

TO 1300i-2-27JG-60-2

TECHNICAL MANUAL

JOB GUIDE

ORGANIZATIONAL MAINTENANCE

FLIGHT CONTROLS SPOILERS (27-60-00 AND 27-63-10 THROUGH 27-64-10)

USAF SERIES

300i AIRCRAFT

MCDONNELL DOUGLAS CORPORATION

MILITARY TRANSPORT AIRCRAFT

F33657-81-C-2108

FA8526-21-D-0001

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T-2

1 AUGUST 2024

INSERT LATEST CHANGED PAGES. DESTROY SUPERSEDED PAGES.

LIST OF EFFECTIVE PAGES

NOTE: The portion of the text affected by the changes is indicated by a vertical line in the outer margins of the page. Changes to illustrations are indicated by miniature pointing hands.

Dates of issue for original and changed pages are:

Original 0 1 Aug 24

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 190 CONSISTING OF THE FOLLOWING:

Page No.	* Change No.	Page No.	* Change No.
Title thru T-2	0	2-178 blank	0
A.	0		
B blank	0		
i	0		
ii blank	0		
iii thru v	0		
vi blank	0		
1-1.	0		
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2-1 thru 2-33.	0		
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2-35 thru 2-36	0		
2-37 blank	0		
2-38 thru 2-51	0		
2-52 blank	0		
2-53 thru 2-54	0		
2-55 blank	0		
2-56 thru 2-69	0		
2-70 blank	0		
2-71 thru 2-72	0		
2-73 blank	0		
2-74 thru 2-81	0		
2-82 blank	0		
2-83 thru 2-101	0		
2-102 blank	0		
2-103 thru 2-133.	0		
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*Zero in this column indicates an original page.

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INTRODUCTION

SCOPE.

This manual contains maintenance procedures for the operational checkout, removal, installation, and adjustment of spoilers system components.

MODEL(S) COVERED.

All

ABBREVIATIONS.

The following is a list of non-standard abbreviations used throughout this manual:

EPC	Electrical Power Center
ESD	Electrostatic Discharge
LRU	Line Replaceable Unit
LS	Line Select
MCD	Mission Computer Display
MFD	Multifunction Display
OFP	Operational Flight Program
PLCS	Places
SC/EFC	Spoiler Control/Electronic Flap Computer
WAP	Warning and caution Annunciator Panel

ELECTROSTATIC DISCHARGE SENSITIVE.

When ****ESD**** appears between a paragraph title and paragraph number, the entire paragraph and all subparagraphs shall be considered Electrostatic Discharge (ESD) Sensitive. When ****ESD**** appears between the step number and the step text, the step shall be considered ESD sensitive. Reference DoD-STD-1686, TO 00-25-234, and DoD-HDBK-263.

CHANGE REQUEST.

Recommended changes to this manual shall be submitted in accordance with TO 00-5-1.

300i TO INFORMATION.

General 300i TO/eTO, TO Manager, Supplement and finalized Recommended Change (RC) information can be found in the Enhanced Technical Information Management System (ETIMS), System of Record.

LIST OF TIME COMPLIANCE TECHNICAL ORDERS (TCTO).

This list of TCTO’s contains all current TCTO’s that affect the technical content of text or illustrations found in this manual.

TCTO NUMBER	TITLE	TCTO DATE	APPLICABILITY

SECTION 1

GENERAL INFORMATION (27-60-00)

1-1. GENERAL INFORMATION.

1-2. No general information exists for this manual. All information is considered specific and is listed where applicable.

1-3. GENERAL WARNINGS, CAUTIONS, AND NOTES.

WARNING

All flight control surfaces and thrust reversers shall be clear of personnel and equipment prior to applying or removing hydraulic power. Failure to comply may cause injury to personnel and damage to aircraft.

1-4. All adhesive sealants, sealants, and compounds used in this manual are listed with a primary part number and/or primary specification number. Any suitable substitutes and/or interchangeable adhesive sealants, sealants, and compounds may be used unless otherwise specified. Suitable substitutes and/or interchangeable adhesive sealants, sealants, and compounds are listed in the system peculiar corrosion control manual (Refer to TO 1300i-23, Chapter 1, Section III).

1-5. Proper tube clearances shall be maintained after hydraulic component replacement, where loosening of tube support clamps and/or brackets on interfacing hydraulic lines is necessary to relieve tube-to-fitting insertion and facilitate component removal. Minimum allowable hydraulic tubing clearances may be found in the system's General System (GS) manual (Refer to TO 1300i-2-29GS-00-1, Chapter 2).

SECTION 2

SPOILER CONTROL/ELECTRONIC FLAP COMPUTER (27-63-10)

MASTER INPUT CONDITIONS:

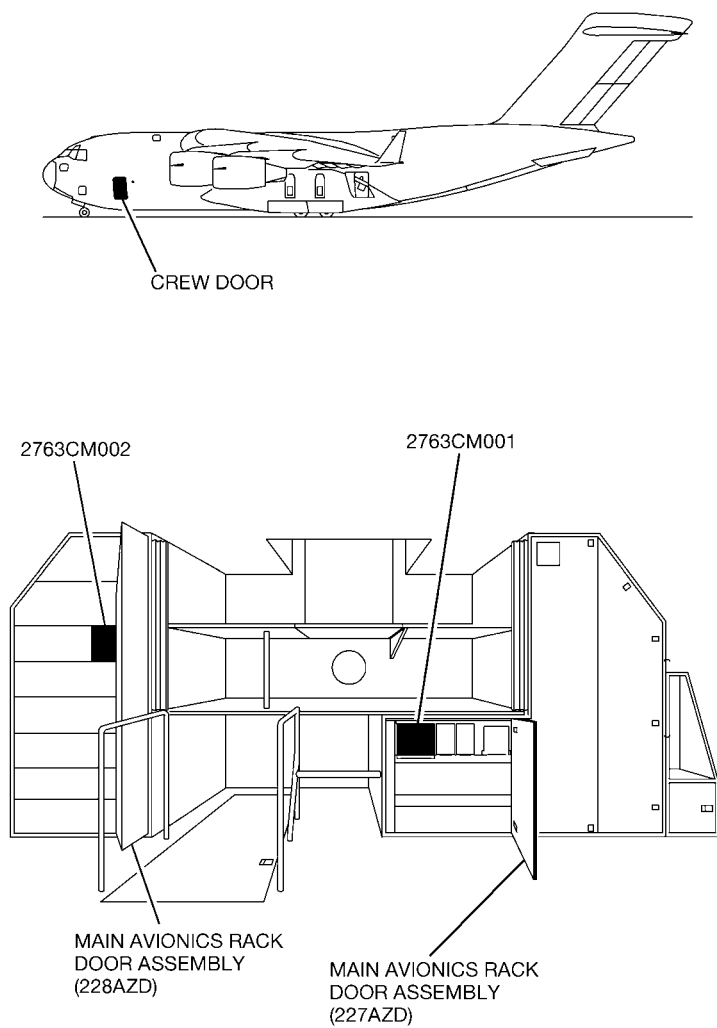
Reference designators:

2763CM001	Spoiler Control/Electronic Flap Computer
2763CM002	Spoiler Control/Electronic Flap Computer

Applicable functions:

- 1 Operational Checkout.
- 2 Removal.
- 3 Installation.
- 5 Adjustment.

Access data:



ICN-88277-G2763001-002-01

SPOILER CONTROL/ELECTRONIC FLAP COMPUTER OPERATIONAL CHECKOUT (27-63-10-1)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

All

Task

All

Additional information:

This procedure consists of the following tasks:

- 1-1. Preparation for spoiler control/electronic flap computer.
- 1-2. Preparation for spoiler control/electronic flap computer for analog backup unit.
- 1-3. Spoiler control/electronic flap computer operational checkout.
- 1-4. Spoiler control/electronic flap computer analog backup unit operational checkout.
- 1-5. Follow-on maintenance for spoiler control/electronic flap computer.
- 1-6. Follow-on maintenance for spoiler control/electronic flap computer analog backup unit.

NOTE

These are typical operational checkout tasks for all spoiler control/electronic flap computers.

Task

All

Additional data:

TO 1300i-2-10JG-60-1

TO 1300i-2-27FI-00-1

TO 1300i-2-27JG-50-1

Task

1-6

1-3,
1-4

1-1

TO 1300i-2-27JG-60-2

	Task
TO 1300i-2-29JG-20-1	1-2, 1-6
TO 1300i-2-31JG-60-1	1-2, 1-6
TO 1300i-2-34FI-00-1	1-3, 1-4
TO 1300i-2-34JG-60-1	1-1, 1-5

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
NA	--

Support equipment:

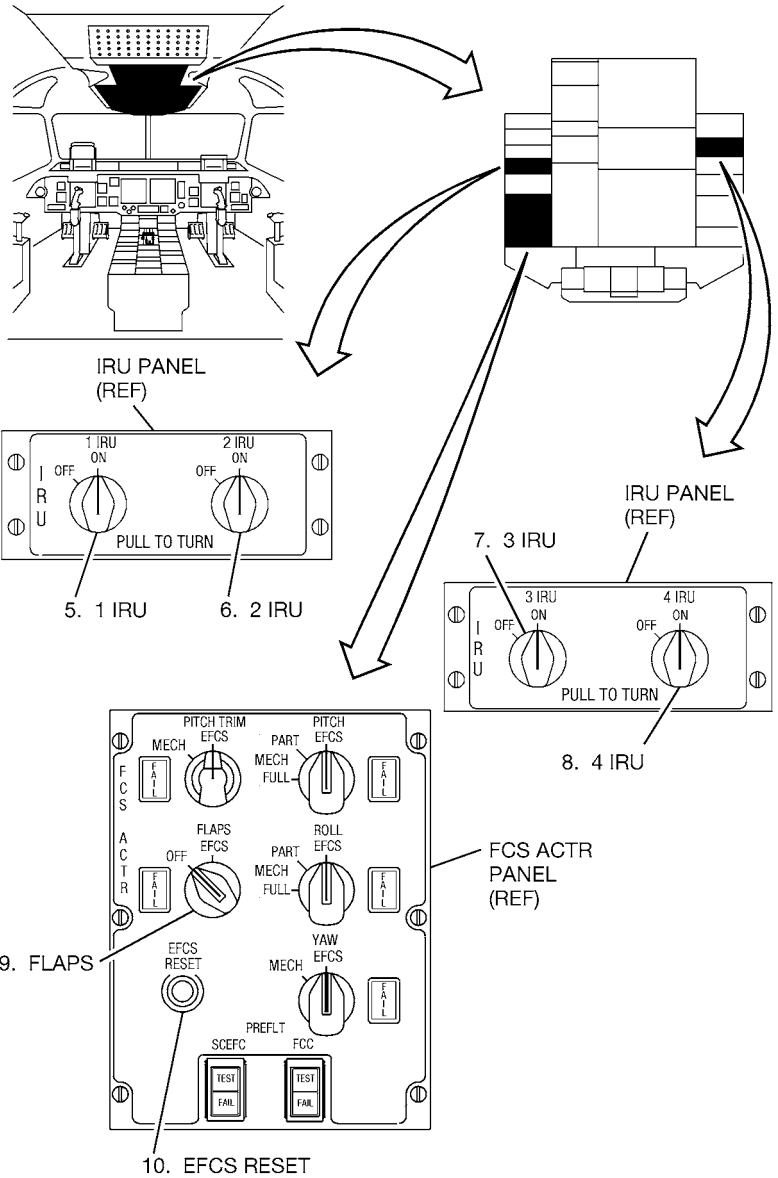
<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

1-1. PREPARATION FOR SPOILER CONTROL/ ELECTRONIC FLAP COMPUTER.

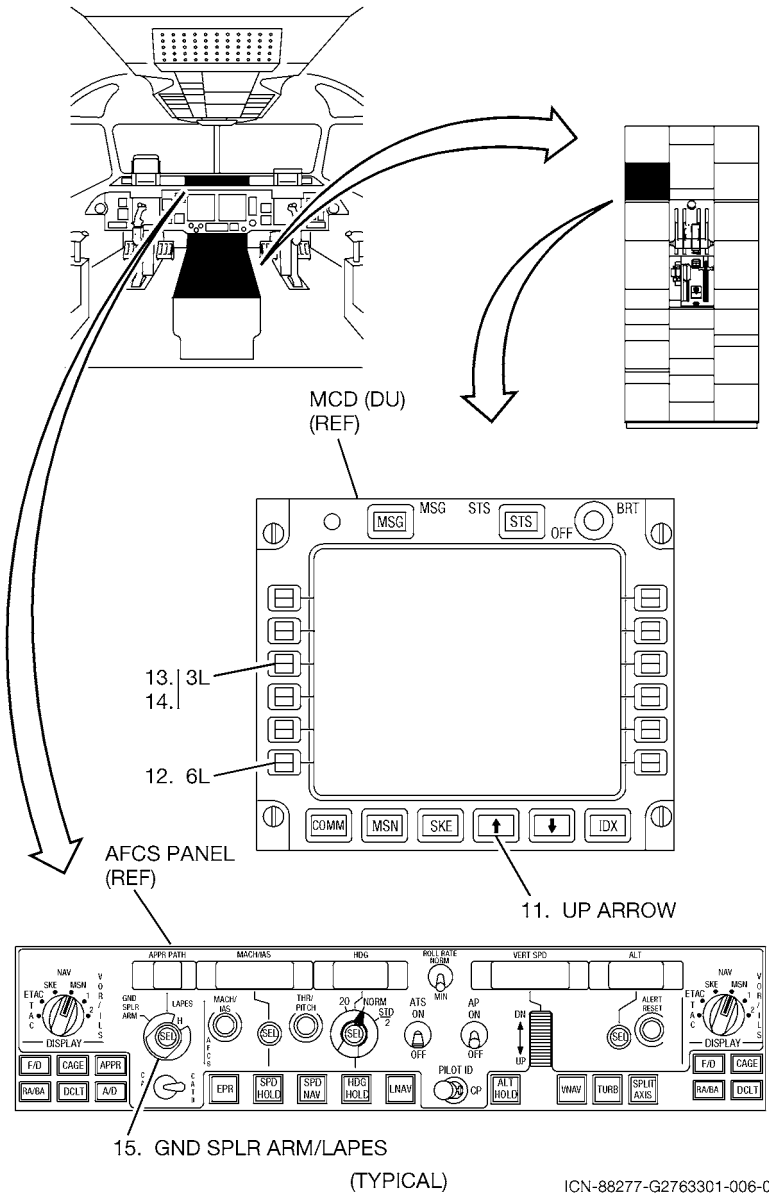
1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.
3. Operate mission computing system (34-62-02, tasks 02-1 and 02-2).
4. Operate flaps system and position flap/slat handle to **UP/RET** (27-50-03, task 03-1).
5. Set **1 IRU** switch on **IRU** panel to **ON**.
6. Set **2 IRU** switch to **ON**.
7. Set **3 IRU** switch on **IRU** panel to **ON**.
8. Set **4 IRU** switch to **ON**.
9. Set **FLAPS** switch on **FCS ACTR** panel to **EFCS**.
10. Press **EFCS RESET** button.



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TO 1300i-2-27JG-60-2

11. Press up arrow key on **MCD (DU)**.
 - **MSN INDEX 2** is displayed.
12. Press 6L Line Select (LS) key.
 - **MAINTENANCE MENU** is displayed.
13. Press 3L LS key.
 - **SCEFC MAINT MENU** is displayed.
14. Press 3L LS key.
 - **SCEFC MAINTENANCE BIT** is displayed.
15. Set **GND SPLR ARM/LAPES** switch on **AFCS** panel to the vertical/off position then **ARM** as commanded by display.
 - **IN PROGRESS** is displayed.
 - **SCEFC MAINTENANCE BIT** is displayed.

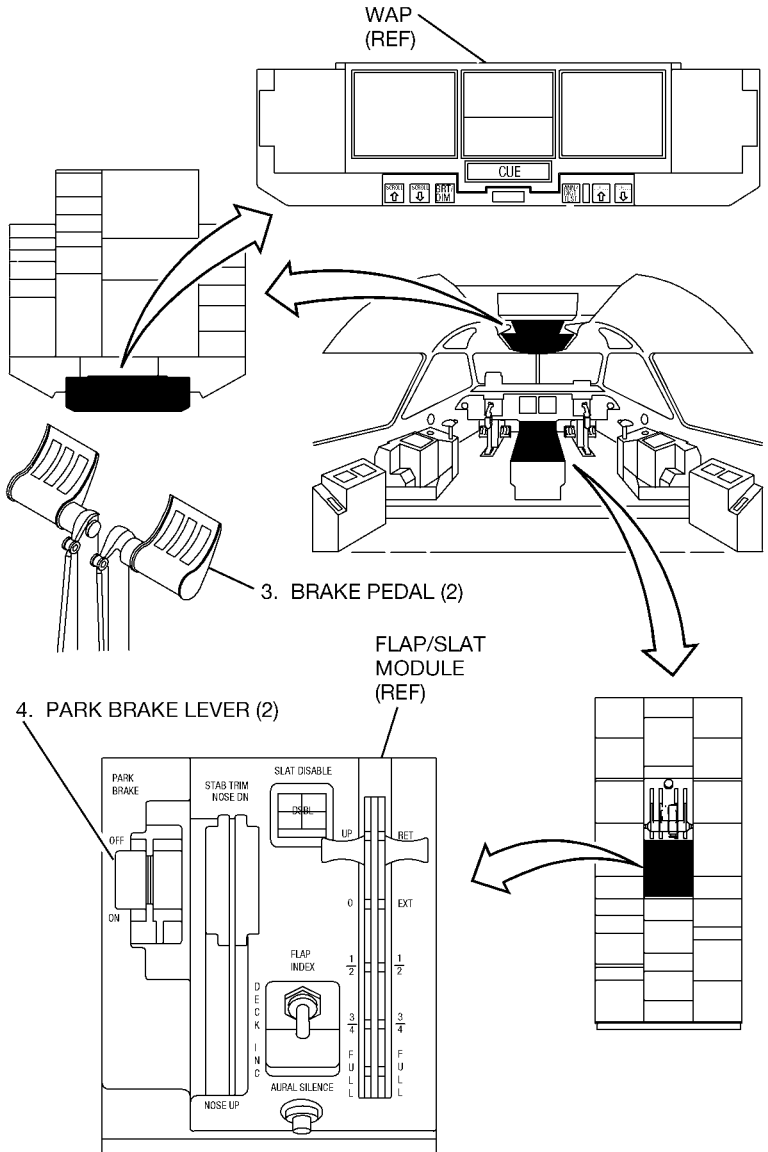


(TYPICAL)

ICN-88277-G2763301-006-01

1-2. PREPARATION FOR SPOILER CONTROL/ ELECTRONIC FLAP COMPUTER FOR ANALOG BACKUP UNIT.

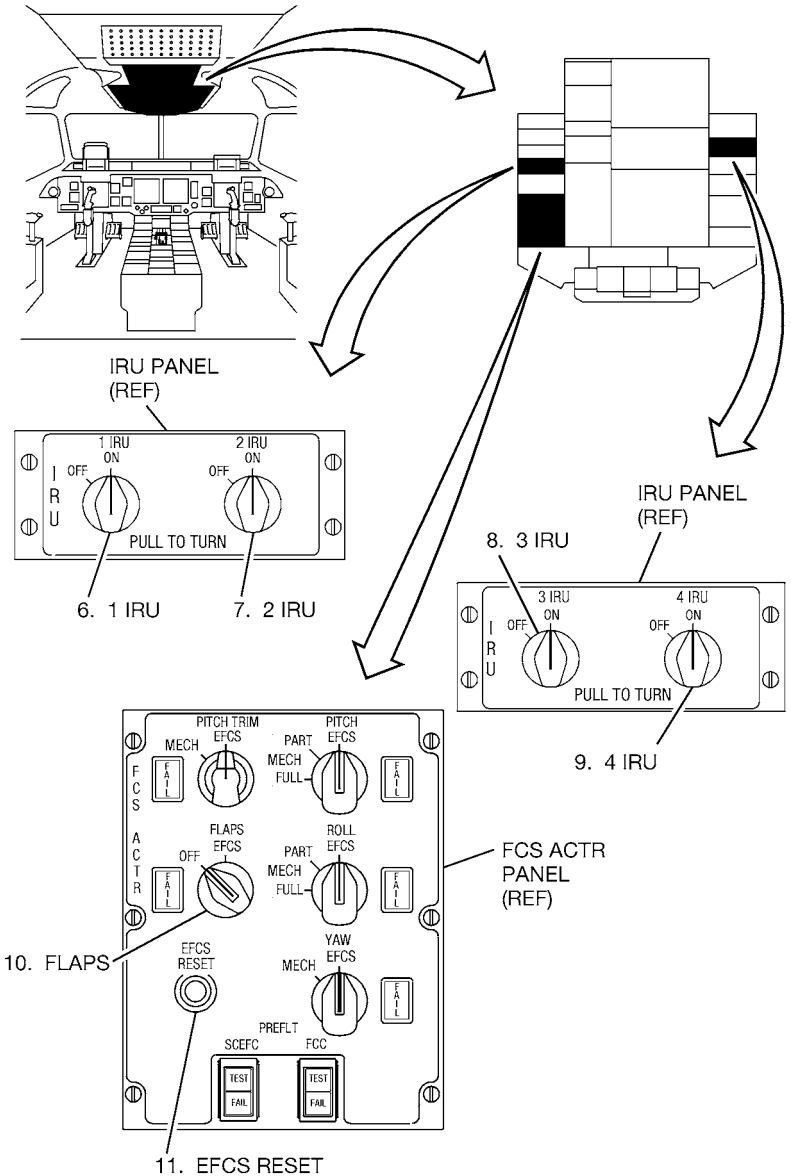
1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.
3. Depress brake pedal.
4. Position **PARK BRAKE** levers on flap/slat module to **ON** and release brake pedals.
 - **PARK BRAKE ON L,R** display light on Warning and caution Annunciator Panel (WAP) comes on.
5. Operate multifunction displays system and select **CFG** format (31-61-02, task 02-1 or 02-2).



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TO 1300i-2-27JG-60-2

6. Set **1 IRU** switch on **IRU** panel to **ON**.
7. Set **2 IRU** switch to **ON**.
8. Set **3 IRU** switch on **IRU** panel to **ON**.
9. Set **4 IRU** switch to **ON**.
10. Set **FLAPS** switch on **FCS ACTR** panel to **EFCS**.
11. Press **EFCS RESET** button.

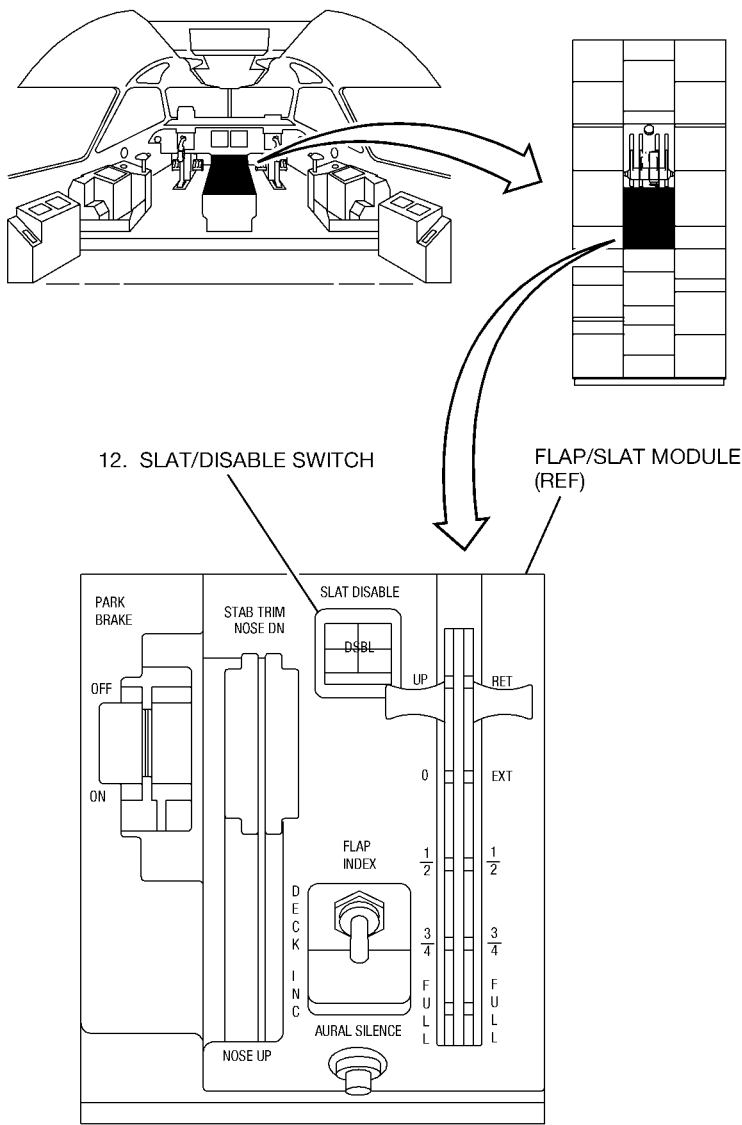


ICN-88277-G2763022-003-01



Auxiliary Power Unit (APU) shall not be operated when slats are in extended position. Failure to comply may cause damage to equipment.

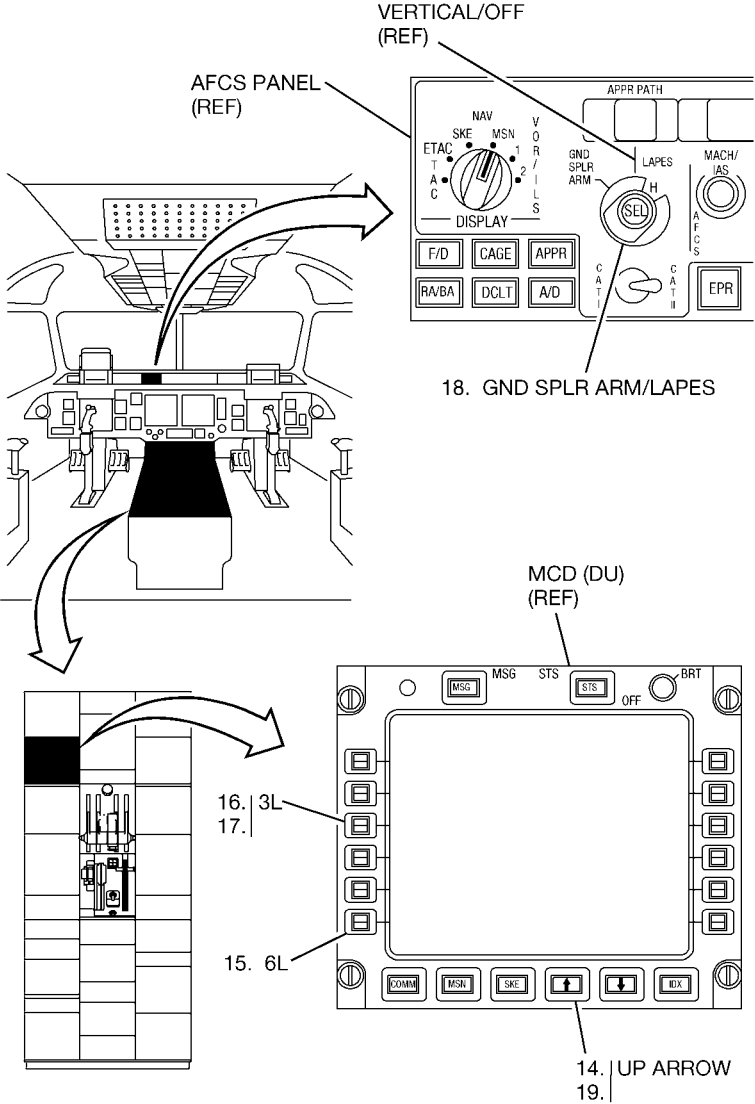
12. Press **SLAT/DISABLE** switch on flap/slat module.
13. Operate auxiliary hydraulic system (29-20-01, task 01-1).



ICN-88277-G2763303-002-01

TO 1300i-2-27JG-60-2

14. Press up arrow key on **MCD (DU)**.
 - **MSN INDEX 2** is displayed.
15. Press 6L Line Select (LS) key.
 - **MAINTENANCE MENU** is displayed.
16. Press 3L LS key.
 - **SCEFC MAINT MENU** is displayed.
17. Press 3L LS key.
 - **SCEFC MAINTENANCE BIT** is displayed.
18. Set **GND SPLR ARM/LAPES** switch on **AFCS** panel to the vertical/off position then **ARM** as commanded by display.
 - **SCEFC MAINTENANCE BIT** is displayed.
 - **IN PROGRESS** is displayed.
19. Press up arrow key on **MCD (DU)**.
 - **SCEFC MAINTENANCE BIT PAGE 2/3** is displayed.



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1-3. SPOILER CONTROL/ELECTRONIC FLAP COMPUTER OPERATIONAL CHECKOUT.

NOTE

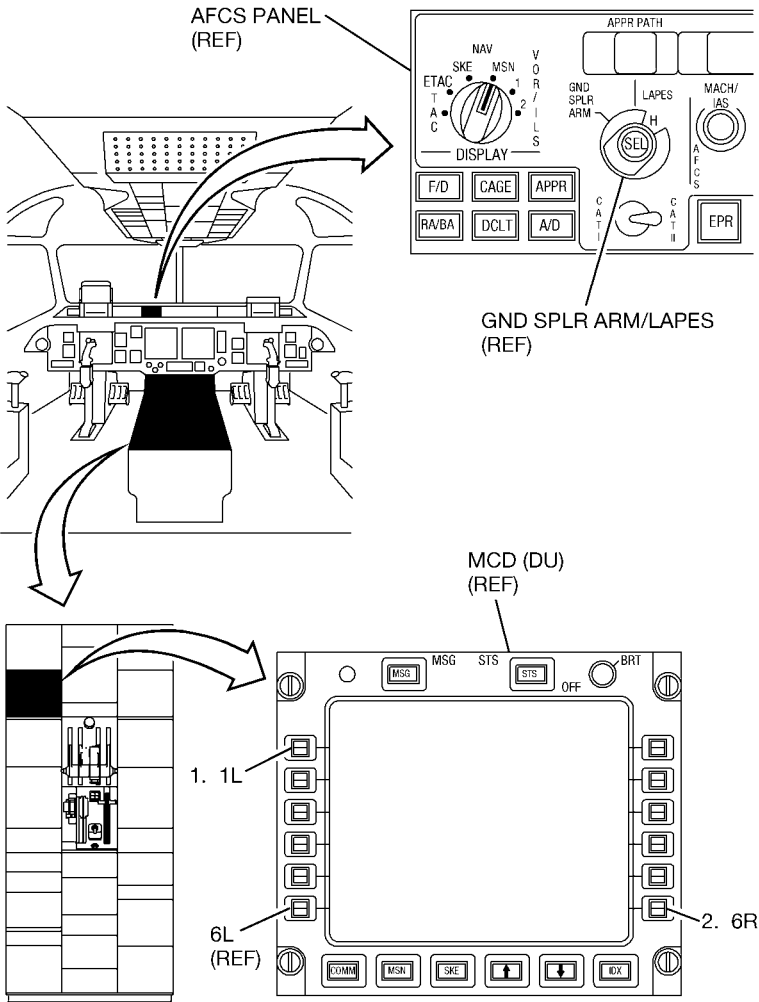
- While **MCD (DU)** displays **IN PROGRESS**, do not touch or move Line Select (LS) keys, control sticks, rudder pedals, or flap/slat handle; if these items are touched or moved, test will abort.
- Test may be aborted at any time by pressing 6L LS key.
- Refer to TO 1300i-2-27FI-00-1, fault chart 27-00 to correct any failure condition.

1. Press 1L LS key on **MCD (DU)**.

- **IN PROGRESS** is displayed (34-62-AA-01, 34-62-AA-02, 34-62-AA-03, 34-62-AA-04, 34-62-AA-05).
- **GND SPLR ARM/LAPES** switch on **AFCS** panel kicks off (34-62-AA-01, 34-62-AA-02, 34-62-AA-03, 34-62-AA-04, 34-62-AA-05).
- **TEST PASSED** is displayed (34-00-MA-00).

2. Press 6R LS key.

- **SCEFC MAINT BIT** is displayed (34-62-AA-01, 34-62-AA-02, 34-62-AA-03, 34-62-AA-04, 34-62-AA-05).



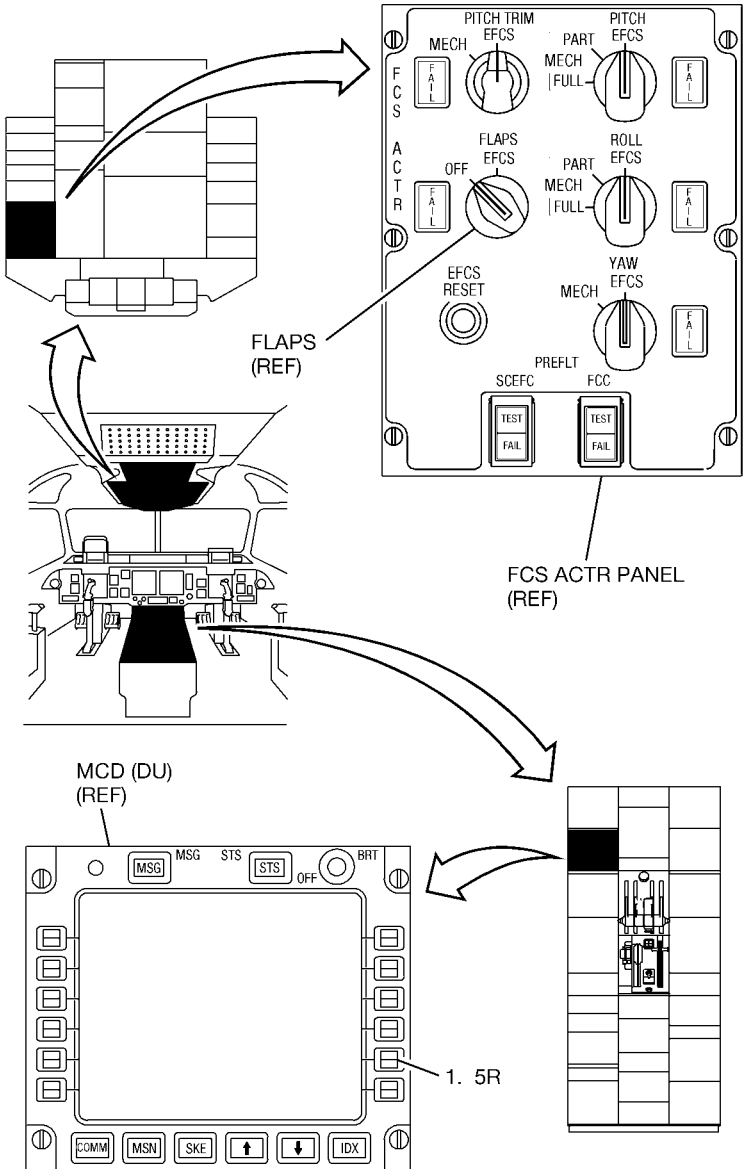
ICN-88277-G2763015-007-01

1-4. SPOILER CONTROL/ELECTRONIC FLAP COMPUTER ANALOG BACKUP UNIT OPERATIONAL CHECKOUT.

NOTE

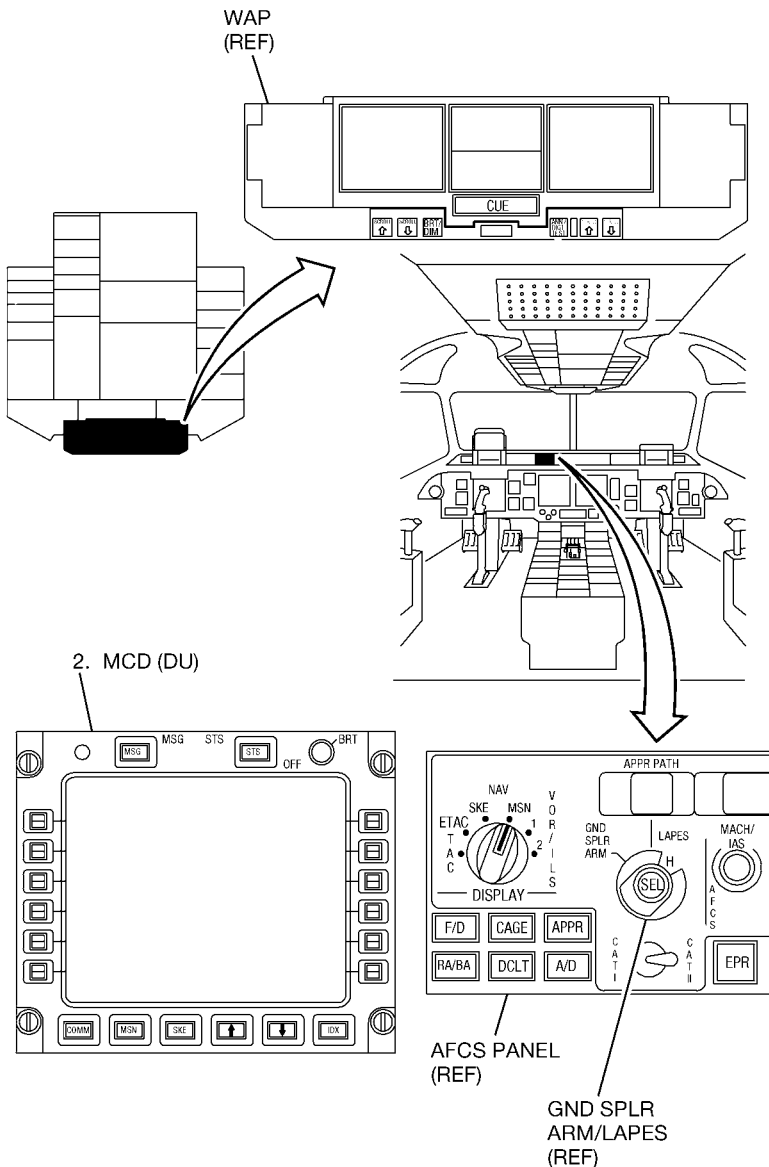
- While **MCD (DU)** displays **IN PROGRESS** do not touch or move Line Select (**LS**) keys, control sticks, rudder pedals, or flap/slat handle; if these items are touched or moved, test will abort.
- Test may be aborted by rotating **FLAPS** switch on **FCS ACTR** panel to **OFF**.
- Refer to TO 1300i-2-27FI-00-1, fault chart 27-00 to correct any failure condition.

1. Press 5R LS key on **MCD (DU)**.



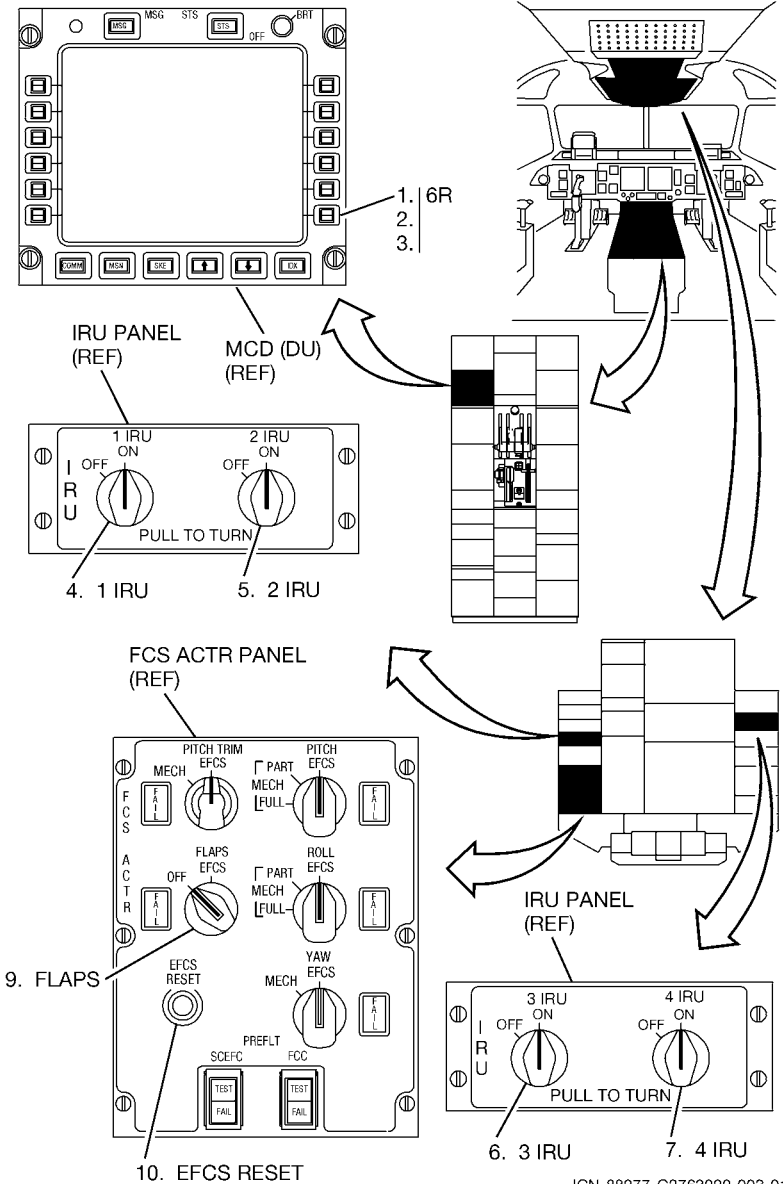
ICN-88277-G2763026-006-01

2. Follow instructions on **MCD (DU)**.
 - **SCEFC MAINTENANCE BIT ABU IN PROGRESS** is displayed (34-62-AA-01, 34-62-AA-02, 34-62-AA-03, 34-62-AA-04, 34-62-AA-05).
 - **TEST PASSED** is displayed (34-00-MA-00).



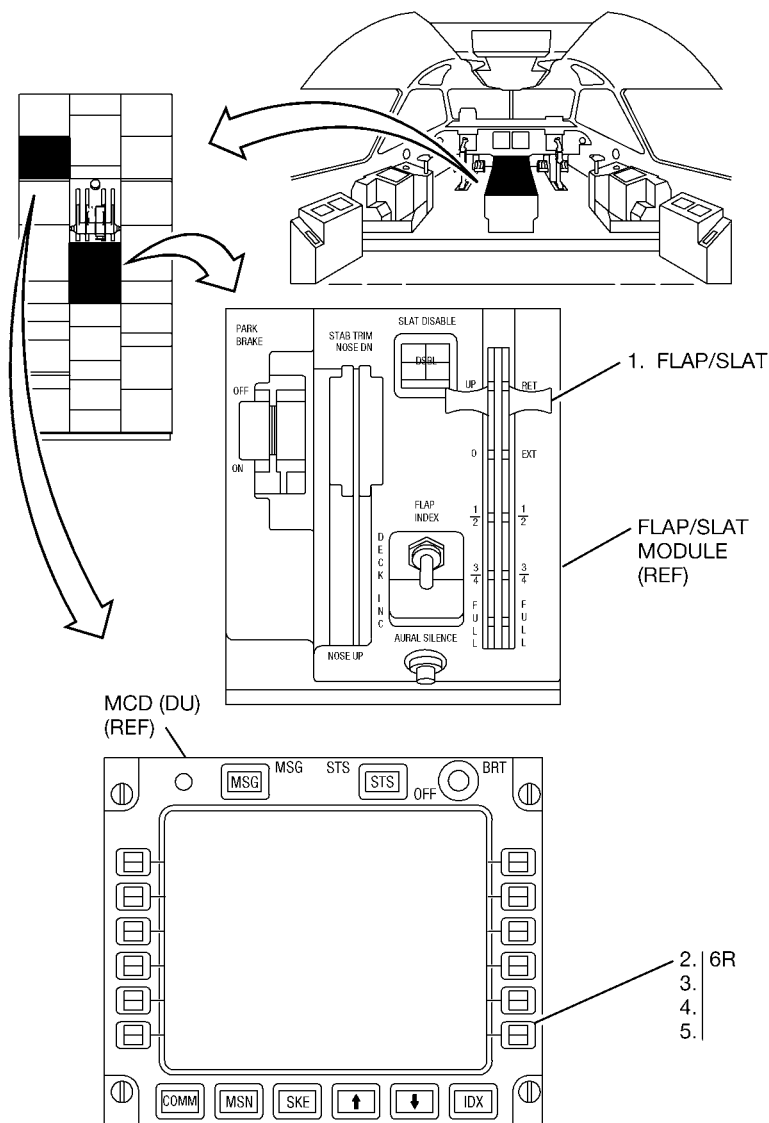
1-5. FOLLOW-ON MAINTENANCE FOR SPOILER CONTROL/ELECTRONIC FLAP COMPUTER.

1. Press 6R Line Select (LS) key on **MCD (DU)**.
 - **SCEFC MAINT MENU** is displayed.
2. Press 6R LS key.
 - **MAINTENANCE MENU** is displayed.
3. Press 6R LS key.
 - **MSN INDEX 2** is displayed.
4. Set **1 IRU** switch on **IRU** panel to **OFF**.
5. Set **2 IRU** switch to **OFF**.
6. Set **3 IRU** switch on **IRU** panel to **OFF**.
7. Set **4 IRU** switch to **OFF**.
8. Shutdown mission computing system (34-62-02, task 02-3).
9. Set **FLAPS** switch on **FCS ACTR** panel to **OFF**.
10. Press **EFCS RESET** button.



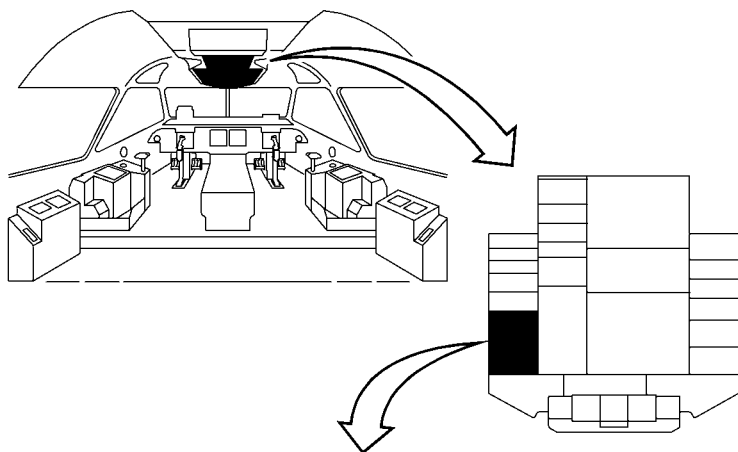
1-6. FOLLOW-ON MAINTENANCE FOR SPOILER CONTROL/ELECTRONIC FLAP COMPUTER ANALOG BACKUP UNIT.

1. $\langle \text{AA} \rangle \rightarrow \langle \text{FW} \rangle$ Position flap/slat handle on flap/slat module to **UP/RET**.
1. $\langle \text{FX} \rangle \rightarrow$ No action required.
2. Press 6R Line Select (LS) key on **MCD (DU)**.
 - **SCEFC MAINTENANCE BIT** is displayed.
3. Press 6R LS key.
 - **SCEFC MAINT MENU** is displayed.
4. Press 6R LS key.
 - **MAINTENANCE MENU** is displayed.
5. Press 6R LS key.
 - **MSN INDEX 2** is displayed.

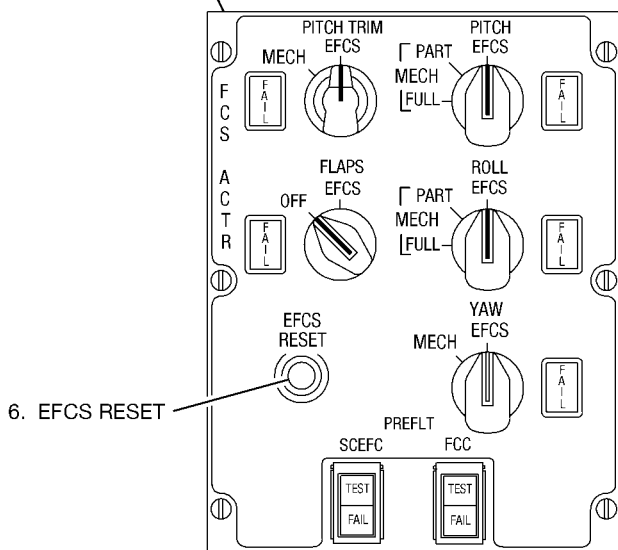


ICN-88277-G2763027-004-01

6. Press **EFCS RESET** button on **FCS ACTR** panel.
 - Flaps are fully retracted on Multifunction Display (MFD) **CFG** page.
7. Shutdown auxiliary hydraulic system (29-20-01, task 01-2).



FCS ACTR PANEL
(REF)



ICN-88277-G2763310-001-01

8. Press **SLAT/DISABLE** switch on flat/slat module.
 - **DSBL** light goes off.
 - **SLAT OVERRIDE** on Warning and caution Annunciator Panel (WAP) goes off.

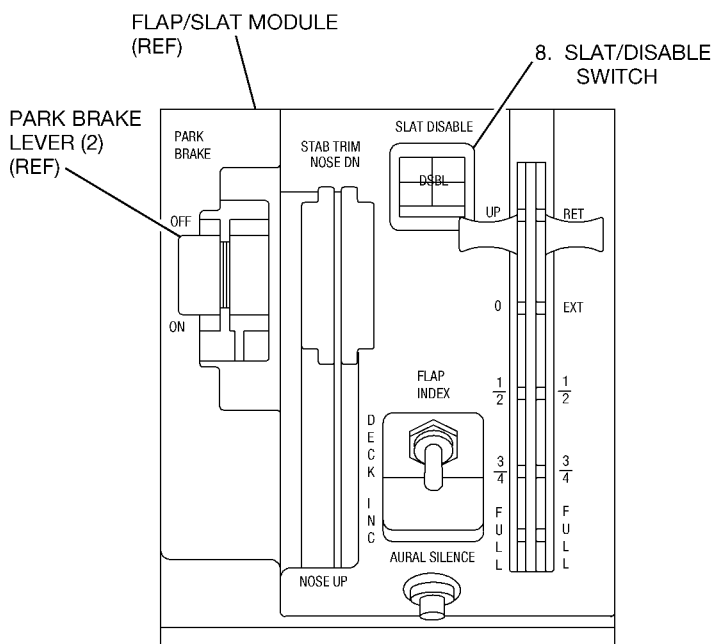
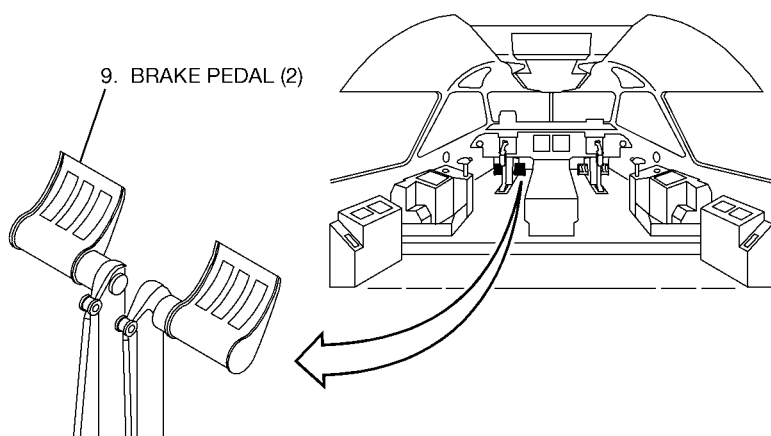
WARNING

Verify personnel are clear of Nose Landing Gear (NLG) and Main Landing Gear (MLG) prior to releasing parking brakes. Failure to comply may cause injury to personnel or damage to aircraft.

CAUTION

Prevent **PARK BRAKE** levers from moving to the forward position on their own when brake pedals are released. Failure to comply may cause damage to aircraft.

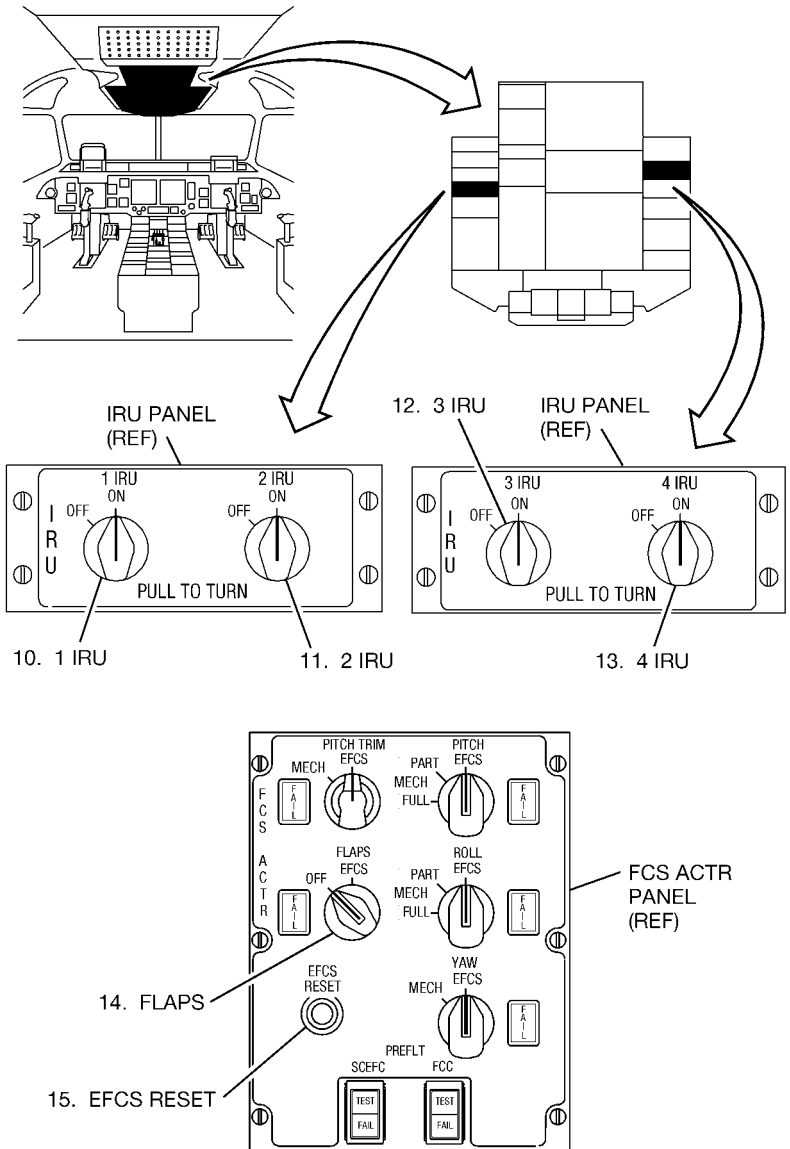
9. While supporting **PARK BRAKE** levers, press and release brake pedals.
 - **PARK BRAKE** levers move to **OFF**.
 - **PARK BRAKE ON L,R** on WAP goes off.



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10. Set **1 IRU** switch on **IRU** panel to **OFF**.
11. Set **2 IRU** switch to **OFF**.
12. Set **3 IRU** switch on **IRU** panel to **OFF**.
13. Set **4 IRU** switch to **OFF**.
14. Set **FLAPS** switch on **FCS ACTR** panel to **OFF**.
15. Press **EFCS RESET** button.
16. Shutdown multifunction displays system (31-61-02, task 02-3 or 02-4).
17. Disconnect external electrical power (10-61-01, task 01-2).



ICN-88277-G2763029-004-01

SPOILER CONTROL/ELECTRONIC FLAP COMPUTER REMOVAL (27-63-10-2)

FUNCTIONAL INPUT CONDITIONS:

Applicability:

All

Task

All

Additional information:

This procedure consists of the following tasks:

- 2-1. Preparation for 2763CM001.
- 2-2. Preparation for 2763CM002.
- 2-3. Removal.

NOTE

This is a typical removal task for all spoiler control/
electronic flap computers.

Task

All

Additional data:

AFI 21-101

Task

2-1,
2-2

TO 00-20-1

2-1,
2-2

TO 1300i-2-00GV-00-1

2-1,
2-2

Personnel recommended:

One

Task

All

Safety conditions:

NA

Task

--

Support equipment:

Nomenclature

PN

Specification

Qty

Task

NA

--

--

--

--

Supplies:

Nomenclature

PN

Specification

Qty

Task

NA

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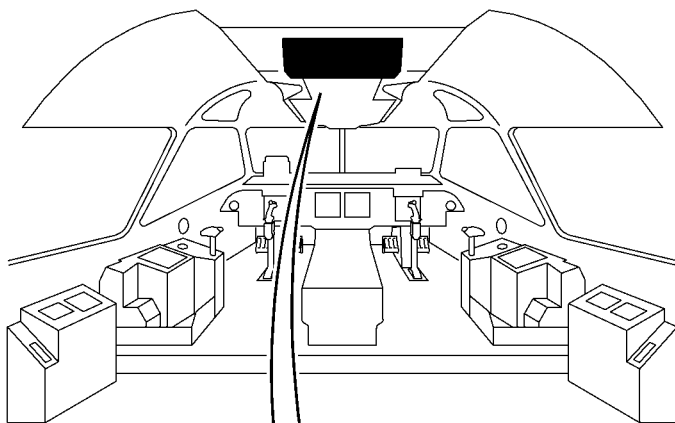
2-1. PREPARATION FOR 2763CM001.

1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.

WARNING

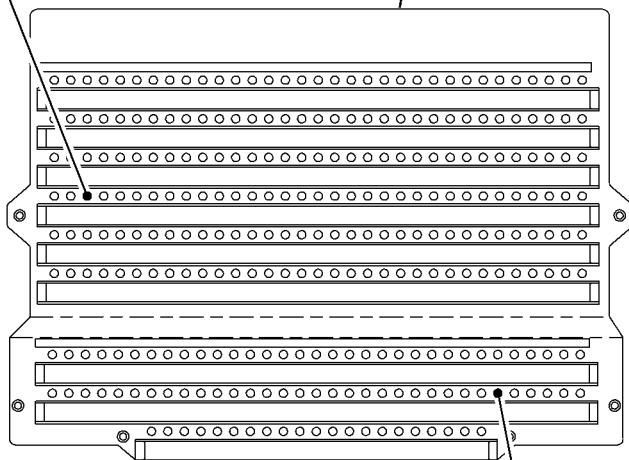
Warning tags shall be attached to all opened circuit breakers as directed by the technical order and an applicable warning statement shall be entered in the AFTO Form/IMT 781A, IAW TO 00-20-1, AFI 21-101 and TO 1300i-2-00GV-00-1, Chapter 5 anytime exiting cockpit circuit breaker area before task completion or there is a delay in maintenance where task cannot be fully accomplished. Failure to comply may cause injury to personnel or damage to aircraft.

3. Open **SCEFC 1** circuit breaker on overhead circuit breaker panel, row **H**, column **28**.
4. Open **SCEFC EMERG 1** circuit breaker on overhead circuit breaker panel, row **D**, column **3**.



OVERHEAD CIRCUIT
BREAKER PANEL
(REF)

4. SCEFC EMERG 1

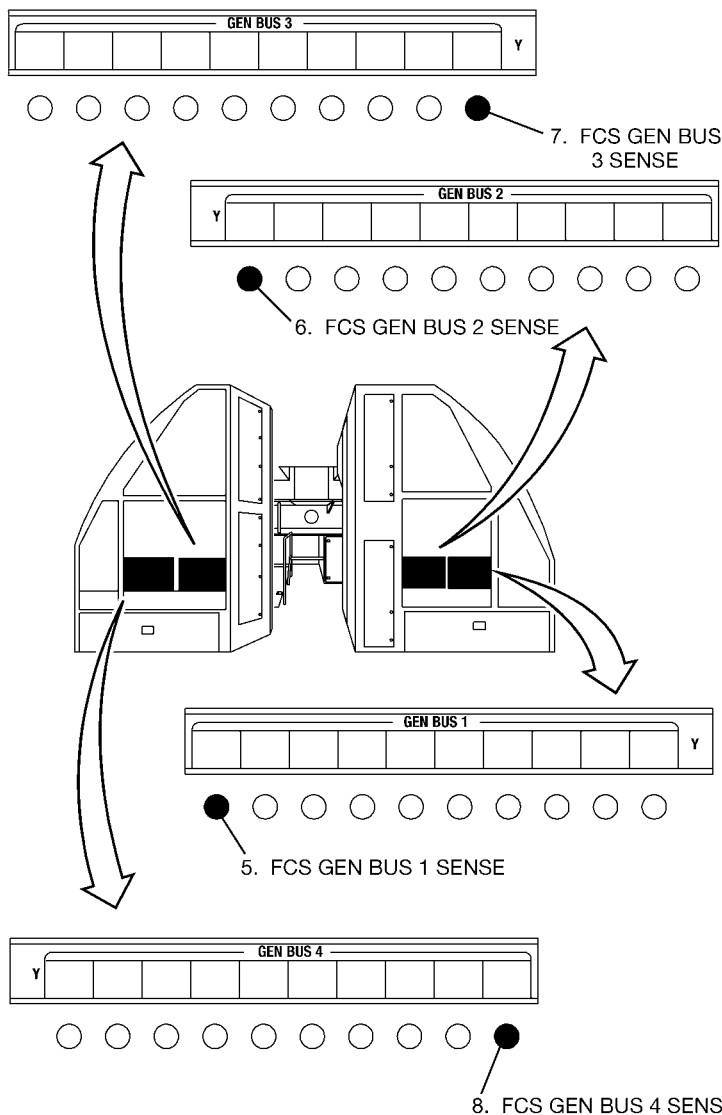


3. SCEFC 1

ICN-88277-G2763006-004-01

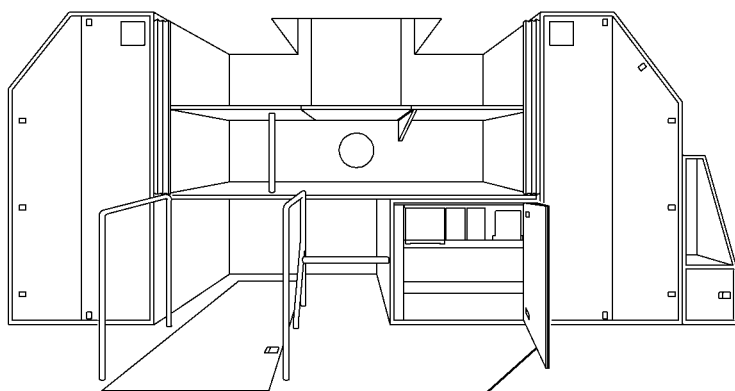
TO 1300i-2-27JG-60-2

5. Open **FCS GEN BUS 1 SENSE** circuit breaker on Electrical Power Center (EPC), row **Y**, column **55**.
6. Open **FCS GEN BUS 2 SENSE** circuit breaker on EPC, row **Y**, column **40**.
7. Open **FCS GEN BUS 3 SENSE** circuit breaker on EPC, row **Y**, column **39**.
8. Open **FCS GEN BUS 4 SENSE** circuit breaker on EPC, row **Y**, column **24**.



ICN-88277-G2763030-002-01

9. Unlatch and open main avionics rack door assembly (227AZD).



9. MAIN AVIONICS RACK
DOOR ASSEMBLY

ICN-88277-G2763007-002-01

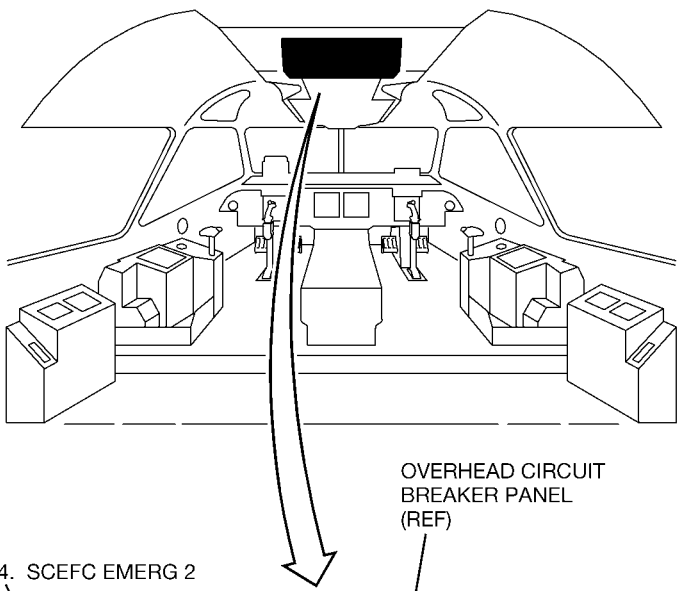
2-2. PREPARATION FOR 2763CM002.

1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.

WARNING

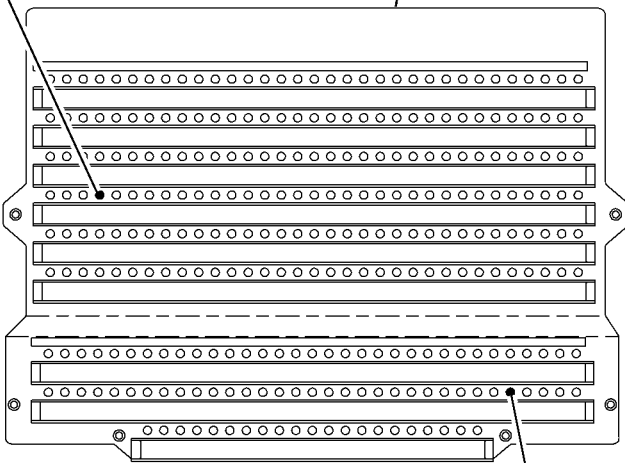
Warning tags shall be attached to all opened circuit breakers as directed by the technical order and an applicable warning statement shall be entered in the AFTO Form/IMT 781A, IAW TO 00-20-1, AFI 21-101 and TO 1300i-2-00GV-00-1, Chapter 5 anytime exiting cockpit circuit breaker area before task completion or there is a delay in maintenance where task cannot be fully accomplished. Failure to comply may cause injury to personnel or damage to aircraft.

3. Open **SCEFC 2** circuit breaker on overhead circuit breaker panel, row **H**, column **29**.
4. Open **SCEFC EMERG 2** circuit breaker on overhead circuit breaker panel, row **D**, column **4**.



OVERHEAD CIRCUIT
BREAKER PANEL
(REF)

4. SCEFC EMERG 2

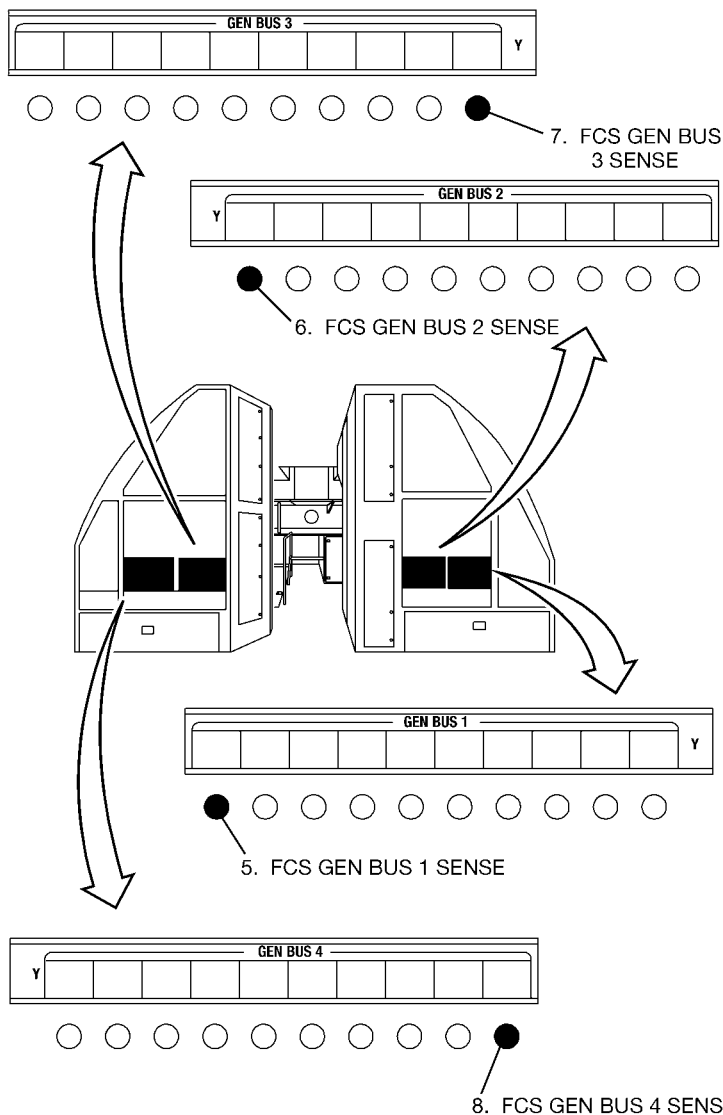


3. SCEFC 2

ICN-88277-G2763002-005-01

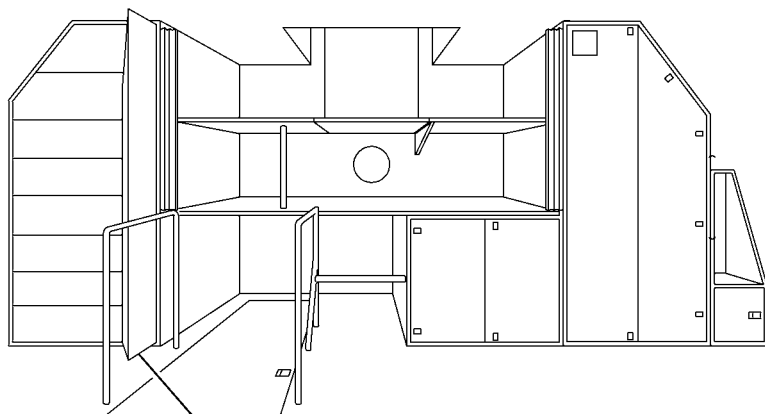
TO 1300i-2-27JG-60-2

5. Open **FCS GEN BUS 1 SENSE** circuit breaker on Electrical Power Center (EPC), row **Y**, column **55**.
6. Open **FCS GEN BUS 2 SENSE** circuit breaker on EPC, row **Y**, column **40**.
7. Open **FCS GEN BUS 3 SENSE** circuit breaker on EPC, row **Y**, column **39**.
8. Open **FCS GEN BUS 4 SENSE** circuit breaker on EPC, row **Y**, column **24**.



ICN-88277-G2763031-002-01

9. Unlatch and open main avionics rack door assembly (228AZD).

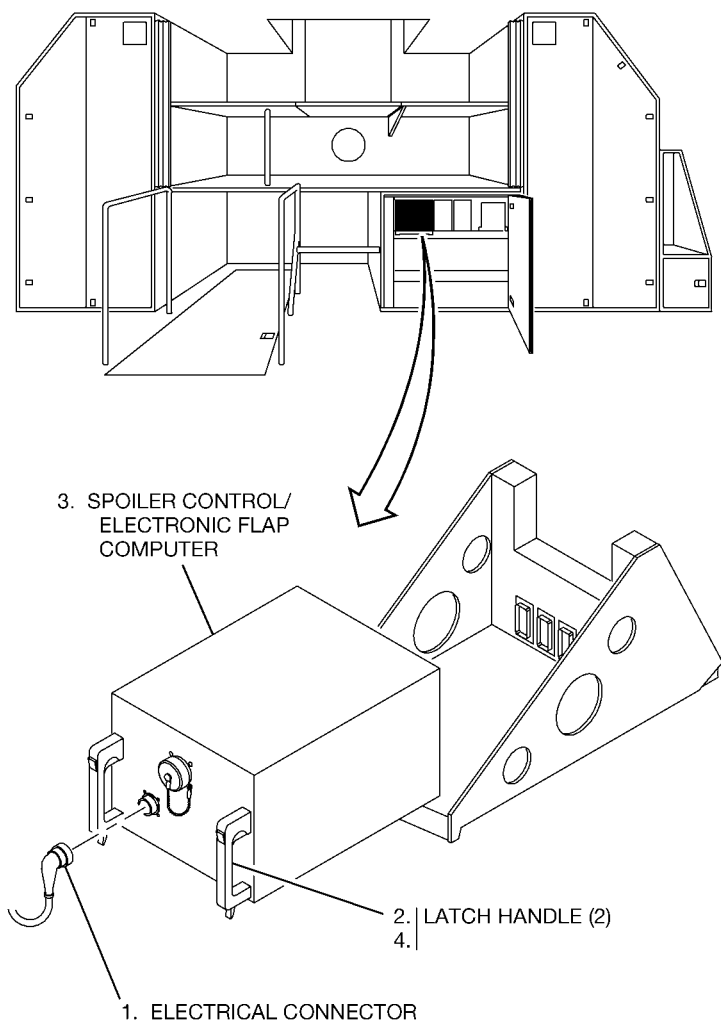


9. MAIN AVIONICS RACK
DOOR ASSEMBLY

ICN-88277-G2763008-002-01

2-3. REMOVAL.

1. ****ESD**** Disconnect electrical connector.
2. Release latch handles.
3. ****ESD**** Remove spoiler control/electronic flap computer.
4. Close latch handles.



(TYPICAL)

ICN-88277-G2763003-003-01

**SPOILER CONTROL/ELECTRONIC FLAP
COMPUTER INSTALLATION
(27-63-10-3)**

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following tasks:

- 3-1. Installation.
- 3-2. Follow-on maintenance for 2763CM001.
- 3-3. Follow-on maintenance for 2763CM002.

NOTE	Task
-------------	-------------

This is a typical installation task for all spoiler control/ electronic flap computers.	All
--	-----

Additional data:	Task
TO 1300i-2-40JG-00-2	3-2, 3-3
TO 1300i-8-1	3-2, 3-3

Personnel recommended:	Task
One	All

Safety conditions:	Task
NA	--

Support equipment:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

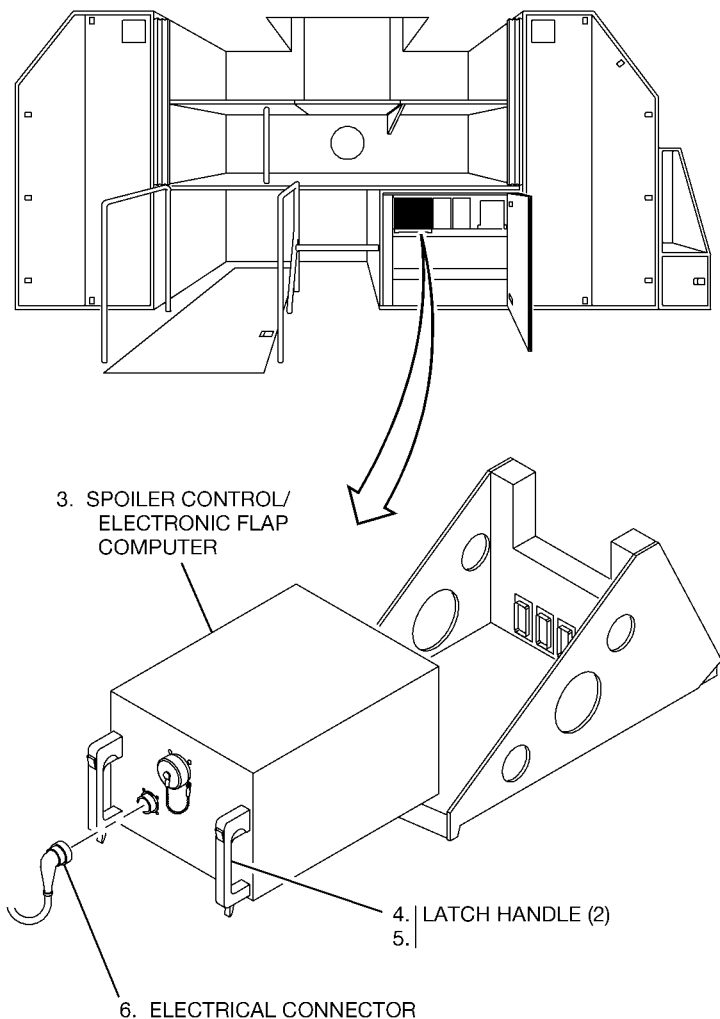
Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

3-1. INSTALLATION.

- 1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
- 2. Review task "Functional Input Conditions" page for task specific safety conditions.
- 3. ****ESD**** Position spoiler control/electronic flap computer on mount.
- 4. Open latch handles.
- 5. Engage mount and close latch handles.
- 6. ****ESD**** Connect electrical connector as follows:

COMPUTER REF DES	CONNECTOR REF DES
2763CM001	2763PP011
2763CM002	2763PP012

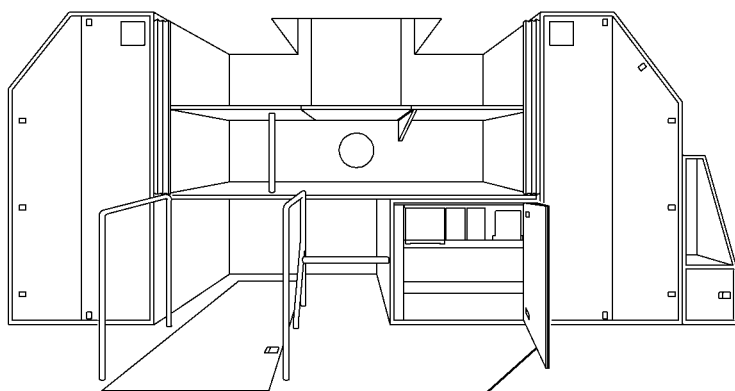


(TYPICAL)

ICN-88277-G2763004-003-01

**3-2. FOLLOW-ON MAINTENANCE FOR
2763CM001.**

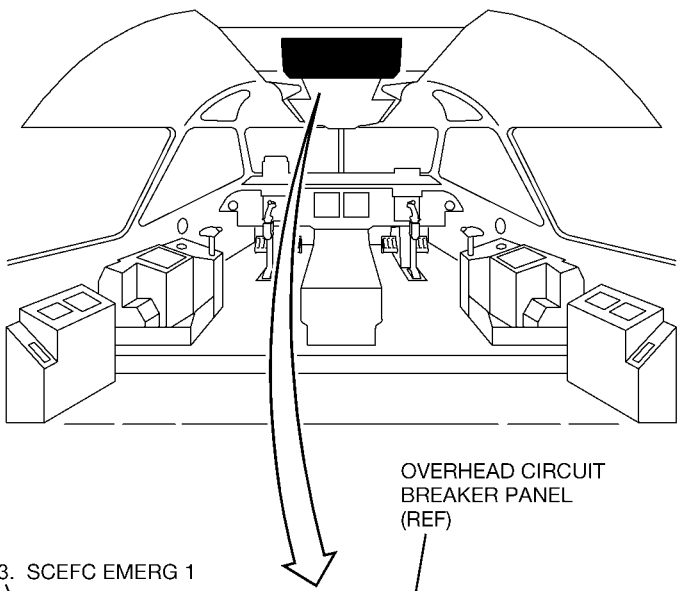
1. Close and latch main avionics rack door assembly (227AZD).



1. MAIN AVIONICS RACK
DOOR ASSEMBLY

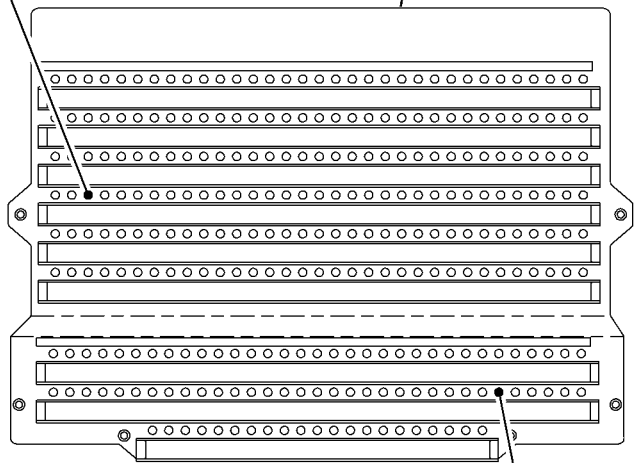
TO 1300i-2-27JG-60-2

2. Close **SCEFC 1** circuit breaker on overhead circuit breaker panel, row **H**, column **28**.
3. Close **SCEFC EMERG 1** circuit breaker on overhead circuit breaker panel, row **D**, column **3**.



OVERHEAD CIRCUIT
BREAKER PANEL
(REF)

3. SCEFC EMERG 1

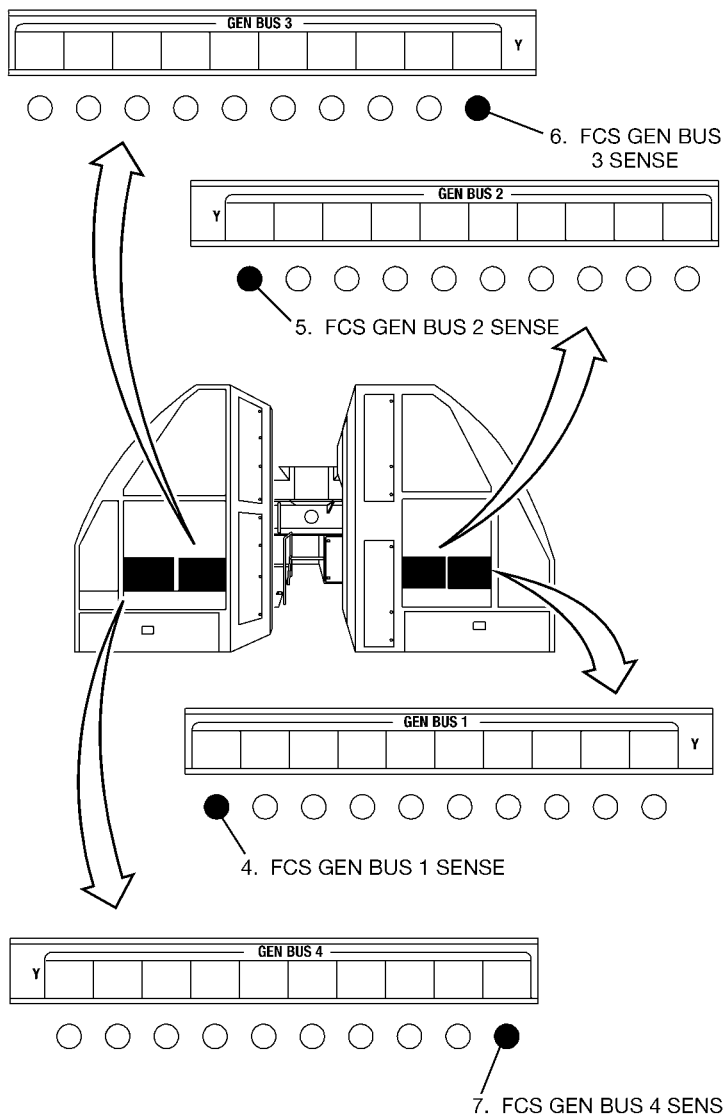


2. SCEFC 1

ICN-88277-G2763010-004-01

TO 1300i-2-27JG-60-2

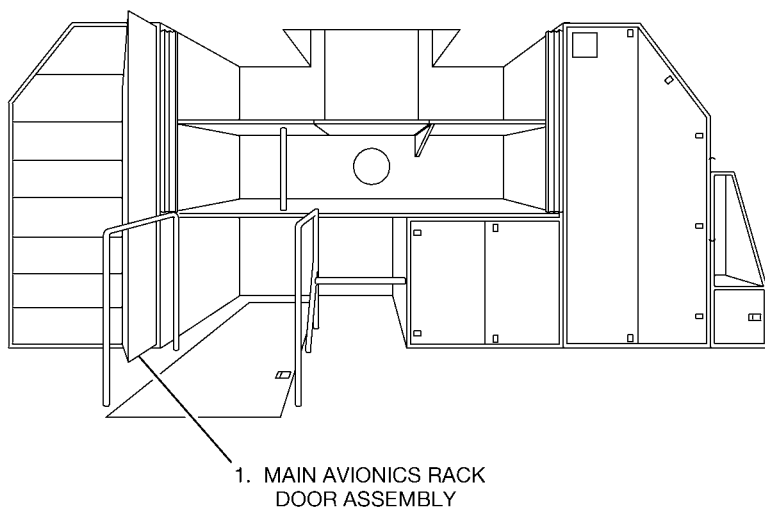
4. Close **FCS GEN BUS 1 SENSE** circuit breaker on Electrical Power Center (EPC), row **Y**, column **55**.
5. Close **FCS GEN BUS 2 SENSE** circuit breaker on EPC, row **Y**, column **40**.
6. Close **FCS GEN BUS 3 SENSE** circuit breaker on EPC, row **Y**, column **39**.
7. Close **FCS GEN BUS 4 SENSE** circuit breaker on EPC, row **Y**, column **24**.
8. Perform Operational Flight Program (OFP) version identification (TO 1300i-8-1, Chapter 1).
 - Refer to TO 1300i-8-1, Chapter 1 for Spoiler Control/Electronic Flap Computer (SC/EFC) OFP software version.
 - When OFP software version number does not match TO 1300i-8-1, Chapter 1, perform SC/EFC OFP loading (40-00-05, task 05-11).
9. Deleted.
10. Perform vanilla box labeling (40-00-05, task 05-6).
11. Perform adjustment (task 5-1).
12. Perform operational checkout (tasks 1-1, 1-3, and 1-5).



ICN-88277-G2763032-002-01

**3-3. FOLLOW-ON MAINTENANCE FOR
2763CM002.**

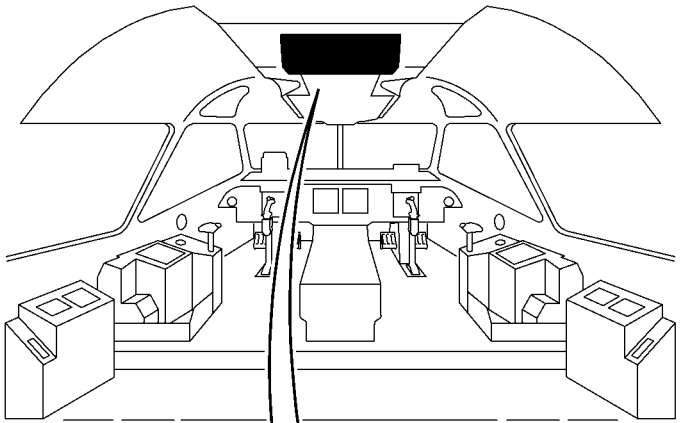
1. Close and latch main avionics rack door assembly (228AZD).



ICN-88277-G2763011-002-01

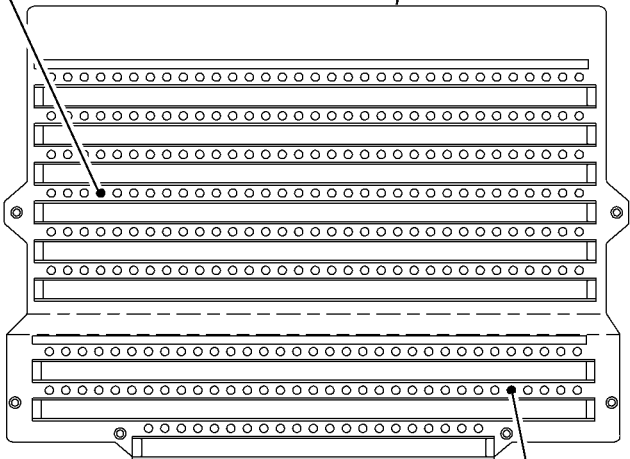
TO 1300i-2-27JG-60-2

2. Close **SCEFC 2** circuit breaker on overhead circuit breaker panel, row **H**, column **29**.
3. Close **SCEFC EMERG 2** circuit breaker on overhead circuit breaker panel, row **D**, column **4**.



OVERHEAD CIRCUIT
BREAKER PANEL
(REF)

3. SCEFC EMERG 2

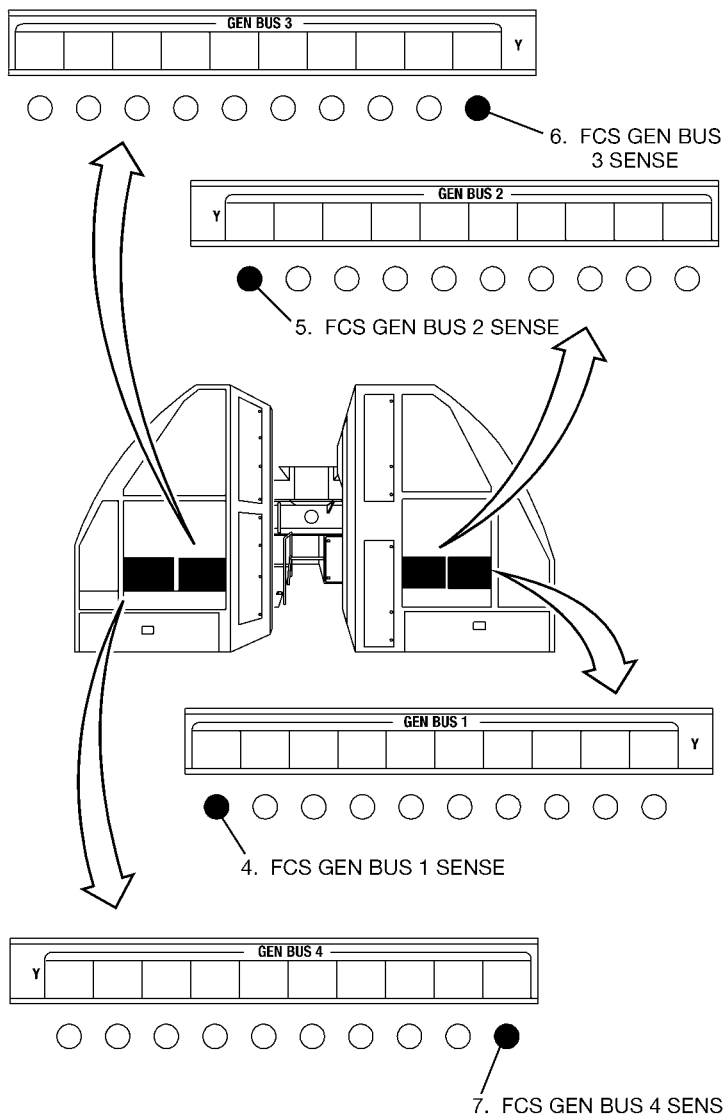


2. SCEFC 2

ICN-88277-G2763005-004-01

TO 1300i-2-27JG-60-2

4. Close **FCS GEN BUS 1 SENSE** circuit breaker on Electrical Power Center (EPC), row **Y**, column **55**.
5. Close **FCS GEN BUS 2 SENSE** circuit breaker on EPC, row **Y**, column **40**.
6. Close **FCS GEN BUS 3 SENSE** circuit breaker on EPC, row **Y**, column **39**.
7. Close **FCS GEN BUS 4 SENSE** circuit breaker on EPC, row **Y**, column **24**.
8. Perform Operational Flight Program (OFP) version identification (TO 1300i-8-1, Chapter 1).
 - Refer to TO 1300i-8-1, Chapter 1 for Spoiler Control/Electronic Flap Computer (SC/EFC) OFP software version.
 - When OFP software version number does not match TO 1300i-8-1, Chapter 1, perform SC/EFC OFP loading (40-00-05, task 05-11).
9. Deleted.
10. Perform vanilla box labeling (40-00-05, task 05-6).
11. Perform adjustment (task 5-1).
12. Perform operational checkout (tasks 1-1, 1-3, and 1-5).



ICN-88277-G2763033-002-01

**SPOILER CONTROL/ELECTRONIC FLAP
COMPUTER ADJUSTMENT
(27-63-10-5)**

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following task:

5-1. Adjustment.

NOTE

	Task
• This is a typical adjustment task for all spoiler control/electronic flap computers.	All
• This adjustment task initializes spoiler control/electronic flap computers.	All

Additional data:

	Task
TO 1300i-2-27JG-00-1	All
TO 1300i-2-34JG-60-1	All

Personnel recommended:

	Task
One	All

Safety conditions:

	Task
NA	--

Support equipment:

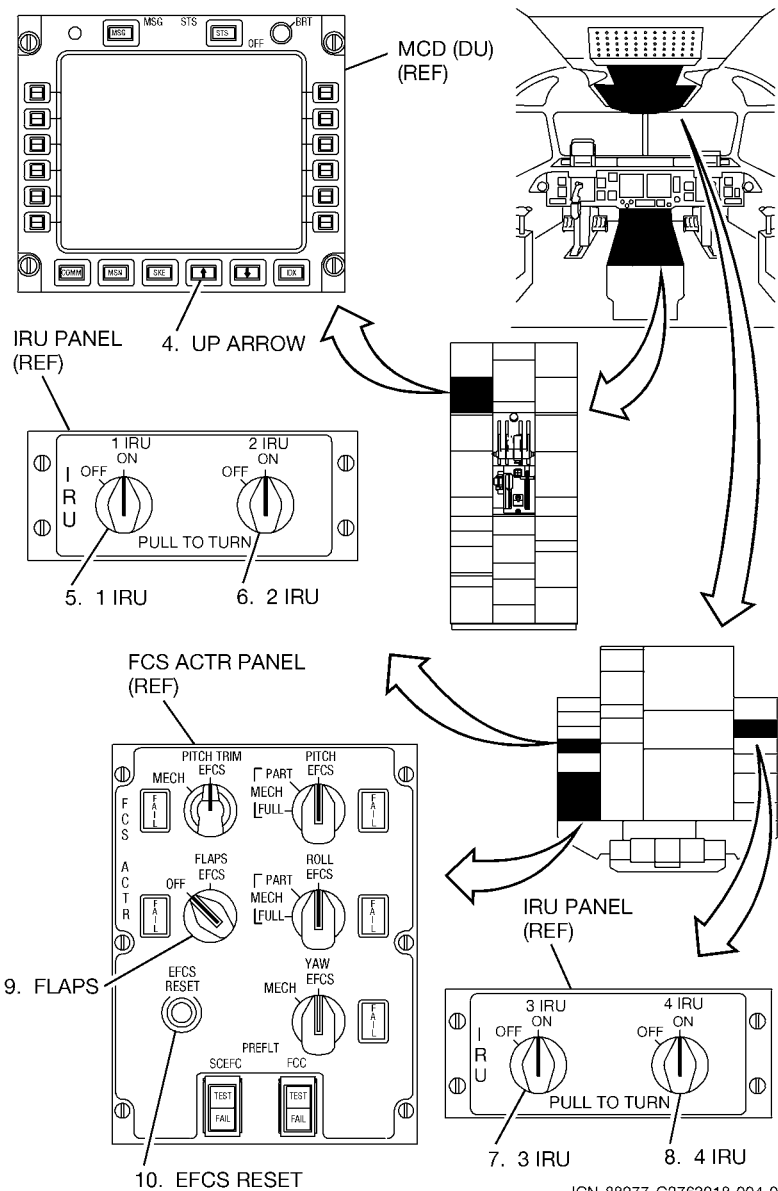
<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

5-1. ADJUSTMENT.

1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.
3. Operate mission computing system (34-62-02, tasks 02-1 and 02-2).
4. Press up arrow key on **MCD (DU)**.
 - **MSN INDEX 2** is displayed.
5. Set **1 IRU** switch on **IRU** panel to **ON**.
6. Set **2 IRU** switch to **ON**.
7. Set **3 IRU** switch on **IRU** panel to **ON**.
8. Set **4 IRU** switch to **ON**.
9. Set **FLAPS** switch on **FCS ACTR** panel to **EFCS**.
10. Press **EFCS RESET** button.



ICN-88277-G2763018-004-01

11. Press 6L Line Select (LS) key on **MCD (DU)**.

- **MAINT MENU** is displayed.

12. Press 3L LS key.

- **SCEFC MAINT MENU** is displayed.

NOTE

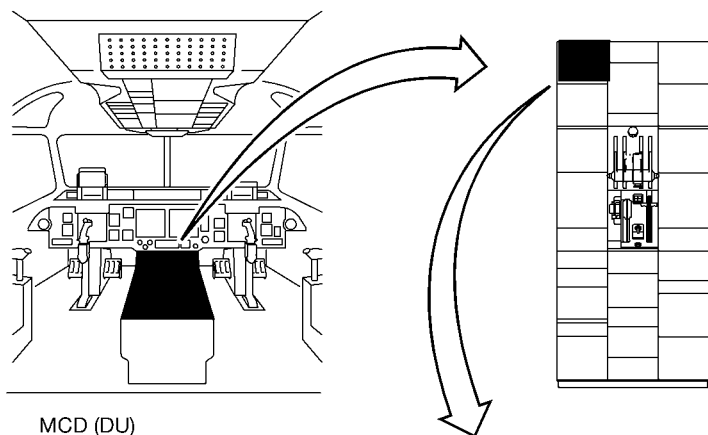
- When initializing, select only those Line Replaceable Units (LRUs) that have not been previously initialized or those that have been swapped to another slot.
- When the tail number or channel identification is in disagreement, they will be selected automatically.
- LRUs that are initialized will be cleared of all fault history or receive fault history data transferred from another LRU. Rig parameters will be initialized to nominal values when all LRUs are initialized. Otherwise, rig parameters are loaded into new LRUs from the existing LRUs.
- When swapping the current spoiler control/electronic flap computer (SC/EFC) for troubleshooting, do not perform an LRU initialization or operational checkout. Initializing both SC/EFC computers at the same time will erase all rig data and will require all flap and spoiler major rigs to be re-accomplished.

13. Press 5L LS key.

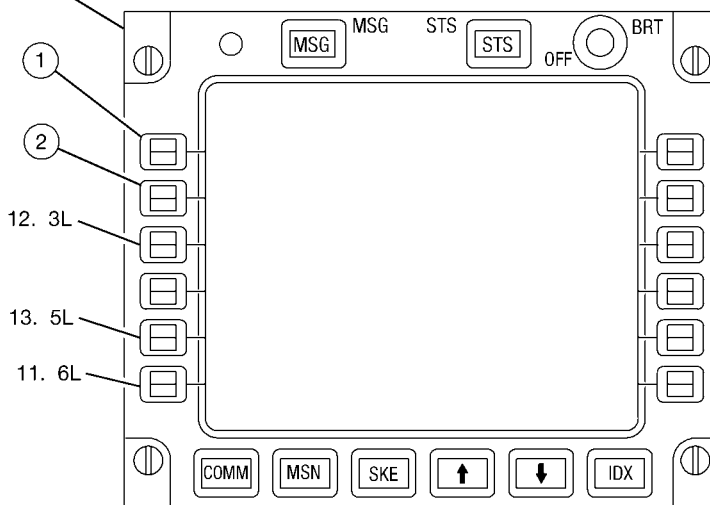
- **LRU INITIALIZATION** is displayed.

14. Press LS key.

- **SCEFC LRU INITIALIZATION** selection is displayed.



MCD (DU)
(REF)



14.

COMPUTER REF DES	INDEX NO.	LINE SELECT KEY
2763CM001	1	1L
2763CM002	2	2L

ICN-88277-G2763013-006-01

15. Press 6L LS key.

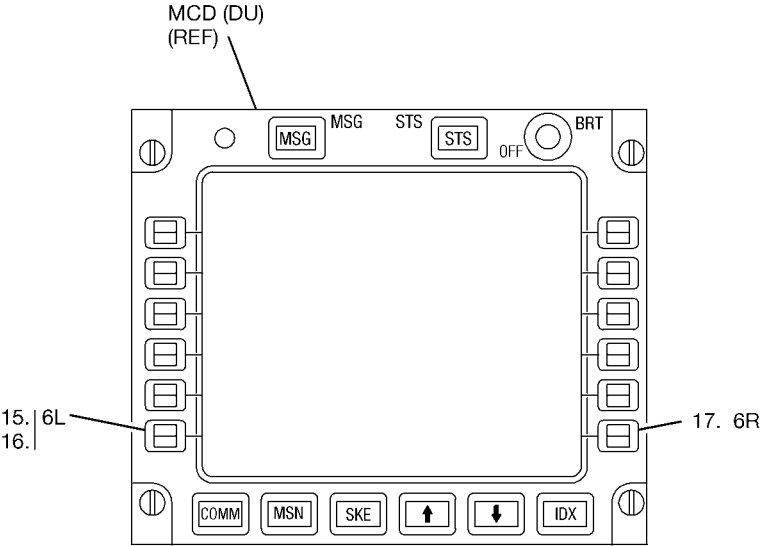
- **SCEFC INITIALIZATION** is displayed.

16. Press 6L LS key.

- **SCEFC LRU INITIALIZATION IN PROGRESS** is displayed.
- **SCEFC LRU INITIALIZATION COMPLETE** is displayed.

17. Press 6R LS key.

- **SCEFC MAINT MENU** is displayed.



ICN-88277-G2763306-003-01

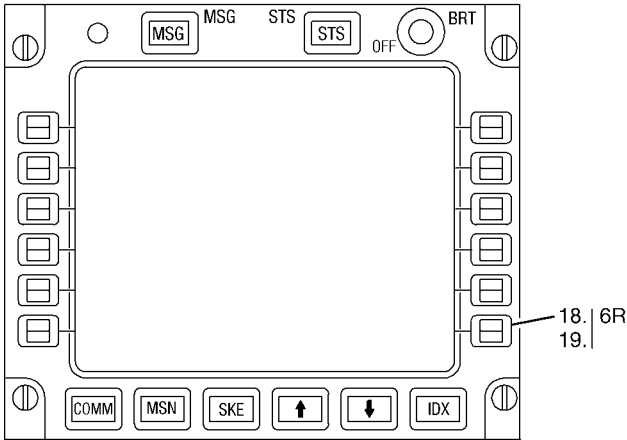
TO 1300i-2-27JG-60-2

18. Press 6R LS key.
 - **MAINTENANCE MENU** is displayed.
19. Press 6R LS key.
 - **MSN INDEX 2** is displayed.

NOTE

- When none of the SC/EFC computers have been replaced, and one or both separately initialized, go to step 21.
- When any one of the SC/EFC computers has been replaced and initialized, go to step 21.
- When none of the SC/EFC computers have been replaced but both have been initialized concurrently, go to step 20.
- When both SC/EFC computers have been replaced and initialized, go to step 20.

20. Perform flight controls major rig (27-00-01).
21. Shutdown mission computing system (34-62-02, task 02-3).



ICN-88277-G2763309-001-01

SPOILER LINEAR ELECTRO-HYDRAULIC ACTUATOR (27-64-10)

MASTER INPUT CONDITIONS:

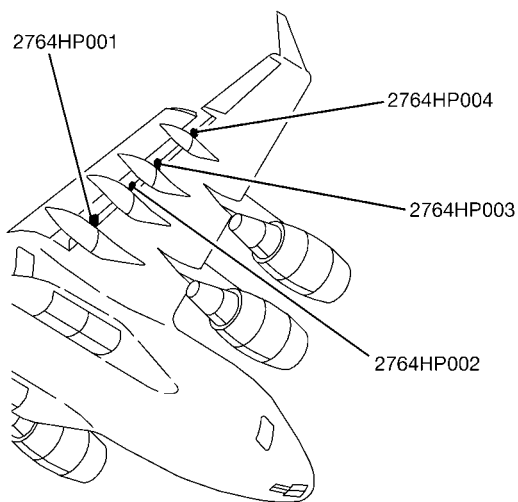
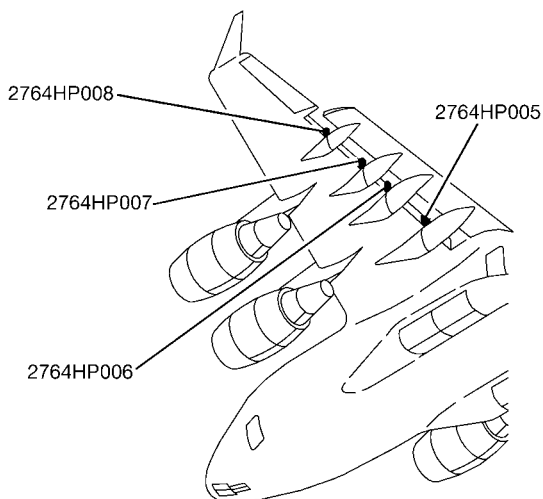
Reference designators:

2764HP001	Right No. 1 Spoiler Linear Electro-Hydraulic Actuator
2764HP002	Right No. 2 Spoiler Linear Electro-Hydraulic Actuator
2764HP003	Right No. 3 Spoiler Linear Electro-Hydraulic Actuator
2764HP004	Right No. 4 Spoiler Linear Electro-Hydraulic Actuator
2764HP005	Left No. 1 Spoiler Linear Electro-Hydraulic Actuator
2764HP006	Left No. 2 Spoiler Linear Electro-Hydraulic Actuator
2764HP007	Left No. 3 Spoiler Linear Electro-Hydraulic Actuator
2764HP008	Left No. 4 Spoiler Linear Electro-Hydraulic Actuator

Applicable functions:

- 1 Operational Checkout.
- 2 Removal.
- 3 Installation.

Access data:



ICN-88277-G2764001-002-01

**SPOILER LINEAR ELECTRO-HYDRAULIC
ACTUATOR OPERATIONAL CHECKOUT
(27-64-10-1)**

FUNCTIONAL INPUT CONDITIONS:

Applicability:	Task
All	All

Additional information:

This procedure consists of the following tasks:

- 1-1. Preparation.
- 1-2. Operational checkout.
- 1-3. Follow-on maintenance.

	Task
NOTE	
This is a typical operational checkout task for all spoiler linear electro-hydraulic actuators.	All

Additional data:

	Task
TO 1300i-2-12JG-29-1	1-1
TO 1300i-2-23JG-40-1	1-1
TO 1300i-2-31JG-60-1	1-1, 1-3
TO 1300i-2-34FI-00-1	1-2

Personnel recommended:

	Task
One	1-3
Two	1-1, 1-2

Person (A) performs task.

Task

Person (B) assists person (A) with scanner for clearance of flight controls.

Safety conditions:

Task

NA

--

Support equipment:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
NA	--	--	--	--

1-1. PREPARATION.

1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
2. Review task "Functional Input Conditions" page for task specific safety conditions.
3. Perform maintenance interphone operation (23-41-02, task 02-3).
4. Operate multifunction displays system and select **CFG** format (31-61-02, task 02-1 or 02-2).
5. Observe hydraulic system reservoir sight gauge for fluid quantity (TO 1300i-2-12JG-29-1, 12-29-00, para 1-9).

WARNING

All flight control surfaces shall be clear of personnel and equipment prior to any movement of the surfaces or applying hydraulic power. Failure to comply may cause injury to personnel or damage to aircraft.

6. (A,B) Press **SYS**, **AUX** switchlight on **HYD** panel.
 - **AUTO** light comes on.
 - **PRESS PSI** indicator reads 3800-4200.