wiring from the solenoid (12CA1) to the first terminal block, pin A/A to the terminal block 1871VT (Ref. ASM 22-85/01)
 - do a check and repair the wiring from the solenoid (12CA1) to the ground, pin A/B (Ref. ASM 22-85/01).
- C. If the F/O side stick is not locked with AP1 then AP2 engaged:
 - (1) Replace the F/O side stick assembly (Ref. AMM TASK 27-92-41-000-001) and (Ref. AMM TASK 27-92-41-400-001).
 - (2) If the fault continues:
 - replace the SOLENOID-PITCH & ROLL LOCK, F/O (12CA2) (Ref. AMM TASK 27-92-41-000-004) and (Ref. AMM TASK 27-92-41-400-004).
 - (3) If the fault continues:
 - do a check of the wiring from the solenoid (12CA2) to the first terminal block, pin A/A to the terminal block 1871VT (Ref. ASM 22-85/01)
 - do a check and repair the wiring from the solenoid (12CA2) to the ground, pin A/B (Ref. ASM 22-85/01).

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- D. If the CAPT side stick is not locked with AP1 engaged only:
 - (1) Replace the RELAY-STICK LOCK 1/CAPT (21CA) (Ref. IPC 22840802).
 - (2) If the fault continues:
 - do a check and repair the wiring from the relay (21CA) to the first terminal block:
 - pin A/A1 to the terminal block 1871VT
 - pin A/A2 to the terminal block 1833VT
 - pin A/X1 to the terminal block 1831VT
 - . pin A/X2 to the terminal block 1833VT (Ref. ASM 22-85/01).
- E. If the F/O side stick is not locked with AP1 engaged only:
 - (1) Replace the RELAY-STICK LOCK 1/F/O (23CA) (Ref. IPC 22840802).
 - (2) If the fault continues:
 - do a check and repair the wiring from the relay (23CA) to the first terminal block:
 - . pin A/A1 to the terminal block 1871VT
 - . pin A/A2 to the terminal block 1833VT
 - pin A/X1 to the terminal block 1831VT
 - . pin A/X2 to the terminal block 1833VT (Ref. ASM 22-85/01).
- F. If the CAPT side stick is not locked with AP2 engaged only:
 - (1) Replace the RELAY-STICK LOCK 2/CAPT (22CA) (Ref. IPC 22840802).
 - (2) If the fault continues:
 - do a check and repair the wiring from the relay (22CA) to the first terminal block:
 - pin A/A1 to the terminal block 1871VT
 - pin A/A2 to the terminal block 1833VT
 - . pin A/X1 to the terminal block 1840VT
 - pin A/X2 to the terminal block 1842VT (Ref. ASM 22-85/01).
- G. If the F/O side stick is not locked with AP2 engaged only:
 - (1) Replace the RELAY-STICK LOCK 2/F/O (24CA) (Ref. IPC 22840802).
 - (2) If the fault continues:
 - do a check and repair the wiring from the relay (24CA) to the first terminal block:
 - pin A/A1 to the terminal block 1871VT
 - . pin A/A2 to the terminal block 1833VT
 - pin A/X1 to the terminal block 1840VT
 - . pin A/X2 to the terminal block 1842VT (Ref. ASM 22-85/01).

EFF: ALL

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- H. If the CAPT and F/O side sticks are not locked with AP1 then AP2 engaged:
 - (1) Replace the C/B AUTO FLT/STICK/LOCK (13CA) (Ref. ASM 22-84/08).
 - (2) If the fault continues:
 - do a check and repair the wiring from the circuit breaker (13CA) to the first terminal block (Ref. ASM 22-85/01).
- J. If the CAPT and F/O side sticks are not locked with AP1 engaged only:
 - (1) Replace the FMGC-1 (1CA1) (Ref. AMM TASK 22-83-34-000-001) and (Ref. AMM TASK 22-83-34-400-001).
 - (2) If the fault continues: - replace the RELAY-STICK LOCK 1/CAPT (21CA) (Ref. IPC 22840802).
 - (3) If the fault continues: - replace the RELAY-STICK LOCK 1/F/O (23CA) (Ref. IPC 22840802).
 - (4) If the fault continues:
 - do a check of the wiring of the STICK LOCK COM and STICK LOCK MON signals from the FMGC1 to the first terminal block (Ref. ASM 22-85/01).
 - (a) If there is no continuity: - repair the above wiring.
 - (b) If there is continuity:
 - do a check for a short circuit and repair the wiring of the STICK LOCK COM and STICK LOCK MON signals from the FMGC1 to the relay (23CA) and the relay (21CA) (Ref. ASM 22-85/01).
- K. If the CAPT and F/O side sticks are not locked with AP2 engaged only:
 - (1) Replace the FMGC-2 (1CA2) (Ref. AMM TASK 22-83-34-000-001) and (Ref. AMM TASK 22-83-34-400-001).
 - (2) If the fault continues:
 - do a check of the wiring of the STICK LOCK COM and STICK LOCK MON signals from the FMGC2 to the first terminal block (Ref. ASM 22-85/01).
 - (a) If there is no continuity: - repair the above wiring.
 - (b) If there is continuity:
 - do a check for a short circuit and repair the wiring of the STICK LOCK COM and STICK LOCK MON signals from the FMGC2 to the relay (22CA) and the relay (24CA) (Ref. ASM 22-85/01).
- L. Do the test given in para. 3.

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TASK 27-93-00-810-946

Loss of Channel 1/2 Yaw CTL from FAC 1/2 to ELAC 1/2

- 1. Possible Causes
 - the DSI 15/18 output discret digital signal of the ELAC 1 and ELAC 2
- 2. Job Set-up Information
 - A. Referenced Information

DESIGNATION

31-32-00-810-932 ASM 27-92/37

Failure of the Discrete Links AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

ELAC1 OR WIRING FROM FAC1/2 or

ELAC2 OR WIRING FROM FAC1/2

- do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DSI 15/18 output discret digital signal of the ELAC 1 and ELAC 2 (Ref. ASM 27-92/37).
- B. Do the test given in Para. 3.

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TASK 27-93-00-810-947

False ELAC Warning due to Faulty Yellow Hydraulic Pressure Switch

1. Possible Causes

- FWC-1 (1WW1)
- PRESS SW-FLT CTL, Y (3151GN)
- wiring from the FWC 1 to the pressure switch

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 29-10-00-200-008 | Check Nitrogen Charge Pressure on Hydraulic Power Accumulators | |
| AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground Power Supply | |
| AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| AMM | 29-23-00-863-001 | Pressurize the Green Hydraulic System from the Yellow Hydraulic System through the PTU with the Electric Pump | |
| AMM | 29-23-00-864-001 | Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU | |
| AMM | 29-24-00-863-001 | Pressurize the Yellow Hydraulic System with the Electric Pump | |
| AMM | 29-24-00-864-001 | Depressurize the Yellow Hydraulic System | |
| AMM | 29-32-12-000-003 | Removal of the System Pressure Switch (3151GN) | |
| AMM | 29-32-12-400-003 | Installation of the System Pressure Switch (3151GN) | |
| AMM | 31-53-34-000-001 | Removal of the Flight Warning Computer (FWC) (1WW1,1WW2) | |
| AMM | 31-53-34-400-001 | <pre>Installation of the Flight Warning Computer (FWC) (1WW1,1WW2)</pre> | |
| ASM | 29-32/01 | | |

3. Fault Confirmation

A. Job Set-Up

(1) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-863-003), (Ref. AMM TASK 29-23-00-863-001) and (Ref. AMM TASK 29-24-00-863-001).

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(2) On the center pedestal, on the ECAM control panel:

Push the F/CTL key, the F/CTL page comes into view.

R

- (3) For the ELAC1, on the overhead panel 24VU, release the FLT CTL/ELAC2 pushbutton switch (on this pushbutton switch, the OFF legend comes on).
- (4) For the ELAC2, on the overhead panel 23VU, release the FLT CTL/ELAC1 pushbutton switch (on this pushbutton switch, the OFF legend comes on).

R

R

- B. Put the aircraft back to its initial configuration.
 - (1) Depressurize the aircraft hydraulic systems (Ref. AMM TASK 29-10-00-864-003), (Ref. AMM TASK 29-23-00-864-001) and (Ref. AMM TASK 29-24-00-864-001).
 - (2) Push the FLT CTL/ELAC1 pushbutton switch or FLT CTL/ELAC2 pushbutton switch that you released before (on this pushbutton switch, the OFF legend goes off).

4. Fault Isolation

R

- R A. If the ELAC 1 FAULT or ELAC 2 FAULT warning goes out view when the R hydraulic systems are pressurized:
 - do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (1) If the test gives a maintenance message related to the Yellow hydraulic pressure switch with a F/CTL maintenance status:
 - do the trouble shooting procedure related to this maintenance message.
 - (2) If the test does not give a maintenance message:
 - Do an inspection of nitrogen charge pressure on hydraulic power accumulators (Ref. AMM TASK 29-10-00-200-008)
 - (a) If the fault continues:
 - replace the FWC-1 (1WW1) (Ref. AMM TASK 31-53-34-000-001) and (Ref. AMM TASK 31-53-34-400-001).
 - (b) If the fault continues:
 - replace the PRESS SW-FLT CTL, Y (3151GN) (Ref. AMM TASK 29-32-12-000-003) and (Ref. AMM TASK 29-32-12-400-003).
 - (c) If the fault continues:
 - do a check and repair the wiring from the FWC 1 to the pressure switch (Ref. ASM 29-32/01).

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R B. Do the test given in Para. 3.

EFF: ALL

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TASK 27-93-00-810-948

Incorrect Hydraulic Pressure Status Received by the FWC

1. Possible Causes

- FWC-1 (1WW1)
- PRESS SW-FLT CTL, G (1151GN)
- PRESS SW-FLT CTL, B (2151GN)
- wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|--------------|-----------|--|--|
| | | | |
| AMM 27-96-00 | 0-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM 29-10-00 | 0-200-008 | Check Nitrogen Charge Pressure on Hydraulic Power Accumulators | |
| AMM 29-32-12 | 2-000-001 | Removal of the System Pressure Switch (1151GN) | |
| AMM 29-32-12 | 2-400-001 | Installation of the System Pressure Switch (1151GN) | |
| AMM 31-53-34 | 4-000-001 | Removal of the Flight Warning Computer (FWC) (1WW1,1WW2) | |
| AMM 31-53-34 | 4-400-001 | <pre>Installation of the Flight Warning Computer (FWC) (1WW1,1WW2)</pre> | |
| ASM 29-32/0' | 1 | | |

3. Fault Confirmation

- A. Test
 - (1) Not applicable, the fault is evident.

4. Fault Isolation

- A. If the ELAC 1 FAULT and ELAC 2 FAULT warnings are shown on the upper ECAM display unit and if the FAULT legend on the ELAC 1 and ELAC 2 pushbutton switches is off:
 - do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (1) If the test gives a maintenance message related to the Green or Blue hydraulic pressure switch with a F/CTL maintenance status:
 - do the trouble shooting procedure related to this maintenance message.

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- (2) If the test does not give a maintenance message:
 - Do an inspection of nitrogen charge pressure on hydraulic power accumulators (Ref. AMM TASK 29-10-00-200-008).
 - (a) If the fault continues:
 - replace the FWC-1 (1WW1) (Ref. AMM TASK 31-53-34-000-001) and (Ref. AMM TASK 31-53-34-400-001).
 - (b) If the fault continues:
 - replace the PRESS SW-FLT CTL, G (1151GN) (Ref. AMM TASK 29-32-12-000-001) and (Ref. AMM TASK 29-32-12-400-001).
 - (c) If the fault continues:
 - replace the PRESS SW-FLT CTL, B (2151GN) (Ref. AMM TASK 29-32-12-000-001) and (Ref. AMM TASK 29-32-12-400-001).
 - (d) If the fault continues:
 - do a check of the wiring from the FWC 1 to the pressure switch 1151GN (Ref. ASM 29-32/01)
 - do a check and repair the wiring from the FWC 1 to the pressure switch 2151GN.

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TASK 27-93-00-810-949

Disagree between COM and MON Aileron Order Signal in the ELAC1 and ELAC2

1. Possible Causes

- ELAC-1 (2CE1)
- SSTU-ROLL CTL, CAPT (4CE1)
- SSTU-ROLL CTL, F/O (4CE2)
- ANI 1-3 of ELAC 1 and ELAC 2 (COM and MON part)
- ANI 1-4 of ELAC 1 and ELAC 2 (COM and MON part)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM | 27-92-41-400-002 | <pre>Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4)</pre> |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| ASM | 27-92/12 | |

3. Fault Confirmation

A. Test

Not applicable, you cannot confirm this fault on the ground.

4. Fault Isolation

- A. If the POST FLIGHT REPORT gives the maintenance message: ELAC 1 AIL ORDER DISAGREE and ELAC 2 AIL ORDER DISAGREE
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (1) During the subsequent flight, if the fault occurs again:
 - replace the SSTU-ROLL CTL, CAPT (4CE1) (Ref. AMM TASK 27-92-41-000-002) (Ref. AMM TASK 27-92-41-400-002).
 - (2) During the subsequent flight, if the fault occurs again:
 - replace the SSTU-ROLL CTL, F/O (4CE2) (Ref. AMM TASK 27-92-41-000-002) (Ref. AMM TASK 27-92-41-400-002).

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- (3) During the subsequent flight, if the fault occurs again:
 - Do a visual inspection for quality of the contacts related to these wirings:

ANI 1-3 of ELAC 1 and ELAC 2 (COM and MON part),
ANI 1-4 of ELAC 1 and ELAC 2 (COM and MON part) (Ref. ASM 2792/12).

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TASK 27-93-00-810-950

Disagree between COM and MON Aileron Order Signal in the ELAC1

- 1. Possible Causes
 - ELAC-1 (2CE1)
 - SSTU-ROLL CTL, CAPT (4CE1)
 - SSTU-ROLL CTL, F/O (4CE2)
 - ANI 1-3 of ELAC-1 and ELAC-2 (COM and MON part)
 - ANI 1-4 of ELAC-1 and ELAC-2 (COM and MON part)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|--------------|------------------|---|
| л м м | 27-92-41-000-002 | Demoved of the Techniques Heite (/CE4 /CE2 /CE7 /CE/) |
| | | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM | 27-92-41-400-002 | <pre>Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4)</pre> |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| ASM | 27-92/12 | · |

- 3. Fault Confirmation
 - A. Test
 - (1) Not applicable, you cannot confirm this fault on the ground.
- 4. Fault Isolation
 - A. If the post flight report gives the maintenance message: ELAC1 AIL ORDER DISAGREE
- R NOTE: If there is this message, see TFU 27.93.00.048.
 - (1) Replace the ELAC-1 (2CE1), (Ref. AMM TASK 27-93-34-000-001) and (Ref. AMM TASK 27-93-34-400-001).
 - (2) During the subsequent flight, if the fault occurs again: - replace the SSTU-ROLL CTL, CAPT (4CE1) and the SSTU-ROLL CTL, F/O (4CE2), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).

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- (3) During the subsequent flight, if the fault occurs again:
 - do a visual inspection for quality of the contacts related to these wirings:

ANI 1-3 of ELAC-1 and ELAC-2 (COM and MON part), ANI 1-4 of ELAC-1 and ELAC-2 (COM and MON part) (Ref. ASM 27-92/12).

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TASK 27-93-00-810-951

Incorrect Hydraulic Pressure-Switch Status Received by the ELAC1 or FWC at Engine Start

1. Possible Causes

- ENG-HYD.-PUMP-SW (1151GN)
- PRESS SW-G HYD, FLT CTL (10CE2)
- ENG-HYD.-PUMP-SW (2151GN)
- PRESS SW-B HYD, FLT CTL (10CE1)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| АММ | 27-92-17-000-001 | Removal of the Flight Control Pressure Switch (10CE2) |
| AMM | 27-92-17-000-001 | Removal of the Flight Control Pressure Switch (10CE1) |
| AMM | 27-92-17-400-001 | Installation of the Flight Control Pressure Switch (10CE2) |
| AMM | 27-92-17-400-003 | <pre>Installation of the Flight Control Pressure Switch (10CE1)</pre> |
| AMM | 29-32-12-000-001 | Removal of the System Pressure Switch (1151GN) |
| AMM | 29-32-12-000-002 | Removal of the System Pressure Switch (2151GN) |
| AMM | 29-32-12-400-001 | Installation of the System Pressure Switch (1151GN) |
| AMM | 29-32-12-400-002 | Installation of the System Pressure Switch (2151GN) |

3. Fault Confirmation

A. Test

R

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(1) Not applicable, you cannot confirm this fault on the ground.

4. Fault Isolation

NOTE: On the upper ECAM display unit, the ELAC1 FAULT warning came into view and went out of view after a few seconds during the engine start phase.

- A. Do the steps that follow:
 - (1) If the fault occurred during start of the LH engine first:
 - replace the ENG-HYD.-PUMP-SW (1151GN) (Ref. AMM TASK 29-32-12-000-001) and (Ref. AMM TASK 29-32-12-400-001).
 - if the fault continues, replace the PRESS SW-G HYD, FLT CTL (10CE2) (Ref. AMM TASK 27-92-17-000-001) and (Ref. AMM TASK 27-92-17-400-001).

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R (2) If the fault occurred after start of the LH engine and before start R of the RH engine: R - replace the ENG-HYD.-PUMP-SW (2151GN) (Ref. AMM TASK 29-32-12-000-R 002) (Ref. AMM TASK 29-32-12-400-002). R - if the fault continues, replace the PRESS SW-B HYD, FLT CTL (10CE1) (Ref. AMM TASK 27-92-17-000-003) and (Ref. AMM TASK 27-92-17-400-R R 003). R (3) If the fault occurred after start of the RH engine and before start R of the LH engine: - replace the ENG-HYD.-PUMP-SW (2151GN) (Ref. AMM TASK 29-32-12-000-R R 002) and (Ref. AMM TASK 29-32-12-400-002). R - if the fault continues, replace the PRESS SW-B HYD, FLT CTL (10CE1) (Ref. AMM TASK 27-92-17-000-003) and (Ref. AMM TASK 27-92-17-400-R R 003).

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- R TASK 27-93-00-810-952
- R Incorrect Hydraulic Pressure-Switch Status Received by the ELAC1 or FWC at
- R Engine Stop
- R 1. Possible Causes
- R ENG-HYD.-PUMP-SW (1151GN)
- R ENG-HYD.-PUMP-SW (2151GN)
- R PRESS SW-G HYD, FLT CTL (10CE2)
- R PRESS SW-B HYD, FLT CTL (10CE1)
- R 2. Job Set-up Information
- R A. Referenced Information

| R R | | | DESIGNATION | |
|--------|-----|------------------|--|--|
| R | AMM | 27-92-17-000-001 | Removal of the Flight Control Pressure Switch (10CE2) | |
| R | AMM | 27-92-17-000-003 | Removal of the Flight Control Pressure Switch (10CE1) | |
| R R | AMM | 27-92-17-400-001 | Installation of the Flight Control Pressure Switch (10CE2) | |
| R R | AMM | 27-92-17-400-003 | Installation of the Flight Control Pressure Switch (10CE1) | |
| R | AMM | 29-32-12-000-001 | Removal of the System Pressure Switch (1151GN) | |
| R | AMM | 29-32-12-000-002 | Removal of the System Pressure Switch (2151GN) | |
| R | AMM | 29-32-12-400-001 | Installation of the System Pressure Switch (1151GN) | |
| R | AMM | 29-32-12-400-002 | Installation of the System Pressure Switch (2151GN) | |

- R 3. Fault Confirmation
- R A. Test.
- R (1) Not applicable, you cannot confirm this fault on the ground.
- R 4. Fault Isolation
- R NOTE: On the upper ECAM display unit, the ELAC1 FAULT warning came into view and went out of view after a few seconds during the engine stop phase.
- R A. If the fault occurred at the engine stop:
- R (1) Replace the ENG-HYD.-PUMP-SW (1151GN) (Ref. AMM TASK 29-32-12-000-R 001) and (Ref. AMM TASK 29-32-12-400-001).
- R (2) Replace the ENG-HYD.-PUMP-SW (2151GN) (Ref. AMM TASK 29-32-12-000-R 002) and (Ref. AMM TASK 29-32-12-400-002).

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| R | (3) If the fault continues: |
|---|---|
| R | - replace the PRESS SW-G HYD, FLT CTL (10CE2) (Ref. AMM TASK 27-92- |
| R | 17-000-001) and (Ref. AMM TASK 27-92-17-400-001). |
| R | - replace the PRESS SW-B HYD, FLT CTL (10CE1) (Ref. AMM TASK 27-92- |
| R | 17-000-003) and (Ref. AMM TASK 27-92-17-400-003). |

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TROUBLE SHOOTING MANUAL

- R TASK 27-93-00-810-953
- Incorrect Hydraulic Pressure-Switch Status Received by the ELAC2 or FWC at
- R Engine Start
- 1. Possible Causes R
- R - ENG-HYD.-PUMP-SW (1151GN)
- PRESS SW-G HYD, FLT CTL (10CE2)
- ENG-HYD.-PUMP-SW (2151GN)
- PRESS SW-B HYD, FLT CTL (10CE1)
- ENG-HYD.-PUMP-SW (3151GN)
- PRESS SW-Y HYD, FLT CTL (10CE3)
- R 2. Job Set-up Information
- R A. Referenced Information

| | REFERENCE | DESIGNATION |
|---|----------------------|---|
| • | AMM 27-92-17-000-001 | Removal of the Flight Control Pressure Switch (10CE2) |

| R R R | AMM AMM AMM | 27-92-17-000-003 | Removal of the Flight Control Pressure Switch (10CE2) Removal of the Flight Control Pressure Switch (10CE3) Removal of the Flight Control Pressure Switch (10CE1) Installation of the Flight Control Pressure Switch |
|-------------|-------------------|------------------|--|
| R | | | (10CE2) |
| R | AMM | 27-92-17-400-002 | Installation of the Flight Control Pressure Switch |
| R | | | (10CE3) |
| R | AMM | 27-92-17-400-003 | Installation of the Flight Control Pressure Switch |
| R | | | (10CE1) |
| R | AMM | 29-32-12-000-001 | Removal of the System Pressure Switch (1151GN) |
| R | AMM | 29-32-12-000-002 | Removal of the System Pressure Switch (2151GN) |
| R | AMM | 29-32-12-000-003 | Removal of the System Pressure Switch (3151GN) |
| R | AMM | 29-32-12-400-001 | Installation of the System Pressure Switch (1151GN) |
| R | AMM | 29-32-12-400-002 | Installation of the System Pressure Switch (2151GN) |
| R | AMM | 29-32-12-400-003 | Installation of the System Pressure Switch (3151GN) |

- 3. Fault Confirmation
- R A. Test.
- R (1) Not applicable, you cannot confirm this fault on the ground.
- 4. Fault Isolation R
- R NOTE: On the upper ECAM display unit, the ELAC2 FAULT warning came into view and went out of view after a few seconds during the engine start R R phase.

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R A. Do the steps that follow:

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R

R

- (1) If the fault occurred during start of the LH engine first:
 - replace the ENG-HYD.-PUMP-SW (1151GN) (Ref. AMM TASK 29-32-12-000-001) and (Ref. AMM TASK 29-32-12-400-001).
 - if the fault continues, replace the PRESS SW-G HYD, FLT CTL (10CE2) (Ref. AMM TASK 27-92-17-000-001) and (Ref. AMM TASK 27-92-17-400-001).
 - (2) If the fault occurred after start of the LH engine and before start of the RH engine:
 - replace the ENG-HYD.-PUMP-SW (2151GN) (Ref. AMM TASK 29-32-12-000-002) (Ref. AMM TASK 29-32-12-400-002).
 - if the fault continues, replace the PRESS SW-B HYD, FLT CTL (10CE1) (Ref. AMM TASK 27-92-17-000-003) and (Ref. AMM TASK 27-92-17-400-003).
 - (3) If the fault occurred during start of the RH engine first:
 - replace the ENG-HYD.-PUMP-SW (3151GN) (Ref. AMM TASK 29-32-12-000-003) and (Ref. AMM TASK 29-32-12-400-003).
 - if the fault continues, replace the PRESS SW-Y HYD, FLT CTL (10CE3) (Ref. AMM TASK 27-92-17-000-002) and (Ref. AMM TASK 27-92-17-400-002).
 - (4) If the fault occurred after start of the RH engine and before start of the LH engine:
 - replace the ENG-HYD.-PUMP-SW (2151GN) (Ref. AMM TASK 29-32-12-000-002) and (Ref. AMM TASK 29-32-12-400-002).
 - if the fault continues, replace the PRESS SW-B HYD, FLT CTL (10CE1) (Ref. AMM TASK 27-92-17-000-003) and (Ref. AMM TASK 27-92-17-400-003).

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R TASK 27-93-00-810-954
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Incorrect Hydraulic Pressure-Switch Status Received by the ELAC2 or FWC at R Engine Stop

1. Possible Causes R

- R - ENG-HYD.-PUMP-SW (1151GN)
- ENG-HYD.-PUMP-SW (2151GN)
- ENG-HYD.-PUMP-SW (3151GN)
- PRESS SW-G HYD, FLT CTL (10CE2)
- PRESS SW-B HYD, FLT CTL (10CE1)
- PRESS SW-Y HYD, FLT CTL (10CE3)

R 2. Job Set-up Information

R

A. Referenced Information

| П | | | | |
|--------|------|------------------|---|--|
| R | REFE | RENCE | DESIGNATION | |
| R | | | | |
| R | AMM | 27-92-17-000-001 | Removal of the Flight Control Pressure Switch (10CE2) | |
| R | AMM | 27-92-17-000-002 | Removal of the Flight Control Pressure Switch (10CE3) | |
| R | AMM | 27-92-17-000-003 | Removal of the Flight Control Pressure Switch (10CE1) | |
| R R | AMM | 27-92-17-400-001 | <pre>Installation of the Flight Control Pressure Switch (10CE2)</pre> | |
| R R | AMM | 27-92-17-400-002 | <pre>Installation of the Flight Control Pressure Switch (10CE3)</pre> | |
| R R | AMM | 27-92-17-400-003 | <pre>Installation of the Flight Control Pressure Switch (10CE1)</pre> | |
| R | AMM | 29-32-12-000-001 | Removal of the System Pressure Switch (1151GN) | |
| R | AMM | 29-32-12-000-002 | Removal of the System Pressure Switch (2151GN) | |
| R | AMM | 29-32-12-000-003 | Removal of the System Pressure Switch (3151GN) | |
| R | AMM | 29-32-12-400-001 | Installation of the System Pressure Switch (1151GN) | |
| R | AMM | 29-32-12-400-002 | Installation of the System Pressure Switch (2151GN) | |
| R | AMM | 29-32-12-400-003 | Installation of the System Pressure Switch (3151GN) | |
| | | | | |

R 3. Fault Confirmation

A. Test. R

R

(1) Not applicable, you cannot confirm this fault on the ground.

4. Fault Isolation R

NOTE: On the upper ECAM display unit, the ELAC2 FAULT warning came into R view and went out of view after a few seconds during the engine stop R R phase.

EFF: ALL **SROS**

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R A. If the fault occurred at the engine stop: R (1) Replace the ENG-HYD.-PUMP-SW (1151GN) (Ref. AMM TASK 29-32-12-000-001) and (Ref. AMM TASK 29-32-12-400-001). R (2) Replace the ENG-HYD.-PUMP-SW (2151GN) (Ref. AMM TASK 29-32-12-000-R 002) and (Ref. AMM TASK 29-32-12-400-002). (3) Replace the ENG-HYD.-PUMP-SW (3151GN) (Ref. AMM TASK 29-32-12-000-R R 003) and (Ref. AMM TASK 29-32-12-400-003). R (4) If the fault continues: R - replace the PRESS SW-G HYD, FLT CTL (10CE2) (Ref. AMM TASK 27-92-17-000-001) and (Ref. AMM TASK 27-92-17-400-001). R - replace the PRESS SW-B HYD, FLT CTL (10CE1) (Ref. AMM TASK 27-92-R R 17-000-003) and (Ref. AMM TASK 27-92-17-400-003). R - replace the PRESS SW-Y HYD, FLT CTL (10CE3) (Ref. AMM TASK 27-92-

17-000-002) and (Ref. AMM TASK 27-92-17-400-002).

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ALL

SROS

EFF:

R

TROUBLE SHOOTING MANUAL

SEC SYSTEM (SPOILER AND ELEVATOR COMPUTER) - FAULT ISOLATION PROCEDURES

TASK 27-94-00-810-801

Loss of the Roll Signal on the CAPT Side Stick for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - SSTU-ROLL CTL, CAPT (4CE1)
 - wiring from the SEC 1 (1CE1) to the SSTU (4CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| F - | REFERENCE | | DESIGNATION | |
|--------|------------|------------------------------|--|--|
| ļ | AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| ļ | AMM | 27-92-41-400-002 | <pre>Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4)</pre> | |
| ļ | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| ļ | AMM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> | |
| ļ | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | AMM ASM | 27-96-00-740-001 27-92/13 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for the BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 OR INPUT OF CAPT ROLL CTL SSTU 4CE1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, CAPT (4CE1), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).

27-94-00 EFF: ALL

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- (2) If the fault continues:
 - do a check and repair the wiring from the SEC 1 (1CE1) to the SSTU (4CE1), (Ref. ASM 27-92/13).
- B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

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TASK 27-94-00-810-802

Loss of the Roll Signal on the F/O Side Stick for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - SSTU-ROLL CTL, F/O (4CE2)
 - wiring from the SEC 1 (1CE1) to the SSTU (4CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/13 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 OR INPUT OF F/O ROLL CTL SSTU 4CE2
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, F/O (4CE2), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the SEC 1 (1CE1) to the SSTU (4CE2), (Ref. ASM 27-92/13).

EFF: ALL

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
SROS

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-803

Loss of the Pitch Signal on the CAPT Side Stick for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - SSTU-PITCH CTL, CAPT (4CE3)
 - wiring from the SEC 1 (1CE1) to the SSTU (4CE3)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/15 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 OR INPUT OF CAPT PITCH CTL SSTU 4CE3
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-PITCH CTL, CAPT (4CE3), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the SEC 1 (1CE1) to the SSTU (4CE3), (Ref. ASM 27-92/15).

EFF: ALL 27-94-00

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-804

Loss of the Pitch Signal on the F/O Side Stick for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - SSTU-PITCH CTL, F/O (4CE4)
 - wiring from the SEC 1 (1CE1) to the SSTU (4CE4)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/15 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 OR INPUT OF F/O PITCH CTL SSTU 4CE4
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-PITCH CTL, F/O (4CE4), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the SEC 1 (1CE1) to the SSTU (4CE4), (Ref. ASM 27-92/15).

EFF: ALL

27-94-00

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-805

Loss of the Roll Signal on the CAPT Side Stick for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - SSTU-ROLL CTL, CAPT (4CE1)
 - wiring from the SEC 2 (1CE2) to the SSTU (4CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------------------|--|--|
| | | | | |
| | AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| | AMM | 27-92-41-400-002 | Installation of the Transducer Units | |
| | | | (4CE1,4CE2,4CE3,4CE4) | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> | |
| | AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| R | | 27-96-00-740-001 27-92/13 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC2 OR INPUT OF CAPT ROLL CTL SSTU 4CE1
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, CAPT (4CE1), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the SEC 2 (1CE2) to the SSTU (4CE1), (Ref. ASM 27-92/13).

EFF: ALL 27-94-00

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-806

Loss of the Roll Signal on the F/O Side Stick for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - SSTU-ROLL CTL, F/O (4CE2)
 - wiring from the SEC 2 (1CE2) to the SSTU (4CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/13 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC2 OR INPUT OF F/O ROLL CTL SSTU 4CE2
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, F/O (4CE2), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the SEC 2 (1CE2) to the SSTU (4CE2), (Ref. ASM 27-92/13).

EFF: ALL

27-94-00

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-807

Loss of the Pitch Signal on the CAPT Side Stick for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - SSTU-PITCH CTL, CAPT (4CE3)
 - wiring from the SEC 2 (1CE2) to the SSTU (4CE3)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------------------|--|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) | |
| | 27-96-00-740-001 27-92/15 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC2 OR INPUT OF CAPT PITCH CTL SSTU 4CE3
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-PITCH CTL, CAPT (4CE3), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the SEC 2 (1CE2) to the SSTU (4CE3), (Ref. ASM 27-92/15).

EFF: ALL

27-94-00

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TROUBLE SHOOTING MANUAL

B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
SROS

27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-808

Loss of the Pitch Signal on the F/O Side Stick for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - SSTU-PITCH CTL, F/O (4CE4)
 - wiring from the SEC 2 (1CE2) to the SSTU (4CE4)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------------------|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | 27-96-00-740-001 27-92/15 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC2 OR INPUT OF F/O PITCH CTL SSTU 4CE4
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-PITCH CTL, F/O (4CE4), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the SEC 2 (1CE2) to the SSTU (4CE4), (Ref. ASM 27-92/15).

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27-94-00

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-809

Loss of the Roll Signal on the CAPT Side Stick for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - SSTU-ROLL CTL, CAPT (4CE1)
 - wiring from the SEC 3 (1CE3) to the SSTU (4CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------------------|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | 27-96-00-740-001 27-92/13 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC3 OR INPUT OF CAPT ROLL CTL SSTU 4CE1
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, CAPT (4CE1), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the SEC 3 (1CE3) to the SSTU (4CE1), (Ref. ASM 27-92/13).

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL

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TASK 27-94-00-810-810

Loss of the Roll Signal on the F/O Side Stick for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - SSTU-ROLL CTL, F/O (4CE2)
 - wiring from the SEC 3 (1CE3) to the SSTU (4CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------------------|--|
| AMM | 27-92-41-000-002 | Removal of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM | 27-92-41-400-002 | Installation of the Transducer Units (4CE1,4CE2,4CE3,4CE4) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-020 | Operational Test of the Side Stick Assembly (Activation for the BITE Test) |
| | 27-96-00-740-001 27-92/13 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the operational test of the side stick assembly (activation for BITE test) (Ref. AMM TASK 27-96-00-710-020).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC3 OR INPUT OF F/O ROLL CTL SSTU 4CE2
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SSTU-ROLL CTL, F/O (4CE2), (Ref. AMM TASK 27-92-41-000-002) and (Ref. AMM TASK 27-92-41-400-002).
 - (2) If the fault continues:
 - do a check and repair the wiring from the SEC 3 (1CE3) to the SSTU (4CE2), (Ref. ASM 27-92/13).

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B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
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TASK 27-94-00-810-811

Loss of the Speedbrake Control Signal for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - XDCR UNIT-SPD BRK CTL (7CE)
 - wiring from the SEC 2 (1CE2) to the transducer unit (7CE)
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | EFERENCE DESIGNATION | |
|------|----------------------|---|
| | | |
| AMM | 27-92-14-000-001 | Removal of the Speedbrake Control Transducer Unit (7CE) |
| AMM | 27-92-14-400-001 | <pre>Installation of the Speedbrake Control Transducer Unit (7CE)</pre> |
| AMM | 27-94-00-710-003 | Operational Test of the Spoiler Elevator Computer 2 (SEC 2) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/19 | |

3. Fault Confirmation

A. Test

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- (1) Do the operational test of the spoiler elevator computer 2 (SEC2) (Ref. AMM TASK 27-94-00-710-003).
 - (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC 2 OR INPUT OF SPBK CTL XDCR UNIT 7CE
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the XDCR UNIT-SPD BRK CTL (7CE), (Ref. AMM TASK 27-92-14-000-001) and (Ref. AMM TASK 27-92-14-400-001).

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- (2) If the fault continues:
 - do a check and repair the wiring from the SEC 2 (1CE2) to the transducer unit (7CE) (Ref. ASM 27-92/19).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-94-00-810-812

Loss of the Left Throttle Lever Transducer Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- CTL UNIT-THROTTLE, ENG 1 (8KS1)
- wiring of VS and SPLY signals from the SEC2 (1CE2) to the throttle control
 unit (8KS1)

2. Job Set-up Information

A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) | |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8K\$1, 8K\$2)</pre> | |
| | ASM | 27-92/20 | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 24VU:
 - release the FLT CTL/SEC2 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 24VU:
 - push the FLT CTL/SEC2 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the left throttle lever in TO/GA and MAX REV during 5 seconds.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC 2 OR INPUT OF L THROTTLE CTL UNIT 8KS1
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 1 (8KS1), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
 - (2) If the fault continues:
 - do a check and repair the wiring of VS and SPLY signals from the SEC2 (1CE2) to the throttle control unit (8KS1) (Ref. ASM 27-92/20).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-94-00-810-813

Loss of the Right Throttle Lever Transducer Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- CTL UNIT-THROTTLE, ENG 2 (8KS2)
- wiring of VS and SPLY signals from the SEC 2 (1CE2) to the throttle control unit (8KS2)

2. Job Set-up Information

A. Referenced Information

| | REFE | RENCE | DESIGNATION |
|---|------|------------------|---|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8KS1, 8KS2)</pre> |
| | ASM | 27-92/20 | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 24VU:
 - release the FLT CTL/SEC2 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 24VU:
 - push the FLT CTL/SEC2 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the right throttle lever in TO/GA and MAX REV during 5 seconds.
- B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC 2 OR INPUT OF R THROTTLE CTL UNIT 8KS2
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 2 (8KS2), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
 - (2) If the fault continues:
 - do a check and repair the wiring of VS and SPLY signals from the SEC 2 (1CE2) to the throttle control unit (8KS2) (Ref. ASM 27-92/20).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-94-00-810-814

Unwanted Permanent Idle of the Left Throttle Control Unit for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - CTL UNIT-THROTTLE, ENG 1 (8KS1)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) | |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8KS1, 8KS2)</pre> | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 23VU:
 - release the FLT CTL/SEC1 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 23VU:
 - push the FLT CTL/SEC1 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the left throttle lever in TO/GA and MAX REV during 5 seconds.
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 SEC1 PERMANENT IDLE OF L THROTTLE CTL UNIT 8KS1
 replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 1 (8KS1), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-94-00-810-815

Unwanted Permanent Idle of the Left Throttle Control Unit for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - CTL UNIT-THROTTLE, ENG 1 (8KS1)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-------------------|--|---|--|
| R | AMM AMM AMM | 24-41-00-861-002 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 76-11-19-000-040 76-11-19-400-040 | Energize the Aircraft Electrical Circuits from the External Power Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) Removal of the Throttle Control Unit (8KS1, 8KS2) Installation of the Throttle Control Unit (8KS1, 8KS2) | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 24VU:
 - release the FLT CTL/SEC2 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 24VU:
 - push the FLT CTL/SEC2 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the left throttle lever in TO/GA and MAX REV during 5 seconds.
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 SEC2 PERMANENT IDLE OF L THROTTLE CTL UNIT 8KS1
 replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 1 (8KS1), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
- B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
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TASK 27-94-00-810-816

Unwanted Permanent Idle of the Left Throttle Control Unit for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - CTL UNIT-THROTTLE, ENG 1 (8KS1)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-------------------|--|---|--|
| R | AMM AMM AMM | 24-41-00-861-002 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 76-11-19-000-040 76-11-19-400-040 | Energize the Aircraft Electrical Circuits from the External Power Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) Removal of the Throttle Control Unit (8KS1, 8KS2) Installation of the Throttle Control Unit (8KS1, 8KS2) | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 24VU:
 - release the FLT CTL/SEC3 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 24VU:
 - push the FLT CTL/SEC3 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the left throttle lever in TO/GA and MAX REV during 5 seconds.
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 SEC3 PERMANENT IDLE OF L THROTTLE CTL UNIT 8KS1
 replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 1 (8KS1), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
- B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
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TASK 27-94-00-810-817

Unwanted Permanent Idle of the Right Throttle Control Unit for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - CTL UNIT-THROTTLE, ENG 2 (8KS2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) |
| AMM | 76-11-19-400-040 | Installation of the Throttle Control Unit (8KS1, 8KS2) |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 23VU:
 - release the FLT CTL/SEC1 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 23VU:
 - push the FLT CTL/SEC1 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the right throttle lever in TO/GA and MAX REV during 5 seconds.
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 SEC1 PERMANENT IDLE OF R THROTTLE CTL UNIT 8KS1
 replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 2 (8KS2), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
- B. Do the operational test and the BITE test given in Para. 3.

EFF: ALL
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TASK 27-94-00-810-818

Unwanted Permanent Idle of the Right Throttle Control Unit for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - CTL UNIT-THROTTLE, ENG 2 (8KS2)
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power | |
| | AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) | |
| | AMM | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8K\$1, 8K\$2)</pre> | |

- 3. Fault Confirmation
 - A. Job set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 24VU:
 - release the FLT CTL/SEC2 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 24VU:
 - push the FLT CTL/SEC2 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the right throttle lever in TO/GA and MAX REV during 5 seconds.
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC2 PERMANENT IDLE OF R THROTTLE CTL UNIT 8KS2 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 2 (8KS2), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-94-00-810-819

Unwanted Permanent Idle of the Right Throttle Control Unit for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - CTL UNIT-THROTTLE, ENG 2 (8KS2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| AMM | 24-41-00-861-002 | Energize the Aircraft Electrical Circuits from the External Power |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| AMM | 76-11-19-000-040 | Removal of the Throttle Control Unit (8KS1, 8KS2) |
| | 76-11-19-400-040 | <pre>Installation of the Throttle Control Unit (8KS1, 8KS2)</pre> |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Energize the aircraft electrical circuits (Ref. AMM TASK 24-41-00-861-002).
 - (2) On the overhead panel 24VU:
 - release the FLT CTL/SEC3 pushbutton switch (the OFF legend comes on).
 - (3) On the overhead panel 24VU:
 - Push the FLT CTL/SEC3 pushbutton switch (the OFF legend goes off).
 - (4) On the central pedestal 11VU:
 - put the right throttle lever in TO/GA and MAX REV during 5 seconds.
 - B. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 SEC3 PERMANENT IDLE OF R THROTTLE CTL UNIT 8KS2
 replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the CTL UNIT-THROTTLE, ENG 2 (8KS2), (Ref. AMM TASK 76-11-19-000-040) and (Ref. AMM TASK 76-11-19-400-040).
- B. Do the operational test and the BITE test given in Para. 3.

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TASK 27-94-00-810-820

Loss of the Wheel Tachometer Signal for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
- R - wiring of ANI-6 signal from the SEC 2 (1CE2) to the related
- TACHOMETER-WHEEL
- DRIVE ASSY-TACHOMETER
- TACHOMETER-WHEEL
 - 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION |
|-------------|-------------------|------------------|--|
| R R R | AMM AMM AMM | 27-94-34-400-001 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Removal of the Tachometer Installation of the Tachometer Removal of the MLG Tachometer-Drive Installation of the MLG Tachometer-Drive |

- 3. Fault Confirmation
 - A. Test

R

R

R

R

R

R R

R

R

Not applicable, you cannot confirm this fault on the ground.

- 4. Fault Isolation
- A. If the Post Flight Report gives the maintenance message: R SEC 2 OR INPUT OF WHEEL TACHOMETER

R

- do a check and repair, if necessary, the wiring of ANI-6 signal from the SEC 2 (1CE2) to the related TACHOMETER-WHEEL for the SEC 2 COM part and MON part (Ref. ASM 27-92/25).
- (1) If the wiring is correct:
 - examine the DRIVE ASSY-TACHOMETER of the related wheels.
- (a) If the DRIVE ASSY-TACHOMETER is damaged:
- replace it (Ref. AMM TASK 32-42-68-000-003) and (Ref. AMM TASK 32-42-68-400-003).
 - (b) If the DRIVE ASSY-TACHOMETER is not damaged and there is no report of brake temperature differences:
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

EFF: ALL **SROS**

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| R | (c) If the DRIVE ASSY-TACHOMETER is not damaged and there is a report |
|---|---|
| R | of brake temperature differences: |
| R | replace the TACHOMETER-WHEEL (Ref. AMM TASK 32-42-57-000-001) |
| R | and (Ref. AMM TASK 32-42-57-400-001). |

EFF: ALL

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TASK 27-94-00-810-821

Loss of the Wheel Tachometer Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
- R - wiring of ANI-6 signal from the SEC 1 (1CE1) to the related
- TACHOMETER-WHEEL
- R - DRIVE ASSY-TACHOMETER
- TACHOMETER-WHEEL
 - 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION | |
|------|---------------------------------|--|--|
| | | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 32-42-57-000-001 | Removal of the Tachometer | |
| AMM | 32-42-57-400-001 | Installation of the Tachometer | |
| AMM | 32-42-68-000-003 | Removal of the MLG Tachometer-Drive | |
| AMM | 32-42-68-400-003 | Installation of the MLG Tachometer-Drive | |
| ASM | 27-92/25 | | |
| | AMM AMM AMM AMM AMM | REFERENCE | |

- 3. Fault Confirmation
 - A. Test

R

R

R

R

R

R

R

R R

R

R

Not applicable, you cannot confirm this fault on the ground.

- 4. Fault Isolation
- A. If the Post Flight Report gives the maintenance message: R R

SEC 1 OR INPUT OF WHEEL TACHOMETER

- do a check and repair, if necessary, the wiring of ANI-6 signal from the SEC 1 (1CE1) to the related TACHOMETER-WHEEL for the SEC 1 COM part and MON part (Ref. ASM 27-92/25).
- (1) If the wiring is correct:
 - examine the DRIVE ASSY-TACHOMETER of the related wheels.
 - (a) If the DRIVE ASSY-TACHOMETER is damaged:
 - replace it (Ref. AMM TASK 32-42-68-000-003) and (Ref. AMM TASK 32-42-68-400-003).
 - (b) If the DRIVE ASSY-TACHOMETER is not damaged and there is no report of brake temperature differences:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

EFF: ALL **SROS**

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| R | (c) If the DRIVE ASSY-TACHOMETER is not damaged and there is a report |
|---|---|
| R | of brake temperature differences: |
| R | replace the TACHOMETER-WHEEL (Ref. AMM TASK 32-42-57-000-001) |
| R | and (Ref. AMM TASK 32-42-57-400-001). |

EFF: ALL

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TASK 27-94-00-810-822

Loss of the Wheel Tachometer Signal for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
- R - wiring of ANI-6 signal from the SEC 3 (1CE3) to the related
- TACHOMETER-WHEEL
- R - DRIVE ASSY-TACHOMETER
- TACHOMETER-WHEEL
 - 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|-------------|-------------------|--|--|--|
| R R R | AMM AMM AMM | 27-94-34-000-001 27-94-34-400-001 32-42-57-000-001 32-42-57-400-001 32-42-68-000-003 32-42-68-400-003 27-92/25 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Removal of the Tachometer Installation of the Tachometer Removal of the MLG Tachometer-Drive Installation of the MLG Tachometer-Drive | |

- 3. Fault Confirmation
 - A. Test

R

R

R

R

R

R

R

R

R

R

R

Not applicable, you cannot confirm this fault on the ground.

- 4. Fault Isolation
- A. If the Post Flight Report gives the maintenance message: R R

SEC 3 OR INPUT OF WHEEL TACHOMETER

- do a check and repair, if necessary, the wiring of ANI-6 signal from the SEC 3 (1CE3) to the related TACHOMETER-WHEEL for the SEC 3 COM part and MON part (Ref. ASM 27-92/25).
- (1) If the wiring is correct:
 - examine the DRIVE ASSY-TACHOMETER of the related wheels.
 - (a) If the DRIVE ASSY-TACHOMETER is damaged:
 - replace it (Ref. AMM TASK 32-42-68-000-003) and (Ref. AMM TASK 32-42-68-400-003).
 - (b) If the DRIVE ASSY-TACHOMETER is not damaged and there is no report of brake temperature differences:
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

EFF: ALL **SROS**

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| ₹ | (c) If the DRIVE ASSY-TACHOMETER is not damaged and there is a report |
|---|---|
| ₹ | of brake temperature differences: |
| ₹ | - replace the TACHOMETER-WHEEL (Ref. AMM TASK 32-42-57-000-001) |
| ₹ | and (Ref. AMM TASK 32-42-57-400-001). |

EFF: ALL

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TASK 27-94-00-810-823

Loss of the Accelerometer 1 Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - ACCLRM-1 (12CE1)
 - wiring of the ANI 4-1 signal from the SEC 1 (1CE1) to the accelerometer 1 (12CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|-------|------------------|---|
| A M M | 27-92-16-000-001 | Removal of the Flight Control Accelerometer |
| AMM | 21-72-10-000-001 | (12CE1,12CE2,12CE3,12CE4) |
| AMM | 27-92-16-400-001 | <pre>Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4)</pre> |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/24 | |

- 3. Fault Confirmation
 - A. Test

R

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- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation

<u>NOTE</u>: If the circuit breakers 15CE1 and 16CE1 are open for the aircraft dispatchin MMEL conditions (ELAC1 deactivated), it is not necessary to do the trouble-shooting procedure.

- A. If the BITE test gives the maintenance message: SEC1 OR WIRING FROM ACCLRM1 12CE1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the ACCLRM-1 (12CE1), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).

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- (2) If the fault continues:
 - do a check and repair the wiring of the ANI 4-1 signal from the SEC 1 (1CE1) to the accelerometer 1 (12CE1) SEC 1 COM part and MON part (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

EFF: ALL
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TASK 27-94-00-810-824

Loss of the Accelerometer 2 Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - ACCLRM-2 (12CE2)
 - wiring of the ANI 4-1 signal from the SEC 1 (1CE1) to the accelerometer 2 (12CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------|------------------------------|--|
| AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) |
| AMM | 27-92-16-400-001 | Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM ASM | 27-96-00-740-001 27-92/24 | BITE Test of the EFCS (Ground Scanning) |
| | | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

SEC1 OR WIRING FROM ACCLRM2 12CE2

- replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - replace the ACCLRM-2 (12CE2), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
- (2) If the fault continues:
 - do a check and repair the wiring of the ANI 4-1 signal from the SEC 1 (1CE1) to the accelerometer 2 (12CE2) SEC 1 COM part and MON part (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

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TASK 27-94-00-810-825

Loss of the Accelerometer 3 Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- ACCLRM-3 (12CE3)
- wiring of the ANI 4-1 signal from the SEC 2 (1CE2) to the accelerometer 3 (12CE3)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| AMM | 27-92-16-400-001 | <pre>Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4)</pre> | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-92/24 | | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - SEC2 OR WIRING FROM ACCLRM3 12CE3
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the ACCLRM-3 (12CE3), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
 - (2) If the fault continues:
 - do a check and repair the wiring of the ANI 4-1 signal from the SEC 2 (1CE2) to the accelerometer 3 (12CE3) SEC 2 COM part and MON part (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

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TASK 27-94-00-810-826

Loss of the Accelerometer 4 Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- ACCLRM-4 (12CE4)
- wiring of the ANI 4-2 signal from the SEC 2 (1CE2) to the accelerometer 4 (12CE4)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|---|--|
| | | | |
| AMM | 27-92-16-000-001 | Removal of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4) | |
| AMM | 27-92-16-400-001 | <pre>Installation of the Flight Control Accelerometer (12CE1,12CE2,12CE3,12CE4)</pre> | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-92/24 | | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - SEC2 OR WIRING FROM ACCLRM4 12CE4
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the ACCLRM-4 (12CE4), (Ref. AMM TASK 27-92-16-000-001) and (Ref. AMM TASK 27-92-16-400-001).
 - (2) If the fault continues:
 - do a check and repair the wiring of the ANI 4-2 signal from the SEC 2 (1CE2) to the accelerometer 4 (12CE4) SEC 2 COM part and MON part (Ref. ASM 27-92/24).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-827

Loss of the Blue Hydraulic Pressure Switch Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the LOW BLUE PRESS signal from the SEC 1 (1CE1) COM and MON parts to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground |
| | | Power Supply |
| AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System |
| ASM | 27-92/27 | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | EL DESIGNATION | | IDENT. LOCATION | |
|-------|---|----------------|-----------------|--|
| | FLIGHT CONTROLS/FCDC1/SPLY FLIGHT CONTROLS/FCDC2/SPLY | 20CE1 20CE2 | B10 Q20 | |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

EFF: ALL 27-94-00

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 OR WIRING FROM B HYD PRESS SW1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - (1) If the fault continues:
 - do a check and repair the wiring of the LOW BLUE PRESS signal from the SEC 1 (1CE1) COM and MON parts to the first terminal block, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

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TASK 27-94-00-810-828

Loss of the Blue Hydraulic Pressure Switch Signal for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the LOW BLUE PRESS signal from the SEC 2 (1CE2) COM and MON parts to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| | | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground | |
| | | Power Supply | |
| AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| ASM | 27-92/27 | | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|-------|---|----------------|------------|
| | FLIGHT CONTROLS/FCDC1/SPLY FLIGHT CONTROLS/FCDC2/SPLY | 20CE1 20CE2 | B10 Q20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

EFF: ALL 27-94-00

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC2 OR WIRING FROM B HYD PRESS SW2
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - (1) If the fault continues:
 - do a check and repair the wiring of the LOW BLUE PRESS signal from the SEC 2 (1CE2) COM and MON parts to the first terminal block, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

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TASK 27-94-00-810-829

Loss of the Blue Hydraulic Pressure Switch Signal for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring of the LOW BLUE PRESS signal from the SEC 3 (1CE3) COM and MON parts to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| | | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 29-10-00-863-003 | Pressurize the Blue Hydraulic System with a Ground | |
| | | Power Supply | |
| AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| ASM | 27-92/27 | | |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Blue hydraulic system with the electric pump (Ref. AMM TASK 29-10-00-863-003).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | EL DESIGNATION | | IDENT. LOCATION | |
|-------|---|----------------|-----------------|--|
| | FLIGHT CONTROLS/FCDC1/SPLY FLIGHT CONTROLS/FCDC2/SPLY | 20CE1 20CE2 | B10 Q20 | |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

EFF: ALL 27-94-00

TROUBLE SHOOTING MANUAL

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR WIRING FROM B HYD PRESS SW2
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.
 - (1) If the fault continues:
 - do a check and repair the wiring of the LOW BLUE PRESS signal from the SEC 3 (1CE3) COM and MON parts to the first terminal block, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Blue hydraulic system (Ref. AMM TASK 29-10-00-864-003).

EFF: ALL 27-94-00

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TASK 27-94-00-810-830

Loss of the Green Hydraulic Pressure Switch Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the LOW GREEN PRESS signal from the SEC 1 (1CE1) COM and MON parts to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|---------------------------------|--|--|
| AMM AMM AMM AMM AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 27-92/27 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
- B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|-------|---|----------------|------------|
| _ | FLIGHT CONTROLS/FCDC1/SPLY FLIGHT CONTROLS/FCDC2/SPLY | 20CE1 20CE2 | B10 Q20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 OR WIRING FROM G HYD PRESS SW1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.

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- (1) If the fault continues:
 - do a check and repair the wiring of the LOW GREEN PRESS signal from the SEC 1 (1CE1) COM and MON parts to the first terminal block, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

EFF: ALL | | SROS 27-94-00

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TASK 27-94-00-810-831

Loss of the Green Hydraulic Pressure Switch Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- wiring of the LOW GREEN PRESS signal from the SEC 2 (1CE2) COM and MON parts to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|---------------------------------|--|--|
| AMM AMM AMM AMM AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 29-10-00-863-001 29-10-00-864-001 27-92/27 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
- B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|--------|----------------------------|--------|----------|
| 49VU | FLIGHT CONTROLS/FCDC1/SPLY | 20CE1 | B10 |
| 12 1VU | FLIGHT CONTROLS/FCDC2/SPLY | 20CE2 | 920 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC2 OR WIRING FROM G HYD PRESS SW2
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.

EFF: ALL 27-94-00

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- (1) If the fault continues:
 - do a check and repair the wiring of the LOW GREEN PRESS signal from the SEC 2 (1CE2) COM and MON parts to the first terminal block, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

EFF: ALL SROS 27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-832

Loss of the Green Hydraulic Pressure Switch Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the LOW GREEN PRESS signal from the SEC 3 (1CE3) COM and MON parts to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 AMM 29-10-00-863-001 AMM 29-10-00-864-001 ASM 27-92/27 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) Pressurize the Green Hydraulic System Depressurize the Green Hydraulic System |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-863-001).
- B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|--------|----------------------------|--------|------------|
| 49VU | FLIGHT CONTROLS/FCDC1/SPLY | 20CE1 | В10 |
| 12 1VU | FLIGHT CONTROLS/FCDC2/SPLY | 20CE2 | Q20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR WIRING FROM G HYD PRESS SW2
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.

EFF: ALL 27-94-00

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- (1) If the fault continues:
 - do a check and repair the wiring of the LOW GREEN PRESS signal from the SEC 3 (1CE3) COM and MON parts to the first terminal block, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Green hydraulic system (Ref. AMM TASK 29-10-00-864-001).

EFF: ALL
SROS

27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-833

Loss of the Yellow Hydraulic Pressure Switch Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the LOW YELLOW PRESS signal from the SEC 1 (1CE1) COM and MON parts to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE D | ESIGNATION |
|--|---|
| AMM 27-94-34-400-001 I AMM 27-96-00-740-001 B AMM 29-10-00-863-002 P | emoval of the SEC (1CE1,1CE2,1CE3) nstallation of the SEC (1CE1,1CE2,1CE3) ITE Test of the EFCS (Ground Scanning) ressurize the Yellow Hydraulic System epressurize the Yellow Hydraulic System |

- 3. Fault Confirmation
 - A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
 - B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|-------|---|----------------|------------|
| _ | FLIGHT CONTROLS/FCDC1/SPLY FLIGHT CONTROLS/FCDC2/SPLY | 20CE1 20CE2 | B10 Q20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 OR WIRING FROM Y HYD PRESS SW1
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.

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- (1) If the fault continues:
 - do a check and repair the wiring of the LOW YELLOW PRESS signal from the SEC 1 (1CE1) COM and MON parts to the first terminal block, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

EFF: ALL
SROS

27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-834

Loss of the Yellow Hydraulic Pressure Switch Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- wiring of the LOW YELLOW PRESS signal from the SEC 2 (1CE2) COM and MON parts to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|-------------------|--|--|
| AMM AMM AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 29-10-00-863-002 29-10-00-864-002 27-92/27 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) Pressurize the Yellow Hydraulic System Depressurize the Yellow Hydraulic System |
| | | |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
- B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|--------|----------------------------|--------|------------|
| 49VU | FLIGHT CONTROLS/FCDC1/SPLY | 20CE1 | В10 |
| 12 1VU | FLIGHT CONTROLS/FCDC2/SPLY | 20CE2 | Q20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC2 OR WIRING FROM Y HYD PRESS SW2
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.

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- (1) If the fault continues:
 - do a check and repair the wiring of the LOW YELLOW PRESS signal from the SEC 2 (1CE2) COM and MON parts to the first terminal block, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

EFF: ALL
SROS

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-835

Loss of the Yellow Hydraulic Pressure Switch Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the LOW YELLOW PRESS signal from the SEC 3 (1CE3) COM and MON parts to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|---------------------------------|--|--|
| AMM AMM AMM AMM ASM | 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 29-10-00-863-002 29-10-00-864-002 27-92/27 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) Pressurize the Yellow Hydraulic System Depressurize the Yellow Hydraulic System |

3. Fault Confirmation

- A. Job Set-Up
 - (1) Pressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-863-002).
- B. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. | LOCATION |
|-------|---|----------------|------------|
| _ | FLIGHT CONTROLS/FCDC1/SPLY FLIGHT CONTROLS/FCDC2/SPLY | 20CE1 20CE2 | B10 Q20 |

- C. Test
 - (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR WIRING FROM Y HYD PRESS SW2
 - replace the SEC-3 (1CE3), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - open and close the circuit breakers 20CE1 and 20CE2.

EFF: ALL 27-94-00

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- (1) If the fault continues:
 - do a check and repair the wiring of the LOW YELLOW PRESS signal from the SEC 3 (1CE3) COM and MON parts to the first terminal block, (Ref. ASM 27-92/27).
 - open and close the circuit breakers 20CE1 and 20CE2.
- B. Do the test given in Para. 3.

5. Close-up

A. Depressurize the Yellow hydraulic system (Ref. AMM TASK 29-10-00-864-002).

EFF: ALL
SROS

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-836

Loss of the THS Command Transducer Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring from the ANI 2-3 XDCR COM signal of the SEC 1 (1CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|---|--|
| 27-90-00-810-817 | Loss of the ACS1 Signal of the SEC1 COM Side | |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM 27-96-00-710-022 | Operational Test of the THS Actuator Electrical | |
| | Control (Activation for BITE Test) | |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM 27-94/12 | | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the SEC 1.

- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC1 COM OR WIRING FROM THS ACTR XDCR2 9CE - refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC1 COM OR WIRING FROM THS ACTR XDCR2 9CE SEC1 OR WIRING FROM L B ELEV POS XDCR 34CE3 SEC1 OR WIRING FROM R B ELEV POS XDCR 34CE4

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-817).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 COM OR WIRING FROM THS ACTR XDCR2 9CE
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring from the ANI 2-3 XDCR COM signal of the SEC 1 (1CE1) to the first terminal block, (Ref. ASM 27-94/12).
- B. Do the tests given in Para. 3.

ALL 27-94-00

EFF:

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-837

Loss of the THS Monitor Transducer Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- monitor position transducer of the THS actuator
- command position transducer of the THS actuator
- wiring of the XDCR COM from the THS actuator (9CE) to the first terminal block
- wiring of the XDCR MON from the THS actuator (9CE) to the first terminal block
- wiring from the ANI 2-3 XDCR MON signal of the SEC 1 (1CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-------------------|--|--|--|
| 27-9 | 0-00-810-818 | Loss of the ACS1 Signal of the SEC1 MON Side | |
| | 27-44-56-400-001 | Installation of the Position Transducer to the THS Actuator 9CE | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 29-10-00-864-003 | Depressurize the Blue Hydraulic System | |
| AMM | 29-23-00-864-001 | Depressurize the Green and Yellow Hydraulic Systems after Operation of the PTU | |
| AMM ASM ASM | 29-24-00-864-001 27-93/12 27-94/12 | Depressurize the Yellow Hydraulic System | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the SEC 1.

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- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message:
 SEC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
 refer to Para. Fault Isolation.
 - (b) If the ground scanning gives at least two maintenance messages of the list below:

SEC1 OR WIRING FROM L ELEV POS MON XDCR

SEC1 OR WIRING FROM R ELEV POS MON XDCR

SEC1 MON OR WIRING FROM THS ACTR XDCR2 9CE

SEC1 OR WIRING FROM L G ELEV MODE XDCR 34CE1

SEC1 OR WIRING FROM R Y ELEV MODE XDCR 34CE2

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-818).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 MON OR WIRING FROM THS ACTR XDCR2 9CE
 - (1) On the overhead panel 23VU:
 - make sure that the FLT CTL/ELAC1 pushbutton switch is pushed (the FAULT and OFF legends of this pushbutton switch are off).
 - release the FLT CTL/SEC1 pushbutton switch (the OFF legend of this pushbutton switche comes on).
 - (2) On the overhead panel 24VU:
 - release the FLT CTL/ELAC2, FLT CTL/SEC2 and the FLT CTL/SEC3
 pushbutton switches (the OFF legend of these pushbutton switches
 comes on).
 - (3) Pressurize the aircraft hydraulic systems (Ref. AMM TASK 29-23-00-864-001) (Ref. AMM TASK 29-24-00-864-001), (Ref. AMM TASK 29-10-00-864-003).
 - (4) Do the BITE test of the EFCS (Groud Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives a maintenance message related to the ELAC1 and THS ACTR XDCR:
 - replace the monitor position transducer of the THS actuator (Ref. AMM TASK 27-44-56-400-001), (Ref. AMM TASK 27-44-56-400-001)
 - If the fault continues:
 - replace the command position transducer of the THS actuator (Ref. AMM TASK 27-44-56-400-001), (Ref. AMM TASK 27-44-56-400-001).

EFF: ALL

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- 1 If the fault continues:
 - do a check of the wiring of the XDCR COM from the THS actuator (9CE) to the first terminal block (Ref. ASM 27-93/12).
- 2 If the fault continues:
 - do a check of the wiring of the XDCR MON from the THS actuator (9CE) to the first terminal block (Ref. ASM 27-93/12).
- (b) If the ground scanning does not give a maintenance message related to the ELAC1 and THS ACTR XDCR:
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (5) If the fault continues:
 - do a check and repair the wiring from the ANI 2-3 XDCR MON signal of the SEC 1 (1CE1) to the first terminal block, (Ref. ASM 27-94/12).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-838

Loss of the Servo Motor 2 Signal on the THS Actuator for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the K12-1 and 2 signal from the SEC 1 (1CE1) to the SEC 1 (1CE1)
- wiring of the K12-1B and 2B signal from the SEC 1 (1CE1) to the first terminal block

Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical |
| | | Control (Activation for BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-94/12 | • |

3. Fault Confirmation

- A. Test
 - (1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the SEC 1.

(2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 OR WIRING TO THS ACTR SERVO MOT2 9CE
 - replace the SEC-1 (1CE1), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check of the wiring of the K12-1 and 2 signal from the SEC 1 (1CE1) to the SEC 1 (1CE1), (Ref. ASM 27-94/12).
 - (a) If there is no continuity, repair the wiring.

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- (b) If there is continuity:
 - do a check and repair the wiring of the K12-1B and 2B signal from the SEC 1 (1CE1) to the first terminal block, (Ref. ASM 27-94/12).
- B. Do the tests given in Para. 3.

EFF: ALL
SROS

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TASK 27-94-00-810-839

Loss of the THS Command Transducer Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- Command Position Transducer
- wiring of the XDCR COM SPLY signal from the THS actuator (9CE) to the first terminal block
- wiring of the XDCR COM V1, V2 signals from the THS actuator (9CE) to the SEC 2 (1CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|---|--|
| 27-90-00-810-821 Loss of the ACS1 Signal of the SEC2 COM Si 27-90-00-810-823 Loss of the ACS1 Signal of the ELAC2 COM Si | |
| | SEC2 COM Side |
| AMM 27-44-56-000-001 | Removal of the Position Transducer from the THS Actuator 9CE |
| AMM 27-44-56-400-001 | Installation of the Position Transducer to the THS Actuator 9CE |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| AMM 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) |
| AMM 27-96-00-740-001 ASM 27-94/13 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the SEC 2.

- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE refer to Para. Fault Isolation.

EFF: ALL

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(b) If the ground scanning gives at least two maintenance messages of the list below:

SEC2 OR WIRING FROM L G ELEV POS XDCR 34CE1 SEC2 OR WIRING FROM R Y ELEV POS XDCR 34CE2 SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-821).
- (c) If the ground scanning gives at least two maintenance messages of the list below:

L G ELEV POS XDCR 34CE1 COM E2/S2:USE STBY XDCR R Y ELEV POS XDCR 34CE2 COM E2/S2:USE STBY XDCR ELAC2 COM OR INPUT OF THS ACTR XDCR1 9CE SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE

- do this trouble shooting procedure (Ref. TASK 27-90-00-810-823).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC2 COM OR INPUT OF THS ACTR XDCR3 9CE
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the Command Position Transducer, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (2) If the fault continues:
 - do a check of the wiring of the XDCR COM SPLY signal from the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-94/13).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check and repair the wiring of the XDCR COM V1, V2 signals from the THS actuator (9CE) to the SEC 2 (1CE2), (Ref. ASM 27-94/13).
- B. Do the tests given in Para. 3.

EFF: ALL 27-94-00

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TASK 27-94-00-810-840

Loss of the THS Monitor Transducer Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- Monitor Position Transducer
- Command Position Transducer
- wiring of the XDCR MON SPLY signal from the THS actuator (9CE) to the first terminal block
- wiring of the XDCR MON V1, V2 signals from the THS actuator (9CE) to the SEC 2 (1CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| | | |
| 27-9 | 0-00-810-822 | Loss of the ACS1 Signal of the SEC2 MON Side |
| 27-9 | 0-00-810-824 | Loss of the ACS1 Signal of the ELAC2 MON Side and |
| | | SEC2 MON Side |
| AMM | 27-44-56-000-001 | Removal of the Position Transducer from the THS |
| | | Actuator 9CE |
| AMM | 27-44-56-400-001 | Installation of the Position Transducer to the THS |
| | | Actuator 9CE |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical |
| | | Control (Activation for BITE Test) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-94/13 | C |
| | | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the SEC 2.

- (2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
 - (a) If the ground scanning gives the maintenance message: SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE - refer to Para. Fault Isolation.

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- (b) If the ground scanning gives at least two maintenance messages of the list below:
 - SEC2 OR WIRING FROM L B ELEV MODE XDCR 34CE3
 - SEC2 OR WIRING FROM L ELEV POS MON XDCR
 - SEC2 OR WIRING FROM R B ELEV MODE XDCR 34CE4
 - SEC2 OR WIRING FROM R ELEV POS MON XDCR
 - SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE
 - do this trouble shooting procedure (Ref. TASK 27-90-00-810-822).
- (c) If the ground scanning gives at least two maintenance messages of the list below:
 - L B ELEV MODE XDCR 34CE3
 - L ELEV POS MON XDCR OF ELAC2/SEC2
 - R B ELEV MODE XDCR 34CE4
 - ELAC2 MON OR INPUT OF THS ACTR XDCR1 9CE
 - SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE
 - do this trouble shooting procedure (Ref. TASK 27-90-00-810-824).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - SEC2 MON OR INPUT OF THS ACTR XDCR3 9CE
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the Monitor Position Transducer, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (2) If the fault continues:
 - replace the Command Position Transducer, (Ref. AMM TASK 27-44-56-000-001) and (Ref. AMM TASK 27-44-56-400-001).
 - (3) If the fault continues:
 - do a check of the wiring of the XDCR MON SPLY signal from the THS actuator (9CE) to the first terminal block, (Ref. ASM 27-94/13).
 - (a) If there is no continuity, repair the wiring.
 - (b) If there is continuity:
 - do a check and repair the wiring of the XDCR MON V1, V2 signals from the THS actuator (9CE) to the SEC 2 (1CE2), (Ref. ASM 27-94/13).
- B. Do the tests given in Para. 3.

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TASK 27-94-00-810-841

Loss of the Servo Motor 3 Signal on the THS Actuator for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- pitch trim actuator
- wiring of the command signal from the THS actuator (9CE) to the SEC 2
 (1CE2)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| | | | |
| AMM | 27-44-57-000-001 | Removal of the Pitch Trim Actuator from the THS Actuator 9CE | |
| AMM | 27-44-57-400-001 | Installation of the Pitch Trim Actuator to the THS Actuator 9CE | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-94/13 | | |

3. Fault Confirmation

A. Test

(1) Do the operational test of the THS actuator electrical control (Ref. AMM TASK 27-96-00-710-022).

NOTE: Do the ground setting only with the SEC 2.

(2) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message:
 - SEC2 OR OUTPUT TO THS ACTR SERVO MOT3 9CE
 - replace the SEC-2 (1CE2), (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the pitch trim actuator, (Ref. AMM TASK 27-44-57-000-001) and (Ref. AMM TASK 27-44-57-400-001).

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- (2) If the fault continues:
 - do a check and repair the wiring of the command signal from the THS actuator (9CE) to the SEC 2 (1CE2), (Ref. ASM 27-94/13).
- B. Do the tests given in Para. 3.

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TASK 27-94-00-810-842

Loss of the ADR 1 Bus 3 for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the DGI-06 signal from the SEC 1 (1CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| 34-13-81-810-825 | Runaway or Drift of One ADR3 Parameter Identified by the ELACs and the SECs |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-92/53 | |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: If there is an EFCS message which is not related to an ADR FAULT (NAV ADRX FAULT or ADR-STATUS), do not remove the ADIRU; refer to these procedures:

- (a) If flight in turbulence:
 - (Ref. TASK 34-11-00-810-870).
- (b) If the fault continues:
 - (Ref. TASK 34-13-00-810-998)
 - (Ref. TASK 34-11-00-810-861).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 OR BUS3 FROM ADR1
 - read the Post Flight Report (PFR) for the maintenance messages ADR3 with AFS in IDENT or ADIRU 1/2/3 DISAGREE with the AFS source.
 - (1) If one of these maintenance messages comes into view on the PFR:
 do this trouble shooting procedure (Ref. TASK 34-13-81-810-825).
 - (2) If these maintenance messages do not come into view on the PFR:
 replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the DGI-06 signal from the SEC 1 (1CE1) to the first terminal block COM and MON parts (Ref. ASM 27-92/53).
- B. Do the test given in Para. 3.

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EFF:

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TASK 27-94-00-810-843

Loss of the ADR 1 Bus 2 for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- wiring of the DGI-07 signal from the SEC 2 (1CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| 34-13-81-810-824 | Runaway or Drift of One ADR2 Parameter Identified by the ELACs and the SECs |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-92/54 | |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: If there is an EFCS message which is not related to an ADR FAULT (NAV ADRX FAULT or ADR-STATUS), do not remove the ADIRU; refer to these procedures:

- (a) If flight in turbulence:
 - (Ref. TASK 34-11-00-810-870).
- (b) If the fault continues:
 - (Ref. TASK 34-13-00-810-998)
 - (Ref. TASK 34-11-00-810-861).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC2 OR BUS2 FROM ADR1
 - read the Post Flight Report (PFR) for the maintenance messages ADR2 with AFS in IDENT or ADIRU 1/2/3 DISAGREE with the AFS source.
 - (1) If one of these maintenance messages comes into view on the PFR:
 do this trouble shooting procedure (Ref. TASK 34-13-81-810-824).
 - (2) If these maintenance messages do not come into view on the PFR:
 replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the DGI-07 signal from the SEC 2 (1CE2) to the first terminal block, COM and MON parts (Ref. ASM 27-92/54).
- B. Do the test given in Para. 3.

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TASK 27-94-00-810-844

Loss of the ADR 2 Bus 2 for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- wiring of the DGI-06 signal from the SEC 2 (1CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| 34-13-81-810-823 | Runaway or Drift of One ADR1 Parameter Identified by the ELACs and the SECs |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-92/54 | |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: If there is an EFCS message which is not related to an ADR FAULT (NAV ADRX FAULT or ADR-STATUS), do not remove the ADIRU; refer to these procedures:

- (a) If flight in turbulence:
 - (Ref. TASK 34-11-00-810-870).
- (b) If the fault continues:
 - (Ref. TASK 34-13-00-810-998)
 - (Ref. TASK 34-11-00-810-861).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC2 OR BUS2 FROM ADR2
 - read the Post Flight Report (PFR) for the maintenance messages ADR1 with AFS in IDENT or ADIRU 1/2/3 DISAGREE with the AFS source.
 - (1) If one of these maintenance messages comes into view on the PFR:
 do this trouble shooting procedure (Ref. TASK 34-13-81-810-823).
 - (2) If these maintenance messages do not come into view on the PFR:
 replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the DGI-06 signal from the SEC 2 (1CE2) to the first terminal block, COM and MON parts (Ref. ASM 27-92/54).
- B. Do the test given in Para. 3.

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TASK 27-94-00-810-845

Loss of the ADR 2 Bus 2 for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring of the DGI-07 signal from the SEC 3 (1CE3) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| 34-13-81-810-825 | Runaway or Drift of One ADR3 Parameter Identified by the ELACs and the SECs |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-92/55 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).
 - NOTE: If there is an EFCS message which is not related to an ADR FAULT (NAV ADRX FAULT or ADR-STATUS), do not remove the ADIRU; refer to these procedures:
 - (a) If flight in turbulence:
 - (Ref. TASK 34-11-00-810-870).
 - (b) If the fault continues:
 - (Ref. TASK 34-13-00-810-998)
 - (Ref. TASK 34-11-00-810-861).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR BUS2 FROM ADR2
 - read the Post Flight Report (PFR) for the maintenance messages ADR3 with AFS in IDENT or ADIRU 1/2/3 DISAGREE with the AFS source.
 - (1) If one of these maintenance messages comes into view on the PFR:
 do this trouble shooting procedure: (Ref. TASK 34-13-81-810-825).
 - (2) If these maintenance messages do not come into view on the PFR: - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the DGI-07 signal from the SEC 3 (1CE3) to the first terminal block, COM and MON parts (Ref. ASM 27-92/55).
- B. Do the test given in Para. 3.

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TASK 27-94-00-810-846

Loss of the ADR 3 Bus 3 for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the DGI-07 signal from the SEC 1 (1CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--------------------------------------|---|
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| 34-13-81-810-823 | Runaway or Drift of One ADR1 Parameter Identified by the ELACs and the SECs |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-740-001 ASM 27-92/53 | BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: If there is an EFCS message which is not related to an ADR FAULT (NAV ADRX FAULT or ADR-STATUS), do not remove the ADIRU; refer to these procedures:

- (a) If flight in turbulence:
 - (Ref. TASK 34-11-00-810-870).
- (b) If the fault continues:
 - (Ref. TASK 34-13-00-810-998)
 - (Ref. TASK 34-11-00-810-861).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 OR BUS3 FROM ADR3
 - read the Post Flight Report (PFR) for the maintenance messages ADR1 with AFS in IDENT or ADIRU 1/2/3 DISAGREE with the AFS source.
 - (1) If one of these maintenance messages comes into view on the PFR:
 do this trouble shooting procedure: (Ref. TASK 34-13-81-810-823).
 - (2) If these maintenance messages do not come into view on the PFR:
 replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the DGI-07 signal from the SEC 1 (1CE1) to the first terminal block, COM and MON parts (Ref. ASM 27-92/53).
- B. Do the test given in Para. 3.

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TASK 27-94-00-810-847

Loss of the ADR 3 Bus 2 for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the DGI-06 signal from the SEC 3 (1CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| 34-11-00-810-861 | Different Angle of Attack Value on the three ADIRUs |
| 34-11-00-810-870 | Airspeed Discrepancy on the PFD or on the Standby Airspeed Indicator |
| 34-13-00-810-998 | Altitude or Airspeed Discrepancy between CAPT PFD and F/O PFD |
| 34-13-81-810-824 | Runaway or Drift of One ADR2 Parameter Identified by the ELACs and the SECs |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-92/55 | |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

NOTE: If there is an EFCS message which is not related to an ADR FAULT (NAV ADRX FAULT or ADR-STATUS), do not remove the ADIRU; refer to these procedures:

- (a) If flight in turbulence:
 - (Ref. TASK 34-11-00-810-870).
- (b) If the fault continues:
 - (Ref. TASK 34-13-00-810-998)
 - (Ref. TASK 34-11-00-810-861).

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4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR BUS2 FROM ADR3
 - read the Post Flight Report (PFR) for the maintenance messages ADR2 with AFS in IDENT or ADIRU 1/2/3 DISAGREE with the AFS source.
 - (1) If one of these maintenance messages comes into view on the PFR:
 do this trouble shooting procedure: (Ref. TASK 34-13-81-810-824).
 - (2) If these maintenance messages do not come into view on the PFR:
 replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the DGI-06 signal from the SEC 3 (1CE3) to the first terminal block, COM and MON parts (Ref. ASM 27-92/55).
- B. Do the test given in Para. 3.

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EFF:

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TASK 27-94-00-810-848

Loss of the IR 1 Bus 3 for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the DGI-02 signal from the SEC 1 (1CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/53 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 OR BUS3 FROM IR1
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI-02 signal from the SEC1 (1CE1) to the first terminal block, COM and MON parts (Ref. ASM 27-92/53).
 - B. Do the test given in Para. 3.

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TASK 27-94-00-810-849

Loss of the IR 1 Bus 2 for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the DGI-03 signal from the SEC 2 (1CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/54 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC2 OR BUS2 FROM IR1
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI-03 signal from the SEC2 (1CE2) to the first terminal block, COM and MON parts (Ref. ASM 27-92/54).
 - B. Do the test given in Para. 3.

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TASK 27-94-00-810-850

Loss of the IR 2 Bus 2 for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the DGI-02 signal from the SEC 2 (1CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/54 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC2 OR BUS2 FROM IR2
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI-02 signal from the SEC2 (1CE2) to the first terminal block, COM and MON parts (Ref. ASM 27-92/54).
 - B. Do the test given in Para. 3.

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TASK 27-94-00-810-851

Loss of the IR 2 Bus 2 for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the DGI-03 signal from the SEC 3 (1CE3) COM part to the second terminal block
- wiring of the DGI-03 signal from the SEC 3 (1CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/55 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR BUS2 FROM IR2
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI-03 signal from the SEC3 (1CE3) COM part to the second terminal block (1840VT) (Ref. ASM 27-92/55).
 - do a check and repair the wiring of the DGI-03 signal from the SEC3 (1CE3) to the first terminal block, COM and MON parts (Ref. ASM 27-92/55).
- B. Do the test given in Para. 3.

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EFF:

ALL

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-852

Loss of the IR 3 Bus 3 for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the DGI-03 signal from the SEC 1 (1CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/53 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 OR BUS3 FROM IR3
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI-03 signal from the SEC1 (1CE1) to the first terminal block, COM and MON parts (Ref. ASM 27-92/53).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-853

Loss of the IR 3 Bus 2 for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring of the DGI-02 signal from the SEC 3 (1CE3) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFER | ENCE | DESIGNATION |
|------------|--|--|
| AMM AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 27-92/55 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC3 OR BUS2 FROM IR3
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI-02 signal from the SEC3 (1CE3) to the first terminal block, COM and MON parts (Ref. ASM 27-92/55).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-854

Loss of the SFCC 1 Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- wiring of the DGI 12 signal from the SEC 2 (1CE2) to the first terminal block
- wiring of the SLATS OUT (DSI 20) signal from the SEC 2 (1CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|---|
| | | |
| 31-3 | 2-00-810-932 | Failure of the Discrete Links |
| AMM | 27-80-00-866-004 | Extending the Slats on the Ground |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-81/10 | |
| ASM | 27-92/42 | |
| ASM | 27-92/54 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001) with the slat extended in position 1 (Ref. AMM TASK 27-80-00-866-004).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC2 OR WIRING FROM SFCC1
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 12 signal from the SEC 2 (1CE2) to the first terminal block, COM part only (Ref. ASM 27-92/54):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.

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- (b) Do a check and repair the wiring of the SLATS OUT (DSI 20) signal from the SEC 2 (1CE2) to the first terminal block, COM part only (Ref. ASM 27-92/42).
- (2) If the fault continues, do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the dicrete output signal (SAP #5, pin AE/8K) of the SFCC1 (21CV) (Ref. ASM 27-81/10).
- B. Do the test given in Para. 3.

EFF: ALL 27-94-00

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-855

Loss of the SFCC 1 Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the DGI 12 signal from the SEC 3 (1CE3) to the first terminal block
- wiring of the SLATS OUT (DSI 20) signal from the SEC 3 (1CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| | | |
| 31-3 | 2-00-810-932 | Failure of the Discrete Links |
| AMM | 27-80-00-866-004 | Extending the Slats on the Ground |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-81/10 | |
| ASM | 27-92/42 | |
| ASM | 27-92/55 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001) with the slat extended in position 1 (Ref. AMM TASK 27-80-00-866-004).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR WIRING FROM SFCC1
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 12 signal from the SEC 3 (1CE3) to the first terminal block, COM part only (Ref. ASM 27-92/55):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.

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- (b) Do a check and repair the wiring of the SLATS OUT (DSI 20) signal from the SEC 3 (1CE3) to the first terminal block, COM part only (Ref. ASM 27-92/42).
- (2) If the fault continues, do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the dicrete output signal (SAP #5, pin AE/8K) of the SFCC1 (21CV) (Ref. ASM 27-81/10).
- B. Do the test given in Para. 3.

EFF: ALL 27-94-00

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-856

Loss of the SFCC 1 Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the DGI 12 signal from the SEC 1 (1CE1) to the first terminal block
- wiring of the SLATS OUT (DSI 20) signal from the SEC 1 (1CE1) COM part to the SFCC 1 (21CV)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-80-00-866-004 AMM 27-94-34-000-001 AMM 27-94-34-400-001 | Failure of the Discrete Links Extending the Slats on the Ground Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

ASM 27-92/53

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001) with the slat extended in position 1 (Ref. AMM TASK 27-80-00-866-004).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 OR WIRING FROM SFCC1
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 12 signal from the SEC 1 (1CE1) to the first terminal block, COM part only (Ref. ASM 27-92/53):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.

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- (b) Do a check and repair the wiring of the SLATS OUT (DSI 20) signal from the SEC 1 (1CE1) COM part to the SFCC 1 (21CV), (Ref. ASM 27-92/42).
- (2) If the fault continues, do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the dicrete output signal (SAP #3, pin AE/8F) of the SFCC1 (21CV) (Ref. ASM 27-81/10).
- B. Do the test given in Para. 3.

EFF: ALL 27-94-00

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TASK 27-94-00-810-857

Loss of the SFCC 2 Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- wiring of the DGI 12 signal from the SEC 2 (1CE2) to the first terminal
- wiring of the SLATS OUT (DSI 20) signal from the SEC 2 (1CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------------|------------------|--|
| | | |
| 31-32-00-810-932 | | Failure of the Discrete Links |
| AMM | 27-80-00-866-004 | Extending the Slats on the Ground |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-81/10 | |
| ASM | 27-92/42 | |
| ASM | 27-92/54 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001) with the slat extended in position 1 (Ref. AMM TASK 27-80-00-866-004).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC2 OR WIRING FROM SFCC2
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 12 signal from the SEC 2 (1CE2) to the first terminal block, MON part only (Ref. ASM 27-
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.

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- (b) Do a check and repair the wiring of the SLATS OUT (DSI 20) signal from the SEC 2 (1CE2) to the first terminal block, MON part only (Ref. ASM 27-92/42).
- (2) If the fault continues, do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the dicrete output signal (SAP #5, pin AE/8K) of the SFCC2 (22CV) (Ref. ASM 27-81/10).
- B. Do the test given in Para. 3.

EFF: ALL 27-94-00

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-858

Loss of the SFCC 2 Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the DGI 12 signal from the SEC 3 (1CE3) to the first terminal
- wiring of the SLATS OUT (DSI 20) signal from the SEC 3 (1CE3) to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------------|------------------|---|
| | | |
| 31-32-00-810-932 | | Failure of the Discrete Links |
| AMM | 27-80-00-866-004 | Extending the Slats on the Ground |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-81/10 | |
| ASM | 27-92/42 | |
| ASM | 27-92/55 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001) with the slat extended in position 1 (Ref. AMM TASK 27-80-00-866-004).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC3 OR WIRING FROM SFCC2
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 12 signal from the SEC 3 (1CE3) to the first terminal block, MON part only (Ref. ASM 27-
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.

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- (b) Do a check and repair the wiring of the SLATS OUT (DSI 20) signal from the SEC 3 (1CE3) to the first terminal block, MON part only (Ref. ASM 27-92/42).
- (2) If the fault continues, do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the dicrete output signal (SAP #5, pin AE/8K) of the SFCC2 (22CV) (Ref. ASM 27-81/10).
- B. Do the test given in Para. 3.

EFF: ALL 27-94-00

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-859

Loss of the SFCC 2 Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the DGI 12 signal from the SEC 1 (1CE1) to the first terminal block
- wiring of the SLATS OUT (DSI 20) signal from the SEC 1 (1CE1) MON part to the SFCC 2 (22CV)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------------|------------------|--|
| | | |
| 31-32-00-810-932 | | Failure of the Discrete Links |
| AMM | 27-80-00-866-004 | Extending the Slats on the Ground |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-81/10 | |
| ASM | 27-92/42 | |
| ASM | 27-92/53 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001) with the slat extended in position 1 (Ref. AMM TASK 27-80-00-866-004).

4. Fault Isolation

- A. If the BITE test gives the maintenance message: SEC1 OR WIRING FROM SFCC2
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 12 signal from the SEC 1 (1CE1) to the first terminal block, MON part only (Ref. ASM 27-92/53):
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.

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- (b) Do a check and repair the wiring of the SLATS OUT (DSI 20) signal from the SEC 1 (1CE1) MON part to the SFCC 2 (22CV), (Ref. ASM 27-92/42).
- (2) If the fault continues, do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the dicrete output signal (SAP #3, pin AE/8F) of the SFCC2 (22CV) (Ref. ASM 27-81/10).
- B. Do the test given in Para. 3.

EFF: ALL 27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-860

Failure of the SEC 1

1. Possible Causes

- RELAY-SEC 1 ANN SPLY (41CE1)
- SEC-1 (1CE1)
- FCDC-1 (3CE1)
- FCDC-2 (3CE2)
- wiring of the RLY SEC FAULT signal from the relay to the SEC
- RLY- SEC 1 ANN SPLY (41CE1)
- wiring of the DSI 4/3 (SEC 1 FAILED) signals
- wiring of the + 28VDC signal
- wiring of the 28VDC GND signal
- wiring of the SEC1 ENGAGED (DSI 01) signal
- wiring from the pushbutton switch (5CE1), pin A/C1 and pin A/C3 to the first terminal block
- P/BSW-FLT CTL/SEC 1 (5CE1)
- wiring of the SEC DISCONNECTED IN THE RACK (DSI 12 and DSI 28) signals
- wiring of the PIN PROGRAM SEC1 (DSI 07) signal
- wiring of the DGO O3 signal

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|---------------------|---|--|
| | | | |
| ΙP | c 27920802 | | |
| ΙP | C 27920803 | | |
| AM | IM 27-94-00-710-002 | Operational Test of the Spoiler Elevator Computer 1 (SEC 1) | |
| AM | IM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AM | IM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AM | IM 27-95-34-000-001 | Removal of the FCDC (3CE1,3CE2) | |
| AM | IM 27-95-34-400-001 | Installation of the FCDC (3CE1,3CE2) | |
| AM | M 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AS | M 27-92/04 | | |
| AS | M 27-92/05 | | |
| AS | M 27-92/40 | | |
| AS | M 27-92/53 | | |
| AS | M 27-95/04 | | |
| AS | M 27-95/05 | | |
| | | | |

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3. Fault Confirmation

A. Test

R R (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test confirms the fault:
- do the operational test of the SEC1 (Ref. AMM TASK 27-94-00-710-002) to make sure that the SEC1 does the servoing of its related surfaces.
- R (1) If the flight controls move in relation to the SEC1 servoing:
 - (a) Remove the SEC1 (Ref. AMM TASK 27-94-34-000-001).
 - (b) At the SEC1 receptacle, do a check of the resistance between pin AB/12K and pin AE/12A (Ref. ASM 27-92/05).
 - 1 If the resistance is less than 280 ohms:
 - Remove the RELAY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803).
 - \underline{b} Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is less than 280 Ohms:
 - . replace the RELAY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803)
 - install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)
 - . install the relay
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 400 ohms:
 - a Remove the relay (41CE1).
 - \underline{b} Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is more than 400 ohms:
 - . replace the RELAY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803)
 - . install the SEC 1 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - . do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)
 - . install the relay

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- . install the SEC 1 (Ref. AMM TASK 27-94-34-400-001).
- 3 If the resistance is between 280 and 400 ohms:
 - a install the SEC1 (Ref. AMM TASK 27-94-34-400-001)
 - Remove the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001).
 if the SEC1 FAULT warning message stays in view , install the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-400-001) and
 - if the SEC1 FAULT warning message goes out of view,
 replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - c If the fault continues:

see Para.c.

- Remove the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001).
- if the SEC1 FAULT warning message stays in view, install the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-400-001) and see Para.d.
- if the SEC1 FAULT warning message goes out of view,
 replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- d If the fault continues:
 - Remove the RLY- SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803).
 - if the SEC1 FAULT warning message stays in view , install the RLY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803) and see Para.e.
 - if the SEC1 FAULT warning message goes out of view, replace the RLY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803).
- e If the fault continues:
 - Do a check and repair the wiring of the DSI 4/3 (SEC 1 FAILED) signals from the FCDC1 (3CE1) and the FCDC2 (3CE2) to the RLY-SEC 1 ANN SPLY (41CE1) (Ref. ASM 27-95/04) and (Ref. ASM 27-95/05).
- (2) If the flight controls do not move in relation to the SEC servoing:
 - (a) Do a check of the wiring of the + 28VDC signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (b).

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- (b) Do a check of the wiring of the 28VDC GND signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (c).
- (c) Do a check of the wiring of the SEC1 ENGAGED (DSI 01) signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (d).
- (d) Do a check of the wiring from the pushbutton switch (5CE1), pin A/C1 and pin A/C3 to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (e).
- (e) Replace the P/BSW-FLT CTL/SEC 1 (5CE1) (Ref. IPC 27920802).
- (f) If the fault continues:
 - Do a check of the wiring of the SEC DISCONNECTED IN THE RACK (DSI 12 and DSI 28) signals from the SEC1 (1CE1) COM part and MON part to the ground terminal (Ref. ASM 27-92/40).
 - if there is no continuity, repair the above wiring.
 - if there is continuity, see Para. 2_
 - 2 Do a check of the wiring of the PIN PROGRAM SEC1 (DSI 07) signal from the SEC1 (1CE1) COM part and MON part to the ground terminal (Ref. ASM 27-92/40).
 - if there is no continuity, repair the above wiring.
 - if there is continuity, see Para. 3
 - Do a check and repair the wiring of the DGO O3 signal from the SEC1 (1CE1) COM part to MON part and MON part to COM part (Ref. ASM 27-92/53).
- B. Do the test given in Para. 3.

EFF: ALL

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TASK 27-94-00-810-864

Loss of the BUS 3 Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the DG03 signal from the SEC1 (1CE1) MON part to COM part
 - wiring of the DGO3 signal from the SEC1 (1CE1) COM part to MON part
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/53 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 MON BUS3

or

SEC1 COM BUS3

- replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DG03 signal from the SEC1 (1CE1) MON part to COM part if the maintenance message is SEC1 MON BUS3 (Ref. ASM 27-92/53)
 - do a check and repair the wiring of the DG03 signal from the SEC1 (1CE1) COM part to MON part if the maintenance message is SEC1 COM BUS3 (Ref. ASM 27-92/53).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-865

Failure of the SEC 2

1. Possible Causes

- RELAY-SEC 2 ANN SPLY (41CE2)
- SEC-2 (1CE2)
- FCDC-1 (3CE1)
- FCDC-2 (3CE2)
- wiring of the RLY SEC FAULT signal from the relay to the SEC
- RLY- SEC 2 ANN SPLY (41CE2)
- wiring of the DSI 4/4 (SEC 2 FAILED) signals
- wiring of the + 28VDC signal
- wiring of the 28VDC GND signal
- wiring of the SEC1 ENGAGED (DSI 01) signal
- wiring from the pushbutton switch (5CE2), pin A/C1 and pin A/C3 to the first terminal block
- P/BSW-FLT CTL/SEC 2 (5CE2)
- wiring of the SEC DISCONNECTED IN THE RACK (DSI 12 and DSI 28) signals
- wiring of the PIN PROGRAM SEC2 (DSI 08) signal
- wiring of the DGO O3 signal

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | | DESIGNATION |
|-----------|--------------|---------|---|
| | | | |
| IF | PC 27920802 | | |
| IF | PC 27920803 | | |
| AN | MM 27-94-00- | 710-003 | Operational Test of the Spoiler Elevator Computer 2 (SEC 2) |
| AN | MM 27-94-34- | 000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AN | MM 27-94-34- | 400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AN | MM 27-95-34- | 000-001 | Removal of the FCDC (3CE1,3CE2) |
| AN | MM 27-95-34- | 400-001 | Installation of the FCDC (3CE1,3CE2) |
| AN | MM 27-96-00- | 740-001 | BITE Test of the EFCS (Ground Scanning) |
| AS | SM 27-92/04 | | |
| AS | SM 27-92/05 | | |
| AS | SM 27-92/40 | | |
| AS | SM 27-92/54 | | |
| AS | SM 27-95/04 | | |
| AS | SM 27-95/05 | | |
| | | | |

EFF: ALL

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3. Fault Confirmation

A. Test

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(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test confirms the fault:
 - do the operational test of the SEC2 (Ref. AMM TASK 27-94-00-710-003) to make sure that the SEC2 does the servoing of its related surfaces.
- R (1) If the flight controls move in relation to the SEC2 servoing:
 - (a) Remove the SEC2 (Ref. AMM TASK 27-94-34-000-001).
 - (b) At the SEC2 receptacle, do a check of the resistance between pin AB/12K and pin AE/12A (Ref. ASM 27-92/05).
 - 1 If the resistance is less than 280 ohms:
 - Remove the RELAY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803).
 - \underline{b} Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is less than 280 Ohms:
 - . replace the RELAY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803)
 - . replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - . do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)
 - install the relay
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 400 ohms:
 - a Remove the relay (41CE2).
 - \underline{b} Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is more than 400 ohms:
 - . replace the RELAY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803)
 - . install the SEC 2 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)

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- . install the relay (41CE2).
- . install the SEC 2 (Ref. AMM TASK 27-94-34-400-001).
- 3 If the resistance is between 280 and 400 ohms:
- a Install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
 - Remove the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001).
 if the SEC2 FAULT warning message stays in view, install the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-400-001) and see Para.c.
 - if the SEC2 FAULT warning message goes out of view,
 replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - c If the fault continues:
 - Remove the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001).
 - if the SEC2 FAULT warning message stays in view , install the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-400-001) and see Para.d.
 - if the SEC2 FAULT warning message goes out of view,
 replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - d If the fault continues:
 - Remove the RLY- SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803).
 - if the SEC2 FAULT warning message stays in view , install the RLY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803) and see Para.e.
 - if the SEC2 FAULT warning message goes out of view, replace the RLY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803).
 - e If the fault continues:
 - Do a check and repair the wiring of the DSI 4/4 (SEC 2 FAILED) signals from the FCDC1 (3CE1) and the FCDC2 (3CE2) to the RLY-SEC 2 ANN SPLY (41CE2) (Ref. ASM 27-95/04) and (Ref. ASM 27-95/05).
- (2) If the flight controls do not move in relation to the SEC2 servoing:
 - (a) Do a check of the wiring of the + 28VDC signal from the SEC 2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (b).

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- (b) Do a check of the wiring of the 28VDC GND signal from the SEC 2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (c).
- (c) Do a check of the wiring of the SEC1 ENGAGED (DSI 01) signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (d).
- (d) Do a check of the wiring from the pushbutton switch (5CE2), pin A/C1 and pin A/C3 to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. (e).
- (e) Replace the P/BSW-FLT CTL/SEC 2 (5CE2) (Ref. IPC 27920802).
- (f) If the fault continues:
 - Do a check of the wiring of the SEC DISCONNECTED IN THE RACK (DSI 12 and DSI 28) signals from the SEC2 (1CE2) COM part and MON part to the ground terminal (Ref. ASM 27-92/40).
 - if there is no continuity, repair the above wiring.
 - if there is continuity, see Para. 2_.
 - 2 Do a check of the wiring of the PIN PROGRAM SEC2 (DSI 08) signal from the SEC2 (1CE2) COM part and MON part to the ground terminal (Ref. ASM 27-92/40).
 - if there is no continuity, repair the above wiring.
 - if there is continuity, see Para. 3_.
 - Do a check and repair the wiring of the DGO O3 signal from the SEC2 (1CE2) COM part to MON part and MON part to COM part (Ref. ASM 27-92/54).
- B. Do the test given in Para. 3.

EFF: ALL 27-94-00

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-869

Loss of the BUS 3 Signal for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the DG03 signal from the SEC 2 (1CE2) MON part to the COM part
 - wiring of the DGO3 signal from the SEC 2 (1CE2) COM part to the MON part
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/54 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC2 MON BUS3

or

SEC2 COM BUS3

- replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGO3 signal from the SEC 2 (1CE2) MON part to the COM part if the maintenance message is SEC 2 MON BUS 3 (Ref. ASM 27-92/54)
 - do a check and repair the wiring of the DG03 signal from the SEC 2 (1CE2) COM part to the MON part if the maintenance message is SEC 2 COM BUS 3 (Ref. ASM 27-92/54).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-870

Failure of the SEC 3

1. Possible Causes

- RELAY-SEC 3 ANN SPLY (41CE3)
- SEC-3 (1CE3)
- FCDC-1 (3CE1)
- FCDC-2 (3CE2)
- wiring of the RLY SEC FAULT signal from the relay to the SEC3
- RLY- SEC 3 ANN SPLY (41CE3)
- wiring of the DSI 20/5 (SEC 3 FAILED) signals
- wiring of the 28VDC GND signal
- wiring of the SEC3 ENGAGED (DSI 01) signal
- wiring from the pins A/C1 and A/C3 of the pushbutton switch (5CE3) to the first terminal block
- P/BSW-FLT CTL/SEC 3 (5CE3)
- wiring of the DGO O3 signal
- wiring from the circuit breaker (21CE3) to the first terminal block
- wiring from the SEC3 (1CE3) pin AC/2 for the COM part and AF/2 for the MON part to the circuit breaker (21CE3)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| IPC | 27920802 | |
| IPC | 27920803 | |
| AMM | 27-94-00-710-001 | Operational Test of the Spoiler Elevator Computer 3 (SEC 3) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-95-34-000-001 | Removal of the FCDC (3CE1,3CE2) |
| AMM | 27-95-34-400-001 | Installation of the FCDC (3CE1,3CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/04 | |
| ASM | 27-92/05 | |
| ASM | 27-92/54 | |
| ASM | 27-95/04 | |
| | | |

3. Fault Confirmation

A. Test

ASM 27-95/05

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

A. Table of the circuit breakers used in this procedure:

PANEL DESIGNATION

IDENT. LOCATION

121VU FLIGHT CONTROLS/SEC3/SPLY

21CE3 Q19

- B. Do the operational test of the SEC3 (Ref. AMM TASK 27-94-00-710-001) to make sure that the SEC3 does the servoing of its related surfaces.
 - (1) If the flight controls move in relation to the SEC3 servoing:
 - (a) Remove the SEC3 (Ref. AMM TASK 27-94-34-000-001).
 - (b) At the SEC3 receptacle, do a check of the resistance between pin AB/12K and pin AE/12A (Ref. ASM 27-92/05).
 - 1 If the resistance is less than 280 ohms:
 - Remove the RELAY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803).
 - b Do a check of the resistance of the relay between pin X1
 - If the resistance is less than 280 Ohms:
 - . replace the RELAY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803)
 - . replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - . do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC3 (Ref. ASM 27-92/05)
 - . install the relay
 - . replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 400 ohms:
 - a Remove the relay (41CE3).
 - b Do a check of the resistance of the relay between pin X1
 - If the resistance is more than 400 ohms:
 - . replace the RELAY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803)
 - . install the SEC3 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC3 (Ref. ASM 27-92/05)
 - . install the relay.

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- install the SEC3 (Ref. AMM TASK 27-94-34-400-001).
- 3 If the resistance is between 280 and 400 ohms:
 - a Install the SEC 3 (Ref. AMM TASK 27-94-34-400-001)
 - <u>b</u> Remove the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001).
 if the SEC3 FAULT warning message stays in view, install the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-400-001) and see Para.c.
 - if the SEC $\overline{3}$ FAULT warning message goes out of view, replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - c If the fault continues:
 - remove the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001).
 - if the SEC3 FAULT warning message stays in view, install the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-400-001) and see Para.d.
 - if the SEC3 FAULT warning message goes out of view, replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - d If the fault continues:
 - remove the RLY- SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803).
 - if the SEC3 FAULT warning message stays in view, install the RLY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803) and see Para.e.
 - if the SEC3 FAULT warning message goes out of view, replace the RLY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803).
 - e If the fault continues:
 - do a check and repair the wiring of the DSI 20/5 (SEC 3 FAILED) signals from the FCDC1 (3CE1) and the FCDC2 (3CE2) to the RLY-SEC 3 ANN SPLY (41CE3) (Ref. ASM 27-95/04) and (Ref. ASM 27-95/05).
- (2) If the flight controls do not move in relation to the SEC3 servoing:
 do a check of the circuit breaker (21CE3) status:
 - (a) If the circuit breaker is closed:
 - do a check for + 28VDC at pin AC/2 for the COM part or AF/2 for the MON part of the SEC3 (1CE3) (Ref. ASM 27-92/04).
 - 1 If there is 28VDC:
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001)
 and (Ref. AMM TASK 27-94-34-400-001).
 If the fault continues:

EFF: ALL

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- <u>a</u> Do a check of the wiring of the 28VDC GND signal from the SEC3 (1CE3) COM part and MON part to the ground terminal (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. b.
- <u>b</u> Do a check of the wiring of the SEC3 ENGAGED (DSI 01) signal from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. c .
- <u>c</u> Do a check of the wiring from the pins A/C1 and A/C3 of the pushbutton switch (5CE3) to the first terminal block (Ref. ASM 27-92/04).
 - if there is no continuity, repair the above wiring
 - if there is continuity, see Para. d .
- <u>d</u> Replace the P/BSW-FLT CTL/SEC 3 (5CE3) (Ref. IPC 27920802).
 If the fault continues:
 - do a check and repair the wiring of the DGO O3 signal from the SEC3 (1CE3) COM part to MON part and MON part to COM part (Ref. ASM 27-92/54).
- 2 If there is no 28VDC:
 - do a check and repair the wiring from the circuit breaker (21CE3) to the first terminal block (Ref. ASM 27-92/04).
- (b) If the circuit breaker is open:
 close it.
- (c) If it trips again:
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 1 If the fault continues:
 - do a check for a short to ground at the wiring from the SEC3 (1CE3) pin AC/2 for the COM part and AF/2 for the MON part to the circuit breaker (21CE3) (Ref. ASM 27-92/04).
 - a If there is a short to ground, repair the above wiring.
 - <u>b</u> If there is no short to ground, replace the circuit breaker (21CE3).
 - C. Do the test given in Para. 3.

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-874

Loss of the BUS 3 Signal for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring of the DGO3 signal from the SEC 3 (1CE3) MON part to the COM part
 - wiring of the DGO3 signal from the SEC 3 (1CE3) COM part to the MON part
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/55 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC3 MON BUS3

or

SEC3 COM BUS3

- replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DG03 signal from the SEC 3 (1CE3) MON part to the COM part if the maintenance message is SEC 3 MON BUS 3 (Ref. ASM 27-92/55)
 - do a check an repair the wiring of the DG03 signal from the SEC 3
 (1CE3) COM part to the MON part if the maintenance message is SEC 3
 COM BUS 3 (Ref. ASM 27-92/55).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-875

Loss of the BUS 1 Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- wiring of the DGO 01 signal from the SEC 2 (1CE2) COM part to the first terminal block
- wiring of the DGO O1 signal from the SEC 2 (1CE2) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

REFERENCE DESIGNATION

31-32-00-810-934 Failure of the Digital Links

AMM 27-94-34-000-001 Removal of the SEC (1CE1,1CE2,1CE3)

AMM 27-94-34-400-001 Installation of the SEC (1CE1,1CE2,1CE3)

3. Fault Confirmation

AMM 27-96-00-740-001

A. Test

ASM 27-92/54

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

BITE Test of the EFCS (Ground Scanning)

4. Fault Isolation

A. If the BITE test gives the maintenance message:

SEC2 COM BUS1

or

SEC2 MON BUS1

- replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the DGO 01 digital output signal of the SEC 2 (Ref. ASM 27-92/54).
- (2) If the fault continues:
 - do a check and repair the wiring of the DGO O1 signal from the SEC2 (1CE2) COM part to the first terminal block if the maintenance message is SEC 2 COM BUS 1 (Ref. ASM 27-92/54) or

EFF: ALL

27-94-00

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- do a check and repair the wiring of the DGO O1 signal from the SEC2 (1CE2) MON part to the first terminal block if the maintenance message is SEC 2 MON BUS 1 (Ref. ASM 27-92/54).
- B. Do the test given in Para. 3.

EFF: ALL
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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-876

Loss of the BUS 1 Signal for the SEC 1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the DGO 01 signal from the SEC 1 (1CE1) COM part to the first terminal block
- wiring of the DGO O1 signal from the SEC 1 (1CE1) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

REFERENCE DESIGNATION

31-32-00-810-934 Failure of the Digital Links

AMM 27-94-34-000-001 Removal of the SEC (1CE1,1CE2,1CE3)

AMM 27-94-34-400-001 Installation of the SEC (1CE1,1CE2,1CE3)

3. Fault Confirmation

AMM 27-96-00-740-001

A. Test

ASM 27-92/53

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

BITE Test of the EFCS (Ground Scanning)

4. Fault Isolation

A. If the BITE test gives the maintenance message:

SEC1 COM BUS1

or

SEC1 MON BUS1

- replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the DGO 01 digital output signal of the SEC 1 (Ref. ASM 27-92/53).
- (2) If the fault continues:
 - do a check and repair the wiring of the DGO 01 signal from the SEC1 (1CE1) COM part to the first terminal block if the maintenance message is SEC 1 COM BUS 1 (Ref. ASM 27-92/53) or

EFF: ALL

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- do a check and repair the wiring of the DGO O1 signal from the SEC1 (1CE1) MON part to the first terminal block if the maintenance message is SEC 1 MOM BUS 1 (Ref. ASM 27-92/53).
- B. Do the test given in Para. 3.

EFF: ALL
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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-877

Loss of the BUS 1 Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the DGO1 signal from the SEC 3 (1CE3) COM part to the first terminal block
- wiring of the DGO1 signal from the SEC 3 (1CE3) MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| 31-32-00-810-934 AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/55 | Failure of the Digital Links Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message:

SEC3 COM BUS1

or

SEC3 MON BUS1

- replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-934)
 related to the DGO digital output signal of the SEC 3 (Ref. ASM 27-92/55).
- (2) If the fault continues:
 - do a check and repair the wiring of the DGO1 signal from the SEC 3 (1CE3) COM part to the first terminal block if the maintenance message is SEC 3 COM BUS 1 (Ref. ASM 27-92/55) or

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- do a check and repair the wiring of the DGO1 signal from the SEC 3
 (1CE3) MON part to the first terminal block if the maintenance
 message is SEC 3 MOM BUS 1 (Ref. ASM 27-92/55).
- B. Do the test given in Para. 3.

EFF: ALL
SROS

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-878

Loss of the FCDC 1 BUS 4 Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - FCDC-1 (3CE1)
 - wiring of the DGI 10 signal from the SEC 1 (1CE1) to the FCDC 1 (3CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-95-34-000-001 AMM 27-95-34-400-001 AMM 27-96-00-740-001 ASM 27-95/02 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 MON OR BUS4 FROM FCDC1
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (2) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the SEC1 (1CE1) to the FCDC 1 (3CE1) (Ref. ASM 27-95/02).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-879

Loss of the FCDC 2 BUS 3 Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the DGI 10 signal from the SEC 1 (1CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-95/03 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC1 MON OR BUS3 FROM FCDC2
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the SEC1 (1CE1) to the first terminal block (Ref. ASM 27-95/03).
 - B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-880

Loss of the FCDC 1 BUS 5 Signal for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the DGI 10 signal from the SEC 2 (1CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | ERENCE | DESIGNATION |
|------|------------------|--|
| | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-95/02 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC2 MON OR BUS5 FROM FCDC1
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the SEC2 (1CE2) to the first terminal block (Ref. ASM 27-95/02).
 - B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-881

Loss of the FCDC 1 BUS 5 Signal for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring of the DGI 10 signal from the SEC 3 (1CE3) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-95/02 | - |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC3 MON OR BUS5 FROM FCDC1
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the SEC3 (1CE3) to the first terminal block (Ref. ASM 27-95/02).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-882

Loss of the FCDC 2 BUS 6 Signal for the SEC 2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring of the DGI 10 signal from the SEC2 (1CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-95/03 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC2 MON OR BUS6 FROM FCDC2
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the SEC2 (1CE2) to the first terminal block (Ref. ASM 27-95/03).
 - B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-883

Loss of the FCDC 2 BUS 6 Signal for the SEC 3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring of the DGI 10 signal from the SEC3 (1CE3) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERE | NCE | DESIGNATION |
|--------|------------------|--|
| AMM 2 | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 2 | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 2 | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 2 | 27-95/03 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: SEC3 MON OR BUS6 FROM FCDC2
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 10 signal from the SEC3 (1CE3) to the first terminal block (Ref. ASM 27-95/03).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-884

Loss of the ELAC 1 COM BUS 1 Signal for the SEC 1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring of the DGI 09 signal from the SEC1 (1CE1) COM part and MON part to the first terminal block
 - wiring of the DSI 21 signal from the SEC1 (1CE1) COM part and MON part to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------------|--|--|
| AMM AMM | 27-94-34-000-001 27-94-34-400-001 27-96-00-740-001 27-92/49 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |
| | 27-92/50 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the test gives the maintenance message:

ELAC1 COM BUS 1

or

SEC1 OR BUS 1 FROM ELAC1 COM

- replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 09 signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/50).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.

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- (b) Do a check and repair the wiring of the DSI 21 signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-885

Loss of the ELAC 1 MON BUS 1 Signal for the SEC 2 or the SEC 3

1. Possible Causes

- SEC-2 (1CE2)
- SEC-3 (1CE3)
- wiring of the DGI 11 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block
- wiring of the DSI 14 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block
- wiring of the DGI 11 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block
- wiring of the DSI 14 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| | | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM | 27-92/49 | | |
| ASM | 27-92/52 | | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - ELAC1 MON BUS 1
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

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EFF:

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- (2) If the fault continues:
 - (a) Do a check of the wiring of the DGI 11 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/52).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring of the DSI 14 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Do a check of the wiring of the DGI 11 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/52).
 - if there is continuity, see Para. (d)
 - if there is no continuity, repair the above wiring.
 - (d) Do a check and repair the wiring of the DSI 14 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).
- B. Do the test given in Para. 3.

EFF: ALL

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-886

Loss of the ELAC 2 COM BUS 1 Signal for the SEC 2 or the SEC 3

1. Possible Causes

- SEC-2 (1CE2)
- SEC-3 (1CE3)
- wiring of the DGI 09 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block
- wiring of the DSI 21 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block
- wiring of the DGI 09 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block
- wiring of the DSI 21 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|---|
| | |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM 27-92/49 | |
| ASM 27-92/52 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC2 COM BUS 1

- replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

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- (2) If the fault continues:
 - (a) Do a check of the wiring of the DGI 09 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/52).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check of the wiring of the DSI 21 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).
 - if there is continuity, see Para. (c)
 - if there is no continuity, repair the above wiring.
 - (c) Do a check of the wiring of the DGI 09 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/52).
 - if there is continuity, see Para. (d)
 - if there is no continuity, repair the above wiring.
 - (d) Do a check and repair the wiring of the DSI 21 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).
- B. Do the test given in Para. 3.

EFF: ALL

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-887

Loss of the ELAC2 MON BUS1 Signal for the SEC1

1. Possible Causes

- SEC-1 (1CE1)
- wiring of the DGI 11 signal from the SEC1 (1CE1) COM part and MON part to the first terminal block
- wiring of the DSI 14 signal from the SEC1 (1CE1) COM part and MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| АММ | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/49 | |
| ASM | 27-92/52 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

A. If the test gives the maintenance message:

ELAC2 MON BUS 1

or

SEC1 OR BUS 1 FROM ELAC2 MON

- replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 11 signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/52).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.

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- (b) Do a check and repair the wiring of the DSI 14 signal from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-888

Loss of the LGCIU1 BUS2 for the SEC3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring from the LGCIU1 (5GA1) to the SEC3 (1CE3)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/55 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:
 - LGCIU1 OR BUS2 TO SEC3
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring from the LGCIU1 (5GA1) to the SEC3 (1CE3) (Ref. ASM 27-92/55).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-889

Loss of the LGCIU1 BUS2 for the SEC2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring from the LGCIU1 (5GA1) to the SEC2 (1CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/54 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: LGCIU1 OR BUS2 TO SEC2
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring from the LGCIU1 (5GA1) to the SEC2 (1CE2) (Ref. ASM 27-92/54).
 - B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-890

Loss of the LGCIU1 BUS1 for the SEC1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring from the LGCIU1 (5GA1) to the SEC1 (1CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-94-34-000-001 AMM 27-94-34-400-001 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 AMM 27-96-00-740-001 ASM 27-92/53 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: LGCIU1 OR BUS1 TO SEC1
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring from the LGCIU1 (5GA1) to the SEC1 (1CE1) (Ref. ASM 27-92/53).
 - B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-891

Loss of the LGCIU2 BUS1 for the SEC3

- 1. Possible Causes
 - SEC-3 (1CE3)
 - wiring from the LGCIU2 (5GA2) to the SEC3 (1CE3)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|--------------------|--|
| A MI | 4 27 0/ 7/ 000 004 | Damested of the SEC (4054 4052 4057) |
| | 1 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMI | 1 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMI | 1 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASI | 1 27-92/55 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: LGCIU2 OR BUS1 TO SEC3
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring from the LGCIU2 (5GA2) to the SEC3 (1CE3) (Ref. ASM 27-92/55).
 - B. Do the test given in Para. 3.

27-94-00

EFF: ALL

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-892

Loss of the LGCIU2 BUS1 for the SEC2

- 1. Possible Causes
 - SEC-2 (1CE2)
 - wiring from the LGCIU2 (5GA2) to the SEC2 (1CE2)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|---|
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM 27-94-34-400-001 AMM 27-96-00-740-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning)</pre> |
| ASM 27-92/54 | - |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: LGCIU2 OR BUS1 TO SEC2
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring from the LGCIU2 (5GA2) to the SEC2 (1CE2) (Ref. ASM 27-92/54).
 - B. Do the test given in Para. 3.

27-94-00

EFF: ALL

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-893

Loss of the LGCIU2 BUS2 for the SEC1

- 1. Possible Causes
 - SEC-1 (1CE1)
 - wiring from the LGCIU2 (5GA2) to the SEC1 (1CE1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/53 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: LGCIU2 OR BUS2 TO SEC1
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring from the LGCIU2 (5GA2) to the SEC1 (1CE1) (Ref. ASM 27-92/53).
 - B. Do the test given in Para. 3.

TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-894

Disagree between LGCIU1 and LGCIU2 for the SEC

1. Possible Causes

- SEC-3 (1CE3)
- SEC-2 (1CE2)
- SEC-1 (1CE1)
- LGCIU-1 (5GA1)
- LGCIU-2 (5GA2)
- PROX SNSR-R L/G EXT, SYS 1 (20GA)
- PROX SNSR-L L/G EXT, SYS 1 (21GA)
- PROX SNSR-R L/G EXT, SYS 2 (22GA)
- PROX SNSR-L L/G EXT, SYS 2 (23GA)
- PROX SNSR-NLG UPLK, SYS 1 (12GA)
- PROX SNSR-NLG UPLK, SYS 2 (13GA)

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION | |
|-----------|------------------|--|--|
| AMM | 27-94-34-000-001 | Demoved of the SEC (1CE1 1CE2 1CE7) | |
| AMM | 27-94-34-400-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| | | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| AMM | 32-00-00-860-002 | Ground Configuration after Flight Configuration with Electrical Power | |
| AMM | 32-31-71-000-001 | Removal of the LGCIU (5GA1, 5GA2) | |
| AMM | 32-31-71-400-001 | Installation of the LGCIU (5GA1, 5GA2) | |
| AMM | 32-31-73-000-001 | Removal of the Proximity-Sensors 9GA(8GA), | |
| | | 11GA(10GA), 27GA(26GA), 29GA(28GA), 15GA(14GA), 17GA(16GA), 21GA(20GA), 23GA(22GA), 33GA(32GA), 35GA(34GA) | |
| AMM | 32-31-73-000-005 | Removal of the NLG Proximity-Sensors 12GA, 13GA, | |
| | | 18GA, 19GA, 24GA, 25GA, 30GA, 31GA, 37GA (36GA), 39GA (38GA) | |
| AMM | 32-31-73-400-001 | Installation of the Proximity-Sensors 9GA(8GA), | |
| | | 11GA(10GA), 27GA(26GA), 29GA(28GA), 15GA(14GA), | |
| | | 17GA(16GA), 21GA(20GA), 23GA(22GA), 33GA(32GA) | |
| AMM | 32-31-73-400-005 | Installation of the NLG Proximity-Sensors 12GA, 13GA, | |
| | | 18GA, 19GA, 24GA, 25GA, 30GA, 31GA, 37GA (36GA), 39GA (38GA) | |
| AMM | 32-69-00-860-001 | Simulation of Flight, with the Aircraft on the Ground | |

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3. Fault Confirmation

- A. Test
 - (1) Do the simulation of flight, with the aircraft on the ground (Ref. AMM TASK 32-69-00-860-001).
- B. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. Table of the circuit breakers used in this procedure:

| PANEL | DESIGNATION | IDENT. L | OCATION |
|--------|--------------------------------|----------|---------|
| 49VU | FLIGHT CONTROLS/SEC1/NORM/SPLY | 21CE1 | в08 |
| 105VU | FLT CTL/SEC1/STBY SPLY | 22CE | B01 |
| 12 1VU | FLIGHT CONTROLS/SEC3/SPLY | 21CE3 | Q19 |
| 12 1VU | FLIGHT CONTROLS/SEC2/SPLY | 21CE2 | Q 18 |

- B. If the test doesn't confirm the fault and if the maintenance message LGCIU BUS DISAGREE was shown after landing gear free-fall extension:

 no maintenance action is necessary.
- C. If the BITE test gives the maintenance message: LGCIU BUS DISAGREE
 - open the circuit breaker (21CE1) on the panel 49VU and the circuit breaker (22CE) on the panel 105VU for the SEC1
 - open the circuit breaker (21CE2) on the panel 121VU for the SEC2 and do the test given in Para. 3. (only the SEC3 is supplied).
 - (1) Close the circuit breaker (21CE2).
 - (2) Open the circuit breaker (21CE3) on the panel 121VU for the SEC3 and do the test given in Para. 3. (only the SEC2 is supplied).
 - (3) Close the circuit breakers (21CE1) and (22CE).
 - (4) Open the circuit breaker (21CE2) on the panel 121VU for the SEC2 and do the test given in Para. 3. (only the SEC1 is supplied).
 - (5) Close the circuit breakers (21CE2) and (21CE3).
 - (a) If the message is shown only when the SEC3 is supplied: - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).

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- (b) If the message is shown only when the SEC2 is supplied: - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
- (c) If the message is shown only when the SEC1 is supplied:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 1 If the fault continues:
 - replace the LGCIU-1 (5GA1) (Ref. AMM TASK 32-31-71-000-001)
 and (Ref. AMM TASK 32-31-71-400-001).
 - 2 If the fault continues:
 - replace the LGCIU-2 (5GA2) (Ref. AMM TASK 32-31-71-000-001)
 and (Ref. AMM TASK 32-31-71-400-001).
- (d) If the message is shown when the SEC2 is supplied and when the SEC3 is supplied:
 - replace the LGCIU-1 (5GA1) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).
 - 1 If the fault continues:
 - replace the LGCIU-2 (5GA2) (Ref. AMM TASK 32-31-71-000-001)
 and (Ref. AMM TASK 32-31-71-400-001).
- (e) If the message is shown when the SEC1 is supplied, when the SEC2 is supplied and when the SEC3 is supplied:
 - replace the LGCIU-1 (5GA1) (Ref. AMM TASK 32-31-71-000-001) and (Ref. AMM TASK 32-31-71-400-001).
 - 1 If the fault continues:
 - replace the LGCIU-2 (5GA2) (Ref. AMM TASK 32-31-71-000-001)
 and (Ref. AMM TASK 32-31-71-400-001).
 - 2 If the fault continues:
 - replace the PROX SNSR-R L/G EXT, SYS 1 (20GA) (Ref. AMM TASK 32-31-73-000-001), (Ref. AMM TASK 32-31-73-400-001).
 - 3 If the fault continues:
 - replace the PROX SNSR-L L/G EXT, SYS 1 (21GA) (Ref. AMM TASK 32-31-73-000-001), (Ref. AMM TASK 32-31-73-400-001).
 - 4 If the fault continues:
 - replace the PROX SNSR-R L/G EXT, SYS 2 (22GA) (Ref. AMM TASK 32-31-73-000-001), (Ref. AMM TASK 32-31-73-400-001).
 - 5 If the fault continues:
 - replace the PROX SNSR-L L/G EXT, SYS 2 (23GA) (Ref. AMM TASK 32-31-73-000-001), (Ref. AMM TASK 32-31-73-400-001).

EFF: ALL

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- 6 If the fault continues:
 - replace the PROX SNSR-NLG UPLK, SYS 1 (12GA) (Ref. AMM TASK 32-31-73-000-005), (Ref. AMM TASK 32-31-73-400-005).
- 7 If the fault continues:
 - replace the PROX SNSR-NLG UPLK, SYS 2 (13GA) (Ref. AMM TASK 32-31-73-000-005), (Ref. AMM TASK 32-31-73-400-005).
- D. Do the test given in Para. 3.

5. Close-up

A. Do the ground configuration after the flight configuration (Ref. AMM TASK 32-00-00-860-002).

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-895

Loss of the Side Stick Priority Signal for One SEC

1. Possible Causes

- SEC-1 (1CE1)
- SEC-2 (1CE2)
- SEC-3 (1CE3)
- wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| 31-32-00-810-932 AMM 27-94-34-000-001 AMM 27-94-34-400-001 AMM 27-96-00-710-003 AMM 27-96-00-740-001 ASM 27-92/17 | Failure of the Discrete Links Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) Operational Test of the Side Stick Priority BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

A. Test

- (1) Do the operational test of the side stick priority (Ref. AMM TASK 27-96-00-710-003).
- (2) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the tests give the maintenance message CHECK PRIORITY WIRING:
 - do the trouble shooting (Ref. TASK 31-32-00-810-932) related to the DSI 29/30 discret input signal of the SEC 1, SEC 2 and the SEC 3 (Ref. ASM 27-92/17).
 - do the tests given in Para. 3. with only the SEC1 engaged for the operational test of the side stick priority.

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EFF:

ALL

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- (1) If the tests give the above maintenance message again:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring of the STICK PRIORITY CAPT (DSI29) and STICK PRIORITY F/O (DSI30) signals from the SEC1 (1CE1) COM part and MON part to the first terminal block (Ref. ASM 27-92/17).
- (2) If the tests do not give a maintenance message:
 - do the tests given in Para. 3. with only the SEC2 engaged for the operational test of the side stick priority.
 - (a) If the tests give the maintenance message CHECK PRIORITY WIRING:
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 1 If the fault continues:
 - do a check and repair the wiring of the STICK PRIORITY CAPT (DSI29) and STICK PRIORITY F/O (DSI30) signals from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/17).
 - (b) If the tests do not give a maintenance message:
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - 1 If the fault continues:
 - do a check and repair the wiring of the STICK PRIORITY CAPT (DSI29) and STICK PRIORITY F/O (DSI30) signals from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/17).
- B. Do the tests given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-896

Loss of the ELAC 1 MON BUS 1 Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- wiring of the DGI 11 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block
- wiring of the DSI 14 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | | DESIGNATION |
|-----------|----|------------------|---|
| | | | |
| Αľ | MM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| Αľ | MM | 27-94-34-400-001 | <pre>Installation of the SEC (1CE1,1CE2,1CE3)</pre> |
| Αľ | MM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| AS | SM | 27-92/49 | |
| AS | SM | 27-92/50 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - SEC2 OR BUS1 FROM ELAC1 MON
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 11 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/50).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the DSI 14 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).

EFF: ALL

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B. Do the test given in Para. 3.

EFF: ALL
SROS

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-897

Loss of the ELAC 1 MON BUS 1 Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the DGI 11 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block
- wiring of the DSI 14 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| АММ | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/49 | |
| ASM | 27-92/50 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - SEC3 OR BUS1 FROM ELAC1 MON
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 11 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/50).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the DSI 14 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).

EFF: ALL

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B. Do the test given in Para. 3.

EFF: ALL
SROS

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-898

Loss of the ELAC 2 COM BUS 1 Signal for the SEC 2

1. Possible Causes

- SEC-2 (1CE2)
- wiring of the DGI 09 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block
- wiring of the DSI 21 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| EFERENCE | DESIGNATION |
|---|--|
| MM 27-94-34-000-001 MM 27-94-34-400-001 MM 27-96-00-740-001 SM 27-92/49 SM 27-92/52 | Removal of the SEC (1CE1,1CE2,1CE3) Installation of the SEC (1CE1,1CE2,1CE3) BITE Test of the EFCS (Ground Scanning) |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - SEC2 OR BUS1 FROM ELAC2 COM
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 09 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/52).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the DSI 21 signal from the SEC2 (1CE2) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).

EFF: ALL

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B. Do the test given in Para. 3.

EFF: ALL
SROS

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-899

Loss of the ELAC 2 COM BUS 1 Signal for the SEC 3

1. Possible Causes

- SEC-3 (1CE3)
- wiring of the DGI 09 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block
- wiring of the DSI 21 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block

2. Job Set-up Information

A. Referenced Information

| REFE | RENCE | DESIGNATION |
|------|------------------|--|
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/49 | |
| ASM | 27-92/52 | |

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

4. Fault Isolation

- A. If the test gives the maintenance message:
 - SEC3 OR BUS1 FROM ELAC2 COM
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the DGI 09 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/52).
 - if there is continuity, see Para. (b)
 - if there is no continuity, repair the above wiring.
 - (b) Do a check and repair the wiring of the DSI 21 signal from the SEC3 (1CE3) COM part and MON part to the first terminal block (Ref. ASM 27-92/49).

EFF: ALL

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B. Do the test given in Para. 3.

EFF: ALL
SROS

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-901

SEC 1 Fault without any associated maintenance message

1. Possible Causes

- RELAY-SEC 1 ANN SPLY (41CE1)
- SEC-1 (1CE1)
- wiring of the RLY SEC FAULT signal from the relay to the SEC
- wiring of the DSI 4/3 (SEC 1 FAILED) signals

2. Job Set-up Information

A. Referenced Information

| REFERENCE | DESIGNATION | |
|----------------------|---|--|
| | | |
| IPC 27920803 | | |
| AMM 27-94-00-710-002 | Operational Test of the Spoiler Elevator Computer 1 (SEC 1) | |
| AMM 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) | |
| AMM 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) | |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| ASM 27-92/05 | | |
| ASM 27-95/04 | | |
| ASM 27-95/05 | | |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the test confirms the fault:
 - do the operational test of the SEC1 (Ref. AMM TASK 27-94-00-710-002) to make sure that the SEC1 servoes its associated surfaces.
 - (1) If the flight controls move according to the SEC1 servoing:
 - (a) Remove the SEC1 (Ref. AMM TASK 27-94-34-000-001).
 - (b) At the SEC1 receptacle, do a check of the resistance between pin AB/12K and pin AE/12A (Ref. ASM 27-92/05).
 - 1 If the resistance is less than 280 ohms:
 - Remove the RELAY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803).
 - \underline{b} Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is less than 280 Ohms:
 - . replace the RELAY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803)
 - . install the SEC1 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)
 - install the relay
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 400 ohms:
 - a Remove the relay (41CE1).
 - <u>b</u> Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is more than 400 ohms:
 - . replace the RELAY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803)
 - install the SEC 1 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)
 - . install the relay
 - . install the SEC 1 (Ref. AMM TASK 27-94-34-400-001).
 - 3 If the resistance is between 280 and 400 ohms:
 - Remove the RELAY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803).

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- if the warning SEC1 stays, install the relay (Ref. IPC 27920803) and see Para. b_.
- if the warning SEC1 goes off, replace the RELAY-SEC 1 ANN SPLY (41CE1) (Ref. IPC 27920803)
- install the SEC 1 (Ref. AMM TASK 27-94-34-400-001).
- Do a check and repair the wiring of the DSI 4/3 (SEC 1 FAILED) signals from the FCDC1 (3CE1) and the FCDC2 (3CE2) to the RELAY-SEC 1 ANN SPLY (41CE1) (Ref. ASM 27-95/04) and (Ref. ASM 27-95/05).
- c Install the SEC 1 (Ref. AMM TASK 27-94-34-400-001).
- B. Do the test given in Para. 3.

EFF: ALL
SROS

27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-902

SEC 2 Fault without any associated maintenance message

1. Possible Causes

- SEC-2 (1CE2)
- RELAY-SEC 2 ANN SPLY (41CE2)
- wiring of the RLY SEC FAULT signal from the relay to the SEC
- wiring of the DSI 4/4 (SEC 2 FAILED) signals

2. Job Set-up Information

A. Referenced Information

| 2 |
|---|
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| |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96- 00-740-001).

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4. Fault Isolation

- A. If the test confirms the fault:
 - do the operational test of the SEC2 (Ref. AMM TASK 27-94-00-710-003) to make sure that the SEC2 servoes its associated surfaces.
 - (1) If the flight controls move according to the SEC2 servoing:
 - (a) Remove the SEC2 (Ref. AMM TASK 27-94-34-000-001).
 - (b) At the SEC2 receptacle, do a check of the resistance between pin AB/12K and pin AE/12A (Ref. ASM 27-92/05).
 - 1 If the resistance is less than 280 ohms:
 - Remove the RELAY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803).
 - \underline{b} Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is less than 280 Ohms:
 - . replace the RELAY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803)
 - . install the SEC2 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)
 - install the relay
 - . replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 400 ohms:
 - a Remove the relay (41CE2).
 - b Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is more than 400 ohms:
 - . replace the RELAY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803).
 - install the SEC 2 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)
 - . install the relay
 - . install the SEC 2 (Ref. AMM TASK 27-94-34-400-001).
 - 3 If the resistance is between 280 and 400 ohms:
 - Remove the RELAY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803).

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- if the warning SEC2 stays, install the relay (Ref. IPC 27920803) and see Para. b_.
- if the warning SEC2 goes off, replace the RELAY-SEC 2 ANN SPLY (41CE2) (Ref. IPC 27920803)
- install the SEC 2 (Ref. AMM TASK 27-94-34-400-001).
- <u>b</u> Do a check and repair the wiring of the DSI 4/4 (SEC 2 FAILED) signals from the FCDC1 (3CE1) and the FCDC2 (3CE2) to the RELAY-SEC 2 ANN SPLY (41CE2) (Ref. ASM 27-95/04) and (Ref. ASM 27-95/05).
- c Install the SEC 2 (Ref. AMM TASK 27-94-34-400-001).
- B. Do the test given in Para. 3.

EFF: ALL | | SROS 27-94-00

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TROUBLE SHOOTING MANUAL

TASK 27-94-00-810-903

SEC 3 Fault without any associated maintenance message

1. Possible Causes

- SEC-3 (1CE3)
- RELAY-SEC 3 ANN SPLY (41CE3)
- wiring of the RLY SEC FAULT signal from the relay to the SEC
- wiring of the DSI 20/5 (SEC 3 FAILED) signals

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| IPC | 27920803 | |
| AMM | 27-94-00-710-001 | Operational Test of the Spoiler Elevator Computer 3 (SEC 3) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-92/05 | |
| ASM | 27-95/04 | |
| ASM | 27-95/05 | |

3. Fault Confirmation

A. Test

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

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4. Fault Isolation

- A. If the test confirms the fault:
 - do the operational test of the SEC3 (Ref. AMM TASK 27-94-00-710-001) to make sure that the SEC3 servoes its associated surfaces.
 - (1) If the flight controls move according to the SEC3 servoing:
 - (a) Remove the SEC3 (Ref. AMM TASK 27-94-34-000-001).
 - (b) At the SEC3 receptacle, do a check of the resistance between pin AB/12K and pin AE/12A (Ref. ASM 27-92/05).
 - 1 If the resistance is less than 280 ohms:
 - Remove the RELAY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803).
 - \underline{b} Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is less than 280 Ohms:
 - . replace the RELAY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803)
 - . install the SEC3 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)
 - install the relay
 - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-400-001).
 - 2 If the resistance is more than 400 ohms:
 - a Remove the relay (41CE3).
 - \underline{b} Do a check of the resistance of the relay between pin X1 and X2.
 - If the resistance is more than 400 ohms:
 - . replace the RELAY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803).
 - install the SEC 3 (Ref. AMM TASK 27-94-34-400-001).
 - If the resistance is between 280 and 400 ohms:
 - do a check and repair the wiring of the RLY SEC FAULT signal from the relay to the SEC (Ref. ASM 27-92/05)
 - . install the relay
 - . install the SEC 3 (Ref. AMM TASK 27-94-34-400-001).
 - 3 If the resistance is between 280 and 400 ohms:
 - \underline{a} Remove the RELAY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803).

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- if the warning SEC3 stays, install the relay (Ref. IPC 27920803) and see Para. b_.
- if the warning SEC3 goes off, replace the RELAY-SEC 3 ANN SPLY (41CE3) (Ref. IPC 27920803)
- install the SEC 3 (Ref. AMM TASK 27-94-34-400-001).
- Do a check and repair the wiring of the DSI 20/5 (SEC 3 FAILED) signals from the FCDC1 (3CE1) and the FCDC2 (3CE2) to the RELAY-SEC 3 ANN SPLY (41CE3) (Ref. ASM 27-95/04) and (Ref. ASM 27-95/05).
- c Install the SEC 3 (Ref. AMM TASK 27-94-34-400-001).
- B. Do the test given in Para. 3.

EFF: ALL

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TROUBLE SHOOTING MANUAL

FCDC SYSTEM (FLIGHT CONTROL DATA CONCENTRATOR) - FAULT ISOLATION PROCEDURES

TASK 27-95-00-810-801

Loss of the FCDC2 Fail Discrete Signal for the FCDC1

- 1. Possible Causes
 - FCDC-2 (3CE2)
 - FCDC-1 (3CE1)
 - wiring of the OPP FCDC FAILED (DSI 17/5) signal

R AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-95-34-000-001 AMM 27-95-34-400-001 | Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) |

- 3. Fault Confirmation
 - A. Test

ASM 27-95/04

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message OPP FCDC FAIL DISCR:
 - do a check of the wiring of the OPP FCDC FAILED (DSI 17/5) signal from the FCDC2 (3CE2) to the FCDC1 (3CE1) (Ref. ASM 27-95/04).
 - (1) If the fault continues:
 - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (2) If the fault continues:
 - replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - B. Do the test given in Para. 3.

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TASK 27-95-00-810-802

Failure of the FCDC2

- 1. Possible Causes
 - FCDC-2 (3CE2)
 - wiring of the 28VDC GND signal
 - wiring of the +28VDC signal
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|------------|--|--|--|
| R | AMM AMM | 27-95-34-000-001 27-95-34-400-001 27-96-00-740-001 27-92/07 | Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC2
 - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the 28VDC GND signal from the FCDC2 (3CE2) to the ground terminal (Ref. ASM 27-92/07).
 - if there is no continuity repair the above wiring
 - if there is continuity see the Para. (b).
 - (b) Do a check and repair the wiring of the +28VDC signal from the FCDC2 (3CE2) to the first terminal block (Ref. ASM 27-92/07).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-803

Failure of the FCDC1

- 1. Possible Causes
 - FCDC-1 (3CE1)
 - wiring of the 28VDC GND signal
 - wiring of the +28VDC signal
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|------------|--|--|--|
| R | AMM AMM | 27-95-34-000-001 27-95-34-400-001 27-96-00-740-001 27-92/07 | Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC1
 - replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (1) If the fault continues:
 - (a) Do a check of the wiring of the 28VDC GND signal from the FCDC1 (3CE1) to the ground terminal (Ref. ASM 27-92/07).
 - if there is no continuity repair the above wiring
 - if there is continuity see the Para. (b).
 - (b) Do a check and repair the wiring of the +28VDC signal from the FCDC1 (3CE1) to the first terminal block (Ref. ASM 27-92/07).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-804

Loss of the ELAC 1 BUS 2 Signal for the FCDC 1

1. Possible Causes

- FCDC-1 (3CE1)
- wiring of the DGI 1/1 signal from the FCDC1 (3CE1) to the first terminal block
- wiring of the DGI 1/3 signal from the FCDC1 (3CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

REFERENCE DESIGNATION

AMM 27-95-34-000-001 Removal of the FCDC (3CE1,3CE2)
AMM 27-95-34-400-001 Installation of the FCDC (3CE1,3CE2)
R AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)
ASM 27-92/50

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: FCDC1 OR BUS2 FROM ELAC1 COM

or

FCDC1 OR BUS2 FROM ELAC1 MON

- replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 1/1 signal from the FCDC1 (3CE1) to the first terminal block (Ref. ASM 27-92/50) if the maintenance message is FCDC1 OR BUS2 FROM ELAC1 COM or
 - do a check and repair the wiring of the DGI 1/3 signal from the FCDC1 (3CE1) to the first terminal block (Ref. ASM 27-92/50) if the maintenance message is FCDC1 OR BUS2 FROM ELAC1 MON.
- B. Do the test given in Para. 3.

EFF: ALL

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-805

Loss of the ELAC 1 BUS 2 Signal for the FCDC 2

1. Possible Causes

- FCDC-2 (3CE2)
- wiring of the DGI 1/1 signal from the FCDC2 (3CE2) to the first terminal
- wiring of the DGI 1/3 signal from the FCDC2 (3CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

______ REFERENCE **DESIGNATION** Removal of the FCDC (3CE1,3CE2)

AMM 27-95-34-000-001 AMM 27-95-34-400-001 R AMM 27-96-00-740-001 Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) ASM 27-92/50

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: FCDC2 OR BUS2 FROM ELAC1 COM

FCDC2 OR BUS2 FROM ELAC1 MON

- replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 1/1 signal from the FCDC2 (3CE2) to the first terminal block (Ref. ASM 27-92/50) if the maintenance message is FCDC2 OR BUS2 FROM ELAC1 COM
 - do a check and repair the wiring of the DGI 1/3 signal from the FCDC2 (3CE2) to the first terminal block (Ref. ASM 27-92/50) if the maintenance message is FCDC2 OR BUS2 FROM ELAC1 MON.
- B. Do the test given in Para. 3.

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TASK 27-95-00-810-806

Loss of the ELAC 2 BUS 2 Signal for the FCDC 1

1. Possible Causes

R

R R

R

- FCDC-1 (3CE1)
- wiring of the DGI 1/2 signal from the FCDC1 (3CE1) to the first terminal block
- wiring of the DGI 1/4 signal from the FCDC1 (3CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

REFERENCE DESIGNATION

AMM 27-95-34-000-001 Removal of the FCDC (3CE1,3CE2)
AMM 27-95-34-400-001 Installation of the FCDC (3CE1,3CE2)
AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)
ASM 27-92/52

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

FCDC1 OR BUS2 FROM ELAC2 COM

or

FCDC1 OR BUS2 FROM ELAC2 MON

- replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 1/2 signal from the FCDC1 (3CE1) to the first terminal block (Ref. ASM 27-92/52) if the maintenance message is FCDC1 OR BUS2 FROM ELAC2 COM or
 - do a check and repair the wiring of the DGI 1/4 signal from the FCDC1 (3CE1) to the first terminal block (Ref. ASM 27-92/52) if the maintenance message is FCDC1 OR BUS2 FROM ELAC2 MON.
- B. Do the test given in Para. 3.

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R

R

R

TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-807

Loss of the ELAC 2 BUS 2 Signal for the FCDC 2

1. Possible Causes

R

R

R

- FCDC-2 (3CE2)
- wiring of the DGI 1/2 signal from the FCDC2 (3CE2) to the first terminal
- wiring of the DGI 1/4 signal from the FCDC2 (3CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

______ REFERENCE DESIGNATION ______

AMM 27-95-34-000-001 Removal of the FCDC (3CE1,3CE2)
AMM 27-95-34-400-001 Installation of the FCDC (3CE1,3CE2)
AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning) ASM 27-92/52

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message:

FCDC2 OR BUS2 FROM ELAC2 COM

R

R

R

FCDC2 OR BUS2 FROM ELAC2 MON

- replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 1/2 signal from the FCDC2 (3CE2) to the first terminal block (Ref. ASM 27-92/52) if the maintenance message is FCDC2 OR BUS2 FROM ELAC2 COM
 - do a check and repair the wiring of the DGI 1/4 signal from the FCDC2 (3CE2) to the first terminal block (Ref. ASM 27-92/52) if the maintenance message is FCDC2 OR BUS2 FROM ELAC2 MON.
- B. Do the test given in Para. 3.

EFF: ALL **SROS**

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-808

Loss of the SEC 2 BUS Signal for the FCDC 1

- 1. Possible Causes
 - FCDC-1 (3CE1)
 - wiring of the DGI 2/2 signal from the FCDC1 (3CE1) to the first terminal block
 - wiring of the DGI 2/4 signal from the FCDC1 (3CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|--|--|--|
| _ | AMM | 27-95-34-000-001 27-95-34-400-001 27-96-00-740-001 | Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test

ASM 27-92/54

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC1 OR BUS FROM SEC2 COM

or

FCDC1 OR BUS FROM SEC2 MON

- replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 2/2 signal from the FCDC1 (3CE1) to the first terminal block (Ref. ASM 27-92/54) if the maintenance message is FCDC1 OR BUS FROM SEC2 COM
 - do a check and repair the wiring of the DGI 2/4 signal from the FCDC1 (3CE1) to the first terminal block (Ref. ASM 27-92/54) if the maintenance message is FCDC1 OR BUS FROM SEC2 MON.
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-809

Loss of the SEC 2 BUS Signal for the FCDC 2

1. Possible Causes

- FCDC-2 (3CE2)
- wiring of the DGI 2/2 signal from the FCDC2 (3CE2) to the first terminal
- wiring of the DGI 2/4 signal from the FCDC2 (3CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

______ REFERENCE **DESIGNATION** Removal of the FCDC (3CE1,3CE2)

AMM 27-95-34-000-001 AMM 27-95-34-400-001 R AMM 27-96-00-740-001 Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) ASM 27-92/54

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: FCDC2 OR BUS FROM SEC2 COM

FCDC2 OR BUS FROM SEC2 MON

- replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 2/2 signal from the FCDC2 (3CE2) to the first terminal block (Ref. ASM 27-92/54) if the maintenance message is FCDC2 OR BUS FROM SEC2 COM
 - do a check and repair the wiring of the DGI 2/4 signal from the FCDC2 (3CE2) to the first terminal block (Ref. ASM 27-92/54) if the maintenance message is FCDC2 OR BUS FROM SEC2 MON.
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-810

Loss of the SEC 1 BUS Signal for the FCDC 1

1. Possible Causes

- FCDC-1 (3CE1)
- wiring of the DGI 2/1 signal from the FCDC1 (3CE1) to the first terminal block
- wiring of the DGI 2/3 signal from the FCDC1 (3CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

REFERENCE DESIGNATION

AMM 27-95-34-000-001 Removal of the FCDC (3CE1,3CE2)
AMM 27-95-34-400-001 Installation of the FCDC (3CE1,3CE2)
R AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)
ASM 27-92/53

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: FCDC1 OR BUS FROM SEC1 COM

or

FCDC1 OR BUS FROM SEC1 MON

- replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 2/1 signal from the FCDC1 (3CE1) to the first terminal block (Ref. ASM 27-92/53) if the maintenance message is FCDC1 OR BUS FROM SEC1 COM or
 - do a check and repair the wiring of the DGI 2/3 signal from the FCDC1 (3CE1) to the first terminal block (Ref. ASM 27-92/53) if the maintenance message is FCDC1 OR BUS FROM SEC1 MON.
- B. Do the test given in Para. 3.

EFF: ALL

27-95-00

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-811

Loss of the SEC 1 BUS Signal for the FCDC 2

1. Possible Causes

- FCDC-2 (3CE2)
- wiring of the DGI 2/1 signal from the FCDC2 (3CE2) to the first terminal block
- wiring of the DGI 2/3 signal from the FCDC2 (3CE2) to the first terminal block

2. Job Set-up Information

A. Referenced Information

REFERENCE DESIGNATION

AMM 27-95-34-000-001 Removal of the FCDC (3CE1,3CE2)

AMM 27-95-34-400-001 Installation of the FCDC (3CE1,3CE2)

R AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

3. Fault Confirmation

A. Test

ASM 27-92/53

(1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: FCDC2 OR BUS FROM SEC1 COM

or

FCDC2 OR BUS FROM SEC1 MON

- replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 2/1 signal from the FCDC2 (3CE2) to the first terminal block (Ref. ASM 27-92/53) if the maintenance message is FCDC2 OR BUS FROM SEC1 COM or
 - do a check and repair the wiring of the DGI 2/3 signal from the FCDC2 (3CE2) to the first terminal block (Ref. ASM 27-92/53) if the maintenance message is FCDC2 OR BUS FROM SEC1 MON.
- B. Do the test given in Para. 3.

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TASK 27-95-00-810-812

Loss of the SEC 3 BUS Signal for the FCDC 1

1. Possible Causes

- FCDC-1 (3CE1)
- wiring of the DGI 3/2 signal from the FCDC 1 (3CE1) to the first terminal block
- wiring of the DGI 3/4 signal from the FCDC 1 (3CE1) to the first terminal block

2. Job Set-up Information

A. Referenced Information

AMM 27-95-34-000-001 Removal of the FCDC (3CE1,3CE2)
AMM 27-95-34-400-001 Installation of the FCDC (3CE1,3CE2)
R AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)
ASM 27-92/55

3. Fault Confirmation

- A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).

4. Fault Isolation

A. If the BITE test gives the maintenance message: FCDC1 OR BUS FROM SEC3 COM

or

FCDC1 OR BUS FROM SEC3 MON

- replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 3/2 signal from the FCDC 1 (3CE1) to the first terminal block (Ref. ASM 27-92/55) if the maintenance message is FCDC1 OR BUS FROM SEC3 COM or
 - do a check and repair the wiring of the DGI 3/4 signal from the FCDC 1 (3CE1) to the first terminal block (Ref. ASM 27-92/55) if the maintenance message is FCDC1 OR BUS FROM SEC3 MON.
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-813

Loss of the SEC 3 BUS Signal for the FCDC 2

- 1. Possible Causes
 - FCDC-2 (3CE2)
 - wiring of the DGI 3/2 signal from the FCDC 2 (3CE2) to the first terminal block
 - wiring of the DGI 3/4 signal from the FCDC 2 (3CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|--------------------------------------|--|--|
| | | 27-95-34-000-001 27-95-34-400-001 | Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) | |
| R | | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test

ASM 27-92/55

- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC2 OR BUS FROM SEC3 COM

or

FCDC2 OR BUS FROM SEC3 MON

- replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
- (1) If the fault continues:
 - do a check and repair the wiring of the DGI 3/2 signal from the FCDC 2 (3CE2) to the first terminal block (Ref. ASM 27-92/55) if the maintenance message is FCDC2 OR BUS FROM SEC3 COM or
 - do a check and repair the wiring of the DGI 3/4 signal from the FCDC 2 (3CE2) to the first terminal block (Ref. ASM 27-92/55) if the maintenance message is FCDC2 OR BUS FROM SEC3 MON.
- B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-814

Loss of the FCDC 1 BUS 3 Signal for the FCDC 2

- 1. Possible Causes
 - FCDC-2 (3CE2)
 - wiring of the DGI 3/1 signal from the FCDC 2 (3CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|------------------|---|--|
| | | | | |
| | AMM | 27-95-34-000-001 | Removal of the FCDC (3CE1,3CE2) | |
| | AMM | 27-95-34-400-001 | Installation of the FCDC (3CE1,3CE2) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-95/02 | _ | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC2 OR BUS3 FROM FCDC1
 - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 3/1 signal from the FCDC 2 (3CE2) to the first terminal block (Ref. ASM 27-95/02).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-815

Loss of the FCDC 2 BUS 3 Signal for the FCDC 1

- 1. Possible Causes
 - FCDC-1 (3CE1)
 - wiring of the DGI 3/1 signal from the FCDC 1 (3CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-----------|--------------------------------------|---|--|
| | | 27-95-34-000-001 | Removal of the FCDC (3CE1,3CE2) | |
| R | | 27-95-34-400-001 27-96-00-740-001 | <pre>Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning)</pre> | |
| | ASM | 27-95/03 | • | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC1 OR BUS3 FROM FCDC2
 - replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the DGI 3/1 signal from the FCDC 1 (3CE1) to the first terminal block (Ref. ASM 27-95/03).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-816

R Loss of the BUS 6 Signal of the FCDC 2 detected by SECs

- 1. Possible Causes
 - FCDC-2 (3CE2)
 - wiring of the DGO 1/4 signal from the FCDC 2 (3CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| 31-32-00-810-932 AMM 27-95-34-000-001 AMM 27-95-34-400-001 AMM 27-96-00-740-001 ASM 27-95/03 | Failure of the Discrete Links Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
- R A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
 - 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC2 BUS6
 - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DGO 1/4 digital output signal of the FCDC 2 (Ref. ASM 27-95/03).
 - (2) If the fault continues:
 - do a check and repair the wiring of the DGO 1/4 signal from the FCDC 2 (3CE2) to the first terminal block (Ref. ASM 27-95/03).
 - B. Do the test given in Para. 3.

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TASK 27-95-00-810-817

Loss of the BUS 5 Signal of the FCDC 1 detected by SECs

- 1. Possible Causes
 - FCDC-1 (3CE1)
 - wiring of the DGO 1/2 signal from the FCDC 1 (3CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-------------------|--|--|--|
| R | AMM AMM AMM | 2-00-810-932 27-95-34-000-001 27-95-34-400-001 27-96-00-740-001 27-95/02 | Failure of the Discrete Links Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC1 BUS5
 - replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932)
 related to the DGO 1/2 digital output signal of the FCDC 1 (Ref. ASM 27-95/02).
 - (2) If the fault continues:
 - do a check and repair the wiring of the DGO 1/2 signal from the FCDC 1 (3CE1) to the first terminal block (Ref. ASM 27-95/02).
 - B. Do the test given in Para. 3.

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TASK 27-95-00-810-818

Loss of the BUS 3 Signal of the FCDC 2 detected by the FCDC 1 and the SEC 1

- 1. Possible Causes
 - FCDC-2 (3CE2)
 - wiring of the DGO 1/1 signal from the FCDC 2 (3CE2) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|---------------|------------------|---|--|
| | | | Failure of the Discrete Links | |
| | AMM | 27-95-34-000-001 | Removal of the FCDC (3CE1,3CE2) | |
| | AMM | 27-95-34-400-001 | Installation of the FCDC (3CE1,3CE2) | |
| R | AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) | |
| | ASM | 27-95/03 | | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC2 BUS3
 - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-932) related to the DGO 1/1 digital output signal of the FCDC 2 (Ref. ASM 27-95/03).
 - (2) If the fault continues:
 - do a check and repair the wiring of the DGO 1/1 signal from the FCDC 2 (3CE2) to the first terminal block (Ref. ASM 27-95/03).
 - B. Do the test given in Para. 3.

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TASK 27-95-00-810-819

Loss of the BUS 3 Signal of the FCDC 1 detected by FCDC 2 and ELAC 1

- 1. Possible Causes
 - FCDC-1 (3CE1)
 - wiring of the DGO 1/1 signal from the FCDC 1 (3CE1) to the first terminal block
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION | |
|---|-------------------|--|---|--|
| R | AMM AMM AMM | 2-00-810-934 27-95-34-000-001 27-95-34-400-001 27-96-00-740-001 27-95/02 | Failure of the Digital Links Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message: FCDC1 BUS3
 - replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (1) If the fault continues:
 - do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the DGO 1/1 digital output signal of the FCDC 1 (Ref. ASM 27-95/02)
 - (2) If the fault continues:
 - do a check and repair the wiring of the DGO 1/1 signal from the FCDC 1 (3CE1) to the first terminal block (Ref. ASM 27-95/02).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-820

Loss of the Pin Programming Inputs Signal for the FCDC1

- 1. Possible Causes
 - FCDC-1 (3CE1)
- wiring of the PIN PROGRAM (DSI 9/5 and DSI 10/5) signal
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| | | |
| AMM | 27-95-34-000-001 | Removal of the FCDC (3CE1,3CE2) |
| AMM | 27-95-34-400-001 | Installation of the FCDC (3CE1,3CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-95/04 | |

- 3. Fault Confirmation
 - A. Test

R

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- (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
- - (1) If the fault continues:
 - do a check and repair the wiring of the PIN PROGRAM (DSI 9/5 and DSI 10/5) signal from the FCDC1 (3CE1) to the ground terminal (Ref. ASM 27-95/04).

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B. Do the test given in Para. 3.

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TASK 27-95-00-810-821

Loss of the Pin Programming Inputs Signal for the FCDC2

- 1. Possible Causes
 - FCDC-2 (3CE2)
 - wiring of the PIN PROGRAM (DSI 11/5 and DSI 12/5) signal
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | | DESIGNATION |
|-----------|------------------|---|
| AMM | 27-95-34-000-001 | Removal of the FCDC (3CE1,3CE2) |
| AMM | 27-95-34-400-001 | Installation of the FCDC (3CE1,3CE2) |
| AMM | 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |
| ASM | 27-95/05 | |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message FCDC2 SDI INPUTS:
 - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (1) If the fault continues:
 - do a check and repair the wiring of the PIN PROGRAM (DSI 11/5 and DSI 12/5) signal from the FCDC2 (3CE2) to the ground terminal (Ref. ASM 27-95/05).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL

TASK 27-95-00-810-833

Loss of the FCDC1 Fail Discrete Signal for the FCDC2

- 1. Possible Causes
 - FCDC-1 (3CE1)
 - FCDC-2 (3CE2)
 - wiring of the OPP FCDC FAILED (DSI 15/5) signal
- 2. Job Set-up Information
 - A. Referenced Information

| | REFERENCE | | DESIGNATION |
|---|------------|--|--|
| R | AMM AMM | 27-95-34-000-001 27-95-34-400-001 27-96-00-740-001 27-95/05 | Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Test
 - (1) Do the BITE test of the EFCS (ground scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the BITE test gives the maintenance message OPP FCDC FAIL DISCR:
 do a check of the wiring of the OPP FCDC FAILED (DSI 15/5) signal from the FCDC1 (3CE1) to the FCDC2 (3CE2) (Ref. ASM 27-95/05).
 - (1) If the fault continues:
 - replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (2) If the fault continues:
 - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - B. Do the test given in Para. 3.

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TROUBLE SHOOTING MANUAL R TASK 27-95-00-810-834 R Loss of the Side Stick Priority Indication on the Glareshield Panel 1. Possible Causes - RELAY-F/O W ANN SPLY (42CE2) R - FCDC-1 (3CE1) - BOARD-ANN LT TEST & INTFC (2LP) - RELAY-CAPT G ANN SPLY (42CE3) - RELAY-CAPT W ANN SPLY (42CE1) R - RELAY-F/O G ANN SPLY (42CE4) - FCDC-2 (3CE2) R - BOARD-ANN LT TEST & INTFC (19LP) - ANN-SIDE STICK PRIORITY, F/O (23CE2) - ANN-SIDE STICK PRIORITY, CAPT (23CE1) R - wiring 2. Job Set-up Information A. Referenced Information R R REFERENCE R **DESIGNATION** IPC 27920802 R 27920803 R IPC IPC 33140803 27-95-34-000-001 Removal of the FCDC (3CE1,3CE2) AMM Installation of the FCDC (3CE1,3CE2) AMM 27-95-34-400-001 AMM 27-96-00-710-003 Operational Test of the Side Stick Priority ASM 27-95/04 R ASM 27-95/05 3. Fault Confirmation A. Test R Do the operational test of the side stick priority (Ref. AMM TASK 27-96-R 00-710-003). 4. Fault Isolation A. If, during the test, with circuit breaker 20CE2 open (circuit breaker R 20CE1 closed), then with circuit breaker 20CE1 open (circuit breaker R 20CE2 closed): R - The red arrow of the F/O SIDE STICK PRIORITY annunciator does not come R on when you push the CAPT takeover and priority pushbutton switch: R

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R

(1) Remove the RELAY-F/O W ANN SPLY (42CE2).

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| | MOODEE SHOOTING MANGAE |
|-------------|---|
| R | (2) Do a check of the resistance of the relay between pin X1 and X2. |
| R R R | (a) If the resistance is less than 280 ohms: install a new F/O W ANN SPLY relay (42CE2) (Ref. IPC 27920803) replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) (Ref. AMM TASK 27-95-34-400-001). |
| R R R | (b) If the resistance is more than 400 ohmsinstall a new F/O W ANN SPLY relay (42CE2) (Ref. IPC 27920803)see Para. (3). |
| R R R | (c) If the resistance is between 280 and 400 ohms:install the F/O W ANN SPLY relay (42CE2)See Para. (3). |
| R | (3) If the fault continues: |
| R R | (a) Replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) (Ref. AMM TASK 27-95-34-400-001). |
| R | (4) If the fault continues: |
| R | (a) Replace the RELAY-F/O W ANN SPLY (42CE2) (Ref. IPC 27920803). |
| R | (5) If the fault continues: |
| R R | (a) Do a check of the wiring between the F/O W ANN SPLY relay (42CE2) pin X2 and the FCDC-1 (3CE1) (Ref. ASM 27-95/04). |
| R R | (b) Do a check of the wiring between the F/O W ANN SPLY relay (42CE2) pin A1 and the ground. |
| R R | (c) Do a check of the wiring between the F/O W ANN SPLY relay (42CE2) pin X1 and the first terminal block. |
| R R R | B. If, during the test, with circuit breaker 20CE2 opened (circuit breaker 20CE1 closed): the CAPT legend of the SIDE STICK PRIORITY annunciator does not come on when you move the F/O side stick: |
| R R | (1) Replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) (Ref. AMM TASK 27-95-34-400-001). |
| R | (2) If the fault continues: |
| R | (a) Replace the BOARD-ANN LT TEST & INTFC (2LP) (Ref. IPC 33140803). |
| R | (3) If the fault continues: |
| R | (a) Replace the RELAY-CAPT G ANN SPLY (42CE3) (Ref. IPC 27920803). |
| | |

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(4) If the fault continues: R (a) Do a check of the wiring between the ANN LT TEST & INTFC BOARD R pin 23 and the FCDC 1 (3CE1) (Ref. ASM 27-95/04). R (b) Do a check of the wiring between pin 3 and pin 25 of the ANN LT R TEST & INTFC board (2LP). (c) Do a check of the wiring between the ANN LT TEST & INTFC board R (2LP) pin 4 and the first terminal block. R R (d) Do a check of the wiring between the ANN LT TEST & INTFC board (2LP) pin 22 and the CAPT G ANN SPLY relay (42CE3) pin A3. R C. If during the test, with circuit breaker 20CE2 open (circuit breaker R 20CE1 closed): R R - the red arrow of the CAPT SIDE STICK PRIORITY annunciator does not come on when you push the F/O takeover and priority pushbutton switch: R (1) Replace the FCDC 1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) (Ref. AMM R TASK 27-95-34-400-001). R (2) If the fault continues: R (a) Replace the BOARD-ANN LT TEST & INTFC (2LP) (Ref. IPC 33140803) R R (3) If the fault continues: (a) Replace the RELAY-CAPT W ANN SPLY (42CE1) (Ref. IPC 27920803). R (4) If the fault continues: R (a) Do a check of the wiring between the ANN LT TEST & INTFC board (2LP) and the FCDC 1(3CE1) (Ref. ASM 27-95/04). R (b) Do a check of the wiring between the ANN LT TEST & INTFC board R R (2LP) pin 4 and the first terminal block. R (c) Do a check of the wiring between the ANN LT TEST & INTFC board (2LP) pin 1 and the CAPT W ANN SPLY relay (42CE1) pin A3. R R D. If during the test, with circuit breaker 20CE2 open (circuit breaker 20CE1 closed): R - the F/O legend of the SIDE STICK PRIORITY annunciator does not come on R when you move the CAPT side stick: (1) Remove the RELAY-F/O G ANN SPLY (42CE4). R

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| R | (2) Do a check of the resistance of the relay between pin X1 and X2. |
|-------------|---|
| R R R | (a) If the resistance is less than 280 ohms: install a new F/O G ANN SPLY relay (42CE4) (Ref. IPC 27920803) replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) (Ref. AMM TASK 27-95-34-400-001). |
| R R R | (b) If the resistance is more than 400 ohms:install a new F/O G ANN SPLY relay (42CE4) (Ref. IPC 27920803)See para. (3). |
| R R R | (c) If the resistance is between 280 and 400 o0hms:install the F/O G ANN SPLY relay (42CE4)see Para. (3). |
| R | (3) If the fault continues: |
| R R | (a) Replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) (Ref. AMM TASK 27-95-34-400-001). |
| R | (4) If the fault continues: |
| R | (a) Replace the RELAY-F/O G ANN SPLY (42CE4) (Ref. IPC 27920803). |
| R | (5) If the fault continues: |
| R R | (a) Do a check of the wiring between the F/O G ANN SPLY relay (42CE4) pin X2 and the FCDC 1 (3CE1) (Ref. ASM 27-95/04). |
| R R | (b) Do a check of the wiring between the F/O G ANN SPLY relay (42CE4) pin A1 and the ground. |
| R R | (c) Do a check of the wiring between the F/O G ANN SPLY relay (42CE4) pin X1 and the first terminal block. |
| R R R | E. If, during the test, with circuit breaker 20CE1 open (circuit breaker 20CE2 closed): The red arrow of the F/O SIDE STICK PRIORITY annunciator does not come on when you push the CAPT takeover and priority pushbutton switch: |
| R R | (1) Replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) (Ref. AMM TASK 27-95-34-400-001). |
| R | (2) If the fault continues: |
| R | (a) Replace the BOARD-ANN LT TEST & INTFC (19LP) (Ref. IPC 33140803). |
| R | (3) If the fault continues: |
| R | (a) Replace the RELAY-F/O W ANN SPLY (42CE2) (Ref. IPC 27920803). |

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(4) If the fault continues: R (a) Do a check of the wiring between the ANN LT TEST & INTFC board R (19LP) pin 38 and the FCDC 2 (3CE2) (Ref. ASM 27-95/05). R (b) Do a check of the wiring between the ANN LT TEST & INTFC board R (19LP) pin 39 and the first terminal block. (c) Do a check of the wiring between the ANN LT TEST & INTFC board R (19LP) pin 37 and the F/O W ANN SPLY relay (42CE2) pin A3. R R F. If, during the test, with circuit breaker 20CE2 open (circuit breaker 20CE1 closed): R - the F/O legend of the SIDE STICK PRIORITY annunciator does not come on R when you move the CAPT side stick: R (1) Remove the RELAY-CAPT G ANN SPLY (42CE3). R (2) Do a check of the resistance of the relay between pin X1 and X2. (a) If the resistance is less than 280 ohms: R - install a new CAPT G ANN SPLY relay (42CE3) (Ref. IPC 27920803). R - replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) R (Ref. AMM TASK 27-95-34-400-001). R R (b) If the resistance is more than 400 ohms: - install a new CAPT G ANN SPLY relay (42CE3) (Ref. IPC R 27920803). R R - see Para. (3). R (c) If the resistance is between 280 and 400 ohms: - install the CAPT G ANN SPLY relay (42CE3) R - see Para. (3). R (3) If the fault continues: R (a) Replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) (Ref. R AMM TASK 27-95-34-400-001). R (4) If the fault continues: R (a) Replace the RELAY-CAPT G ANN SPLY (42CE3) (Ref. IPC 27920803). R (5) If the fault continues: R R (a) Do a check of the wiring between the CAPT G ANN SPLY relay (42CE3) pin X2 and the FCDC 2(3CE2) (Ref. ASM 27-95/05). R (b) Do a check of the wiring between the CAPT G ANN SPLY relay R (42CE3) pin A1 and the ground. R

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| R R | | (c) Do a check of the wiring between the CAPT G ANN SPLY relay (42CE3) pin X1 and the first terminal block. |
|------------------|----|--|
| R R R | G. | <pre>If, during the test, with circuit breaker 20CE1 open (circuit breaker 20CE2 closed): - the red arrow of the CAPT SIDE STICK PRIORITY annunciator does not come on when you push the F/O takeover and priority pushbutton switch:</pre> |
| R | | (1) Remove the RELAY-CAPT W ANN SPLY (42CE1). |
| R | | (2) Do a check of the resistance of the relay between pin X1 and X2. |
| R R R R | | (a) If the resistance is less than 280 ohms: install a new CAPT W ANN SPLY relay (42CE1) (Ref. IPC 27920803). replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) (Ref. AMM TASK 27-95-34-400-001). |
| R R R | | (b) If the resistance is more than 400 ohms:install a new CAPT W ANN SPLY relay (42CE1) (Ref. IPC 27920803).see para. (3). |
| R R R | | (c) If the resistance is between 280 and 400 ohms:install the CAPT W ANN SPLY (42CE1).see Para. (3). |
| R | | (3) If the fault continues: |
| R R | | (a) Replace the FCDC-2 (3CE2) (Ref. AMM TASK 27-95-34-000-001) (Ref. AMM TASK 27-95-34-400-001). |
| R | | (4) If the fault continues: |
| R | | (a) Replace the RELAY-CAPT W ANN SPLY (42CE1) (Ref. IPC 27920803). |
| R | | (5) If the fault continues: |
| R R | | (a) Do a check of the wiring between the CAPT W ANN SPLY relay (42CE1) pin X2 and the FCDC 2 (3CE2) (Ref. ASM 27-95/05). |
| R R | | (b) Do a check of the wiring between the CAPT W ANN SPLY relay (42CE1) pin A1 and the ground. |
| R R | | (c) Do a check of the wiring between the CAPT W ANN SPLY relay (42CE1) pin X1 and the first terminal block. |
| R R R R | н. | <pre>If, during the test, with circuit breaker 20CE2 open (circuit breaker 20CE1 closed), then with circuit breaker 20CE1 open (circuit breaker 20CE2 closed): - The red arrow of the F/O SIDE STICK PRIORITY annunciator does not come on when you push the CAPT takeover and priority pushbutton switch:</pre> |
| | | |

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(1) Replace the ANN-SIDE STICK PRIORITY, F/O (23CE2) (Ref. IPC 27920802). R (2) If the fault continues: R (a) Replace the RELAY-F/O W ANN SPLY (42CE2) (Ref. IPC 27920803). R (3) If the fault continues: (a) Do a check of the wiring between the F/O SIDE STICK PRIORITY R annunciator (23CE2) pin 7 and the F/O W ANN SPLY relay (42CE2) R pin A2 (Ref. ASM 27-95/05). R J. If, during the test, with circuit breaker 20CE2 open (circuit breaker R 20CE1 closed), then with circuit breaker 20CE1 open (circuit breaker R 20CE2 closed): R - the CAPT legend of the SIDE STICK PRIORITY annunciator does not come on R when you move the F/O side stick: R (1) Replace the ANN-SIDE STICK PRIORITY, CAPT (23CE1) (Ref. IPC R 27920802). R R (2) If the fault continues: (a) Replace the RELAY-CAPT G ANN SPLY (42CE3) (Ref. IPC 27920803). R (3) If the fault continues: R (a) Do a check of the wiring between the CAPT SIDE STICK PRIORITY R annunciator (23CE1) pin 4 and the CAPT G ANN SPLY relay (42CE3) R R pin A2 (Ref. ASM 27-95/05). R K. If, during the test, with circuit breaker 20CE2 open (circuit breaker 20CE1 closed), then with circuit breaker 20CE1 open (circuit breaker R 20CE2 closed): R - the red arrow of the CAPT SIDE STICK PRIORITY annunciator does not come R on when you push the F/O takeover and priority pushbutton switch: R (1) Replace the ANN-SIDE STICK PRIORITY, CAPT (23CE1) (Ref. IPC R 27920802). R (2) If the fault continues: R (a) Replace the RELAY-CAPT W ANN SPLY (42CE1) (Ref. IPC 27920803). R (3) If the fault continues: R R (a) Do a check of the wiring between the CAPT SIDE STICK PRIORITY annunciator (23CE1) pin 7 and the CAPT W ANN SPLY relay (42CE1) R pin A2 (Ref. ASM 27-95/04). R

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- L. If, during the test, with circuit breaker 20CE2 open (circuit breaker R 20CE1 closed), then with circuit breaker 20CE1 open (circuit breaker R R 20CE2 closed): - the F/O legend of the SIDE STICK PRIORITY annunciator does not come on R when you move the CAPT side stick: (1) Replace the ANN-SIDE STICK PRIORITY, F/O (23CE2) (Ref. IPC 27920802). (2) If the fault continues: R (a) Replace the RELAY-F/O G ANN SPLY (42CE4) (Ref. IPC 27920803). R R (3) If the fault continues: R (a) Do a check of the wiring between the F/O SIDE STICK PRIORITY annunciator (23CE2) pin 4 and the F/O G ANN SPLY relay (42CE4) R R pin A2 (Ref. ASM 27-95/05).
- R M. Do the test given in Para. 3.

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TASK 27-95-00-810-836

Loss of one FCDC Output Bus

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

REFERENCE

DESIGNATION

31-32-00-810-934 Failure of the Digital Links
AMM 27-96-00-740-001 BITE Test of the EFCS (Ground Scanning)

R ASM 27-95/00

- 3. Fault Confirmation
 - A. Test

R

- (1) Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001).
- 4. Fault Isolation
 - A. If the test confirms the fault:
 - (1) Do the trouble shooting procedure (Ref. TASK 31-32-00-810-934) related to the FCDC output bus:
 - DGO 2/5 (bus 2)
 - DGO 1/5 (bus 1)

(Ref. ASM 27-95/00).

B. Do the test given in Para. 3.

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TASK 27-95-00-810-839

Loss of the F/CTL Page Automatic Call up during Check List

- 1. Possible Causes
 - FCDC-1 (3CE1)
 - DMC-2 (1WT2)
 - XDCR UNIT-RUDDER POS (42WV)
 - SDAC-1 (1WV1)
- DMC-1 (1WT1)
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|--|--|
| AMM 27-95-34-000-001 AMM 27-95-34-400-001 AMM 31-50-00-710-001 AMM 31-55-34-000-001 AMM 31-63-34-400-001 AMM 31-63-34-400-001 | Removal of the FCDC (3CE1,3CE2) Installation of the FCDC (3CE1,3CE2) Ground Scanning of the Central Warning System Removal of the SDAC (1WV1,1WV2) Installation of the SDAC (1WV1,1WV2) Removal of the DMC (1WT1,1WT2,1WT3) Installation of the DMC (1WT1,1WT2,1WT3) |

3. Fault Confirmation

A. Not applicable. The fault is evident during the check list with the engines in operation.

4. Fault Isolation

- A. If the F/CTL page does not come into view automatically during the check list (Flight Phase 02):
 - On the upper ECAM DU, do a check for a warning during this phase.
- B. If there is a warning:
 - No maintenance action is necessary. Do the trouble shooting related to the warning (Ref 27 ECAM).

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R **ON A/C 201-225, 227-227, 229-299, 426-455, 476-499, 503-549, 551-599, R 701-749,

- C. If there is no warning:
 - do a check for the RUD position symbol on the lower ECAM DU.
 - (1) If the RUD position symbol is shown:
 - (a) replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (b) If the fault continues:
 - replace the DMC-2 (1WT2) (Ref. AMM TASK 31-63-34-000-001) and (Ref. AMM TASK 31-63-34-400-001).
 - (2) If the RUD position symbol is not shown:
 - Do the BITE test of the SDAC (Ref. AMM TASK 31-50-00-710-001).
 - (a) If the BITE test gives a maintenance message related to the XDCR UNIT-RUDDER POS (42WV):
 - do the related trouble shooting procedure.
 - (b) If the BITE test does not give a maintenance message related to the XDCR UNIT-RUDDER POS (42WV)
 - replace the SDAC-1 (1WV1) (Ref. AMM TASK 31-55-34-000-001)
 (Ref. AMM TASK 31-55-34-400-001).

**ON A/C 456-475,

- C. If there is no warning:
 - do a check for the RUD position symbol on the lower ECAM DU.
 - (1) If the RUD position symbol is shown:
 - (a) replace the FCDC-1 (3CE1) (Ref. AMM TASK 27-95-34-000-001) and (Ref. AMM TASK 27-95-34-400-001).
 - (b) If the fault continues:
 - replace the DMC-1 (1WT1) (Ref. AMM TASK 31-63-34-000-001) and (Ref. AMM TASK 31-63-34-400-001).
 - (2) If the RUD position symbol is not shown:
 - Do the BITE test of the SDAC (Ref. AMM TASK 31-50-00-710-001).
 - (a) If the BITE test gives a maintenance message related to the XDCR UNIT-RUDDER POS (42WV):
 - do the related trouble shooting procedure.

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| R | (b) If the BITE test does not give a maintenance message related to |
|---|--|
| R | the XDCR UNIT-RUDDER POS (42WV) |
| R | replace the SDAC-1 (1WV1) (Ref. AMM TASK 31-55-34-000-001) |
| R | (Ref. AMM TASK 31-55-34-400-001). |

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MAINTENANCE AND SAFETY TESTS/BITE - FAULT ISOLATION PROCEDURES

TASK 27-96-00-810-801

Result of the Operational Test of the Logics that Activates the ELAC 1&2 and SEC 1 STBY PWR SPLY not Satisfactory

1. Possible Causes

- RELAY-ELAC 1 BATT SPLY BREAKING (35CE)
- ELAC-1 (2CE1)
- PSDU-ELAC 1 (43CE)
- RELAY-SEC 1 BATT SPLY BREAKING (37CE)
- SEC-1 (1CE1)
- PSDU-SEC 1 (45CE)
- RELAY-ELAC 2 ANN SPLY (40CE2)
- RELAY-SEC 2 SPLY (46CE)
- RELAY-ELAC 2/SEC2 SPLY RELAY DRIVE (50CE)
- P/BSW-FLT CTL/ELAC 2 (6CE2)
- RELAY ELAC2 SPLY (64CE)
- RELAY ELAC2 SPLY (53CE)
- RELAY-ELAC 2 SPLY (44CE)
- RELAY-ELAC 2 EMER SPLY (48CE)
- PRESS SW-B HYD, FLT CTL (10CE1)
- LGCIU-1 (5GA1)
- RELAY-SPEED CONDITION, 2 (3PH)
- SEC-3 (1CE3)
- SEC-2 (1CE2)
- C/B-FLT CTL/ELAC1/STBY SPLY (16CE1)
- C/B-FLT CTL/SEC1/STBY SPLY (22CE)
- C/B-FLIGHT CONTROLS/ELAC2/STBY (16CE2)
- wiring

2. Job Set-up Information

A. Referenced Information

| REFERENCE | | DESIGNATION |
|------------------|------------------|---|
| 27-95-00-810-834 | | Loss of the Side Stick Priority Indication on the Glareshield Panel |
| IPC | 24620801 | |
| IPC | 27920301 | |
| IPC | 27920802 | |
| IPC | 27920803 | |
| IPC | 27920804 | |
| AMM | 27-93-34-000-001 | Removal of the ELAC (2CE1,2CE2) |
| AMM | 27-93-34-400-001 | Installation of the ELAC (2CE1,2CE2) |
| AMM | 27-94-34-000-001 | Removal of the SEC (1CE1,1CE2,1CE3) |
| AMM | 27-94-34-400-001 | Installation of the SEC (1CE1,1CE2,1CE3) |

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| REFERENCE | | DESIGNATION |
|-----------|------------------|--|
| AMM | 27-96-00-710-018 | Operational Test of Logics Activating ELAC 1&2, & SEC STBY PWR SPLY & Ability of SEC 1&2 to Achieve Pitch CTL & Ability of Sidestick Priority Function |
| AMM | 32-31-71-000-001 | Removal of the LGCIU (5GA1, 5GA2) |
| AMM | 32-31-71-400-001 | Installation of the LGCIU (5GA1, 5GA2) |
| ASM | 27-92/02 | |
| ASM | 27-92/04 | |
| ASM | 27-92/27 | |

3. Fault Confirmation

A. Test
Do the operational test (Ref. AMM TASK 27-96-00-710-018)

4. Fault Isolation

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- A. If during the test, when you open the circuit breakers 15CE1 and 15CE2:
 - (1) The ELAC1 FAULT warning comes into view:
 - (a) Remove the RELAY-ELAC 1 BATT SPLY BREAKING (35CE) (Ref. IPC 27920803)
 - (b) Do a check of the resistance of the relay 35CE.
 - 1 If the resistance is less than 280 ohms:
 - replace the relay 35CE (Ref. IPC 27920803)
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001)
 (Ref. AMM TASK 27-93-34-400-001)
 - 2 If the resistance is more than 400 ohms:
 - replace the RELAY-ELAC 1 BATT SPLY BREAKING (35CE) (Ref. IPC 27920803)
 - $\underline{3}$ If the resistance is between 280 and 400 ohms: see para (c).
 - (c) Install the RELAY-ELAC 1 BATT SPLY BREAKING (35CE) (Ref. IPC 27920803)
 - (d) If the fault continues:
 - replace the ELAC-1 (2CE1) (Ref. AMM TASK 27-93-34-000-001)
 (Ref. AMM TASK 27-93-34-400-001).
 - (e) If the fault continues:
 - replace the PSDU-ELAC 1 (43CE) (Ref. IPC 27920803).

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- (f) If the fault continues:
 - replace the C/B-FLT CTL/ELAC1/STBY SPLY (16CE1) (Ref. IPC 27920804).
- (g) If the fault continues:

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- replace the RELAY-ELAC 1 BATT SPLY BREAKING (35CE) (Ref. IPC 27920803)
- (h) If the fault continues:
 - do a check of the wiring from the relay 35CE pin X2 to the ELAC1 pin 13G (Ref. ASM 27-92/02)
 - do a check of the wiring from the ground to the ELAC1 pin 14G
 - do a check of the wiring from the PSDU 43CE pin 4 to the first terminal block
 - do a check of the wiring from the PSDU 43CE pin 1 to the ground
 - do a check of the wiring from the relay 35CE pin A2 to the PSDU pin 2
 - do a check of the wiring from the circuit breaker 16CE1 to the relay 35CE pin A1
 - do a check of the wiring from the relay 35CE pin X1 to the first terminal block
- (2) The SEC1 FAULT warning comes into view:
 - (a) Remove the RELAY-SEC 1 BATT SPLY BREAKING (37CE) (Ref. IPC 27920803)
 - (b) Do a check of the resistance of the relay
 - 1 If the resistance is less than 280 ohms:
 - replace the relay (37CE) (Ref. IPC 27920803)
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) (Ref. AMM TASK 27-94-34-400-001)
 - 2 If the resistance is more than 400 ohms:
 - replace the RELAY-SEC 1 BATT SPLY BREAKING (37CE) (Ref. IPC 27920803)
 - $\underline{\mathbf{3}}$ If the resistance is between 280 and 400 ohms:
 - see para (c).
 - (c) Install the RELAY-SEC 1 BATT SPLY BREAKING (37CE) (Ref. IPC 27920803)
 - (d) If the fault continues:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) (Ref. AMM TASK 27-94-34-400-001)
 - (e) If the fault continues:
 - replace the PSDU-SEC 1 (45CE) (Ref. IPC 27920803)

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- (f) If the fault continues:
 - replace the C/B-FLT CTL/SEC1/STBY SPLY (22CE) (Ref. IPC 27920804)
- (g) If the fault continues:
 - replace the RELAY-SEC 1 BATT SPLY BREAKING (37CE) (Ref. IPC 27920803)
- (h) If the fault continues:
 - do a check of the wiring from the relay 37CE pin X2 to the SEC1 pin 14A (Ref. ASM 27-92/04)
 - do a check of the wiring from the ground to the SEC1 pin 14B
 - do a check of the wiring from the PSDU 45CE pin 4 to the first terminal block
 - do a check of the wiring from the PSDU 45CE pin 1 to the ground
 - do a check of the wiring from the relay 37CE pin A2 to the PSDU pin 2
 - do a check of the wiring from the circuit breaker 22 CE to the relay 37 CE pin A
 - do a check of the wiring from the relay 37 CE pin X1 to the first terminal block.
- B. If during the test, when you open the GA circuit breakers and circuit breaker 15CE2, the ELAC2 FAULT warning does not come into view:
 - (1) Replace the RELAY-ELAC 2 ANN SPLY (40CE2) (Ref. IPC 27920803).
 - (2) If the fault continues:
 - replace the RELAY-SEC 2 SPLY (46CE) (Ref. IPC 27920803).
 - (3) If the fault continues:
 - replace the RELAY-ELAC 2/SEC2 SPLY RELAY DRIVE (50CE) (Ref. IPC 27920803).
 - (4) If the fault continues:
 - replace the P/BSW-FLT CTL/ELAC 2 (6CE2) (Ref. IPC 27920802).
 - (5) If the fault continues:
 - do a check of the wiring between the relay 50CE pin A2 and the relay 46CE pin A3
 - do a check of the wiring between the relay 50CE pin A3 and the ground
 - do a check of the wiring between the relay 46CE pin A1 and the ground
 - do a check of the wiring between the relay 46CE pin A2 and the relay 40CE2 pin A3
 - do a check of the wiring between the relay 40CE pin A2 and the pushbutton switch 6CE2 pin A3.
- C. If during the test, when you close the GA circuit breakers, the ELAC 2 legend remains amber:
 - replace the RELAY ELAC2 SPLY (64CE) (Ref. IPC 27920803).

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- R D. If during the test, when you open the circuit breaker 19CE1:
 - (1) During the 30 second time delay, the ELAC2 FAULT warning stays in view:
 - replace the RELAY ELAC2 SPLY (53CE) (Ref. IPC 27920803)
 - (a) If the fault continues:
 - replace the RELAY-ELAC 2 SPLY (44CE) (Ref. IPC 27920803)
 - (b) If the fault continues:
 - replace the RELAY-ELAC 2 EMER SPLY (48CE) (Ref. IPC 27920803)
 - (c) If the fault continues:
 - replace the RELAY-ELAC 2/SEC2 SPLY RELAY DRIVE (50CE) (Ref. IPC 27920803)
 - (d) If the fault continues:
 - replace the C/B-FLIGHT CONTROLS/ELAC2/STBY (16CE2) (Ref. IPC 27920804).
 - (e) if the fault continues:
 - do a check of the wiring from the circuit breaker 16CE2 to the relay 53CE pins A1, B1 (Ref. ASM 2792/02).
 - do a check of the wiring from the circuit breaker 16CE2 to the relay 35CE pin B2
 - do a check of the wiring from the relay 53CE pin A2 to the first terminal block
 - do a check of the wiring from the relay 53CE pin X1 to the relay 44CE pin A1
 - do a check of the wiring from the relay 53CE pin X2 to the relay 50CE pin A2
 - do a check of the wiring from the relay 50CE pin A3 to the ground
 - do a check of the wiring from the relay 44CE pin X1 to the relay 48CE pin B3
 - do a check of the wiring from the relay 44CE pin X2 to the relay 50CE pin A2
 - do a check of the wiring from the relay 44CE pin X1 to the relay 44CE pin A2
 - do a check of the wiring from the relay 35CE pin B1 to the relay 48CE pin B2.
 - (2) After the 30 second time delay, if the ELAC2 FAULT warning does not come into view:
 - replace the RELAY-ELAC 2/SEC2 SPLY RELAY DRIVE (50CE) (Ref. IPC 27920803)
 - (a) If the fault continues:
 - replace the PRESS SW-B HYD, FLT CTL (10CE1) (Ref. IPC 27920301)

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- (b) If the fault continues:
 - do a check of the wiring from the relay 48CE pin B3 to the relay 50CE pin X1 and the wiring from the relay 50CE pin X2 to the ground.
- E. If during the test, when you depressurize the Blue hydraulic system (the GA circuit breakers, the circuit breakers 15CE2 and 19CE1 are open):
 - (1) The ELAC2 FAULT warning stays in view:
 - replace the RELAY-ELAC 2/SEC2 SPLY RELAY DRIVE (50CE) (Ref. IPC 27920803)
 - (a) If the fault continues:
 - replace the PRESS SW-B HYD, FLT CTL (10CE1) (Ref. IPC 27920301)
 - (b) If the fault continues:
 - do a check of the wiring from the relay 48CE pin B3 to the relay 50CE pin X1
 - do a check of the wiring from the relay 50CE pin X2 to the ground.

**ON A/C 201-225, 248-299, 430-499, 503-549, 551-599,

- F. If during the test, when you release the ELAC1 pushbutton switch, the ELAC2 FAULT warning comes into view:
 - replace the RELAY ELAC2 SPLY (64CE) (Ref. IPC 27920803)
 - (1) If the fault continues:
 - replace the LGCIU-1 (5GA1) (Ref. AMM TASK 32-31-71-000-001) (Ref. AMM TASK 32-31-71-400-001)
 - (2) If the fault continues:
 - do a check of the wiring from the LGCIU 1 pin 11D to the relay 64CE pin A1
 - do a check of the wiring from the relay 64CE pin A1 to the relay
 64CE pin X1
 - do a check of the wiring from the relay 64CE pin B1 to the relay 44CE pin X2
 - do a check of the wiring from the relay 64CE pin A2 to the relay
 48CE pin A3
 - do a check of the wiring from the relay 48CE pin A2 to the relay
 35CE pin B1
 - do a check of the wiring from the relay 64CE pin B2 to the ground
 - do a check of the wiring from the relay 64CE pin X2 to the ground.

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R **ON A/C 227-227, 229-247, 426-429, 701-749,

- F. If during the test, when you close the GA circuit breakers, the ELAC2 FAULT warning stays in view:
 - replace the RELAY-SPEED CONDITION, 2 (3PH) (Ref. IPC 24620801)
 - (1) If the fault continues:
 - do a check of the wiring from the relay 3PH to the first terminal block
 - do a check of the wiring from the relay 50CE pin X2 to the ground.

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- G. If during the test, when you release the ELAC1 pushbutton switch, the ELAC2 FAULT warning comes into view:
 - replace the RELAY-SEC 1 BATT SPLY BREAKING (37CE) (Ref. IPC 27920803)
 - (1) If the fault continues:
 - do a check of the wiring from the relay 35CE pin B1 to the relay 37CE pin B1
 - do a check of the wiring from the relay 35CE pin B2 to the relay 37CE pin B2.
- H. If during the test, when you push the ELAC1 pushbutton switch, the ELAC2 FAULT warning stays in view:
 - replace the RELAY-ELAC 1 BATT SPLY BREAKING (35CE) (Ref. IPC 27920803).
- R J. If during the test, with the circuit breakers 15CE1 and 15CE2 open (ELACs de-energized) the SEC does not do the servoing of its related surface:
 - (1) On the SD, the symbols of the L and R spoilers 2 are in amber: - replace the SEC-3 (1CE3) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring from the SEC 3 (1CE3) COM and MON to the terminal block (DSI 19) (Ref. ASM 27-92/27).
 - (2) On the SD, the symbols of the L and R spoilers 3, and the symbols B of the L and R elevators are in amber:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
- R do a check and repair the wiring from the SEC 1 (1CE1) COM and R MON to the terminal block (DSI 18) (Ref. ASM 27-92/27).

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- (3) On the SD, the symbols of the L and R spoilers 4 are in amber: - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring from the SEC 1 (1CE1) COM and MON to the terminal block (DSI 19) (Ref. ASM 27-92/27).
- (4) On the SD, the symbols of the L and R spoilers 5, the symbol G of the L elevator and the symbol G of the L aileron are in amber:
 - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring from the SEC 2 (1CE2) COM and MON to the terminal block (DSI 18) (Ref. ASM 27-92/27).
- (5) On the SD, the symbol Y of the R elevator is in amber: - replace the SEC-2 (1CE2) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring from the SEC 2 (1CE2) COM and MON to the terminal block (DSI 19) (Ref. ASM 27-92/27).
- (6) On the SD, the symbol G of the R aileron is in amber:
 - replace the SEC-1 (1CE1) (Ref. AMM TASK 27-94-34-000-001) and (Ref. AMM TASK 27-94-34-400-001).
 - (a) If the fault continues:
 - do a check and repair the wiring from the SEC 1 (1CE1) COM and MON to the terminal block (DSI 17) (Ref. ASM 27-92/27).
- K. During the operational test of the sidestick priority function, with the takeover and priority pushbutton switch pushed:
 - if the red arrow of the SIDE STICK PRIORITY F/O (CAPT) annunciator on panel 130VU (131VU) does not come on:
 - (1) Do the trouble shooting procedure (Ref. TASK 27-95-00-810-834).
 - L. Do the test given in Para. 3.

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TASK 27-96-00-810-802

Operational Test of the THS Actuator Electrical Control not OK

- 1. Possible Causes
- 2. Job Set-up Information
 - A. Referenced Information

| REFERENCE | DESIGNATION |
|----------------------|--|
| AMM 27-96-00-710-022 | Operational Test of the THS Actuator Electrical Control (Activation for BITE Test) |
| AMM 27-96-00-740-001 | BITE Test of the EFCS (Ground Scanning) |

- 3. Fault Confirmation
 - A. Do the Operational Test of the THS Actuator Electrical Control (Ref. AMM TASK 27-96-00-710-022).
- 4. Fault Isolation

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- A. Do the BITE test of the EFCS (Ground Scanning) (Ref. AMM TASK 27-96-00-740-001):
 - refer to 27 ECAM for the related maintenance message,
 - do the related trouble shooting procedure.

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