CHAPTER

46

INFORMATION SYSTEMS

CHAPTER 46
INFORMATION SYSTEMS

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46-EFFECTIVE PAGES

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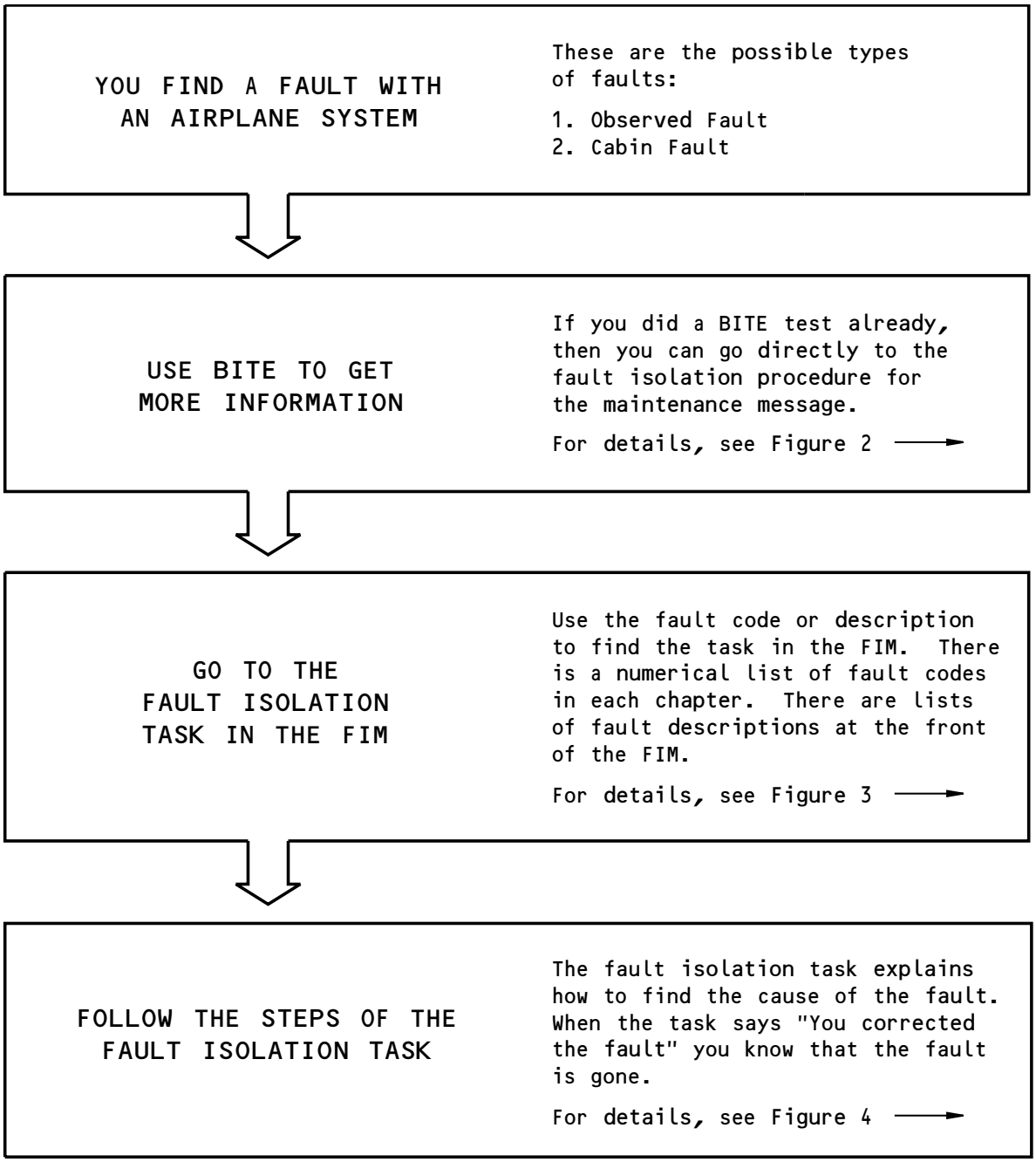

G04902 S0000148576_V1

Basic Fault Isolation Process
Figure 1

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Some airplane systems have built-in test equipment (BITE). IF the system finds a fault when you do a BITE test, it will give you a maintenance message.

A maintenance message can be any of these:

- a code
- a text message
- a light
- an indication.

To find the fault isolation task for a maintenance message, go to the Maintenance Message Index in the chapter for the applicable system.

If you do not know which chapter is the correct one, look at the list at the front of any Maintenance Message Index. For each system or component (LRU) that has BITE, this list gives the chapter number where you can find the Index that you need.

Find the maintenance message for the applicable LRU or system in the Index. Then find the task number on the same line as the maintenance message. Go to the task in the FIM and do the steps of the task (see Figure 4).

G04950 S0000148578_V1

Getting Fault Information from BITE
Figure 2

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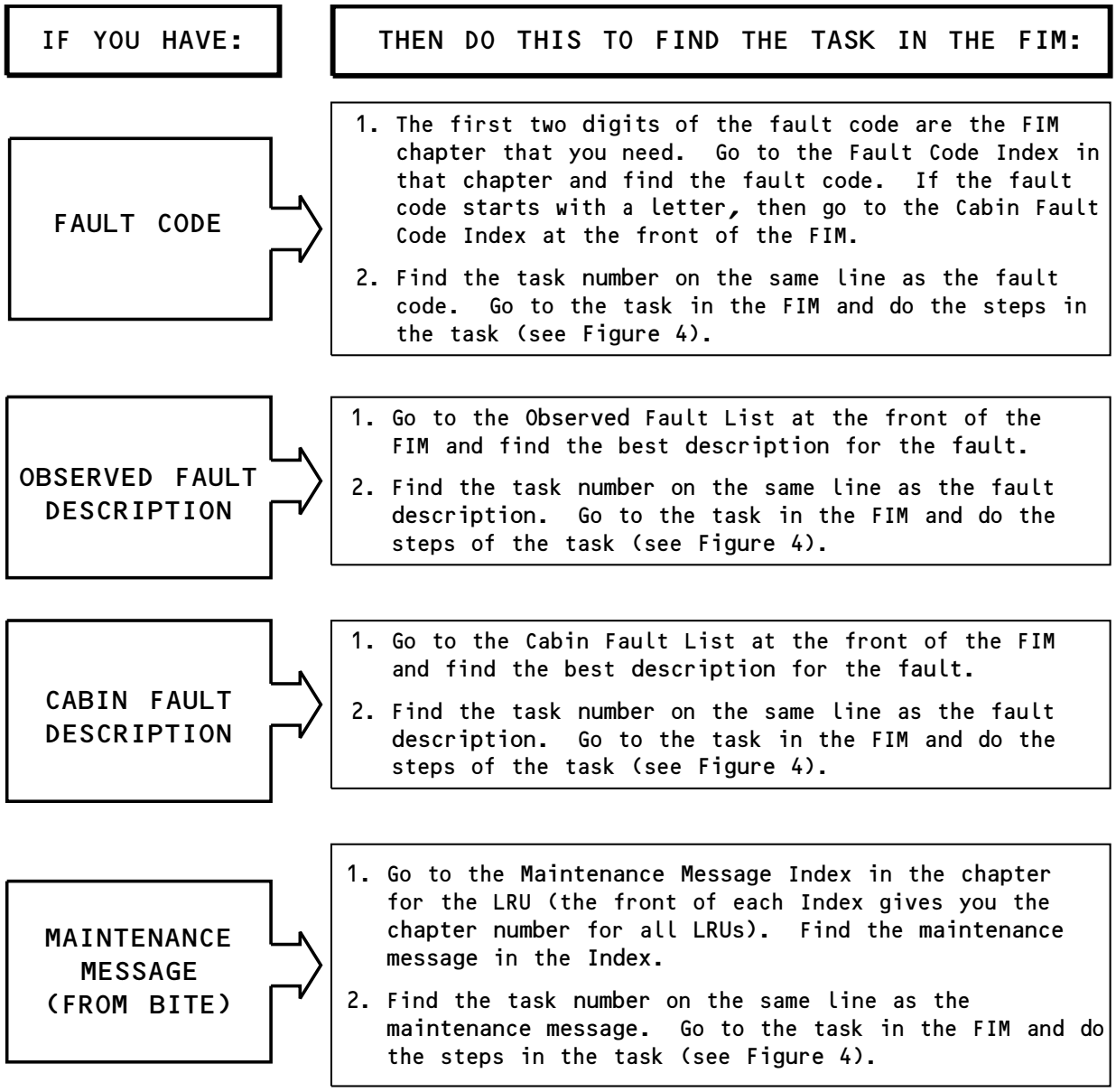

G04979 S0000148579_V2

Finding the Fault Isolation Task in the FIM
Figure 3

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ASSUMED CONDITIONS AT START OF TASK

- External electrical power is ON
- Hydraulic power and pneumatic power are OFF
- Engines are shut down
- No equipment in the system is deactivated

POSSIBLE CAUSES

- The list of possible causes has the most likely cause first and the least likely cause last.
- You can use the maintenance records of your airline to determine if the fault occurred before. Compare the list of possible causes to the past maintenance actions. This will help prevent repetition of the same maintenance actions.

INITIAL EVALUATION PARAGRAPH

- The primary purpose of the Initial Evaluation paragraph at the start of the task is to help you find out if you can detect the fault right now:
  - If you cannot detect the fault right now, then the task cannot isolate the fault and the Initial Evaluation paragraph will say that there was an intermittent fault.
  - If you have an intermittent fault, you must use your judgement (and follow your airline's policy) to decide which maintenance action to take. Then monitor the airplane to see if the fault happens again on subsequent flights.
- The Initial Evaluation paragraph can also help you find out which Fault Isolation Procedure to use to isolate and correct the fault.

FAULT ISOLATION STEPS

- The FIM task steps are presented in a specified order. The "If... then" statements will guide you along a logical path. But if you do not plan to follow the FIM task exactly, make sure that you read it before you start to isolate the fault. Some FIM procedures start with important steps that have an effect on the other steps in the procedure.
- When you are at the endpoint of the path, the step says "...you corrected the fault." Complete the step and exit the procedure.

G05009 S0000148580_V3

Doing the Fault Isolation Task
Figure 4

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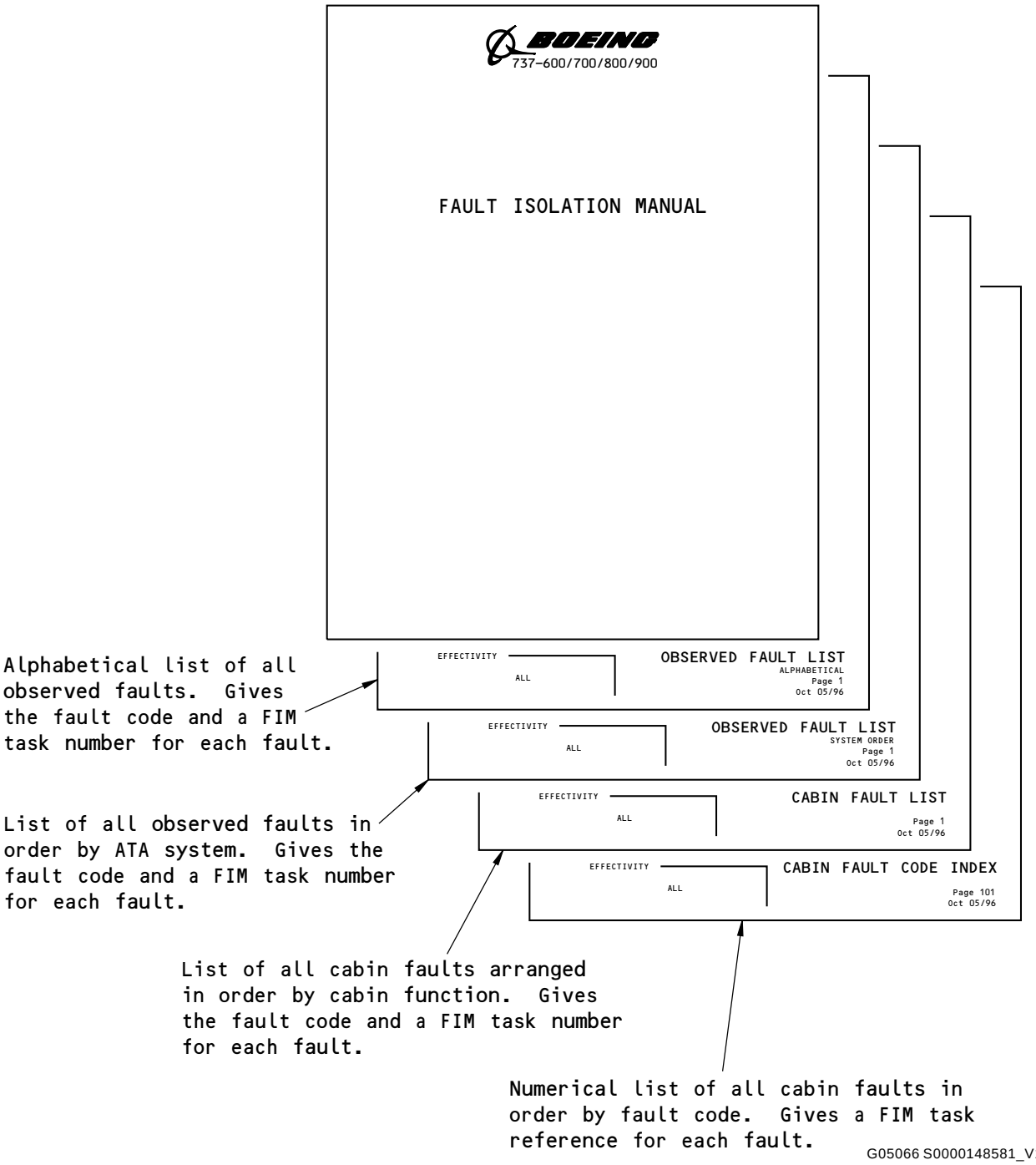

Subjects at Front of FIM
Figure 5

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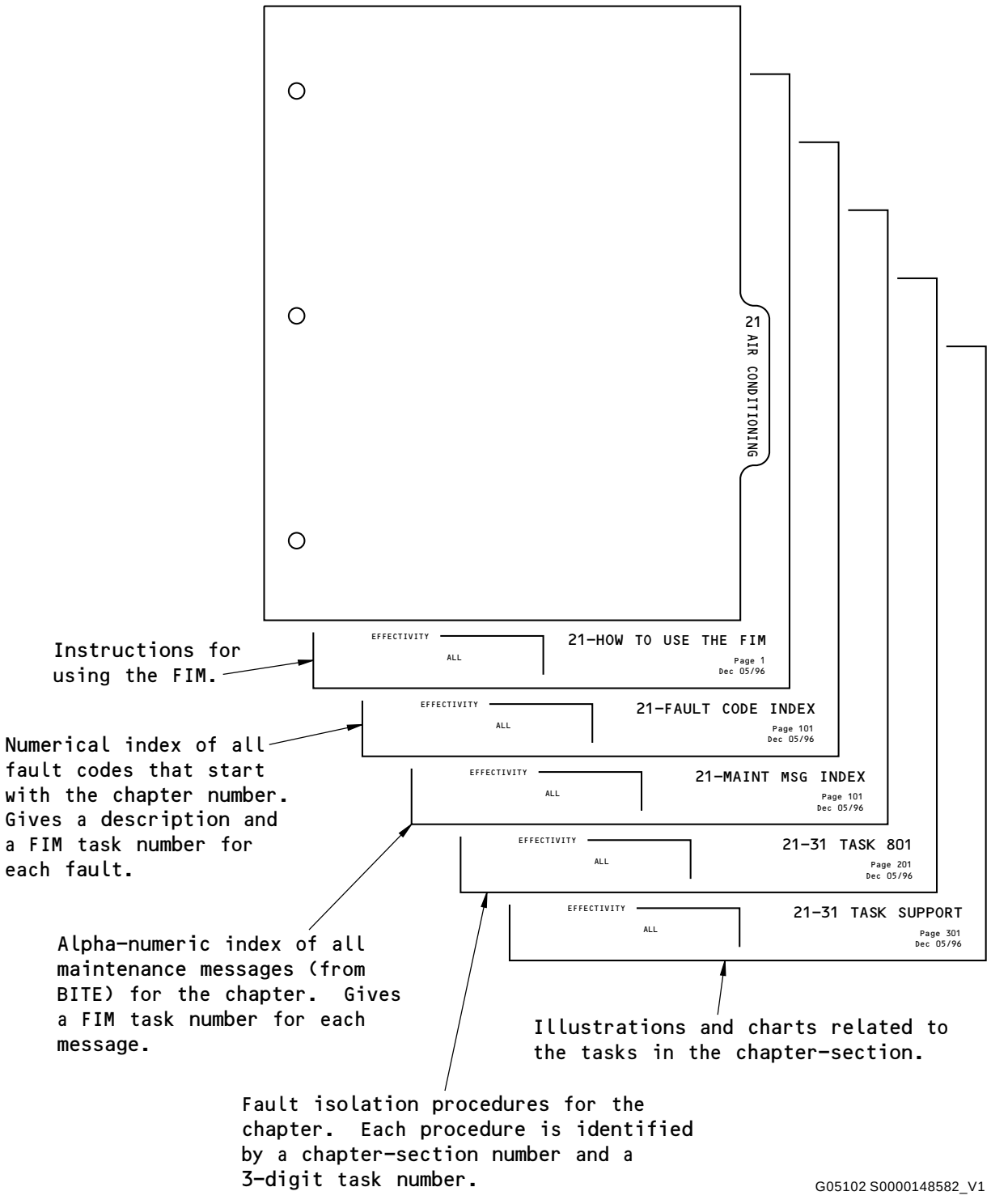

Subjects in Each FIM Chapter
Figure 6

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FAULT CODE	FAULT DESCRIPTION	GO TO FIM TASK
461 696 31	Electronic flight bag: message shows on fault log page (Class 2 EFB) - captain's.	46-15 TASK 801
461 696 32	Electronic flight bag: message shows on fault log page (Class 2 EFB) - first officer's.	46-15 TASK 801
461 730 31	Electronic flight bag: "Aircraft Model Unknown" shows on display - captain's.	46-15 TASK 818
461 730 32	Electronic flight bag: "Aircraft Model Unknown" shows on display - first officer's.	46-15 TASK 818
461 731 31	Electronic flight bag: EFB OS Corrupted Message shows on display - captain's.	46-15 TASK 831
461 731 32	Electronic flight bag: EFB OS Corrupted Message shows on display - first officer's.	46-15 TASK 831
461 732 31	Electronic flight bag: ERROR CROSSLOADING TO EFB shows on display - captain's.	46-15 TASK 846
461 732 32	Electronic flight bag: ERROR CROSSLOADING TO EFB shows on display - first officer's.	46-15 TASK 846
461 733 31	Electronic flight bag: ERROR DELETING LSAP shows on display - captain's.	46-15 TASK 820
461 733 32	Electronic flight bag: ERROR DELETING LSAP shows on display - first officer's.	46-15 TASK 820
461 734 31	Electronic flight bag: ERROR READING LSAP shows on display - captain's.	46-15 TASK 842
461 734 32	Electronic flight bag: ERROR READING LSAP shows on display - first officer's.	46-15 TASK 842
461 735 31	Electronic flight bag: FILE SYSTEM CORRUPTED shows on display - captain's.	46-15 TASK 819
461 735 32	Electronic flight bag: FILE SYSTEM CORRUPTED shows on display - first officer's.	46-15 TASK 819
461 736 31	Electronic flight bag: LOAD TO RIGHT EFB FAILED shows on display - captain's.	46-15 TASK 843
461 736 32	Electronic flight bag: LOAD TO RIGHT EFB FAILED shows on display - first officer's.	46-15 TASK 843
461 737 31	Electronic flight bag: START CROSSLOAD FAILED shows on display - captain's.	46-15 TASK 850
461 737 32	Electronic flight bag: START CROSSLOAD FAILED shows on display - first officer's.	46-15 TASK 850
461 738 31	Electronic flight bag: SYSTEM ERROR shows on display - captain's.	46-15 TASK 845
461 738 32	Electronic flight bag: SYSTEM ERROR shows on display - first officer's.	46-15 TASK 845

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FAULT CODE	FAULT DESCRIPTION	GO TO FIM TASK
461 739 31	Electronic flight bag: SYSTEM SETTIGNS CHANGE shows on display - captain's.	46-15 TASK 851
461 739 32	Electronic flight bag: SYSTEM SETTIGNS CHANGE shows on display - first officer's.	46-15 TASK 851
461 740 31	Electronic flight bag: TAIL ID COMPUTED shows on display - captain's.	46-15 TASK 840
461 740 32	Electronic flight bag: TAIL ID COMPUTED shows on display - first officer's.	46-15 TASK 840
461 741 31	Electronic flight bag: TAIL ID MISMATCH shows on display - captain's.	46-15 TASK 816
461 741 32	Electronic flight bag: TAIL ID MISMATCH shows on display - first officer's.	46-15 TASK 816
461 742 31	Electronic flight bag: TIME CHANGED FROM shows on display - captain's.	46-15 TASK 848
461 742 32	Electronic flight bag: TIME CHANGED FROM shows on display - first officer's.	46-15 TASK 848
461 743 31	Electronic flight bag: "Unable to determine date and time" shows on display - captain's.	46-15 TASK 841
461 743 32	Electronic flight bag: "Unable to determine date and time" shows on display - first officer's.	46-15 TASK 841
461 744 31	Electronic flight bag: "Unable to set date and time" shows on display - captain's.	46-15 TASK 847
461 744 32	Electronic flight bag: "Unable to set date and time" shows on display - first officer's.	46-15 TASK 847
461 745 31	Electronic flight bag: "Your battery is critically low" shows on display - captain's.	46-15 TASK 839
461 745 32	Electronic flight bag: "Your battery is critically low" shows on display - first officer's.	46-15 TASK 839
461 801 00	Onboard Network System: shows "System dataload state is currently disabled".	46-13 TASK 856

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801. Message Shows on the ONS EXISTING FAULTS Page

A. General

(1) Use the data in task to identify the correct fault isolation procedure when you know the NFS fault message code.

(a) In contrast, if the ONS maintenance browser is unserviceable, or the NFS has a problem but no NFS fault message shows, then refer to the Frontmatter section of the chapter 46 FIM.

1) Typically, an observed fault is a problem that can occur, but does not refer to a specific NFS fault message.

B. Fault Isolation Procedure

(1) Using the results from this task (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801), do these steps that follow:

(a) If one or more messages shows, then a corrective action is required.

(b) Find the specified fault code in the table that follows.

(c) Do fault isolation task specified.

(d) After the corrective action, make sure that no NFS messages show.

(e) When the NFS message check shows no LRUs or ATA/LRUs, with no messages, then no additional corrective action is necessary.

FAULT CODE	FAULT MESSAGE	GO TO FIM TASK
46–001 or 46–00001	ONS NFS-1 FAIL	46-13 TASK 802
46–002 or 46–00002	The NED inside the NFS1 is failed or has invalid client credentials	46-13 TASK 803
46–003 or 46–00003	Any hard drive fault (write errors) in File Store Service	46-13 TASK 804
46–004 or 46–00004	Insufficient storage space in the ONS MSD for a to-be-loaded LSAP	46-13 TASK 805
46–005 or 46–00005	SECURITY FAULT	46-13 TASK 806
46–007 or 46–00007	AIRPLANE DATA NOT AVAILABLE	46-13 TASK 807
46–008 or 46–00008	NFS 1 has a loaded part that fails validity check	46-13 TASK 808
46–009 or 46–00009	SECURITY LOG FULL	46-13 TASK 809
46–010 or 46–00010	NO AIRPLANE CREDENTIALS AVAILABLE	46-13 TASK 810
46–011	Self Monitor of NFS1 indicates an internal communication failure	46-13 TASK 811
46–012 or 46–00012	NFS-1 SOFTWARE FAIL	46-13 TASK 812
46–014 or 46–00014	NFS-1 DNS SERVICE FAIL	46-13 TASK 813

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(Continued)

FAULT CODE	FAULT MESSAGE	GO TO FIM TASK
46–015 or 46–00015	NFS-1 SYSLOG SERVICE FAIL	46-13 TASK 814
46–016 or 46–00016	NFS-1 FILE STORE SERVICE FAIL	46-13 TASK 815
46–017 or 46–00017	NFS-1 UPDOWN SERVICE FAIL	46-13 TASK 816
46–018 or 46–00018	DHCP service didn't initialize or reached the restart limit	46-13 TASK 817
46–020 or 46–00020	ONS SERVICE FAIL	46-13 TASK 818
46–021 or 46–00021	NFS-1 AVIONICS SERVICE FAIL	46-13 TASK 819
46–022 or 46–00022	NTP service didn't initialize or reached the restart limit	46-13 TASK 820
46–023 or 46–00023	SAPS service didn't initialize or reached the restart limit	46-13 TASK 821
46–025 or 46–00025	Application Hosting Service didn't initialize	46-13 TASK 822
46–030 or 46–00030	EXPIRED CRATE SIGNING CERTIFICATE	46-13 TASK 823
46–031 or 46–00031	EXPIRED VPN/TLS CERTIFICATE	46-13 TASK 824
46–032 or 46–00032	EXPIRED COMMAND SIGNING CERTIFICATE	46-13 TASK 825
46–033 or 46–00033	EXPIRED SOFTWARE PART SIGNING CERTIFICATE	46-13 TASK 826
46–035 or 46–00035	EXPIRED SECURITY TRUST ANCHORS	46-13 TASK 827
46–036 or 46–00036	EXPIRED AIRPLANE CERTIFICATE IN RADIUS CHAIN	46-13 TASK 828
46–037 or 46–00037	EXPIRED AIRLINE CERTIFICATE AUTHORITY CERTIFICATE	46-13 TASK 829
46–038 or 46–00038	AIRPLANE CERTIFICATE EXPIRING SOON	46-13 TASK 830
46–039 or 46–00039	AIRLINE CA CERT WILL EXPIRE WITHIN 30 DAYS OR LESS	46-13 TASK 831
46–040 or 46–00040	AIRPLANE DATA DOES NOT MATCH SECURITY CERTIFICATE	46-13 TASK 832
46–041 or 46–00041	OAS CERTIFICATE MISMATCH	46-13 TASK 833

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(Continued)

FAULT CODE	FAULT MESSAGE	GO TO FIM TASK
46–044 or 46–00044	OBEDS detects expired or missing OAS certificate	46-13 TASK 835
46–046 or 46–00046	OBEDS operational error detected	46-13 TASK 836
46–048 or 46–00048	OBEDS cannot authenticate ground server connection	46-13 TASK 837
46–060 or 46–00060	A NetManager AMI has failed validation	46-13 TASK 839
46–062 or 46–00062	An OAS AMI has failed validation	46-13 TASK 840
46–063	AIRPLANE AMI VALIDITY TIME NOT WITHIN CURRENT AIRPLANE TIME	46-13 TASK 841
46–065 or 46–00065	The OBEDS data in the EXCOMM AMI fails validation	46-13 TASK 842
46–066 or 46–00066	A NetManager OPC has failed validation	46-13 TASK 843
46–067	Internal NED OPC is not compatible with NFS OPC	46-13 TASK 844
46–110 or 46–00110	EGPWS~NFS1 ETHERNET BUS FAIL	46-13 TASK 845
46–150 or 46–00150	DFDAU~NFS1 ARINC 717 BUS FAIL	46-13 TASK 862
46–153 or 46–00153	FMC~NFS1 ‘FMC-02’ BUS FAIL	46-13 TASK 846
46–154 or 46–00154	FMC~NFS1 ‘FMC-09’ BUS FAIL	46-13 TASK 847
46–155 or 46–00155	ADIRU-L~NFS1 ‘ADR-4’ BUS FAIL	46-13 TASK 848
46–156 or 46–00056	ADIRU-L~NFS1 ‘IR-3’ BUS FAIL	46-13 TASK 849
46–157 or 46–00157	DEU-1~NFS1 ‘CDS-GP’ BUS FAIL	46-13 TASK 850
46–158 or 46–00158	DEU-2~NFS1 ‘CDS-GP’ BUS FAIL	46-13 TASK 851
46–159 or 46–00159	EVSC~NFS1 ‘AVM’ BUS FAIL	46-13 TASK 852
46–161 or 46–00161	MMR-1~NFS1 ‘GNSS DATA OUT #3’ BUS FAIL	46-13 TASK 853
46–162 or 46–00162	ATC-L~NFS1 ‘GENERAL OUT #1’ BUS FAIL	46-13 TASK 854

END OF TASK

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802. 46-001 or 46-00001 Fault Code (ONS NFS-1 FAIL Message) Shows - Fault Isolation

A. Description

(1) Use this task when Fault Code 46-001 shows on the Existing Faults page.

(a) You find this fault when NFS-1 shows in the LRU NAME column.

(2) This fault code shows when the internal network extension device (NED) inside the NFS-1 fails. This fault code indicates there is a loss of all ARINC 429 receive and transmit functionality or you cannot get status of Ethernet busses.

B. Possible Causes

(1) Software

(2) Network file server (NFS), M2889.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-001 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-001 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Make new server credentials, (Onboard Network System Server Credentials Check, AMM TASK 46-13-00-750-802).

NOTE: The specified task makes new server, and all client credentials at the same time.

(a) Click refresh on the browser or, exit and then select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-001 does not show, then you corrected the fault.

3) If Fault Code 46-001 still shows, then continue.

(2) Install the NED OPS and NED OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-001 does not show, then you corrected the fault.

3) If Fault Code 46-001 still shows, then continue.

(3) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-001 does not show, then you corrected the fault.

END OF TASK

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803. 46-002 or 46-00002 Fault Code (The NED inside the NFS1 is failed or has invalid client credentials) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-002.

(a) The text for Fault Code 46-002 is: The NED inside the NFS1 is failed or has invalid client credentials.

(2) This fault code shows when the internal network extension device (NED) inside the NFS is unserviceable. This fault code indicates there is a loss of all ARINC 429 receive and transmit functionality, or you cannot get status of Ethernet busses.

B. Possible Causes

(1) Software

(2) Network file server (NFS), M2889.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-002 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-002 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Make new server credentials, (Onboard Network System Server Credentials Check, AMM TASK 46-13-00-750-802).

NOTE: The specified task makes new server, and all client credentials at the same time.

(a) Click refresh on the browser or, exit and then select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-002 does not show, then you corrected the fault.

3) If Fault Code 46-002 still shows, then continue.

(2) Install the NED OPS and NED OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-002 does not show, then you corrected the fault.

3) If Fault Code 46-002 still shows, then continue.

(3) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

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2) If Fault Code 46-002 does not show, then you corrected the fault.

——— END OF TASK ———

804. 46-003 or 46-00003 Fault Code (Any hard drive fault (write errors) in File Store Service) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-003.

(a) The text for Fault Code 46-003 is: Any hard drive fault (write errors) in File Store Service.

(2) Use this task when you see any hard drive fault (write errors) in File Store Service.

(3) This fault code is sensed by the File Store Service that supports Filestore and Mass Storage Device (MSD) service. It shows when an attempt to write to the hard drive fails.

B. Possible Causes

(1) Software

(2) Network file server (NFS), M2889.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-003 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-003 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

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(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-003 does not show, then you corrected the fault.

(c) If Fault Code 46-003 still shows, then continue.

(3) Install NFS NetManager, NFS Operating System (OS) and NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-003 does not show, then you corrected the fault.

3) If Fault Code 46-003 still shows, then continue.

(4) Reformat the NFS Operational Drive. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-003 does not show, then you corrected the fault.

3) If Fault Code 46-003 still shows, then continue.

(5) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-003 does not show, then you corrected the fault.

——— END OF TASK ———

805. 46-004 or 46-00004 Fault Code (Insufficient storage space in the ONS MSD for a to-be-loaded LSAP) Shows - Fault Isolation

A. Description

(1) Use this task when onboard network system (ONS) Existing Faults for NFS1 shows Fault Code 46-004.

(a) The text for Fault Code 46-004 is: Insufficient storage space in the ONS MSD for a to-be-loaded LSAP.

(2) This fault code shows when there is not enough storage space in the ONS Mass Storage Device (MSD). No more loadable software parts (LSAPs) can be staged to the Mass Storage Device (MSD) due to insufficient space available.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

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2) If Fault Code 46-004 does not show, then the fault was intermittent.
   a) Since NFS1 shows, another fault isolation task can be necessary.
3) If Fault Code 46-004 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Erase all unnecessary software parts from the MSD. Do this task: (Mass Storage Device Software Removal, AMM TASK 46-13-00-070-801).
   (a) Do a check again of the Existing Faults page.
      1) If NFS1 does not show, then you corrected the fault.
      2) If Fault Code 46-004 does not show, then you corrected the fault.

——— END OF TASK ———

806. 46-005 or 46-00005 Fault Code (SECURITY FAULT Message) Shows - Fault Isolation

A. Description

(1) Use this task when onboard network system (ONS) Existing Faults for NFS1 shows fault code 46-005.
   (a) The fault data for 46-005 is: SECURITY FAULT.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

   (a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.
      1) If NFS1 does not show, then the fault was intermittent. No action is necessary.
      2) If Fault Code 46-005 does not show, then the fault was intermittent.
         a) Since NFS1 shows, another fault isolation task can be necessary.
      3) If Fault Code 46-005 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Make sure you first talk to your engineering department. Then, do the steps that follow.

(2) Download security log files to the maintenance laptop, (Network File Server Log File Check, AMM TASK 46-13-01-710-802).

NOTE: Follow your airline or operator's requirements for record keeping and data retention.

(3) Erase the unnecessary security log files from the NFS, (Network File Server Log File Check, AMM TASK 46-13-01-710-802). These are the steps:

NOTE: Ask your engineering department to identify log that you can erase.

   (a) Click once on the target log file(s).
      1) You can highlight one, some, or all of the log files on a page.
      2) There can one or more pages of records.
   (b) Click once on the DELETE button.

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(c) When the confirmation box shows, click once on the CONFIRM button.

E. Repair Confirmation

(1) Do a check ONS Existing Faults > NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If LRU: NFS1 does not show, then you corrected the fault.

(b) If Existing Faults > NFS1 does not show fault code 46-005, then you corrected the fault.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

——— END OF TASK ———

807. 46-007 or 46-00007 Fault Code (AIRPLANE DATA NOT AVAILABLE Message) Shows - Fault Isolation

A. Description

(1) Use this task when Onboard Network System (ONS) Existing Faults for NFS1 shows Fault Code 46-007.

(a) The fault data for 46-007 is: AIRPLANE DATA NOT AVAILABLE.

(2) This fault shows when the necessary Standard Airplane Parameter Service (SAPS) data to the NFS is unserviceable.

(a) This fault code message can occur when a CSR is generated, and SAPS data is unserviceable, at the same time.

(b) SAPS data is necessary to validate the Security Certificates.

B. Possible Causes

(1) Circuit breakers

(2) Network file server (NFS), M2889

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-007 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-007 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Make sure that these circuit breakers are closed:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
A	2	C01479	RADIO NAVIGATION MMR 1
A	7	C01519	TERRAIN DISPLAY
B	5	C00186	ATC 1

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CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
A	6	C01017	FMCS CMPTR 1
C	9	C00109	FLIGHT RECORDER AC
D	5	C01359	DISPLAY DEU 1 PRI

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
D	11	C01360	DISPLAY DEU 2 PRI
D	16	C01262	FMCS CMPTR 2

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	2	C01076	ENGINE VIB MON

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT

(a) If you closed the breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > NFS1 does not show, then you corrected the problem.

2) If Existing Faults > NFS1 shows, but does not show code 46-007, then you corrected the problem.

3) If NFS1 shows fault code 46-007, then continue.

(2) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

NOTE: Give priority to fault messages that refer to the INTERNAL NED, SAPS or AIRPLANE DATA, or NFS1 BUS.

1) If fault code 46–002 shows, then do this fault isolation task (46-002 or 46-00002 Fault Code (The NED inside the NFS1 is failed or has invalid client credentials) Shows - Fault Isolation, 46-13 TASK 803).

2) If fault code 46–023 shows, then do this fault isolation task (46-023 or 46-00023 Fault Code (SAPS service didn't initialize or reached the restart limit) Shows - Fault Isolation, 46-13 TASK 821).

3) If fault code 46–067 shows, then do this fault isolation task (46-067 Fault Code (Internal NED OPC is not compatible with NFS OPC) Shows - Fault Isolation, 46-13 TASK 844).

4) For other fault codes that show in NFS1, find the applicable fault isolation task using the table in (46-13 TASK 801), and do the corrective action.

(b) After the corrective action, again do a check of Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If Existing Faults > NFS1 does not show, then you corrected the problem.

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2) If Existing Faults > NFS1 shows, but does not show code 46-007, then you corrected the problem.

3) If NFS1 shows fault code 46-007, then continue.

(3) Remove the NFS, and install a serviceable unit: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and then re-enter the NFS MESSAGES page.

1) If Fault Code 46-007 does not show, then you corrected the fault.

2) If Fault Code 46-007 still shows, then continue.

E. Repair Confirmation

(1) Do a check of Airplane Data in ONS, (Onboard Network System Airplane Identification Check, AMM TASK 46-13-00-860-801).

(a) Make sure the data in ONS, and the airplane data agree.

(2) After confirmation of the Airplane Data entry, examine Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If Existing Faults > NFS1 does not show, then you corrected the problem.

(b) If Existing Faults > NFS1 shows, but does not show code 46-007, then you corrected the problem.

——— END OF TASK ———

808. 46-008 or 46-00008 Fault Code (NFS 1 has a loaded part that fails validity check) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-008.

(a) The text for Fault Code 46-008 is: NFS 1 has a loaded part that fails validity check.

(2) This fault code shows when a Loadable Software Airplane Part (LSAP) on the NFS-1 fails a boot-time validity check and is not loaded.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes are present.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-008 does not show, then the fault was intermittent. No action is necessary.

3) If Fault Code 46-008 shows, then do the Fault Isolation Procedure below.

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D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER

AKS 006-999

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-008 does not show, then you corrected the fault.

(c) If Fault Code 46-008 shows, then continue.

(3) Install NFS NetManager, NFS Operating System (OS) and NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-008 does not show, then you corrected the fault.

3) If Fault Code 46-008 still shows, then continue.

(4) Reformat the NFS Operational Drive. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-008 does not show, then you corrected the fault.

3) If Fault Code 46-008 still shows, then continue.

(5) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-008 does not show, then you corrected the fault.

END OF TASK

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809. 46-009 or 46-00009 Fault Code (SECURITY LOG FULL Message) Shows - Fault Isolation

A. General

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-009.

(a) The text for Fault Code 46-009 is: SECURITY LOG FULL.

(2) The NFS shows this fault code when the security partition is 95% full. When that limit is exceeded, there can be a loss of security data.

B. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-009 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-009 shows, then do the Fault Isolation Procedure below.

C. Fault Isolation Procedure

(1) Make sure you first talk to your engineering department. Then, do the steps that follow.

(2) Set the ONS maintenance browser to show the NFS logs page.

(a) Make your selection: Extended Maintenance > ONS Maintenance > Logs.

(b) On the NFS LOGS pop-up, do these steps:

1) Click once on the word SECURITY to highlight.

2) Click once on the CONTINUE button.

(3) Download security log files to the maintenance laptop, (Network File Server Log File Check, AMM TASK 46-13-01-710-802).

NOTE: Follow your airline or operator's requirements for record keeping and data retention.

(4) Erase the unnecessary security log files from the NFS, (Network File Server Log File Check, AMM TASK 46-13-01-710-802). These are the steps:

NOTE: Ask your engineering department to identify log that you can erase.

(a) Click once on the target log file(s).

1) You can highlight one, some, or all of the log files on a page.

2) There can one or more pages of records.

(b) Click once on the DELETE button.

(c) When the confirmation box shows, click once on the CONFIRM button.

D. Repair Confirmation

(1) Do a check ONS Existing Faults > NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If LRU: NFS1 does not show, then you corrected the fault.

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(b) If Existing Faults > NFS1 does not show fault code 46-009, then you corrected the fault.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

——— END OF TASK ———

810. 46-010 or 46-00010 Fault Code (NO AIRPLANE CREDENTIALS AVAILABLE Message) Shows - Fault Isolation

A. Description

(1) Use this task when onboard network system (ONS) Existing Faults for NFS1 shows Fault Code 46-010.

(a) The fault data for 46-010 is: NO AIRPLANE CREDENTIALS AVAILABLE.

B. Possible Causes

(1) Software

(2) Network File Server (NFS), M2889

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-010 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-010 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Do a check of the airplane credentials, (Onboard Network System Airplane Credentials Check, AMM TASK 46-13-00-750-801).

(a) If you find a problem, do the corrective action in that task.

(2) On the ONS browser, make your selections: Extended Maintenance > ONS Maintenance > Existing Faults.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-010 does not show, then you corrected the fault.

(c) If Fault Code 46-010 still shows, then continue.

(3) Erase the NFS drive, and install new software. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-010 does not show, then you corrected the fault.

——— END OF TASK ———

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811. 46-011 Fault Code (Self Monitor of NFS1 indicates an internal communication failure) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-011.

(a) The fault data for 46–011 is: Self Monitor of NFS1 indicates an internal communication failure.

(2) This fault code shows when the NFS-1 self-monitor function senses that internal communication is unserviceable.

B. Possible Causes

(1) Software

(2) Network file server, M2889.

C. Initial Evaluation

(1) Do this task: (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes are present.

(a) If NFS1 does not show, then the fault was intermittent. No action is necessary.

(b) If Fault Code 46-011 does not show, then the fault was intermittent. No action is necessary.

(c) If Fault Code 46-011 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Again do a check of the Existing Faults page for NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-011 does not show, then you corrected the fault.

(c) If Fault Code 46-011 still shows, then continue.

(3) Reformat the NFS Operational Drive. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Again do a check of the ONS Existing Faults page for NFS1.

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1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-011 does not show, then you corrected the fault.

——— END OF TASK ———

812. 46-012 or 46-00012 Fault Code (NFS-1 SOFTWARE FAIL Message) Shows - Fault Isolation

A. Description

(1) Use this task when onboard network system (ONS) Existing Faults for NFS1 shows Fault Code 46-012.

(a) The fault data for 46-012 is: NFS-1 SOFTWARE FAIL.

(2) This is a high-level fault that is triggered by lower level faults.

(a) There are no fault isolation procedure for this specific fault code.

(b) Typically, NFS1 shows fault code 46-012 with one or more other fault codes at the same time.

1) Do the corrective action for the other fault code, or codes first.

B. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-012 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-012 shows, then do the Fault Isolation Procedure below.

C. Fault Isolation Procedure

(1) If NFS-1 shows Fault Code 46-014 at the same time as Fault Code 46-012, then do this task: (46-014 or 46-00014 Fault Code (NFS-1 DNS SERVICE FAIL Message) Shows - Fault Isolation, 46-13 TASK 813)

(2) If NFS-1 shows Fault Code 46-015 at the same time as Fault Code 46-012, then do this task: (46-015 or 46-00015 Fault Code (NFS-1 SYSLOG SERVICE FAIL Message) Shows - Fault Isolation, 46-13 TASK 814).

(3) If NFS-1 shows Fault Code 46-016 at the same time as Fault Code 46-012, then do this task: (46-016 or 46-00016 Fault Code (NFS-1 FILE STORE SERVICE FAIL Message) Shows - Fault Isolation, 46-13 TASK 815).

(4) If NFS-1 shows Fault Code 46-017 at the same time as Fault Code 46-012, then do this task: (46-017 or 46-00017 Fault Code (NFS-1 UPDOWN SERVICE FAIL Message) Shows - Fault Isolation, 46-13 TASK 816).

(5) If NFS-1 shows Fault Code 46-018 at the same time as Fault Code 46-012, then do this task: (46-018 or 46-00018 Fault Code (DHCP service didn't initialize or reached the restart limit) Shows - Fault Isolation, 46-13 TASK 817).

(6) If fault continues, you can do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Make sure you do the steps to generate new credentials as specified in that task.

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(b) Again do a check of the Existing Faults page, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-012 does not show, then you corrected the fault.

3) If Fault Code 46-012 still shows, then continue.

(7) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-012 does not show, then you corrected the fault.

——— END OF TASK ———

813. 46-014 or 46-00014 Fault Code (NFS-1 DNS SERVICE FAIL Message) Shows - Fault Isolation

A. Description

(1) Use this task when onboard network system (ONS) Existing Faults for NFS1 shows Fault Code 46-014.

(a) The fault data for 46-014 is: NFS-1 DNS SERVICE FAIL.

(2) This fault code can show when the NFS cannot get access to a specific uniform resource location (URL), website, or IP address.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-014 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-014 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

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This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-014 does not show, then you corrected the fault.

(c) If Fault Code 46-014 still shows, then continue.

(3) Install 46 NFS NetManager, 46 NFS Operating System (OS) and 46 NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-014 does not show, then you corrected the fault.

3) If Fault Code 46-014 still shows, then continue.

(4) Erase the NFS drive, and install new software. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-014 does not show, then you corrected the fault.

3) If Fault Code 46-014 still shows, then continue.

(5) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-014 does not show, then you corrected the fault.

——— END OF TASK ———

814. 46-015 or 46-00015 Fault Code (NFS-1 SYSLOG SERVICE FAIL Message) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-015.

(a) The fault data for 46-015 is: NFS-1 SYSLOG SERVICE FAIL.

(2) This fault code can show when the NFS internal software cannot create or save log files.

B. Possible Causes

(1) Software

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C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-015 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-015 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER

AKS 006-999

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-015 does not show, then you corrected the fault.

(c) If Fault Code 46-015 still shows, then continue.

(3) Install 46 NFS NetManager, 46 NFS Operating System (OS) and 46 NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-015 does not show, then you corrected the fault.

3) If Fault Code 46-015 still shows, then continue.

(4) Erase the NFS drive, and install new software. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-015 does not show, then you corrected the fault.

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3) If Fault Code 46-015 still shows, then continue.

(5) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-015 does not show, then you corrected the fault.

——— END OF TASK ———

815. 46-016 or 46-00016 Fault Code (NFS-1 FILE STORE SERVICE FAIL Message) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-016.

(a) The text for Fault Code 46-016 is: NFS-1 FILE STORE SERVICE FAIL.

(2) This fault code can occur when

(a) A CNAS-hosted application cannot save data to the NFS.

(b) A CNAS-hosted application cannot save or get software parts for a configuration update of the NFS.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-016 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-016 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			

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AKS 007, 008, 011, 012, 014, 019, 026, 028-999 (Continued)

(Continued)

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-016 does not show, then you corrected the fault.

(c) If Fault Code 46-016 still shows, then continue.

(3) Install 46 NFS NetManager, 46 NFS Operating System (OS) and 46 NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-016 does not show, then you corrected the fault.

3) If Fault Code 46-016 still shows, then continue.

(4) Erase the NFS drive, and install new software. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-016 does not show, then you corrected the fault.

3) If Fault Code 46-016 still shows, then continue.

(5) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-016 does not show, then you corrected the fault.

END OF TASK

816. 46-017 or 46-00017 Fault Code (NFS-1 UPDOWN SERVICE FAIL Message) Shows - Fault Isolation

A. Description

(1) Use this task when onboard network server (ONS) Existing Faults for NFS1 shows Fault Code 46-017.

(a) The fault data for 46-017 is: NFS-1 UPDOWN SERVICE FAIL.

(2) The NFS causes this fault code when an internal process named uplink-downlink service (UDS) is unserviceable.

(a) Typically, an ONS client uses UDS to send data to the network file server (NFS).

(b) UDS can also be part of the process to select a file for transmission to an off-airplane destination.

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B. Possible Causes

(1) Airplane credentials

(2) Network File Server (NFS), M2889.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-017 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-017 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER

AKS 006-999

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-017 does not show, then you corrected the fault.

(c) If Fault Code 46-017 still shows, then continue.

(3) Do a check of the airplane credentials, (Onboard Network System Airplane Credentials Check, AMM TASK 46-13-00-750-801).

(a) If you find a problem, do the corrective action in that task.

(4) On the ONS browser, make your selections: Extended Maintenance > ONS Maintenance > Existing Faults.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-017 does not show, then you corrected the fault.

(c) If Fault Code 46-017 still shows, then continue.

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(5) Remove the NFS, and install a serviceable NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-017 does not show, then you corrected the fault.

——— END OF TASK ———

817. 46-018 or 46-00018 Fault Code (DHCP service didn't initialize or reached the restart limit) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows fault code 46–018.

(a) The fault data for 46–018 is: DHCP service didn't initialize or reached the restart limit.

(2) This fault code is detected with internal monitoring of the service and indicates Dynamic Host Configuration Protocol (DHCP) service didn't initialize, or it reached the restart limit. It is detected by internal monitoring of the DHCP service.

NOTE: DHCP is the protocol that lets a computer get it's IP address, its default gateway address and Domain Name Server information.

(3) One possible, observed problem related to this fault code is the laptop cannot connect to the NFS because it is not assigned an IP address.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-018 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-018 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

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This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-018 does not show, then you corrected the fault.

(c) If Fault Code 46-018 still shows, then continue.

(3) Install 46 NFS NetManager, 46 NFS Operating System (OS) and 46 NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-018 does not show, then you corrected the fault.

3) If Fault Code 46-018 still shows, then continue.

(4) Erase the NFS drive, and install new software. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-018 does not show, then you corrected the fault.

3) If Fault Code 46-018 still shows, then continue.

(5) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-018 does not show, then you corrected the fault.

——— END OF TASK ———

818. 46-020 or 46-00020 Fault Code (ONS SERVICE FAIL Message) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows fault code 46-020.

(a) The fault data for 46-020 is: ONS SERVICE FAIL.

(2) This is a high-level fault that is triggered by lower level faults.

(a) There are no fault isolation procedure for this specific fault code.

(b) Typically, NFS1 shows fault code 46-020 with one or more other fault codes at the same time.

1) Do the corrective action for the other fault code, or codes first.

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B. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-020 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-020 shows, then do the Fault Isolation Procedure below.

C. Fault Isolation Procedure

(1) If NFS-1 shows Fault Code 46-021 at the same time as Fault Code 46-020, then do this task: (46-021 or 46-00021 Fault Code (NFS-1 AVIONICS SERVICE FAIL Message) Shows - Fault Isolation, 46-13 TASK 819).

(2) If NFS-1 shows Fault Code 46-022 at the same time as Fault Code 46-020, then do this task: (46-022 or 46-00022 Fault Code (NTP service didn't initialize or reached the restart limit) Shows - Fault Isolation, 46-13 TASK 820).

(3) If NFS-1 shows Fault Code 46-023 at the same time as Fault Code 46-020, then do this task: (46-023 or 46-00023 Fault Code (SAPS service didn't initialize or reached the restart limit) Shows - Fault Isolation, 46-13 TASK 821).

(4) If fault continues, you can do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Make sure you do the steps to generate new credentials as specified in that task.

(b) Again do a check of the Existing Faults page, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-020 does not show, then you corrected the fault.

3) If Fault Code 46-020 still shows, then continue.

(5) Replace the NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-020 does not show, then you corrected the fault.

——— END OF TASK ———

819. 46-021 or 46-00021 Fault Code (NFS-1 AVIONICS SERVICE FAIL Message) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows fault code 46–021.

(a) The fault data for 46–021 is: NFS-1 AVIONICS SERVICE FAIL.

(2) This fault code is detected with internal monitoring of the service.

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B. Possible Causes

(1) Software

(2) Network File Server (NFS), M2889

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-021 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-021 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER

AKS 006-999

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-021 does not show, then you corrected the fault.

(c) If Fault Code 46-021 still shows, then continue.

(3) Install 46 NFS NetManager, 46 NFS Operating System (OS) and 46 NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-021 does not show, then you corrected the fault.

3) If Fault Code 46-021 still shows, then continue.

(4) Erase the NFS drive, and install new software. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

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(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-021 does not show, then you corrected the fault.

3) If Fault Code 46-021 still shows, then continue.

(5) Remove the NFS, and install a serviceable NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-021 does not show, then you corrected the fault.

——— END OF TASK ———

820. 46-022 or 46-00022 Fault Code (NTP service didn't initialize or reached the restart limit) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-022.

(a) The fault data for 46-022 is: NTP service didn't initialize or reached the restart limit.

(2) The NFS can cause this fault code to show when the network time protocol (NTP) is unserviceable.

B. Possible Causes

(1) Software

(2) Network File Server (NFS), M2889

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-022 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-022 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

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This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-022 does not show, then you corrected the fault.

(c) If Fault Code 46-022 still shows, then continue.

(3) Install 46 NFS NetManager, 46 NFS Operating System (OS) and 46 NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-022 does not show, then you corrected the fault.

3) If Fault Code 46-022 still shows, then continue.

(4) Erase the NFS drive, and install new software. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-022 does not show, then you corrected the fault.

3) If Fault Code 46-022 still shows, then continue.

(5) Remove the NFS, and install a serviceable NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-022 does not show, then you corrected the fault.

——— END OF TASK ———

821. 46-023 or 46-00023 Fault Code (SAPS service didn't initialize or reached the restart limit) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-023.

(a) The fault data for 46-023 is: SAPS service didn't initialize or reached the restart limit.

(2) The NFS shows this fault code when the standard airline parameter service (SAPS) is unserviceable.

B. Possible Causes

(1) Software

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C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-023 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-023 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER

AKS 006-999

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-023 does not show, then you corrected the fault.

(c) If Fault Code 46-023 still shows, then continue.

(3) Install 46 NFS NetManager, 46 NFS Operating System (OS) and 46 NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-023 does not show, then you corrected the fault.

3) If Fault Code 46-023 still shows, then continue.

(4) Erase the NFS drive, and install new software. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-023 does not show, then you corrected the fault.

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3) If Fault Code 46-023 still shows, then continue.

(5) Replace the NFS with a serviceable NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-023 does not show, then you corrected the fault.

——— END OF TASK ———

822. 46-025 or 46-00025 Fault Code (Application Hosting Service didn't initialize) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows fault code 46-025.

(a) The fault data for 46-025 is: Application Hosting Service didn't initialize.

(2) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-025.

(a) The fault data for 46-025 is: Application Hosting Service didn't initialize.

(3) The NFS shows this fault code when the NFS application host is unserviceable.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-025 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-025 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

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AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-025 does not show, then you corrected the fault.

(c) If Fault Code 46-025 still shows, then continue.

(3) Install 46 NFS NetManager, 46 NFS Operating System (OS) and 46 NFS OPC software parts. Do this task: (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-025 does not show, then you corrected the fault.

3) If Fault Code 46-025 still shows, then continue.

(4) Erase the NFS drive, and install new software. Do this task: (Network File Server Drive Reformat Procedure, AMM TASK 46-13-01-070-802).

(a) Click refresh on the browser or, exit and then again select the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-025 does not show, then you corrected the fault.

3) If Fault Code 46-025 still shows, then continue.

(5) Replace the NFS with a serviceable NFS. Do these tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Click refresh on the browser or, exit and select again the Existing Faults button.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-025 does not show, then you corrected the fault.

——— END OF TASK ———

823. 46-030 or 46-00030 Fault Code (EXPIRED CRATE SIGNING CERTIFICATE Message) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-030.

(a) The fault data for 46-030 is: EXPIRED CRATE SIGNING CERTIFICATE.

(2) This fault shows when one of these conditions is present:

(a) An OBEDS internal function found no certificate from OAS.

(b) The crated installation file is unserviceable.

(c) The certificate has expired, or is unserviceable.

NOTE: The certificate can refer to the airplane certificate, command certificate, crate certificate, SSL certificate, or part certificate.

B. Possible Causes

(1) Software.

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C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-030 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-030 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Examine the configuration this software part: 46 NFS OAS AIRLINE CERTS UMS, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with 46 NFS OAS AIRLINE CERTS UMS, then install a new LSAP, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-030.

1) If 46-030 does not show, then you corrected the fault.

——— END OF TASK ———

824. 46-031 or 46-00031 Fault Code (EXPIRED VPN/TLS CERTIFICATE Message) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-031.

(a) The fault data for 46-031 is: EXPIRED VPN/TLS CERTIFICATE.

(2) This fault shows when one of these conditions is present:

(a) The virtual private network (VPN) certificate has expired, or is unserviceable.

(b) The transport layer security (TLS) certificate has expired, or is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-031 does not show, then the fault was intermittent.

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a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-031 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Examine the configuration this software part: 46 NFS OAS AIRLINE CERTS UMS, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with 46 NFS OAS AIRLINE CERTS UMS, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-031.

1) If 46-031 does not show, then you corrected the fault.

——— END OF TASK ———

825. 46-032 or 46-00032 Fault Code (EXPIRED COMMAND SIGNING CERTIFICATE Message) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-032.

(a) The fault data for 46-032 is: EXPIRED COMMAND SIGNING CERTIFICATE.

(2) This fault shows when this condition is present:

(a) The command signing certificate (CSR) has expired, or is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-032 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-032 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Examine the configuration this software part: 46 NFS OAS AIRLINE CERTS UMS, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with 46 NFS OAS AIRLINE CERTS UMS, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

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(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-032.

1) If 46-032 does not show, then you corrected the fault.

——— END OF TASK ———

826. 46-033 or 46-00033 Fault Code (EXPIRED SOFTWARE PART SIGNING CERTIFICATE Message) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-033.

(a) The fault data for 46-033 is: EXPIRED SOFTWARE PART SIGNING CERTIFICATE.

(2) This fault shows when the software part signing certificate has expired, or is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-033 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-033 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Examine the configuration of the software part: 46 NFS OAS AIRLINE CERTS UMS, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with 46 NFS OAS AIRLINE CERTS UMS, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-033.

1) If 46-033 does not show, then you corrected the fault.

——— END OF TASK ———

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827. 46-035 or 46-00035 Fault Code (EXPIRED SECURITY TRUST ANCHORS) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-035.

(a) The fault data for 46-035 is: EXPIRED SECURITY TRUST ANCHORS.

(2) This fault shows at NFS boot-up when the security trust anchor, in the airline AMI has expired.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-035 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-035 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Examine the configuration of the software part: 46 NFS OAS AIRLINE CERTS AMI, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with 46 NFS OAS AIRLINE CERTS AMI, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-035.

1) If 46-035 does not show, then you corrected the fault.

END OF TASK

828. 46-036 or 46-00036 Fault Code (EXPIRED AIRPLANE CERTIFICATE IN RADIUS CHAIN) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-036.

(a) The fault data for 46-036 is: EXPIRED AIRPLANE CERTIFICATE IN RADIUS CHAIN.

(2) This fault shows when the software part signing certificate has expired, or is unserviceable.

B. Possible Causes

(1) Software.

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C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-036 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-036 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Do this task: (Onboard Network System Airplane Credentials Check, AMM TASK 46-13-00-750-801).

(a) Make sure you do the steps to generate a credential signing request (CST), and install the new airplane keys.

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-036.

1) If 46-036 does not show, then you corrected the fault.

——— END OF TASK ———

829. 46-037 or 46-00037 Fault Code (EXPIRED AIRLINE CERTIFICATE AUTHORITY CERTIFICATE) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-037.

(a) The fault data for 46-037 is: EXPIRED AIRLINE CERTIFICATE AUTHORITY CERTIFICATE.

(2) This fault shows when the airline certificate has expired, or is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-037 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

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3) If Fault Code 46-037 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Examine the configuration of the software part: 46 NFS OAS AIRLINE CERTS UMS, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with 46 NFS OAS AIRLINE CERTS UMS, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-037.

1) If 46-037 does not show, then you corrected the fault.

——— END OF TASK ———

830. 46-038 or 46-00038 Fault Code (AIRPLANE CERTIFICATE EXPIRING SOON) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-038.

(a) The fault data for 46-038 is: AIRPLANE CERTIFICATE EXPIRING SOON.

(2) This fault shows when the software part signing certificate has expired, or is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-038 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-038 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Do this task: (Onboard Network System Airplane Credentials Check, AMM TASK 46-13-00-750-801).

(a) Make sure you do the steps to generate a credential signing request (CST), and install the new airplane keys.

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-038.

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1) If 46-038 does not show, then you corrected the fault.

——— END OF TASK ———

831. 46-039 or 46-00039 Fault Code (AIRLINE CA CERT WILL EXPIRE WITHIN 30 DAYS OR LESS) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-039.

(a) The fault data for 46-039 is: AIRLINE CA CERT WILL EXPIRE WITHIN 30 DAYS OR LESS.

(2) This fault shows when the airline CA certificate will expire, or become unserviceable, in 30 days or less.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-039 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-039 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Examine the configuration of the software part: 46 NFS OAS AIRLINE CERTS UMS, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with 46 NFS OAS AIRLINE CERTS UMS, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-039.

1) If 46-039 does not show, then you corrected the fault.

——— END OF TASK ———

832. 46-040 or 46-00040 Fault Code (AIRPLANE DATA DOES NOT MATCH SECURITY CERTIFICATE) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-040.

(a) The fault data for 46-040 is: AIRPLANE DATA DOES NOT MATCH SECURITY CERTIFICATE.

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(2) This fault shows when the data recorded on the ONS airplane identification page, and one or more security certificates, do not agree.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-040 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-040 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Do a check of the airplane identification data, (Onboard Network System Airplane Identification Check, AMM TASK 46-13-00-860-801).

(a) If you find a problem, then correct the airplane identification data.

(2) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-040 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-040 shows, then do the Fault Isolation Procedure below.

(3) Do this task: (Onboard Network System Airplane Credentials Check, AMM TASK 46-13-00-750-801).

(a) Make sure you do the steps to generate a credential signing request (CST), and install the new airplane keys.

(4) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-040.

1) If 46-040 does not show, then you corrected the fault.

END OF TASK

833. 46-041 or 46-00041 Fault Code (OAS CERTIFICATE MISMATCH) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-041.

(a) The fault data for 46-041 is: OAS CERTIFICATE MISMATCH.

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(2) The NFS can show this fault when a certificate for operationally approved software (OAS) does not agree, or is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-041 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-041 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Verify the configuration of the network file server. This is the task: (Onboard Network System Configuration Check, AMM TASK 46-13-00-720-803).

(a) If you find a problem with the configuration, then do these steps:

1) Install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-041 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-041 shows, then do the Fault Isolation Procedure below.

(3) Do this task: (Onboard Network System Airplane Credentials Check, AMM TASK 46-13-00-750-801).

(a) Make sure you do the steps to generate a credential signing request (CST), and install the new airplane keys.

(4) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-041.

1) If 46-041 does not show, then you corrected the fault.

END OF TASK

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835. 46-044 or 46-00044 Fault Code (OBEDS detects expired or missing OAS certificate) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-044.

(a) The fault data for 46-044 is: OBEDS detects expired or missing OAS certificate.

(2) The NFS shows this fault when the Oracle™ application server (OAS) certificate for Onboard Boeing Electronic Distribution of Software (OBEDS) is expired, missing, or unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-044 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-044 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Do this task: (Onboard Network System Airplane Credentials Check, AMM TASK 46-13-00-750-801).

(a) Make sure you do the steps to generate a credential signing request (CST), and install the new airplane keys.

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-044.

1) If 46-044 does not show, then you corrected the fault.

——— END OF TASK ———

836. 46-046 or 46-00046 Fault Code (OBEDS operational error detected) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-046.

(a) The fault data for 46-046 is: OBEDS operational error detected.

(2) The NFS shows this fault when the Oracle™ application server (OAS) certificate for Onboard Boeing Electronic Distribution of Software (OBEDS) is expired, missing, or unserviceable.

B. Possible Causes

(1) Software.

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C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-046 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-046 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Do this task: (Onboard Network System Airplane Credentials Check, AMM TASK 46-13-00-750-801).

(a) If you find a problem, do the corrective action in the specified task.

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-046.

1) If 46-046 does not show, then you corrected the fault.

——— END OF TASK ———

837. 46-048 or 46-00048 Fault Code (OBEDS cannot authenticate ground server connection) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-048.

(a) The fault data for 46-048 is: OBEDS cannot authenticate ground server connection.

(2) The NFS shows this fault when the Onboard Boeing Electronic Distribution of Software (OBEDS) connection is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-048 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-048 shows, then do the Fault Isolation Procedure below.

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D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-048 does not show, then you corrected the fault.

(c) If Fault Code 46-048 still shows, then continue.

(3) Do this task: (Onboard Network System Airplane Credentials Check, AMM TASK 46-13-00-750-801).

(a) Make sure you do the steps to generate a credential signing request (CST), and install the new airplane keys.

(4) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-048.

1) If 46-048 does not show, then you corrected the fault.

——— END OF TASK ———

838. 46-049 Fault Code (Received request for non-existent client) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults > NFS1 shows fault code 46-049.

(a) The fault data for 46-049 is: Received request for non-existent client.

(2) The NFS shows this fault when the ???

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes are present.

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(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If NFS1 does not show Fault Code 46-049, then the fault was intermittent.

3) If Fault Code 46-049 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-049 does not show, then you corrected the fault.

(c) If Fault Code 46-049 still shows, then continue.

(2) Do this task: (Onboard Network System Server Credentials Check, AMM TASK 46-13-00-750-802).

(3) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-049.

1) If 46-049 does not show, then you corrected the fault.

——— END OF TASK ———

839. 46-060 or 46-00060 Fault Code (A NetManager AMI has failed validation) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-060.

(a) The fault data for 46-060 is: A NetManager AMI has failed validation.

(2) The NFS shows this fault when a type of LSAP identified as NetManager AMI (airline modifiable information) is unserviceable.

(a) Typically, NFS1 shows fault code 46-060 with one or more other fault codes, at the same time.

1) Do the corrective action for the other fault code, or codes first.

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B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-060 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-060 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) If NFS-1 shows Fault Code 46-065 at the same time as Fault Code 46-060, then do this task: (46-065 or 46-00065 Fault Code (The OBEDS data in the EXCOMM AMI fails validation), 46-13 TASK 842)

(a) When complete, then examine the selection: Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then you corrected the fault.

2) If Fault Code 46-060 does not show, then you corrected the fault.

3) If Fault Code 46-060 still shows, then continue.

(2) Examine the NFS software configuration, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with airline or operator-specified software, then follow your airline's policy to report this condition.

(b) If you find a problem with the software configuration, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

E. Repair Confirmation

(1) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes are present.

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-060.

1) If 46-060 does not show, then you corrected the fault.

——— END OF TASK ———

840. 46-062 or 46-00062 Fault Code (An OAS AMI has failed validation) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-062.

(a) The fault data for 46-062 is: An OAS AMI has failed validation.

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(2) The NFS shows this fault when a type of LSAP identified as OAS AMI (airline modifiable information) is unserviceable.

(a) Typically, NFS1 shows fault code 46-062 with one or more other fault codes, at the same time.

1) Do the corrective action for the other fault code, or codes first.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes are present.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If NFS1 does not show Fault Code 46-062, then the fault was intermittent.

3) If Fault Code 46-062 shows, then do these steps:

a) Examine NFS1 existing faults for fault code 46-065, and determine if it shows.

b) Do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Examine the NFS software configuration, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with airline or operator-specified software, then follow your airline's policy to report this condition.

(b) If you find a problem with the software configuration, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-062.

1) If 46-062 does not show, then you corrected the fault.

——— END OF TASK ———

841. 46-063 Fault Code (AIRPLANE AMI VALIDITY TIME NOT WITHIN CURRENT AIRPLANE TIME) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults > NFS1 shows fault code 46-063.

(a) The fault data for 46-063 is: AIRPLANE AMI VALIDITY TIME NOT WITHIN CURRENT AIRPLANE TIME.

B. Possible Causes

(1) Software.

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C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes are present.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If NFS1 does not show Fault Code 46-063, then the fault was intermittent.

3) If Fault Code 46-063 shows, then do these steps:

a) Examine NFS1 existing faults for fault code 46-065, and determine if it shows.

b) Do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Examine the NFS software configuration, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with the software configuration, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-063.

1) If 46-063 does not show, then you corrected the fault.

——— END OF TASK ———

842. 46-065 or 46-00065 Fault Code (The OBEDS data in the EXCOMM AMI fails validation)

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-065.

(a) The fault data for 46-065 is: The OBEDS data in the EXCOMM AMI fails validation.

(b) This fault code, and fault code 46-060, can show at the same time.

(c) If this occurs, the two fault codes can refer to the same problem.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-065 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

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3) If Fault Code 46-065 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Examine the NFS software configuration, (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with airline or operator-specified software, then follow your airline's policy to report this condition.

(b) If you find a problem with the software configuration, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-065.

1) If 46-065 does not show, then you corrected the fault.

——— END OF TASK ———

843. 46-066 or 46-00066 Fault Code (A NetManager OPC has failed validation) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults for NFS1 shows Fault Code 46-066.

(a) The fault data for 46-066 is: A NetManager OPC has failed validation.

(2) The NFS shows this fault when a type of LSAP identified as NetManager OPC (operation program code) is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes show.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If Fault Code 46-066 does not show, then the fault was intermittent.

a) Since NFS1 shows, another fault isolation task can be necessary.

3) If Fault Code 46-066 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

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This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

(2) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-066 does not show, then you corrected the fault.

(c) If Fault Code 46-066 shows, then continue.

(3) Examine the configuration (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with airline or operator-specified software, then follow your airline's policy to report this condition.

(b) If you find a problem with the ONS software configuration, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(4) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-066.

1) If 46-066 does not show, then you corrected the fault.

——— END OF TASK ———

844. 46-067 Fault Code (Internal NED OPC is not compatible with NFS OPC) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults > NFS1 shows fault code 46-067.

(a) The fault data for 46-067 is: Internal NED OPC is not compatible with NFS OPC.

(2) The NFS shows this fault when the software parts do not agree.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a check of ONS Existing Faults for NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes are present.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1.

1) If NFS1 does not show, then the fault was intermittent. No action is necessary.

2) If NFS1 does not show Fault Code 46-067, then the fault was intermittent.

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3) If Fault Code 46-067 shows, then do the Fault Isolation Procedure below.

D. Fault Isolation Procedure

(1) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

NOTE: It is necessary to wait from three to five minutes for a complete NFS reboot.

Click refresh on the browser or, exit and then re-enter the Existing Faults page.

(a) If NFS1 does not show, then you corrected the fault.

(b) If Fault Code 46-067 does not show, then you corrected the fault.

(c) If Fault Code 46-067 still shows, then continue.

(2) Examine the configuration (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) If you find a problem with airline or operator-specified software, then follow your airline's policy to report this condition.

(b) If you find a problem with the ONS software configuration, then install the correct software for NFS, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(3) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > NFS1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If NFS1 does not show, then you corrected the fault.

(b) If NFS1 shows, then select NFS1 and look for fault code 46-067.

1) If 46-067 does not show, then you corrected the fault.

——— END OF TASK ———

845. 46-110 or 46-00110 Fault Code (EGPWS~NFS1 ETHERNET BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when ONS Existing Faults > EGPWS shows fault code 46-110.

(a) The fault data for 46-110 is: EGPWS~NFS1 ETHERNET BUS FAIL.

(2) The NFS shows this fault when communication from the enhanced ground proximity system (EGPWS) to the network file server (NFS) is unserviceable.

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B. Possible Causes

(1) Software

(2) Wiring

(3) Network file server, M2889.

(4) Ground proximity warning computer, M652.

C. Related Data

(1) WDM 46-13-11.

D. Initial Evaluation

(1) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, and no fault codes are present.

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > EGPWS.

1) If EGPWS does not show, then the fault was intermittent. No action is necessary.

2) If Existing Faults > EGPWS shows, but does not show code 46-110, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If fault code 46-110 shows, then continue.

(2) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > Ethernet (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection EGPWS shows the status: DOWN, then do: Fault Isolation Procedure - Ethernet Bus, that follows.

(b) If End Connection EGPWS shows the status: High, Low, Up, or words other than DOWN, then do: Fault Isolation Procedure - NFS Configuration, that follows.

E. Fault Isolation Procedure - Ethernet Bus

(1) Make sure that this circuit breaker is closed:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
A	7	C01519	TERRAIN DISPLAY

(a) If you closed the breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > EGPWS does not show, then you corrected the problem.

2) If Existing Faults > EGPWS shows, but does not show code 46-110, then you corrected the problem.

3) If EGPWS shows fault code 46-110, then continue.

(b) If you closed the breaker, do a check of ONS EXISTING FAULTS, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If 46 - Onboard Network System does not show selectable, then you corrected the problem.

2) If 46 - Onboard Network System does show selectable, but does not show code 46-00110, then you corrected the problem.

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3) If fault code 46-00110 shows, then continue.

(2) Do this check of the wiring:

(a) Remove the Ground Proximity Warning Computer (GPWC), M652. This is the task: (Ground Proximity Warning Computer Removal, AMM TASK 34-46-01-000-801).

(b) Remove the NFS, M2889. This is the task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

	E/E Bay		
	M2889, NFS, E5-2	M652, GPWC, E1-1	
E5-2	D13673B	D1153B	
	KK-1	B4	0
	KK-3	A5	0
	KK-2	A4	0
	KK-4	B5	0

1) If you find a problem, then repair the wiring.

(d) Install the NFS, M2889. This is the task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(e) Install the GPWC, M652. This is the task: (Ground Proximity Warning Computer Installation, AMM TASK 34-46-01-400-801).

(3) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > EGPWS, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > EGPWS does not show, then you corrected the problem.

(b) If Existing Faults > EGPWS shows, but code 46-110 does not show, then you corrected the problem.

(c) If EGPWS shows fault code 46-110, then continue.

(4) Install a new client credential for EGPWS, (Onboard Network System Client Credentials Check, AMM TASK 46-13-00-750-803).

(5) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > EGPWS, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > EGPWS does not show, then you corrected the problem.

(b) If Existing Faults > EGPWS shows, but code 46-110 does not show, then you corrected the problem.

(c) If EGPWS shows fault code 46-110, then continue.

(6) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(7) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > EGPWS.

(a) If EGPWS does not show, then you corrected the fault.

(b) If fault code 46-110 does not show, then you corrected the fault.

(c) If the Existing Faults page shows no LRUs, with no fault codes, then the NFS is serviceable.

(d) If fault code 46-110 shows, then continue.

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(8) Remove the GPWC, M652, and install a serviceable GPWC. Do these tasks: (Ground Proximity Warning Computer Removal, AMM TASK 34-46-01-000-801, and Ground Proximity Warning Computer Installation, AMM TASK 34-46-01-400-801).

(9) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

).

F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure that 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then install the correct software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > EGPWS, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > EGPWS does not show, then you corrected the problem.

(b) If Existing Faults > EGPWS does not show code 46-110, then you corrected the problem.

(c) If Existing Faults > EGPWS shows fault code 46-110, then continue.

(3) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > EGPWS, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If LRU EGPWS does not show, then you corrected the fault.

(b) If Existing Faults > EGPWS shows, but does not show code 46-110, then you corrected the problem.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

——— END OF TASK ———

846. 46-153 or 46-00153 Fault Code (FMC~NFS1 `FMC-02` BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > FMC shows fault code 46-153.

(a) The fault data for 46-153 is: FMC~NFS1 'FMC-02' BUS FAIL.

(2) The nomenclature FMC-02 refers to the bus.

(3) This fault can occur when ARINC 429 communications, on bus FMC-02, between the FMC and NFS is unserviceable.

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B. Possible Causes

(1) Circuit breakers.

(2) Wiring

(3) Network file server (NFS), M2889

(4) Flight Management Computer, FMC-1, M1175.

(5) FMCS Transfer Relay 2, R476.

C. Related Data

(1) WDM 34-61-14

(2) WDM 46-13-11.

D. Initial Evaluation

(1) Set the FMC SOURCE SELECT SWITCH, P5-28, to BOTH ON L.

(2) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > FMC.

1) If the LRU FMC does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > FMC shows, but does not show code 46-153, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If FMC shows fault code 46-153, then continue.

(3) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 429 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection: FMC Relay / FMC-02 shows the status: FAILED, then do: Fault Isolation Procedure - FMC-02 Bus, that follows.

(b) If End Connection: FMC Relay / FMC-02 shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

E. Fault Isolation Procedure - FMC-02 BUS

(1) Make sure that these circuit breakers are closed:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
A	6	C01017	FMCS CMPTR 1

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
E	15	C01263	FMCS XFR

(a) If you found an open breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > FMC does not show, then you corrected the problem.

2) If Existing Faults > FMC shows, but does not show code 46-153, then you corrected the problem.

3) If FMC shows fault code 46-153, then continue.

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CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove FMC-1, M1175. Do this task: (FMCS Computer Removal, AMM TASK 34-61-02-000-801).

	E/E BAY to		
	M2889, NFS	**M1175, Single FMC**	
E5-2	**D13673A**	**D2179B**	
	D12	D7	0
	E12	E7	0

1) If you find a problem, then repair the wiring.

(d) Install FMC-1. Do this task: (FMCS Computer Installation, AMM TASK 34-61-02-400-801).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(3) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > FMC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If FMC does not show, then you corrected the fault.

(b) If Existing Faults > FMC shows, but does not show code 46-153, then you corrected the problem.

(c) If Fault Code 46-153 still shows, then continue.

(4) Set the FMC SOURCE SELECT SWITCH, P5-28, to NORMAL.

(5) Make sure the FMCS Transfer Relay, R00476, is serviceable, (Flight Management Computer System - Operational Test, AMM TASK 34-61-00-710-801).

F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803).

(a) Make sure the 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then replace the applicable software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > FMC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU FMC does not show, then you corrected the fault.

(b) If Existing Faults > FMC shows, but does not show code 46-153, then you corrected the problem.

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(c) If FMC shows fault code 46-153, then continue.

(3) Set the FMC SOURCE SELECT SWITCH, P5-28, to NORMAL.

(4) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > FMC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU FMC does not show, then you corrected the fault.

(b) If Existing Faults > FMC shows, but does not show code 46-153, then you corrected the problem.

1) Corrective action for other fault codes shown is necessary.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

——— END OF TASK ———

847. 46-154 or 46-00154 Fault Code (FMC~NFS1 `FMC-09` BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > FMC shows fault code 46-154.

(a) The fault data for 46-154 is: FMC~NFS1 'FMC-09' BUS FAIL.

(2) This fault can occur when ARINC 429 communications, on bus FMC-09, between the FMC and NFS is unserviceable.

B. Possible Causes

(1) Circuit breakers.

(2) Wiring

(3) Network file server (NFS), M2889

(4) Flight Management Computer, FMC-2, M1632.

(5) FMCS Transfer Relay 2, R476.

C. Related Data

(1) WDM 34-61-15.

(2) WDM 46-13-11.

D. Initial Evaluation

(1) Set the FMC SOURCE SELECT SWITCH, P5-28, to BOTH ON L.

(2) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > FMC.

1) If the LRU FMC does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > FMC shows, but does not show code 46-154, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

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3) If FMC shows fault code 46-154, then continue.

(3) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 429 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection: FMC Relay / FMC-09 shows the status: FAILED, then do: Fault Isolation Procedure - FMC-09 Bus, that follows.

(b) If End Connection: FMC Relay / FMC-09 shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

E. Fault Isolation Procedure - FMC-09 BUS

(1) Make sure that these circuit breakers are closed:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
D	16	C01262	FMCS CMPTR 2
E	15	C01263	FMCS XFR

(a) If you found an open breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > FMC does not show, then you corrected the problem.

2) If Existing Faults > FMC shows, but does not show code 46-154, then you corrected the problem.

3) If FMC shows fault code 46-154, then continue.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove FMC-2, M1632. Do this task: (FMCS Computer Removal, AMM TASK 34-61-02-000-801).

E/E BAY

	M2889, NFS	**M1632, FMC2**	
E5-2	**D13673A**	**D2179B**	
	G12	G9	0
	H12	H9	0

(d) Install FMC-2. Do this task: (FMCS Computer Installation, AMM TASK 34-61-02-400-801).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(3) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > FMC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If FMC does not show, then you corrected the fault.

(b) If Existing Faults > FMC shows, but does not show code 46-154, then you corrected the problem.

(c) If Fault Code 46-154 still shows, then continue.

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(4) Set the FMC SOURCE SELECT SWITCH, P5-28, to NORMAL.

(5) Make sure the FMCS Transfer Relay 2, R00476, is serviceable, (Flight Management Computer System - Operational Test, AMM TASK 34-61-00-710-801).

F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure the 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then replace the applicable software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > FMC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU FMC does not show, then you corrected the fault.

(b) If Existing Faults > FMC shows, but does not show code 46-154, then you corrected the problem.

(c) If FMC shows fault code 46-154, then continue.

(3) Set the FMC SOURCE SELECT SWITCH, P5-28, to NORMAL.

(4) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > FMC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU FMC does not show, then you corrected the fault.

(b) If Existing Faults > FMC shows, but does not show code 46-154, then you corrected the problem.

1) Corrective action for other fault codes shown is necessary.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

——— END OF TASK ———

848. 46-155 or 46-00155 Fault Code (ADIRU-L~NFS1 `ADR-4` BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L shows fault code 46-155.

(a) The fault data for 46-155 is: ADIRU-L~NFS1 'ADR-4' BUS FAIL.

(2) This fault can occur when ARINC 429 communications, on bus ADR-4, between the ADIRU-L and NFS is unserviceable.

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B. Possible Causes

(1) Circuit breakers.

(2) Wiring

(3) Network file server (NFS), M2889

(4) ADIRU-L, M1749.

C. Related Data

(1) WDM 34-21-14.

(2) WDM 46-13-11.

D. Initial Evaluation

(1) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L.

1) If the LRU ADIRU-L does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > ADIRU-L shows, but does not show code 46-155, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If ADIRU-L shows fault code 46-155, then continue.

(2) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 429 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection: ADIRU-L / ADR-4 shows the status: FAILED, then do: Fault Isolation Procedure - ADR-L-4 Bus, that follows.

(b) If End Connection: ADIRU-L / ADR-4 shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

E. Fault Isolation Procedure - ADR-4 BUS

(1) Make sure that this circuit breaker is closed:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT

(a) If you closed a breaker, then do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > ADIRU-L does not show, then you corrected the problem.

2) If Existing Faults > ADIRU-L shows, but does not show code 46-155, then you corrected the problem.

3) If ADIRU-L shows fault code 46-155, then continue.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

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(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove ADIRU-L, M1749. Do this task: (Air Data Inertial Reference Unit Removal, AMM TASK 34-21-01-000-801).

	E/E BAY		
	M2889, NFS	M1749, ADIRU-L	
E5-2	D13673A	D3687A	
	B9	A9	0
	C9	B9	0

(d) Install ADIRU-L. Do this task: (Air Data Inertial Reference Unit Installation, AMM TASK 34-21-01-400-801).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(3) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L.

1) If the LRU ADIRU-L does not show, then you corrected the problem.

2) If Existing Faults > ADIRU-L shows, but does not show code 46-155, then you corrected the problem.

3) If ADIRU-L shows fault code 46-155, then continue.

F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure the 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then install the correct software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L.

1) If the LRU ADIRU-L does not show, then you corrected the problem.

2) If Existing Faults > ADIRU-L shows, but does not show code 46-155, then you corrected the problem.

3) If ADIRU-L shows fault code 46-155, then continue.

(3) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

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G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU ADIRU-L does not show, then you corrected the fault.

(b) If Existing Faults > ADIRU-L shows, but does not show code 46-155, then you corrected the problem.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

——— END OF TASK ———

849. 46-156 or 46-00156 Fault Code (ADIRU-L~NFS1 `IR-3` BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L shows fault code 46-156.

(a) The fault data for 46-156 is: ADIRU-L~NFS1 'IR-3' BUS FAIL.

(2) This fault can occur when ARINC 429 communications, on bus IR-3, between the ADIRU-L and NFS is unserviceable.

B. Possible Causes

(1) Circuit breakers

(2) Wiring

(3) Network file server (NFS), M2889

(4) ADIRU-L, M1749.

C. Related Data

(1) WDM 34-21-13

(2) WDM 46-13-11.

D. Initial Evaluation

(1) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L.

1) If the LRU ADIRU-L does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > ADIRU-L shows, but does not show code 46-156, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If ADIRU-L shows fault code 46-156, then continue.

(2) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 429 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection: ADIRU-L / IR-3 shows the status: FAILED, then do: Fault Isolation Procedure - IR-3 Bus, that follows.

(b) If End Connection: ADIRU-L / IR-3 shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

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E. Fault Isolation Procedure - IR-3 BUS

(1) Make sure that this circuit breaker is closed:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
D	11	C00133	INDICATOR MASTER DIM DIM/TST CONT

(a) If you closed the breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > ADIRU-L does not show, then you corrected the problem.

2) If Existing Faults > ADIRU-L shows, but does not show code 46-156, then you corrected the problem.

3) If ADIRU-L shows fault code 46-156, then continue.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove ADIRU-L, M1749. Do this task: (Air Data Inertial Reference Unit Removal, AMM TASK 34-21-01-000-801).

E/E BAY

	M2889, NFS	**M1749, ADIRU-L**	
E5-2	**D13673A**	**D3687B**	
	B10	C10	0
	C10	C11	0

(d) Install ADIRU-L. Do this task: (Air Data Inertial Reference Unit Installation, AMM TASK 34-21-01-400-801).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(3) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L.

1) If the LRU ADIRU-L does not show, then you corrected the problem.

2) If Existing Faults > ADIRU-L shows, but does not show code 46-156, then you corrected the problem.

3) If ADIRU-L shows fault code 46-156, then continue.

(4) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

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F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure the 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then install the correct software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > ADIRU-L does not show, then you corrected the problem.

(b) If Existing Faults > ADIRU-L does not show code 46-156, then you corrected the problem.

(c) If Existing Faults > ADIRU-L shows fault code 46-156, then continue.

(3) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > ADIRU-L, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU ADIRU-L does not show, then you corrected the fault.

(b) If Existing Faults > ADIRU-L shows, but does not show code 46-156, then you corrected the problem.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

——— END OF TASK ———

850. 46-157 or 46-00157 Fault Code (DEU-1~NFS1 `CDS-GP` BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > DEU-1 shows fault code 46-157.

(a) The fault data for 46-157 is: DEU-1~NFS1 'CDS-GP' BUS FAIL.

(2) This fault can occur when ARINC 429 communications, on bus CDS-GP, between the DEU-1 and NFS is unserviceable.

B. Possible Causes

(1) Circuit breakers

(2) Wiring

(3) Network file server (NFS), M2889

(4) DEU-1, M1808.

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C. Related Data

(1) WDM 31-62-15

(2) WDM 46-13-11.

D. Initial Evaluation

(1) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > DEU-1.

1) If the LRU DEU-1 does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > DEU-1 shows, but does not show code 46-157, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If DEU-1 shows fault code 46-157, then continue.

(2) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 429 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection: DEU-1 / CDS-GP shows the status: FAILED, then do: Fault Isolation Procedure - CDS-GP Bus, that follows.

(b) If End Connection: DEU-1 / CDS-GP shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

E. Fault Isolation Procedure - CDS-GP BUS

(1) Make sure that this circuit breaker is closed:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
D	5	C01359	DISPLAY DEU 1 PRI

(a) If you closed the breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > DEU-1 does not show, then you corrected the problem.

2) If Existing Faults > DEU-1 shows, but does not show code 46-157, then you corrected the problem.

3) If DEU-1 shows fault code 46-157, then continue.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove DEU-1, M1808. Do this task: (Display Electronic Unit Removal, AMM TASK 31-62-21-000-801).

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	E/E BAY		
	M2889, NFS	M1808, DEU-1	
E5-2 to E3-1	D13673A	D3973D	
	B11	A15	0
	C11	B15	0

(d) Install DEU-1. Do this task: (Display Electronic Unit Installation, AMM TASK 31-62-21-400-801).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(3) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > DEU-1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > DEU-1 does not show, then you corrected the problem.

(b) If Existing Faults > DEU-1 shows, but code 46-157 does not show, then you corrected the problem.

(c) If DEU-1 shows fault code 46-157, then continue.

(4) Install a new client credential for DEU-1, (Onboard Network System Client Credentials Check, AMM TASK 46-13-00-750-803).

(5) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > DEU-1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > DEU-1 does not show, then you corrected the problem.

(b) If Existing Faults > DEU-1 shows, but code 46-157 does not show, then you corrected the problem.

(c) If DEU-1 shows fault code 46-157, then continue.

(6) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure that 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then install the correct software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > DEU-1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > DEU-1 does not show, then you corrected the problem.

(b) If Existing Faults > DEU-1 does not show code 46-157, then you corrected the problem.

(c) If Existing Faults > DEU-1 shows fault code 46-157, then continue.

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(3) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > DEU-1, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU DEU-1 does not show, then you corrected the fault.

(b) If Existing Faults > DEU-1 shows, but does not show code 46-157, then you corrected the problem.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

——— END OF TASK ———

851. 46-158 or 46-00158 Fault Code (DEU-2~NFS1 `CDS-GP` BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > DEU-2 shows fault code 46-158.

(a) The fault data for 46-158 is: DEU-2~NFS1 'CDS-GP' BUS FAIL.

(2) This fault can occur when ARINC 429 communications, on bus CDS-GP, between the DEU-2 and NFS is unserviceable.

B. Possible Causes

(1) Circuit breakers

(2) Wiring

(3) Network file server (NFS), M2889

(4) DEU-2, M1809.

C. Related Data

(1) WDM 31-62-25

(2) WDM 46-13-11.

D. Initial Evaluation

(1) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > DEU-2.

1) If the LRU DEU-2 does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > DEU-2 shows, but does not show code 46-158, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If DEU-2 shows fault code 46-158, then continue.

(2) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 429 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection: DEU-2 / CDS-GP shows the status: FAILED, then do: Fault Isolation Procedure - CDS-GP Bus, that follows.

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(b) If End Connection: DEU-2 / CDS-GP shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

E. Fault Isolation Procedure - CDS-GP BUS

(1) Make sure that this circuit breaker is closed:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
D	11	C01360	DISPLAY DEU 2 PRI

(a) If you closed the breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > DEU-2 does not show, then you corrected the problem.

2) If Existing Faults > DEU-2 shows, but does not show code 46-158, then you corrected the problem.

3) If DEU-2 shows fault code 46-158, then continue.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove DEU-2, M1809. Do this task: (Display Electronic Unit Removal, AMM TASK 31-62-21-000-801).

	E/E BAY		
	M2889, NFS	**M1809, DEU-2**	
E5-2 to E3-1	**D13673A**	**D3975D**	
	B12	A15	0
	C12	B15	0

(d) Install DEU-2. Do this task: (Display Electronic Unit Installation, AMM TASK 31-62-21-400-801).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(3) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > DEU-2, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > DEU-2 does not show, then you corrected the problem.

(b) If Existing Faults > DEU-2 shows, but code 46-158 does not show, then you corrected the problem.

(c) If DEU-2 shows fault code 46-158, then continue.

(4) Install a new client credential for DEU-2, (Onboard Network System Client Credentials Check, AMM TASK 46-13-00-750-803).

(5) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > DEU-2, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > DEU-2 does not show, then you corrected the problem.

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(b) If Existing Faults > DEU-2 does not show code 46-158, then you corrected the problem.

(c) If DEU-2 shows fault code 46-158, then continue.

(6) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure that 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then install the correct software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > DEU-2, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > DEU-2 does not show, then you corrected the problem.

(b) If Existing Faults > DEU-2 does not show code 46-158, then you corrected the problem.

(c) If Existing Faults > DEU-2 shows fault code 46-158, then continue.

(3) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > DEU-2, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU DEU-2 does not show, then you corrected the fault.

(b) If Existing Faults > DEU-2 shows, but does not show code 46-158, then you corrected the problem.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

——— END OF TASK ———

852. 46-159 or 46-00159 Fault Code (EVSC~NFS1 `AVM` BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > EVSC shows fault code 46-159.

(a) The fault data for 46-159 is: EVSC~NFS1 'AVM' BUS FAIL.

(2) This fault can occur when ARINC 429 communications is unserviceable on the Airborne Vibration Monitor (AVM) bus, between the Engine Vibration Signal Conditioner (EVSC) and network file server (NFS).

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B. Possible Causes

(1) Circuit breaker

(2) Wiring

(3) Network file server (NFS), M2889

(4) EVSC (or AVMSC), M1420.

C. Related Data

(1) WDM 46-13-11

(2) WDM 77-31-11

(3) WDM 77-31-21.

D. Initial Evaluation

(1) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > EVSC.

1) If the LRU EVSC does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > EVSC shows, but does not show code 46-159, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If EVSC shows fault code 46-159, then continue.

(2) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 429 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection EVSC: AVM shows the status: FAILED, then do: Fault Isolation Procedure - AVM Bus, that follows.

(b) If End Connection EVSC: AVM shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

E. Fault Isolation Procedure - AVM BUS

(1) Make sure that this circuit breaker is closed:

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
A	2	C01076	ENGINE VIB MON

(a) If you closed the breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > EVSC does not show, then you corrected the problem.

2) If Existing Faults > EVSC shows, but does not show code 46-159, then you corrected the problem.

3) If EVSC shows fault code 46-159, then continue.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

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(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove EVSC, M1420. Do this task: (Airborne Vibration Monitor (AVM) Signal Conditioner Removal, AMM TASK 77-31-03-000-801-F00).

	E/E BAY		
	M2889, NFS	**M1240, EVSC**	
E5-2 to E3-2	**D13673A**	**D3228A**	
	G5	C6	0
	H5	D6	0

(d) Install the EVSC. Do this task: (Airborne Vibration Monitor (AVM) Signal Conditioner Installation, AMM TASK 77-31-03-400-801-F00).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(3) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > EVSC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > EVSC does not show, then you corrected the problem.

(b) If Existing Faults > EVSC shows, but code 46-159 does not show, then you corrected the problem.

(c) If EVSC shows fault code 46-159, then continue.

(4) Install a new client credential for EVSC, (Onboard Network System Client Credentials Check, AMM TASK 46-13-00-750-803).

(5) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > EVSC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > EVSC does not show, then you corrected the problem.

(b) If Existing Faults > EVSC shows, but code 46-159 does not show, then you corrected the problem.

(c) If EVSC shows fault code 46-159, then continue.

(6) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(7) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure that 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then install the correct software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

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(2) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > EVSC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > EVSC does not show, then you corrected the problem.

(b) If Existing Faults > EVSC does not show code 46-159, then you corrected the problem.

(c) If Existing Faults > EVSC shows fault code 46-159, then continue.

(3) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > EVSC, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU EVSC does not show, then you corrected the fault.

(b) If Existing Faults > EVSC shows, but does not show code 46-159, then you corrected the problem.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

——— END OF TASK ———

853. 46-161 or 46-00161 Fault Code (MMR-1~NFS1 `GNSS DATA OUT #3` BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > MMR shows fault code 46-161.

(a) The fault data for 46-161 is: MMR~NFS1 'GNSS DATA OUT #3' BUS FAIL.

(2) This fault can occur when ARINC 429 communications is unserviceable on bus GNSS Data #3, between Multimode Receiver (MMR)-1 and network file server (NFS).

(a) Onboard Network System (ONS) uses the bus name: GNSS Data #3.

(b) The wiring diagram uses the bus name: GPS-1 OUTPUT BUS 3.

B. Possible Causes

(1) Circuit breaker

(2) Wiring

(3) Network file server (NFS), M2889

(4) MMR, M2104.

C. Related Data

(1) WDM 34-58-11

(2) WDM 46-13-11.

D. Initial Evaluation

(1) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > MMR.

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1) If the LRU MMR does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > MMR shows, but does not show code 46-161, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If MMR shows fault code 46-161, then continue.

(2) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 429 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection MMR: GNSS Data #3 shows the status: FAILED, then do: Fault Isolation Procedure - GNSS Bus #3, that follows.

(b) If End Connection MMR: GNSS Data #3 shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

E. Fault Isolation Procedure - GNSS BUS #3

(1) Make sure that this circuit breaker is closed:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
A	2	C01479	RADIO NAVIGATION MMR 1

(a) If you closed the breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > MMR does not show, then you corrected the problem.

2) If Existing Faults > MMR shows, but does not show code 46-161, then you corrected the problem.

3) If MMR shows fault code 46-161, then continue.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove MMR, M2104. Do this task: (Receiver for ILS - Removal, AMM TASK 34-31-42-000-801).

	E/E BAY		
	M2889, NFS	**M2104, MMR-1**	
E5-2 to E1-2	**D13673A**	**D10719B**	
	G7	E9	0
	H7	F9	0

(d) Install the MMR. Do this task: (Receiver for ILS - Installation, AMM TASK 34-31-42-400-801).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(3) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > MMR, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

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(a) If Existing Faults > MMR does not show, then you corrected the problem.

(b) If Existing Faults > MMR shows, but code 46-161 does not show, then you corrected the problem.

(c) If MMR shows fault code 46-161, then continue.

(4) Install a new client credential for MMR, (Onboard Network System Client Credentials Check, AMM TASK 46-13-00-750-803).

(5) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > MMR, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > MMR does not show, then you corrected the problem.

(b) If Existing Faults > MMR shows, but code 46-161 does not show, then you corrected the problem.

(c) If MMR shows fault code 46-161, then continue.

(6) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure that 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then install the correct software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > MMR, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > MMR does not show, then you corrected the problem.

(b) If Existing Faults > MMR does not show code 46-161, then you corrected the problem.

(c) If Existing Faults > MMR shows fault code 46-161, then continue.

(3) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > MMR, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU MMR does not show, then you corrected the fault.

(b) If Existing Faults > MMR shows, but does not show code 46-161, then you corrected the problem.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

END OF TASK

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854. 46-162 or 46-00162 Fault Code (ATC-L~NFS1 `GENERAL OUT #1` BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > ATC-L shows fault code 46-162.

(a) The fault data for 46-162 is: ATC-L~NFS1 `GENERAL OUT #1` BUS FAIL.

(2) This fault can occur when ARINC 429 communications is unserviceable on the GEN OUT #1 bus, between Air Traffic Control (ATC) transponder #1 and network file server (NFS).

B. Possible Causes

(1) Circuit breaker

(2) Wiring

(3) Network file server (NFS), M2889

(4) ATC-L, M163.

C. Related Data

(1) WDM 34-53-11

(2) WDM 46-13-11

D. Initial Evaluation

(1) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > ATC-L.

1) If the LRU ATC-L does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > ATC-L shows, but does not show code 46-162, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If ATC-L shows fault code 46-162, then continue.

(2) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 429 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection ATC-L GENERAL OUT #1 shows the status: FAILED, then do: Fault Isolation Procedure - GEN OUT #1 Bus, that follows.

(b) If End Connection ATC-L GENERAL OUT #1 shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

E. Fault Isolation Procedure - GEN OUT #1 BUS

(1) Make sure that this circuit breaker is closed:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
B	5	C00186	ATC 1

(a) If you closed the breaker, do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

1) If Existing Faults > ATC-L does not show, then you corrected the problem.

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2) If Existing Faults > ATC-L shows, but does not show code 46-162, then you corrected the problem.

3) If ATC-L shows fault code 46-162, then continue.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove ATC-L, M163. Do this task: (ATC Transponder Removal, AMM TASK 34-53-02-020-801).

	E/E BAY		
	M2889, NFS	M163, ATC-1 TRANSPONDER	
E5-2 to E1-2	D13673A	D149A	
	G8	E2	0
	H8	F2	0

(d) Install the ATC-L. Do this task: (ATC Transponder Installation, AMM TASK 34-53-02-400-801).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(3) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > ATC-L, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > ATC-L does not show, then you corrected the problem.

(b) If Existing Faults > ATC-L shows, but code 46-162 does not show, then you corrected the problem.

(c) If ATC-L shows fault code 46-162, then continue.

(4) Install a new client credential for ATC-L, (Onboard Network System Client Credentials Check, AMM TASK 46-13-00-750-803).

(5) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > ATC-L, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > ATC-L does not show, then you corrected the problem.

(b) If Existing Faults > ATC-L shows, but code 46-162 does not show, then you corrected the problem.

(c) If ATC-L shows fault code 46-162, then continue.

(6) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

F. Fault Isolation Procedure - NFS Configuration

(1) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure that 46 NED OPC is serviceable.

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(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then install the correct software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(2) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > ATC-L, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If Existing Faults > ATC-L does not show, then you corrected the problem.

(b) If Existing Faults > ATC-L does not show code 46-162, then you corrected the problem.

(c) If Existing Faults > ATC-L shows fault code 46-162, then continue.

(3) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > ATC-L, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU ATC-L does not show, then you corrected the fault.

(b) If Existing Faults > ATC-L shows, but does not show code 46-162, then you corrected the problem.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

——— END OF TASK ———

855. Data Load Error Problems

A. Description

(1) Use this task when ONS Maintenance browser shows a pop-up with the words: Data Load Error.

(a) Corrective action follows for these Data Load Error messages:

1) “Another Operator is performing a conflicting operation at this time. Please try again later.”

2) “System data load state is currently DISABLED. Unable to proceed with the requested operation.”

B. Possible Causes

(1) Air/Ground Relay, R584.

C. Related Data

(1) WDM 46-13-11.

D. Initial Evaluation

(1) Examine the Data Load Error for additional information:

(a) For the message: “Another Operator is performing a conflicting operation at this time. Please try again later”, do the Conflicting Operation - Fault Isolation Procedure that follows.

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(b) For the message: “System data load state is currently DISABLED. Unable to proceed with the requested operation”, do the Load State Disabled - Fault Isolation Procedure that follows.

E. Conflicting Operation - Fault Isolation Procedure

(1) If ONS shows a pop-up with the words: Data Load Error, with the message: “Another Operator is performing a conflicting operation at this time. Please try again later”, then do these steps that follow.

(a) Wait 60 seconds - to let ONS reset.

(b) If same message shows again, then:

1) Close the ONS browser session. Make your selection “X” in upper right-hand corner.

2) Open and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 006, 009, 010, 013, 015-018, 020-025, 027			
C	1	C01958	NETWORK FILE SERVER
AKS 006-999			

This circuit breaker is inoperative and should remain open:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 007, 008, 011, 012, 014, 019, 026, 028-999			
C	1	C01958	NETWORK FILE SERVER (INOP)

AKS 006-999

(c) Let ONS reboot, then launch the web browser, and do your initial action again.

F. Load State Disabled - Fault Isolation Procedure

(1) If ONS shows a pop-up with the words: Data Load Error, with the message: “System data load state is currently DISABLED. Unable to proceed with the requested operation”, then do these steps that follow.

(a) Do a check of Input Monitoring > Avionics Parameters. This is the task: (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

1) Make sure that Avionics Parameters shows the result: Flight Phase = 1.

a) If Flight Phase shows 2, 3, 4, 5, or 6, then do this task: (Air Data Inertial Reference System - Alignment from the ISDU, AMM TASK 34-21-00-820-802 or Air Data Inertial Reference System - Alignment from the FMC CDU, AMM TASK 34-21-00-820-801).

NOTE: Flight Phase conditions 2, 3, 4, 5, and 6 tell ONS that the airplane is in motion. The ADIRU must be re-aligned.

2) Make sure that Avionics Parameters shows the result: Weight on Wheels = True.

a) If Weight on Wheels does not equal TRUE, then make sure the Air-Ground Relay, R584, is serviceable, (AIR/GROUND SYSTEM - MAINTENANCE PRACTICES, AMM 32-09-00/201

3) If you find a problem, do a check of NFS fault messages, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

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a) For a specific corrective action, refer to (Message Shows on the ONS EXISTING FAULTS Page, 46-13 TASK 801).

——— END OF TASK ———

856. System Dataload State Disabled Problems - Fault Isolation

A. Description

(1) Use this task when the ONS browser shows a pop-up window with the text that follows:

(a) System dataload state is currently DISABLED. Unable to proceed with the requested operation.

(2) The data load page has two requirements, as follows.

(a) The Weight-On-Wheels discrete condition must show ground, or true.

(b) The Flight Phase must show condition 1, which refers to the aircraft on ground, and not moving.

B. Possible Causes

(1) Wiring

(2) ADIRU-L (alignment)

(3) Air/Ground relay, R00584.

C. Related Data

(1) WDM 32-31-11

(2) WDM 46-13-11.

D. Initial Evaluation

(1) Using the maintenance browser, make your selection: Line Maintenance > Data Load, (Onboard Network System LRU Software Installation, AMM TASK 46-13-00-470-801).

(a) If the Data Load page shows correctly, then the fault is intermittent.

(b) If a pop-up window shows with shows the words: “System dataload state is currently DISABLED. Unable to proceed with the requested operation”, then do the fault isolation procedure the follows.

E. Fault Isolation Procedure

(1) Do a check of Input Monitoring. Make your selection: Extended Maintenance > Input Monitoring, (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(2) In the pop-up window, make your selection: Avionics Parameters.

(3) Make sure that Input Monitoring shows the condition: Flight Phase = 1.

NOTE: Flight Phase 2 thru 6 tells NFS that the aircraft is in motion, which prevents ONS data load.

(a) If Flight Phase = 1, then skip the wiring check, and continue with the Weight-On-Wheels condition that follows.

(b) If Flight Phase equals 2, 3, 4, 5, or 6, the a corrective action is required, (AIR DATA INERTIAL REFERENCE SYSTEM - ADJUSTMENT/TEST, AMM 34-21-00/501). There are two possible corrective actions:

1) Shut-down the ADIRU-L.

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a) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-1

Row	Col	Number	Name
E	5	C01009	ADIRU LEFT DC
E	7	C01007	ADIRU LEFT AC

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
E	8	C00425	ADIRU LEFT EXC

2) Or, activate ADIRU-L, and complete the alignment task. Do this task: (Air Data Inertial Reference System - Alignment from the ISDU, AMM TASK 34-21-00-820-802 or Air Data Inertial Reference System - Alignment from the FMC CDU, AMM TASK 34-21-00-820-801).

(c) If Extended Maintenance > Input Monitoring > Avionics Parameters shows Flight Phase = 1, then continue.

(4) Make sure that Weight On Wheels input discrete shows the condition: TRUE, (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If Weight on Wheels shows FALSE, then do the wiring check, and other steps that follow.

1) Remove the NFS, (Network File Server Removal, AMM TASK 46-13-01-000-801).

2) Get access to electrical connector D11002 from System 1 Air Ground Relay, R584, WDM 32-31-11).

	E/E BAY		
	NFS, M2889, E5-2	J22, RELAY, R584	
E5-2	D13673A	D11002	
	K3	C3	0

a) If you find a problem, then correct the wiring.

4) Install the NFS, (Network File Server Installation, AMM TASK 46-13-01-400-801).

5) Connect electrical connector D11002 with the System 1 Air/Ground relay, R584.

(b) If the Weight-On-Wheels condition is TRUE, then continue.

(5) Make sure that the System 1 Air/Ground Relay, R584, is serviceable, (AIR/GROUND SYSTEM - MAINTENANCE PRACTICES, AMM 32-09-00/201, and WDM 32-31-11).

——— END OF TASK ———

862. 46-150 or 46-00150 Fault Code (DFDAU~NFS1 ARINC 717 BUS FAIL) Shows - Fault Isolation

A. Description

(1) Use this task when Extended Maintenance > ONS Maintenance > Existing Faults > DFDAU shows fault code 46-150.

(a) The fault data for 46-150 is: DFDAU~NFS1 ARINC 717 BUS FAIL.

(2) This fault can occur when ARINC 717 communications is unserviceable on bus ARINC 717, between Digital Flight Data Acquisition Unit (DFDAU)-1 and Network File Server (NFS).

(a) Onboard Network System (ONS) uses the bus name: ARINC 717.

(b) The wiring diagram uses the bus name: DAR DATA OUT.

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B. Possible Causes

(1) Circuit breaker

(2) Wiring

(3) Network File Server (NFS), M2889

(4) DFDAU, M675.

C. Circuit Breakers

(1) This is the primary circuit breaker related to the fault:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
C	9	C00109	FLIGHT RECORDER AC

D. Related Data

(1) WDM 31-35-09

(2) WDM 46-13-11.

E. Initial Evaluation

(1) Do a check of ONS Existing Faults, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) Set the browser to show Extended Maintenance > ONS Maintenance > Existing Faults > DFDAU.

1) If the LRU DFDAU does not show, then the fault is intermittent. No action is necessary.

2) If Existing Faults > DFDAU shows, but does not show code 46-150, then the fault is intermittent.

a) Corrective action for other fault codes shown is necessary.

3) If DFDAU shows fault code 46-150, then continue.

(2) Using ONS, make your selection: Extended Maintenance > Input Monitoring > NFS > 717 Receive (Onboard Network System Input Monitoring Check, AMM TASK 46-13-00-720-802).

(a) If End Connection DFDAU: ARINC 717 shows the status: FAILED, then do: Fault Isolation Procedure - ARINC 717 BUS, that follows.

(b) If End Connection DFDAU: ARINC 717 shows the status: High, Low, or words other than FAILED, then do: Fault Isolation Procedure - NFS Configuration, that follows.

F. Fault Isolation Procedure - ARINC 717 BUS

(1) Make sure that this circuit breaker is closed:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
C	9	C00109	FLIGHT RECORDER AC

(a) If you closed the breaker, do the repair confirmation at the end of this task.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(2) Do this check of the wiring:

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(a) Remove the NFS, M2889. Do this task: (Network File Server Removal, AMM TASK 46-13-01-000-801).

(b) Remove DFDAU, M675. Do this task: (Receiver for ILS - Removal, AMM TASK 34-31-42-000-801).

	E/E BAY		
	M2889, NFS	**M675, DFDAU**	
E5-2 to E3-2	**D13673A**	**D2295A**	
	G4	C9	0
	H4	D9	0

(d) Install the DFDAU. Do this task: (Receiver for ILS - Installation, AMM TASK 34-31-42-400-801).

(e) Install the NFS. Do this task: (Network File Server Installation, AMM TASK 46-13-01-400-801).

(f) Do the repair confirmation at the end of this task.

(3) Install a new client credential for DFDAU, (Onboard Network System Client Credentials Check, AMM TASK 46-13-00-750-803).

(a) Do the repair confirmation at the end of this task.

(4) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Do the repair confirmation at the end of this task.

(5) Do a check of ONS software. This is the task: (Network File Server Software Check, AMM TASK 46-13-01-710-803

(a) Make sure that 46 NED OPC is serviceable.

(b) Make sure that 46 NFS OPC is serviceable.

(c) Make sure the two parts agree with your airline's required software record.

NOTE: At this step in the process, it is very likely that at least one of the two parts is unserviceable.

(d) If you find a problem, then install the correct software part, (Network File Server Software Installation, AMM TASK 46-13-01-470-801).

(e) Do the repair confirmation at the end of this task.

(6) Remove the NFS, and install a serviceable NFS. These are the tasks: (Network File Server Removal, AMM TASK 46-13-01-000-801, and Network File Server Installation, AMM TASK 46-13-01-400-801).

(a) Do the repair confirmation at the end of this task.

G. Repair Confirmation

(1) Do a check of Extended Maintenance > ONS Maintenance > Existing Faults > DFDAU, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the LRU DFDAU does not show, then you corrected the fault.

(b) If Existing Faults > DFDAU shows, but does not show code 46-150, then you corrected the problem.

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(c) If the extended maintenance check is not satisfactory, then continue the Fault Isolation at the subsequent step.

NOTE: ONS is serviceable only when the Existing Faults page shows no LRUs, with no fault codes present.

(2) Do a check of EXTENDED MAINTENANCE > EXISTING FAULTS > 46 - Onboard Network System, (Onboard Network System NFS Message Check, AMM TASK 46-13-00-720-801).

(a) If the 46 - Onboard Network System does not show selectable, then you corrected the fault.

(b) If 46 - Onboard Network System shows selectable, but does not show code 46-00150, then you corrected the problem.

(c) If the extended maintenance check is not satisfactory, then continue the Fault Isolation at the subsequent step.

NOTE: ONS is serviceable only when the EXISTING FAULTS page shows no ATA/LRUs, and no fault codes show.

——— END OF TASK ———

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801. EFB Fault Log Message Problems - Fault Isolation

A. General

(1) This task gives a table of EFB fault log messages, and a reference to the task number that corrects that fault message.

B. Fault Isolation Procedure

(1) Examine the table that follows. Find the task number for the fault log message that shows on the EFB fault log.

NOTE: For an index of observed problems, those that do not show in the EFB fault log, refer to the AMM frontmatter of chapter 46.

EFB Fault Log Messages

Fault Log Message	Go to FIM Task
ADC: [application button name] FAILED	46-15 TASK 803
ADC: [application button name] FAILED PROCESS	46-15 TASK 805
ADC: [application button name] FAILED LAUNCH	46-15 TASK 806
ADC: [LSAP number] CFG FAILED	46-15 TASK 804
ADC: [software nomenclature] INVALID	46-15 TASK 810
ADC: [software nomenclature] MISSING	46-15 TASK 809
ADC: [short part number] CRC FAILURE	46-15 TASK 811
ADC: [short part number] INVALID	46-15 TASK 808
ADC: [short part number] MISSING	46-15 TASK 807
ADC: CONNECTION FAILURE	46-15 TASK 814
ADC: H/W - S/W CONFIG MISMATCH	46-15 TASK 813
ADC: INTERNAL APPLICATION ERROR	46-15 TASK 802
ADC: TAIL ID REQUEST ERROR	46-15 TASK 812
ADMW: [short part number] MISSING	46-15 TASK 822
[short part number] FAILED TO START	46-15 TASK 828
[short part number] FAILURE CRC	46-15 TASK 823
[short part number] INVALID	46-15 TASK 836
[short part number] SHUTDOWN FAILURE	46-15 TASK 817
H/W ERROR	46-15 TASK 833
INTERNAL CONFIGURATION MISSING	46-15 TASK 830
INVLD BUTTON LOC	46-15 TASK 815
NO ARINC 429 INPUTS	46-15 TASK 834
NO ETHERNET INPUTS	46-15 TASK 835
PART 121 WINDOWS CRC FAILURE	46-15 TASK 837
PART 121 WINDOWS INVALID	46-15 TASK 838
PROGRAM PIN PARITY FAILURE	46-15 TASK 829

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EFB Fault Log Messages (Continued)

Fault Log Message	Go to FIM Task
RESTART INITIATED	46-15 TASK 821
SHUTDOWN INITIATED	46-15 TASK 832
SYSTEM START AIR	46-15 TASK 826
SYSTEM START GROUND	46-15 TASK 827
UNABLE TO COMPARE	46-15 TASK 824

——— END OF TASK ———

802. ADC: INTERNAL APPLICATION ERROR Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct this EFB fault log message:

(a) ADC: INTERNAL APPLICATION ERROR.

(2) This fault message shows when the application dispatch controller (ADC) fails during configuration check. This can cause these two observed problems:

(a) Windows-OS based applications will stop (or terminate).

(b) Windows-OS based applications will not start.

(3) The problem that causes this fault does not cause a message to show on the system page.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) From the MAIN MENU, make your selection SYSTEM PAGE.

(2) Make your selection: RESTART.

(a) Let the Windows-OS boot up again. This can take approximately 5 minutes.

(3) Examine the Windows-OS based application buttons.

(a) Make sure the buttons show gray in color, and that the applications are serviceable.

(b) If Windows applications start correctly and the ADC: INTERNAL APPLICATION ERROR fault message does not show with a new date and time stamp, then you corrected the fault.

(c) If Windows applications do not start, then do the fault isolation steps that follow.

D. Fault Isolation Procedure

(1) Install the ADC APPLICATION, short part number BFBADCP. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

NOTE: The first three letters of the short part number can be either the 3-letter designation for the airline, or LSAP supplier designation.

E. Repair Confirmation

(1) When the conditions that follow exist, you have corrected the problem.

(a) The Windows-OS application buttons show gray in color.

(b) The Windows-OS applications launch correctly.

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(c) The fault message ADC: INTERNAL APPLICATION ERROR (and/or the WINDOWS OR ADC FAILURE) does not show, or does not show with a new date and time stamp.

——— END OF TASK ———

803. ADC: [App Button Name] FAILED Fault Message - Fault Isolation

A. General

(1) This task gives the steps to correct this EFB fault log message:

(a) [application button name] FAILED

NOTE: 'Application button name' refers to the identity of the application (for example, PERFORMANCE, or TERMINAL CHARTS) as it shows on the EFB main menu.

(2) This fault message shows in the FAULT LOG page when the application has stopped unexpectedly.

(3) The problem that causes this fault message also causes the words APPLICATION FAILURE to show in the system log, and in the fault log.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Examine the SYSTEM CONFIG page for unserviceable or missing parts:

(a) On the main menu, make your selection: SYSTEM PAGE.

NOTE: This step causes the FAULT icon go off.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: SYSTEM CONFIG.

(d) Examine the page for software parts numbers, for the specified application, that are missing or shows cyan or amber in color.

NOTE: Software parts that show cyan or amber in color are unserviceable. Parts that show white in color are serviceable.

1) Make a record of the problems you found.

2) If one or more parts is missing or unserviceable, continue at the fault isolation procedure that follows.

(2) Do a RESTART. These are the steps.

(a) From the SYSTEM CONFIG page, make your selection: SHOW, and then BACK.

1) Make sure the EFB Maintenance page shows.

2) Again, make your selection: SHOW, and then BACK.

3) On the SYSTEM page, make your selection: RESTART EFB.

(b) Let the EFB reboot to show the MAIN MENU.

(c) Again launch the application specified by the original fault log message.

(d) If the application launches successfully then the fault is intermittent.

(e) If the application is unserviceable, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Install all software parts for the specified application. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

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(a) If the application launches successfully, then you corrected the fault.

(b) If the application is again unserviceable, then continue.

(2) Install the software parts that follow. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

- ADC APPLICATION
- ADC CUSTOMER CONFIG
- ADC SUPPLIER CONFIG
- PART 121 WINDOWS.

(a) After restart, do a check to make sure the failed application operates correctly:

1) If the failed application launches successfully then you corrected the fault.

2) If the failed application did not launch successfully then continue.

(3) Tell your maintenance operations or EFB administrator. They must make sure these two LSAP are serviceable:

- ADC CUSTOMER CONFIG
- PARTS 121 WINDOWS.

——— END OF TASK ———

804. ADC: [LSAP number] CFG FAILED Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) <Part number> CFG FAILED

1) <Part Number> refers to the identity of the loadable software airplane part (LSAP).

a) The part number can show one of two ways:

- MMMxx-PPPP-ssss
- MMMPPPPSSS.

2) CFG refers to the applicable configuration software part.

(2) This message shows on the EFB fault log page when one or more applications is unserviceable.

NOTE: The fault can occur if an application does not launch correctly, or terminates unexpectedly.

(3) This fault can cause the SYSTEM FAULT LOG, on the SYSTEM page, to show these messages:

(a) APPLICATIONS FAILURE

NOTE: If the time-stamp for the FAULT LOG message, and SYSTEM FAULT LOG message agree, then the two messages are for the same fault.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Set the EFB to show the SYSTEM CONFIG page.

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

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(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: SYSTEM CONFIG.

(2) Examine the SYSTEM CONFIG page.

NOTE: Software part numbers that show white in color are serviceable. Software part numbers that show amber in color are unserviceable.

(a) If one or more software part shows amber in color, then do these steps:

1) Make a record of the part number and time-stamp of each part that shows amber in color.

2) Do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) From your record, install the applicable software part numbers. Do one of these tasks:

LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802.

(a) Do a check of the operation of the application:

(b) If it launches correctly, with no new faults, then you corrected the fault.

(c) If one or more applications do not launch correctly, then continue.

(2) Tell your maintenance operations, or EFB software engineering group about this problem. They must make sure that the software part is serviceable for the specified aircraft number.

E. Repair Confirmation

(1) If the applications on the MAIN MENU launch, and operate correctly, and there are no new fault messages, then you corrected the problem.

——— END OF TASK ———

805. ADC: [App Button Name] FAILED PROCESS Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the fault message:

(a) <application button name> FAILED PROCESS

NOTE: 'Application button name' refers to the name of the application (for example, PERFORMANCE, or TERMINAL CHARTS) that shows on the EFB main menu.

(2) This fault message shows on the EFB fault log page when the application dispatch controller (ADC) does not receive the expected result from the application. The fault message is not applicable to the flight Initiation and flight close functions.

(3) The problem that causes this fault message also causes the words APPLICATION FAILURE to show in the SYSTEM LOG and EFB fault log.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a restart, and then check the specified application. These are the steps:

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

(b) Make your selection: Restart.

(c) Let the EFB reboot to show the MAIN MENU. This can take approximately 5 minutes.

(d) Launch the application specified by the fault message.

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1) If the application launches successfully, then the fault is intermittent.

2) If the specified application does not launch successfully within three minutes, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Install all software parts for the specified application. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) If the application launches successfully, then you corrected the fault.

(b) If the application is again unserviceable, then continue.

(2) Install the software parts that follow. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

- ADC APPLICATION
- ADC CUSTOMER CONFIG
- ADC SUPPLIER CONFIG
- PART 121 WINDOWS.

(a) If the application launches successfully, then you corrected the fault.

E. Repair Confirmation

(1) If the application launches, and operates correctly, with no new faults, then you corrected the problem.

——— END OF TASK ———

806. ADC: [App Button Name] FAILED LAUNCH Fault Message - Fault Isolation

A. General

(1) This task is for this maintenance message:

(a) <application button name> FAILED LAUNCH

NOTE: 'Application button name' refers to the identity of the application as it shows on the EFB main menu.

(2) This maintenance message shows in the FAULT LOG page when the application failed to launch.

(3) The problem that causes this fault message also causes the words APPLICATION FAILURE to show in the SYSTEM LOG and EFB fault log.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a restart, and then check the specified application. These are the steps:

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

(b) Make your selection: Restart.

(c) Let the EFB reboot to show the MAIN MENU. This can take approximately three minutes.

(d) Launch the application specified by the fault message.

1) If the application launches successfully, then the fault is intermittent.

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2) If the specified application does not launch successfully within five minutes, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Install all software parts for the specified application. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) If the application launches successfully, then you corrected the fault.

(b) If the application is again unserviceable, then continue.

(2) Install the software parts that follow. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

- ADC APPLICATION
- ADC CUSTOMER CONFIG
- ADC SUPPLIER CONFIG
- PART 121 WINDOWS.

(a) If the application launches successfully, then you corrected the fault.

E. Repair Confirmation

(1) If the application launches, and operates correctly, with no new faults, then you corrected the problem.

——— END OF TASK ———

807. ADC: [SPN] MISSING Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) [Short part number] MISSING.

(2) The short part number (SPN) is the first three characters, and middle four characters of the Loadable Software Airplane Part (LSAP). For example, the ADC supplier configuration part is identified as BFBxx-ADCS-yyyy. The SPN will be BFBADCS.

(3) This fault shows when an LSAP is missing.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Examine the SYSTEM CONFIG page. Do the steps that follow.

(a) Push the MENU bezel key.

(b) Make your selection: SYSTEM PAGE.

(c) Make your selection: EFB MAINTENANCE.

(d) Make your selection: SYSTEM CONFIG.

(e) Examine the system configuration page for the LSAP specified by the fault message.

1) Make sure the part is present, and agrees with your airline requirement.

2) If the specifed part is missing, then do the fault isolation procedure that follows.

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D. Fault Isolation Procedure

(1) Do are restart of the EFB. Do the steps that follow.

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

(b) Make your selection: Restart.

(c) Let the EFB reboot to show the MAIN MENU. This can take approximately three minutes.

(2) Examine the fault log page. Do the steps that follow.

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

(d) Examine the fault log page for the message: [short part number] MISSING.

1) If the fault does not show, or does not have a new time stamp, then you corrected the problem.

2) If the fault shows with a new time stamp, then continue.

(3) Install all software parts for the specified application. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) If the application launches successfully, then you corrected the fault.

(b) If the application is again unserviceable, then continue.

(4) Install the software parts that follow. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

- ADC APPLICATION
- ADC CUSTOMER CONFIG
- ADC SUPPLIER CONFIG
- PART 121 WINDOWS.

(a) If the application launches successfully, then you corrected the fault.

E. Repair Confirmation

(1) If the application launches, and operates correctly, with no new faults, then you corrected the problem.

——— END OF TASK ———

808. ADC: [SPN] INVALID Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) [Short part number] INVALID.

(2) The short part number (SPN) is the first 3 characters, and middle 4 characters of the LSAP. For example, the ADC supplier configuration part is identified as BFBxx-ADCS-yyyy. The SPN will be BFBADCS.

(3) This fault shows when the LSAP is unserviceable.

B. Possible Causes

(1) Software.

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C. Initial Evaluation

(1) Examine the SYSTEM CONFIG page. Do the steps that follow.

(a) Push the MENU bezel key.

(b) Make your selection: SYSTEM PAGE.

(c) Make your selection: EFB MAINTENANCE.

(d) Make your selection: SYSTEM CONFIG.

(e) Examine the system configuration page for the LSAP specified by the fault message.

1) Make sure the parts show white in color.

NOTE: Parts that show white in color are serviceable. Parts that show cyan, or amber in color are unserviceable.

2) Make sure the part is present, and agrees with your airline requirement.

3) If one or more parts is missing, or unserviceable, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Do are restart of the EFB. Do the steps that follow.

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

(b) Make your selection: Restart.

(c) Let the EFB reboot to show the MAIN MENU. This can take approximately 3 minutes.

(2) Examine the fault log page. Do the steps that follow.

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

(d) Examine the fault log page for the message: [short part number] INVALID.

1) If the fault does not show, or does not have a new time stamp, then you corrected the problem.

2) If the fault shows with a new time stamp, then continue.

(3) Install all software parts for the specified application. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) If the application launches successfully, then you corrected the fault.

(b) If the application is again unserviceable, then continue.

(4) Install the software parts that follow. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

- ADC APPLICATION
- ADC CUSTOMER CONFIG
- ADC SUPPLIER CONFIG
- PART 121 WINDOWS.

(a) If the application launches successfully, then you corrected the fault.

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E. Repair Confirmation

(1) If the application launches, and operates correctly, with no new faults, then you corrected the problem.

——— END OF TASK ———

809. ADC: [Software Nomenclature] MISSING Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) [software nomenclature] MISSING.

(2) [Software nomenclature] refers to LSAP name specified by the airline or operator.

(3) This fault shows when an LSAP is missing.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Examine the SYSTEM CONFIG page. Do the steps that follow.

(a) Push the MENU bezel key.

(b) Make your selection: SYSTEM PAGE.

(c) Make your selection: EFB MAINTENANCE.

(d) Make your selection: SYSTEM CONFIG.

(e) Examine the system configuration page for the LSAP specified by the fault message.

1) Make sure the part is present, and agrees with your airline requirement.

2) If one or more parts is missing, or shows cyan or amber in color, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Restart the Windows OS. Do the steps that follow.

(a) Push the MENU bezel key.

(b) Make your selection: SYSTEM PAGE.

(c) Make your selection: RESTART.

1) Let the system reboot, and show the main menu. This can take approximately three minutes.

(2) Examine the fault log page. Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

(d) Examine the fault log page for the message: [part name] MISSING.

1) If the fault does not show, or does not have a new time stamp, then you corrected the problem.

2) If the fault shows, with a new time stamp, then continue.

(3) Install the specified software parts. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

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E. Repair Confirmation

(1) If the EFB Fault Log no longer shows the message ([part name] MISSING), with a new time stamp, then you corrected the problem.

——— END OF TASK ———

810. ADC: [Software Nomenclature] INVALID Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) [Software nomenclature] INVALID.

(2) [Software nomenclature] refers to LSAP name specified by the airline or operator.

(3) This fault shows when an LSAP is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Examine the SYSTEM CONFIG page. Do the steps that follow.

(a) Push the MENU bezel key.

(b) Make your selection: SYSTEM PAGE.

(c) Make your selection: EFB MAINTENANCE.

(d) Make your selection: SYSTEM CONFIG.

(e) Examine the system configuration page for the LSAP specified by the fault message.

1) Make sure the part is present, and agrees with your airline requirement.

2) If one or more parts is missing, or shows cyan or amber in color, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Restart the Windows OS. Do the steps that follow.

(a) Push the MENU bezel key.

(b) Make your selection: SYSTEM PAGE.

(c) Make your selection: RESTART.

1) Let the system reboot, and show the main menu. This can take approximately three minutes.

(2) Examine the fault log page. Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

(d) Examine the fault log page for the message: [software nomenclature] INVALID.

1) If the fault does not show, or does not have a new time stamp, then you corrected the problem.

2) If the fault shows, with a new time stamp, then continue.

(3) Install a serviceable LSAP. Do one of these tasks (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

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E. Repair Confirmation

(1) If the EFB Fault Log no longer shows the message [software nomenclature] INVALID, with a new time stamp, then you corrected the problem.

——— END OF TASK ———

811. ADC: [SPN] CRC FAILURE Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) [Short part number] FAILURE CRC.

(2) The short part number (SPN) is the first three characters, and middle four characters of the LSAP. For example, the ADC supplier configuration part is identified as BFBxx-ADCP-yyyy. The SPN will be BFBADCP.

(3) This fault shows when the specified LSAP is unserviceable. Specifically, the LSAP has failed an internal cyclic redundancy check (CRC) performed by the electronic display unit (EDU).

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Examine the SYSTEM CONFIG page. Do the steps that follow.

(a) Push the MENU bezel key.

(b) Make your selection: SYSTEM PAGE.

(c) Make your selection: EFB MAINTENANCE.

(d) Make your selection: SYSTEM CONFIG.

(e) Examine the system configuration page for the LSAP specified by the fault message.

1) Make sure the parts show white in color.

NOTE: Parts that show white in color are serviceable. Parts that show cyan, or amber in color are unserviceable.

2) Make sure the part is present, and agrees with your airline requirement.

3) If one or more parts is missing, or unserviceable, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Using the short part number from the fault message, determine which application is unserviceable.

(2) Install all software parts for the specified application. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) If the application launches successfully, then you corrected the fault.

(b) If the application is again unserviceable, then continue.

(3) Install the software parts that follow. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

- ADC APPLICATION
- ADC CUSTOMER CONFIG

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- ADC SUPPLIER CONFIG
- PART 121 WINDOWS.

(a) If the application launches successfully, then you corrected the fault.

E. Repair Confirmation

(1) Examine the SYSTEM CONFIG page.

(a) If the LSAP shows white in color, then continue.

(2) Examine the FAULT LOG.

(a) If the fault [short part number] FAILURE CRC does not show, or shows but the time stamp is not new, then continue.

(3) If the application launches, and operates correctly, with no new faults, then you corrected the problem.

——— END OF TASK ———

812. ADC: TAIL ID REQUEST ERROR Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) ADC: TAIL ID REQUEST ERROR

(2) This fault message shows when the application dispatch controller (ADC) software has identified that the TAIL ID, or MAJOR MINOR Model data is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART.

1) Let the EFB reboot, and show the main menu. This can take approximately 3 minutes.

(c) From the main menu, make your selection: SYSTEM PAGE.

(d) Make your selection: EFB MAINTENANCE.

(e) Make your selection: FAULT LOG.

(f) Examine the fault log page for the message: ADC: TAIL ID REQUEST ERROR.

1) If the fault does not show, with a new time and date stamp, then you corrected the problem.

2) If the fault shows, with a new time stamp, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Download the EFB fault logs. Do this task: (Data Download - Procedure, AMM TASK 46-15-00-470-804).

(2) Refer this fault, with the log data, to your EFB administrator. The administrator must report the problem to Boeing.

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E. Repair Confirmation

(1) When the conditions that follow exist, you have corrected the problem.

(a) All application buttons show on the main menu

(b) All applications launch correctly.

(c) The fault message WINDOWS OR ADC FAILURE does not show, or does not show with a new time stamp. ADC: TAIL ID REQUEST ERROR

——— END OF TASK ———

813. ADC: H/W - S/W CONFIG MISMATCH Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) H/W-S/W CONFIG MISMATCH.

NOTE: H/W refers to hardware. S/W refers to software.

(2) This fault occurs when the major (or minor) model data does not agree, when the EFB compares Windows OS with Linux OS data.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do the steps that follow.

(a) Push the MENU bezel key.

(b) Make your selection: SYSTEM PAGE.

(c) Make your selection: EFB MAINTENANCE.

(d) Make your selection: SYSTEM CONFIG.

(e) Examine the system configuration page for the LSAP: BFBxx-W025-yyyy.

1) Make sure the part is present, and agrees with your airline requirement.

2) If the part is unserviceable, then do the fault isolation procedure for software that follows.

3) If the part is serviceable, then continue.

(2) Do this task: (Analog Discrete Input Check - Procedure, AMM TASK 46-15-00-710-810).

(a) Make sure the aircraft model shows correctly.

(b) If a Program Item Number (PIN) is unserviceable, then do the fault isolation procedure for hardware that follows.

D. Fault Isolation Procedure - Software

(1) Install the LSAP: BFBxx-W025-yyyy. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

E. Fault Isolation Procedure - Hardware

(1) Cycle power to the electronic switching module unit (EMSU). Do these steps:

(a) From the EFB MAINTENANCE page, make your selection: SHUTDOWN.

NOTE: The EFB takes approximately 20 seconds to go off.

1) When the EDU ON/OFF button shows amber in color, then continue.

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(b) Set the EFB power cutoff switch, on the sidewall, to the OFF position.

1) Make sure the switch show the words PWR OFF illuminated.

2) Make sure the EDU ON/OFF button is not illuminated (that is, not amber in color).

(2) Energize the EFB again. Do these steps:

(a) Set the EFB Power Cutoff Switch to the EFB position.

1) Make sure the letters EFB show amber in color.

(b) On the EDU, press and hold the ON/OFF button for two seconds, and then release.

1) Let the EFB boot-up until the main menu shows.

(3) Do this task: (Analog Discrete Input Check - Procedure, AMM TASK 46-15-00-710-810).

(a) Make sure that the PIN for each display is serviceable.

(b) If a PIN is unserviceable, refer to: (PROGRAM PIN PARITY FAILURE Fault Message - Fault Isolation, 46-15 TASK 829).

F. Repair Confirmation

(1) If the EFB Fault Log no longer shows the message (H/W-S/W MISMATCH), with a new time stamp, then you corrected the problem.

——— END OF TASK ———

814. ADC CONNECTION FAILURE Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows.

(a) The electronic display unit (EDU) shows the words ADC CONNECTION FAILURE.

(b) This problem also causes the system page message: SYSTEM FAILURE.

(c) This problem, when it occurs on system start-up, can also cause specific application buttons to not show.

(d) This problem, when it occurs during typical EFB operation, can cause specific application buttons to show cyan in color.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Restart the EFB. Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART EFB.

(c) Let the system shut down, and reboot. When the MAIN MENU shows again, then continue.

(2) Examine the main menu.

(a) If all application buttons show, and operate correctly, and the FAULT icon does not show, then the fault is intermittent.

(b) If one or more application buttons is missing, or shows cyan in color, and the fault icon shows, then continue.

(3) Examine the messages on the system page. Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

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(b) Examine the log for a new maintenance message, with a new date and time, and then continue.

(4) Examine the fault log. Do the steps that follow.

(a) From the system page, make your selection: EFB MAINTENANCE.

(b) Make your selection: FAULT LOG.

1) If a new fault log message ADC CONNECTION FAILURE does not show, then the problem is intermittent.

2) If the ADC CONNECTION FAILURE message shows, with a new date and time, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Install the LSAP identified as ADC APPLICATION, part number BFBxx-ADCP-zzzz. Use one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

E. Repair Confirmation

(1) If the two conditions that follow exist, then you have corrected the problem, and the EFB is serviceable.

(a) Make sure the installed applications on the main menu are serviceable.

NOTE: For example, do a check of Airport Maps, Charts, Performance, Documents and Video, if installed.

(b) Make sure that no new faults show in the fault log, and system log.

——— END OF TASK ———

815. INVLD BUTTON LOC Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows.

(a) The fault log shows the message: [application button name] INVLD BUTTON LOC

(b) The system log shows the message: [application button name] FAILURE.

NOTE: Application button name refers to the text in the touchscreen button. INVLD is a reference to invalid, or unserviceable. LOC refers to the button location.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Restart the EFB. Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART EFB.

(c) Let the system shut down, and reboot. When the MAIN MENU shows again, then continue.

(2) Examine the main menu.

(a) If all application buttons show, and operate correctly, and the FAULT icon does not show, then the fault is intermittent.

(b) If one or more application buttons is missing, or shows cyan in color, and the fault icon shows, then continue.

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(3) Examine the messages on the system page. Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) If the fault message [application button name] FAILURE shows, with a new date and time, then continue.

(4) Examine the fault log. Do the steps that follow.

(a) From the system page, make your selection: EFB MAINTENANCE.

(b) Make your selection: FAULT LOG.

(c) If the [application button name] INVLD BUTTON LOC message shows, with a new date and time, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Notify the EFB administrator of this fault.

(a) The fault suggests that the LSAP ADC Customer Config, short part number xxxADCC, is unserviceable.

(b) When the serviceable part is available, then continue.

(2) Install the serviceable part, using one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

E. Repair Confirmation

(1) If the two conditions that follow exist, then you have corrected the problem, and the EFB is serviceable.

(a) Make sure the installed applications on the main menu are serviceable.

NOTE: For example, do a check of Airport Maps, Charts, Performance, Documents and Video, if installed.

(b) Make sure that no new faults show in the fault log, and system log.

——— END OF TASK ———

816. TAIL ID MISMATCH Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows. When using the TAIL ID function, the page shows the words:

(a) TAIL ID MISMATCH.

(2) This problem occurs when the tail identification data, recorded in the captain's and first officer's EFB, do not agree.

B. Possible Causes

(1) Data entry.

(2) Electronic display unit.

C. Initial Evaluation

(1) Examine the tail identification data on the captain's and first officer's EFB. Do the steps that follow.

(a) Get the correct tail identification number (or registration number) from the aircraft data plate.

(b) Using the captain's EFB, on the main menu, make your selection: IDENT.

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(c) Using the first officer's EFB, make your selection IDENT.

(d) If the two EFBs and data plate agree, then the problem is intermittent.

(e) If the data does not agree, then do the fault isolation procedure the follows.

D. Fault Isolation Procedure

(1) Do this task: (Tail Identification Check - Procedure, AMM TASK 46-15-00-710-804).

(a) Make sure you complete the steps to set the tail identification in the task.

(b) If the problem is still present, then continue.

(2) On the applicable EFB, do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(3) If the fault continues, replace the EDU. Do these tasks: (Electronic Display Unit Removal, AMM TASK 46-15-01-000-801, and Electronic Display Unit Installation, AMM TASK 46-15-01-400-801).

(a) Make sure you do the operational check as specified in the installation task.

E. Repair Confirmation

(1) If the tail identification data in the two EFBs agree with the aircraft data plate, then the system is serviceable.

——— END OF TASK ———

817. [Short Part Number] SHUTDOWN FAILURE Fault Message - Fault Isolation

A. Description

(1) This task refers to the EFB fault log message:

(a) [Short part number] SHUTDOWN FAILURE.

(2) The short part number (SPN) is the first 3 characters, and middle 4 characters of the LSAP. For example, the ADC supplier configuration part is identified as BFBxx-ADCS-yyyy. The SPN will be BFBADCS.

(3) This fault message shows when a service in the specified LSAP did not respond to the shutdown command, within a specified time limit.

(4) The problem also causes the system log to show the message: SYSTEM FAILURE.

B. Fault Isolation Procedure

(1) This fault is for information purposes only. No corrective action is required.

——— END OF TASK ———

818. Aircraft Model Unknown Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the dialog box message:

(a) AIRCRAFT MODEL UNKNOWN.

(2) This fault message can occur when you select the IDENT function, and the application dispatch manager for Windows (ADMW) can not get the aircraft major and minor model data.

B. Possible Causes

(1) Electronic switching module unit (ESMU).

(2) Software.

(3) Wiring.

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C. Related Data

(1) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, Captain's EFB, Dwg no. 700-28512.

(2) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, First Officer's EFB, Dwg no. 700-28513.

D. Initial Evaluation

(1) Restart the EFB. Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART EFB.

(c) Let the system shut down, and reboot. When the MAIN MENU shows again, then continue.

(2) On the main menu, make your selection: IDENT.

(3) If the display shows the words: Unable to determine aircraft model, make your selection OK.

(a) Do the fault isolation procedure that follows.

(b) If the same message does not show, then the problem is intermittent.

E. Fault Isolation Procedure

(1) Cycle power to the electronic switching module unit (ESMU). Do these steps:

(a) From the EFB MAINTENANCE page, make your selection: SHUTDOWN.

NOTE: The EFB takes approximately 20 seconds to go off.

1) When the EDU ON/OFF button shows amber in color, then continue.

(b) Set the EFB power cutoff switch, on the sidewall, to the OFF position.

1) Make sure the switch show the words PWR OFF illuminated.

2) Make sure the EDU ON/OFF button is not illuminated (that is, not amber in color).

(2) Energize the EFB again. Do these steps:

(a) Set the EFB Power Cutoff Switch to the EFB position.

1) Make sure the letters EFB show amber in color.

(b) On the EDU, press and hold the ON/OFF button for two seconds, and then release.

1) Let the EFB boot-up until the main menu shows.

(3) Do this task: (Analog Discrete Input Check - Procedure, AMM TASK 46-15-00-710-810).

(a) If the program identification number (PIN) shows the word UNKNOWN, then remove the applicable ESMU, and install a serviceable ESMU. Do these tasks: (Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801, and Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801).

(b) If the PIN continues to show UNKNOWN, then do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(c) If the PIN shows a number other than specified by the task (Analog Discrete Input Check - Procedure, AMM TASK 46-15-00-710-810), then do the wiring check that follows.

(4) If the PIN shows a number other than required, examine the wiring for continuity to ground as follows.

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LEFT SIDEWALL		
ESMU-L, M9101	**GROUND**	
D9103	**GD835**	
PIN 7	GROUND	0

RIGHT SIDEWALL		
ESMU-R, M9201	**GROUND**	
D9203	**GD837**	
PIN 7	GROUND	0

(b) If you find a problem, repair the wiring.

F. Repair Confirmation

(1) From the main menu, if the IDENT page is serviceable, then you corrected the problem.

——— END OF TASK ———

819. File System Corruption Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the pop-up dialog message:

(a) File system corrupted.

(2) The problem occurs when the file identified as: LSAPInfo is missing or unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Restart the EFB. Do these steps:

(a) If the dialog box is present, make your selection: RESTART.

(b) If the main menu shows, then:

1) Make your selection: SYSTEM PAGE.

2) Make your selection: EFB MAINTENANCE.

3) Make your selection: RESTART EFB.

(2) Wait for the MAIN MENU to show.

(a) If the main menu shows, with no dialog box, then the fault is intermittent.

(b) If the dialog box shows, with the words: File system corrupt, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(a) Make sure you do the software installation check specified in the restoration task.

E. Repair Confirmation

(1) If the EFB boots to show the main menu, with no dialog box message, then you corrected the problem.

——— END OF TASK ———

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820. LSAP Removal Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB dialog box with the words:

(a) ERROR DELETING LSAP. One or more LSAPs failed to delete.

(2) This fault message shows when the DELETE LSAP function, followed by a subsequent retry were unsuccessful.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) From the LOAD MENU, make your selection: SYSTEM CONFIG.

(a) If the target LSAP (to be deleted) shows, then continue.

(b) Push the MENU bezel key to show the LOAD MENU.

(2) From the LOAD MENU, make your selection: DELETE LSAPS.

(a) Select one or more LSAPs to delete.

(b) Delete the LSAP.

1) If unsuccessful, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(a) Make sure you do the software installation check specified in the restoration task.

E. Repair Confirmation

(1) If the EFB boots to show the main menu, with no dialog box message, then you corrected the problem.

——— END OF TASK ———

821. RESTART INITIATED Fault Message - Fault Isolation

A. Description

(1) This task describes the condition when the EFB shows the words:

(a) RESTART INITIATED.

(2) This dialog box message shows when you make the selection: RESTART EFB on the SYSTEM PAGE.

B. Initial Evaluation

(1) The message RESTART INITATED is not a fault message, and is normal operation.

——— END OF TASK ———

822. ADMW: [Short Part Number] MISSING Fault Message - Fault Isolation

A. Description

(1) This task refers to the EFB fault log message:

(a) [Short part number] MISSING.

(2) The short part number (SPN) is the first 3 characters, and middle 4 characters of the LSAP. For example, the ADC supplier configuration part is identified as BFBxx-ADCP-yyyy. The SPN will be BFBADCP.

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(3) This fault message shows when the LSAP is missing.

(4) The problem also causes the system log to show the message: SYSTEM FAILURE.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Examine the SYSTEM CONFIG page. Do these steps:

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: SYSTEM CONFIG.

1) If the specified LSAP does not show, then do the fault isolation procedure that follows.

2) If the LSAP shows, then continue.

(2) Do a restart of the EFB. These the steps:

(a) Make your selection: SHOW > MENU.

1) Make sure the main menu shows.

(b) Make your selection: SYSTEM PAGE.

(c) Make your selection: RESTART.

1) Let the system reboot, and show the main menu. This can take approximately 5 minutes.

(3) Examine the EFB fault log. These are the steps:

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

1) If the [SPN] MISSING fault message does not show with a new date and time stamp, then the problem is intermittent.

2) If the [SPN] MISSING fault shows again, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Install the correct LSAP. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

E. Repair Confirmation

(1) If the main menu shows the application buttons, and the applications operate correctly with no new fault messages, then you corrected the problem.

——— END OF TASK ———

823. [Short Part Number] FAILURE CRC Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message that follows:

(a) [Short part number] FAILURE CRC.

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(2) Short part number (SPN) refers to the first 3 characters, and middle 4 characters of the LSAP. For example, the ADC supplier configuration part is identified as BFBxx-ADCP-yyyy. The SPN will be BFBADCP.

(3) This problem also causes the system page log to show the message: SYSTEM FAILURE.

(4) This fault message occurs when the specified LSAP fails the ADMW CRC (application dispatch manager-Windows, cycle redundancy check).

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Do a restart of the EFB.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART.

(c) Let the system reboot, and show the main menu. This can take approximately five minutes.

(2) Examine the EFB fault log. These are the steps:

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

(d) If the log shows the [SPN] FAILURE CRC fault message, with a new date and time, make a record of the specified LSAP short part number.

(3) Examine the SYSTEM CONFIG

(a) From the fault log, make your selection: SHOW > BACK.

1) Make sure the EFB maintenance page shows.

(b) Make your selection: SYSTEM CONFIG.

(c) Find the specified LSAP from your record.

(d) If the LSAP shows amber in color, do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Install the correct LSAP. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) Make sure you do the software check specified in the installation task.

E. Repair Confirmation

(1) If the main menu shows the application buttons, and the applications operate correctly with no new fault messages, then you corrected the problem.

——— END OF TASK ———

824. UNABLE TO COMPARE Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the fault message:

(a) UNABLE TO COMPARE TAIL ID.

(2) This fault message occurs at EFB start-up, when one EFB can not compare the tail identification data with the opposite side EFB. One of these conditions can cause this.

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- The offside EFB is unserviceable.
- A firewall or network issue prevents communication between the two EFBs.

NOTE: This is an informational fault in cases where the offside EFB is on, connected, and has a saved tail ID, but the tail ID comparsion has timed out after three seconds.

B. Possible Causes

(1) Offside EFB.

(2) Software settings.

(3) Wiring.

C. Initial Evaluation

(1) Examine the TAIL ID page. Do these steps:

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: LOAD MENU.

1) This causes the EFB to boot into load mode. This can take approximately three minutes.

(d) Make your selection: TAIL ID.

1) If the OFFSIDE ID button shows a tail ID, then the comparison has timed out at start-up. This fault is informational.

2) If the EFB shows the dialog box with the words Unable to compare tail ID," then continue.

(2) Examine the EFB fault log. Do these steps:

(a) From the TAIL ID page, push the MENU or back bezel key.

(b) Make your selection: RETURN TO MAIN.

1) Let the EFB reboot into flight mode, and show the main menu. This can take approximately five minutes.

(c) Make your selection: SYSTEM PAGE.

(d) Make your selection: EFB MAINTENANCE.

(e) Make your selection: FAULT LOG.

1) If the fault log does not show the fault message UNABLE TO COMPARE, with a new time and date, then the fault is intermittent.

2) If the fault message shows, with a new time and date, the do the fault isolation procedure that follows.

D. Related Data

(1) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, Captain's EFB, Dwg no. 700-28512.

(2) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, First Officer's EFB, Dwg no. 700-28513.

E. Fault Isolation Procedure

(1) Make sure the two electronic display units (EDU) are energized.

(a) Make sure the two two EFB Power Cutoff Switches, one on each sidewall, shows the letters EFB as amber in color.

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(b) The EDU receives power and data from the electronic switching module unit (ESMU).

(2) Do a check of the Ethernet inputs page. These are the steps:

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: INPUT MONITORING.

(d) Make your selection: ETHERNET INPUTS.

1) If the condition of the offside (that is, right or left) EFB shows ABSENT, then you must correct the problem.

2) If the condition of the offside EFB shows PRESENT, then continue.

(3) Do this task: (Tail Identification Check - Procedure, AMM TASK 46-15-00-710-804).

(a) If you find a problem, then correct the tail ID data.

(b) If the problem remains, then continue.

(4) Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(a) If the problem remains, then continue.

(5) Remove the two ESMUs. This is the task: (Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801).

(6) Examine the wiring below for continuity between ESMU-L and ESMU-R.

FLIGHT DECK

ESMU-L, M9101 D9107P3	**ESMU-R, M9201 D9207P3**	
1	3	0
2	6	0
3	1	0
6	2	0

(b) If you find a problem, then repair the wiring.

(7) Install the two ESMUs. This is the task: (Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801).

(8) If the fault continues, then remove the EDU, and install a serviceable EDU. Do these tasks: (Electronic Display Unit Removal, AMM TASK 46-15-01-000-801, and Electronic Display Unit Installation, AMM TASK 46-15-01-400-801).

(a) Make sure you set the TAIL ID, as specified in the EDU install task.

F. Repair Confirmation

(1) After you restart the EFB, and do a check of the fault log, if the specified fault message does not show with a new time and date, then you corrected the problem.

——— END OF TASK ———

825. LOAD MENU SELECTED Message - Fault Isolation

A. Description

(1) This task describes the condition when the EFB shows the words:

(a) LOAD MENU SELECTED.

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(2) This message is a confirmation, and shows in a dialog box when you make the selection: LOAD MENU on the EFB MAINTENANCE page.

B. Initial Evaluation

(1) The message LOAD MENU SELECTED is not a fault, and is normal operation.

——— END OF TASK ———

826. SYSTEM START AIR Fault Message - Fault Isolation

A. Description

(1) This task describes the occurrence of the EFB fault log message:

(a) SYSTEM START AIR.

(2) This fault log message occurs when the EFB boots-up during flight.

NOTE: During flight, the EFB fault log is not available.

(a) Typically, this fault message does not require corrective action. It shows as a record for information only.

B. Fault Isolation Procedure

(1) Examine the fault log page. Do the steps that follow.

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

(d) Examine the fault log page for the message: SYSTEM START AIR.

1) This fault is for information only. No corrective action is required.

——— END OF TASK ———

827. SYSTEM START GROUND Fault Message - Fault Isolation

A. Description

(1) This task describes the occurrence of the EFB fault log message:

(a) SYSTEM START GROUND.

(2) This fault log message occurs when the EFB boots-up when the airplane is on the ground.

(a) This fault message does not require corrective action. It shows in the fault log as a record for information only.

B. Fault Isolation Procedure

(1) Examine the fault log page. Do the steps that follow.

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

(d) Examine the fault log page for the message: SYSTEM START GROUND.

1) This fault is for information only. No corrective action is required.

——— END OF TASK ———

828. [Short Part Number] FAILED TO START Fault Message - Fault Isolation

A. Description

(1) This task refers to the EFB fault log message:

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(a) [Short part number] FAILED TO START.

(2) The problem that causes this fault also causes the system page log to show the fault message: SYSTEM FAILURE.

(3) The short part number (SPN) is the first 3 characters, and middle 4 characters of the LSAP. For example, the ADC supplier configuration part is identified as BFBxx-ADCS-yyyy. The SPN will be BFBADCS.

(4) This fault message shows when the specified LSAP is selected, but will not start or launch.

(a) If the application is already running when you select it again, the same fault log message can occur.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a restart of the EFB.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART.

(c) Let the system reboot, and show the main menu. This can take approximately five minutes.

(2) Examine the EFB fault log. These are the steps:

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

(d) If the log shows the [SPN] FAILED TO START fault message, with a new date and time, make a record of the specified LSAP short part number.

(3) Examine the SYSTEM CONFIG

(a) From the fault log, make your selection: SHOW > BACK.

1) Make sure the EFB maintenance page shows.

(b) Make your selection: SYSTEM CONFIG.

(c) Find the specified LSAP from your record.

(d) If the LSAP shows amber in color, do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Install the LSAP specified by the fault log message. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) Make sure you do the software check specified in the installation task.

E. Repair Confirmation

(1) If the main menu shows the application buttons, and the applications operate correctly with no new fault messages, then you corrected the problem.

END OF TASK

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829. PROGRAM PIN PARITY FAILURE Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) PROGRAM PIN PARITY FAILURE.

(2) This fault message occurs when the EFB senses the incorrect number of grounded program pins.

(3) This problem also causes the system page log to show the message: SYSTEM FAILURE.

B. Possible Causes

(1) Wiring.

C. Related Data

(1) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, Captain's EFB, Dwg no. 700-28512.

(2) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, First Officer's EFB, Dwg no. 700-28513.

D. Initial Evaluation

(1) Examine the EFB fault log. Do these steps:

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: EFB MAINTENANCE.

(c) Make your selection: FAULT LOG.

1) If the specified fault message shows, make a record of the date and time stamp. And then continue.

(d) Make your selection: SHOW > BACK.

1) Make sure the EDU shows the EFB MAINTENANCE page.

(2) Cycle power to the electronic switching module unit (ESMU). Do these steps:

(a) From the EFB MAINTENANCE page, make your selection: SHUTDOWN.

NOTE: The EFB takes approximately 20 seconds to go off.

1) When the EDU ON/OFF button shows amber in color, then continue.

(b) Set the EFB power cutoff switch, on the sidewall, to the OFF position.

1) Make sure the switch show the words PWR OFF illuminated.

2) Make sure the EDU ON/OFF button is not illuminated (that is, not amber in color).

(3) Energize the EFB again. Do these steps:

(a) Set the EFB Power Cutoff Switch to the EFB position.

1) Make sure the letters EFB show amber in color.

(b) On the EDU, press and hold the ON/OFF button for two seconds, and then release.

1) Let the EFB boot-up until the main menu shows.

(4) Examine the main menu.

(a) If the application buttons show white in color, they operate correctly, and the fault annunciation is not illuminated, then the problem is intermittent.

(b) If the applications are missing or unserviceable, then do the fault isolation procedure that follows.

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E. Fault Isolation Procedure

(1) Examine the IDENT page.

(a) On the main menu, make your selection: IDENT.

(b) Examine the result for A/C MODEL.

1) If the model is correct then continue at the step that follows to examine the analog discretes page.

2) If the model is not correct, then continue.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(2) Remove the applicable ESMU. Do this task: (Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801).

(3) Do a check of the wiring that follows for continuity to ground for ESMU-L and ESMU-R.

LEFT SIDEWALL		
ESMU-L, M9101	**GROUND**	
D9103, AFB1	**GROUND**	
PIN 7	GROUND	0

RIGHT SIDEWALL		
ESMU-R, M9201	**GROUND**	
D9203, AFB2	**GROUND**	
PIN 7	GROUND	0

(b) If you find a problem, repair the wiring.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(4) Install the applicable ESMU. Do this task: (Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801).

(a) Let the EFB boot up and show the main menu.

(5) Again, examine the main menu.

(a) If the application buttons show white in color, they operate correctly, and the fault annunciation is not illuminated, then you corrected the problem.

(b) If the applications are missing or unserviceable, then continue.

(6) Do a check of the analog discretes page. These are the steps.

(a) From the main menu, make your selection:

(b) Make your selection: INPUT MONITORING.

(c) Make your selection: ANALOG DISCRETE INPUTS.

1) For the captain's EFB only, make sure the PIN shows the number 16.

a) If the captain's EFB does not show PIN 16, then do the wiring check that follows.

2) For the first officer's EFB only, make sure the PIN shows the number 37.

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a) If the first officer's EFB does not show PIN 37, then do the wiring check that follows.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(7) Remove the applicable ESMU. Do this task: (Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801).

(8) If the captain's EFB PIN is not 16, then do the wiring check that follows for continuity to ground.

LEFT SIDEWALL

ESMU-L, M9101	**GROUND**	
D9103	**GD835 / GROUND**	
PIN 5	GD835 / GROUND	0
PIN 7	GD835 / GROUND	0
D9104	**GD835 / GROUND**	
PIN 6	GD835	0

(b) If you find a problem, then repair the wiring.

(9) If the first officer's PIN is not 37, then do the wiring check that follows for continuity to grpund.

RIGHT SIDEWALL

	EMSU-R, M9201	**GROUND**	
M9201	**D9203**	**GROUND**	**OPEN**
	PIN 5	NC	OPEN
	PIN 6	NC	OPEN
	PIN 7	GD837 / GROUND	0
M9201	**D9204**	**NC**	**OPEN**
	PIN 4	NC	OPEN
	PIN 5	NC	OPEN
	PIN 6	NC	OPEN

(b) If you find a problem, then repair the wiring.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(10) Install the applicable ESMU. Do this task: (Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801).

(a) Let the EFB reboot, and show the main menu. This can take approximately five minutes.

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F. Repair Confirmation

(1) If the main menu shows the application buttons, and the applications operate correctly with no new fault messages, then you corrected the problem.

——— END OF TASK ———

830. INTERNAL CONFIGURATION MISSING Fault Message - Fault Isolation

A. Description

(1) This procedure gives the steps to correct the EFB fault log message:

(a) INTERNAL CONFIGURATION MISSING.

(2) This condition also causes the system page log to show the same fault message.

(3) This fault shows when the internal configuration text file is missing or unserviceable. The Windows operating system creates this file at start-up.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Restart the EFB. Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART EFB.

(c) Let the system shut down, and reboot. When the MAIN MENU shows again, then continue.

(2) Examine the main menu.

(a) If all application buttons show, and operate correctly, and the FAULT icon does not show, then the fault is intermittent.

(b) If one or more application buttons is missing, and the fault icon shows, then continue.

(3) Examine the messages on the system page. Do the steps that follow.

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) If the fault message shows, with a new date and time, then continue.

D. Fault Isolation Procedure

(1) Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

E. Repair Confirmation

(1) Let the EFB reboot to show the main menu.

(a) If the application buttons show, operate correctly, with no new fault annunciation, then you corrected the problem.

——— END OF TASK ———

831. EFB OS Corrupted Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows.

(a) The EFB display shows a dialog box with the words: Corrupted Operating System Software.

(2) This dialog box can show when the Windows operating system is unserviceable.

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B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Energize the captain's and first officer's EFB.

(a) If the EFB boots to show the main menu, and the fault message 'Corrupted Operating System Software' does not show, then the problem is intermittent.

(b) If the EFB shows the dialog box with the fault message 'Corrupted Operating System Software', do these steps.

1) Make your selection: SHUTDOWN.

2) Do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

E. Repair Confirmation

(1) If the EFB boots to show the main menu, then you corrected the problem.

——— END OF TASK ———

832. SHUTDOWN INITIATED Fault Message - Fault Isolation

A. Description

(1) This task describes the EFB fault log message:

(a) SHUTDOWN INITIATED.

(2) This fault log message shows when you make the SHUTDOWN selection on the EFB maintenance page.

(a) This fault log message is caused by normal operation and is not a fault.

B. Initial Evaluation

(1) No corrective action is required.

——— END OF TASK ———

833. H/W ERROR Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) H/W ERROR. DEFAULTING TO AIR.

(2) The problem that causes this fault message also causes the system page log to show the same message.

(3) This fault message shows when the weight-on-wheels (WOW) discrete is unserviceable.

(a) When the EFB defaults to AIR mode, only in-flight applications and pages are enabled.

B. Possible Causes

(1) Wiring.

(2) Electronic switching module unit (ESMU).

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C. Related Data

(1) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, Captain's EFB, Dwg no. 700-28512.

(2) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, First Officer's EFB, Dwg no. 700-28513.

D. Initial Evaluation

(1) Cycle power to the ESMU. Do these steps:

(a) From the EFB MAINTENANCE page, make your selection: SHUTDOWN.

NOTE: The EFB takes approximately 20 seconds to go off.

1) When the EDU ON/OFF button shows amber in color, then continue.

(b) Set the EFB power cutoff switch, on the sidewall, to the OFF position.

1) Make sure the switch show the words PWR OFF illuminated.

2) Make sure the EDU ON/OFF button is not illuminated (that is, not amber in color).

(2) Energize the EFB again. Do these steps:

(a) Set the EFB Power Cutoff Switch to the EFB position.

1) Make sure the letters EFB show amber in color.

(b) On the EDU, press and hold the ON/OFF button for two seconds, and then release.

1) Let the EFB boot-up until the main menu shows.

(3) Examine the main menu.

(a) If the application buttons show and operate correctly, and the fault icon is not illuminated, then the fault is intermittent.

(b) If the fault icon shows, or the application buttons are unserviceable, then continue.

(4) Examine the system page log. Do these steps:

(a) Make your selection: SYSTEM PAGE.

(b) If the specified fault message shows with a new date and time, then do the fault isolation procedure that follows.

E. Fault Isolation Procedure

(1) Do a check of the analog discrete page. This is the task: (Analog Discrete Input Check - Procedure, AMM TASK 46-15-00-710-810).

(a) If the weight-on-wheels (WOW) discrete shows OPEN, then do a check of the wiring for continuity.

LEFT SIDEWALL		
ESMU CAPT,	**AIR/GND**	
M9101	**RELAY, R589**	
D9103	**D11012**	
PIN 4	D2	0

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RIGHT SIDEWALL		
ESMU F/O,	**AIR/GND**	
M9201	**RELAY, R589**	
D9203	**D11014**	
PIN 4	D2	0

2) If you find a problem, then repair the wiring.

(b) If the WOW discrete shows the word UNKNOWN, then remove the ESMU, and install a serviceable ESMU. Do these tasks: (Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801, and Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801).

F. Repair Confirmation

(1) If the main menu application buttons are serviceable, and the fault icon is not illuminated, then you corrected the fault.

——— END OF TASK ———

834. NO ARINC 429 INPUTS Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) NO ARINC 429 INPUTS.

(2) The problem that causes this fault message also causes the system page log to show the words: NO ESMU DATA.

(3) This fault message occurs when the electronic switching module unit (EMSU), and electronic display unit (EDU) are energized, but digital data is not received by the EDU.

B. Possible Causes

(1) Software.

(2) EDU.

C. Initial Evaluation

(1) Do a check of the ARINC 429 INPUTS. This is the task: (ARINC 429 Input Monitor Check - Procedure, AMM TASK 46-15-00-710-809).

(a) If all buses show the condition PRESENT, then the problem is intermittent.

(b) If all buses show the condition UNKNOWN, the do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Cycle power to the electronic switching module unit (EMSU). Do these steps:

(a) From the EFB MAINTENANCE page, make your selection: SHUTDOWN.

NOTE: The EFB takes approximately 20 seconds to go off.

1) When the EDU ON/OFF button shows amber in color, then continue.

(b) Set the EFB power cutoff switch, on the sidewall, to the OFF position.

1) Make sure the switch show the words PWR OFF illuminated.

2) Make sure the EDU ON/OFF button is not illuminated (that is, not amber in color).

(2) Energize the EFB again. Do these steps:

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(a) Set the EFB Power Cutoff Switch to the EFB position.

1) Make sure the letters EFB show amber in color.

(b) On the EDU, press and hold the ON/OFF button for two seconds, and then release.

1) Let the EFB boot-up until the main menu shows.

(3) Examine the main menu.

(a) If the application buttons are serviceable, and the fault icon does not show, then you corrected the problem.

(b) If the applications are unserviceable, then continue.

(4) Do a software restoration (or, reimage). This is the task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(a) If the application buttons are serviceable, and the fault icon does not show, then you corrected the problem.

(b) If the applications are unserviceable, then continue.

(5) Remove the EDU and install a serviceable EDU. Do these tasks: (Electronic Display Unit Removal, AMM TASK 46-15-01-000-801, and Electronic Display Unit Installation, AMM TASK 46-15-01-400-801).

(a) If the application buttons are serviceable, and the fault icon does not show, then you corrected the problem.

E. Repair Confirmation

(1) After you restart the EFB, if the main menu applications are serviceable and no new fault icon shows, then you corrected the problem.

——— END OF TASK ———

835. NO ETHERNET INPUTS Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) NO ETHERNET INPUTS.

(2) The problem that causes this fault message also causes the system page log to show the words: NO ESMU CONNECTION.

(3) This fault message occurs when the Ethernet interface to the electronic display unit (EDU) is unserviceable.

B. Possible Causes

(1) Software.

(2) EDU.

C. Initial Evaluation

(1) Do this task: (Ethernet Input Monitor Check - Procedure, AMM TASK 46-15-00-710-811).

(a) If all buses show the condition PRESENT, then the fault is intermittent.

(b) If all buses show the condition ABSENT, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Cycle power to the electronic switching module unit (EMSU). Do these steps:

(a) From the EFB MAINTENANCE page, make your selection: SHUTDOWN.

NOTE: The EFB takes approximately 20 seconds to go off.

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1) When the EDU ON/OFF button shows amber in color, then continue.

(b) Set the EFB power cutoff switch, on the sidewall, to the OFF position.

1) Make sure the switch show the words PWR OFF illuminated.

2) Make sure the EDU ON/OFF button is not illuminated (that is, not amber in color).

(2) Energize the EFB again. Do these steps:

(a) Set the EFB Power Cutoff Switch to the EFB position.

1) Make sure the letters EFB show amber in color.

(b) On the EDU, press and hold the ON/OFF button for two seconds, and then release.

1) Let the EFB boot-up until the main menu shows.

(3) Examine the main menu.

(a) If the application buttons are serviceable, and the fault icon does not show, then you corrected the problem.

(b) If the applications are unserviceable, then continue.

(4) Do a software restoration (or, reimage). This is the task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(a) If the application buttons are serviceable, and the fault icon does not show, then you corrected the problem.

(b) If the applications are unserviceable, then continue.

(5) Remove the EDU and install a serviceable EDU. Do these tasks: (Electronic Display Unit Removal, AMM TASK 46-15-01-000-801, and Electronic Display Unit Installation, AMM TASK 46-15-01-400-801).

(a) If the application buttons are serviceable, and the fault icon does not show, then you corrected the problem.

E. Repair Confirmation

(1) After you restart the EFB, if the main menu applications are serviceable and no new fault icon shows, then you corrected the problem.

——— END OF TASK ———

836. [Short Part Number] INVALID Fault Message - Fault Isolation

A. Description

(1) This task refers to the EFB fault log message:

(a) [Short part number] INVALID.

(2) The short part number (SPN) is the first 3 characters, and middle 4 characters of the LSAP. For example, the ADC supplier configuration part is identified as BFBxx-ADCS-yyyy. The SPN will be BFBADCS.

(3) This fault message shows when the authorization key is unsericeable for the specified LSAP.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do the steps that follow to confirm the problem.

(a) On the EFB main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART.

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1) Let the EFB reboot to show the main menu. This can take approximately five minutes.

(c) Examine the main menu.

1) If the application buttons are serviceable, and the FAULT icon is not illuminated, then the fault is intermittent.

2) If the applications are unserviceable, or the FAULT icon is illuminated, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Notify your EFB administrator of this fault.

(a) The specified LSAP is unserviceable.

(2) When a serviceable LSAP is furnished, then do this task: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801).

E. Repair Confirmation

(1) After you restart the EFB, if the main menu applications are serviceable and no new fault icon shows, then you corrected the problem.

——— END OF TASK ———

837. PART 121 WINDOWS CRC FAILURE Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) PART 121 WINDOWS CRC FAILURE.

(2) When this problem occurs, this same fault message also shows in the system page log.

(3) This fault message occurs when the PART 121 WINDOWS loadable software airplane part (LSAP) is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a restart of the EFB. Do these steps:

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART EFB.

(c) Let the system shut down, and reboot. This can take approximately five minutes.

(2) Examine the main menu.

(a) If the application buttons are serviceable, and the fault icon does not show, then the problem is intermittent.

(b) If the applications are unserviceable, or the fault icon shows, then continue.

(3) Examine the fault messages on the system page. Do these steps:

(a) On the main menu, make your selection: SYSTEM PAGE.

(b) If a fault message, other than PART 121 WINDOWS CRC FAILURE shows, then correct that problem first.

(c) If the fault message PART 121 WINDOWS CRC FAILURE shows, with a new date and time, then continue.

(4) Examine the SYSTEM CONFIG page. Do these steps:

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(a) Make your selection: EFB MAINTENANCE.

(b) Make your selection: SYSTEM CONFIG.

(c) Find the LSAP: PART 121 WINDOWS.

1) If the LSAP shows amber in color, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Install the LSAP: PART 121 WINDOWS. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

E. Repair Confirmation

(1) After you restart the EFB, if the main menu applications are serviceable and no new fault icon shows, then you corrected the problem.

——— END OF TASK ———

838. PART 121 WINDOWS INVALID Fault Message - Fault Isolation

A. Description

(1) This task gives the steps to correct the EFB fault log message:

(a) PART 121 WINDOWS INVALID.

(2) When this problem occurs, this same fault message also shows in the system page log.

(3) This fault message occurs when the PART 121 WINDOWS loadable software airplane part (LSAP) is unserviceable.

(a) Specifically, the LSAP did not pass the ADMW AuthKey check.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a restart of the EFB. Do these steps:

(a) From the main menu, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART EFB.

(c) Let the system shut down, and reboot. This can take approximately five minutes.

(2) Examine the main menu.

(a) If the application buttons are serviceable, and the fault icon does not show, then the problem is intermittent.

(b) If the applications are unserviceable, or the fault icon shows, then continue.

(3) Examine the fault messages on the system page. Do these steps:

(a) On the main menu, make your selection: SYSTEM PAGE.

(b) If a fault message shows, other than PART 121 WINDOWS INVALID, then correct that problem first.

(c) If the fault message PART 121 WINDOWS INVALID shows, with a new date and time, then continue.

D. Fault Isolation Procedure

(1) Notify your EFB administrator of this fault.

(a) The specified LSAP (PART 121 WINDOWS) is unserviceable.

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(2) When a serviceable LSAP is furnished, then do this task: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801).

E. Repair Confirmation

(1) After you restart the EFB, if the main menu applications are serviceable and no new fault icon shows, then you corrected the problem.

——— END OF TASK ———

839. EFB Battery Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows. The electronic display unit (EDU) shows the words:

(a) Your battery is critically low. To continue using the EFB, provide aircraft power to the EFB.

(2) This message shows when the EDU does not receive power from the electronic switching module unit (ESMU), and the EDU internal battery drops to seven percent (7%) of its capacity.

B. Possible Causes

(1) EFB power cutoff switch.

(2) EMSU.

(3) Power convertor unit (PCU).

C. Related Data

(1) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, Captain's EFB, Dwg no. 700-28512.

(2) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, First Officer's EFB, Dwg no. 700-28513.

D. Initial Evaluation

(1) Examine the EDU for the specified alert message.

(a) If the problem does not show, then the problem can be intermittent.

(b) If the problem continues, then do the fault isolation procedure that follows.

E. Fault Isolation Procedure

(1) Do a check of the applicable EFB power cut-off switch.

(a) Make sure the EFB power cutoff switch, on the sidewall, is set to the EFB power on position.

1) Make sure the switch shows the word EFB, illuminated, and is amber in color.

(2) Remove the ESMU, and install a serviceable ESMU. These are the tasks: (Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801, and Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801).

(a) If the problem remains, then continue.

(3) Remove the PCU, and install a serviceable PCU. These are the tasks: (Power Converter Unit Removal, AMM TASK 46-15-03-000-801, and Power Converter Unit Installation, AMM TASK 46-15-03-400-801).

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F. Repair Confirmation

(1) After you restart the EFB, if the main menu applications are serviceable and no new fault icon shows, then you corrected the problem.

——— END OF TASK ———

840. TAIL ID Corruption Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows. The electronic display unit (EDU) shows the words:

(a) Tail ID corrupted.

(2) The dialog box that shows this message also shows the functions to restart, or shutdown.

(3) This dialog box shows when the file that contains the tail number identification is missing or unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a restart of the EFB. Do these steps:

(a) If the fault dialog box shows, make your selection: RESTART.

(b) If the display show the main menu, make your selection: SYSTEM PAGE.

1) Make your selection: RESTART EFB.

(c) Let the system reboot. This can take approximately five minutes to show the main menu.

1) If the EFB boots to show the main menu, then the problem is intermittent.

2) If the display shows the TAIL ID ENTRY page, then do the fault isolation procedure that follows.

3) If the display again shows the TAIL ID Corrupted dialog box, then continue with step 3 of the fault isolation procedure that follows (that is; software restoration).

D. Fault Isolation Procedure

(1) If the TAIL ID entry page shows, enter the correct tail identification number. Refer to (Tail Identification Check - Procedure, AMM TASK 46-15-00-710-804).

(a) From the MAIN MENU, make your selection: SYSTEM PAGE.

(b) Make your selection: RESTART.

(c) Let the system reboot, and show the main menu. This can take approximately five minutes.

(2) Examine the main menu.

(a) If the applications are serviceable, and the fault icon is not illuminated, then you corrected the problem.

(b) If the tail ID corruption message, or the fault icon shows again, then continue.

(3) Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

E. Repair Confirmation

(1) After a restart of the EFB, if the main menu shows, and the TAIL ID dialog box does not show, then you corrected the problem.

——— END OF TASK ———

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841. Date and Time Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows:

(a) The EFB display shows a dialog box with the words: Unable to determine date and time.

(2) This message shows when the date and time settings are unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Do a restart of the EFB.

(a) If the dialog box shows, make your selection: RESTART.

(b) If the main menu shows, do these steps:

1) Make your selection: SYSTEM PAGE.

2) Make your selection: RESTART.

(c) If the load menu shows, make your selection: RETURN TO MAIN.

(2) From the main menu, make your selection: IDENT.

(a) If the fault message does not show, then the fault is intermittent.

(b) If the fault message shows, do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(a) Make sure you install all software parts specified by your airline or operator.

(2) Do a check again of the IDENT page:

(a) From the main menu, make your selection: IDENT.

1) If the specified dialog box does not show, and the identification data is correct, then you corrected the problem.

2) If the problem continues, then contact Boeing for additional assistance. Include a reference to this procedure.

E. Repair Confirmation

(1) When you select the IDENT function, if the specified dialog box does not show, and the identification data is correct, then you corrected the problem.

——— END OF TASK ———

842. Error Reading LSAP Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows:

(a) The EFB display show a dialog box with the words: ERROR READING LSAP. One or more LSAPs are corrupted.

(2) When using the MEDIA LOAD function, this dialog box can show one or more LSAP is unserviceable.

(a) A corrupt, or unserviceable LSAP will not show on the media load page.

B. Possible Causes

(1) Software.

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C. Initial Evaluation

(1) If the specified dialog box shows, make your selection: OK.

(2) From the LOAD MENU, make your selection: MEDIA LOAD.

(3) In the media load dialog box, make your selection from the available sources.

(a) If the Error reading LSAP dialog box does not show, then the fault is intermittent. The directory does not contain an unserviceable LSAP.

(b) If the dialog box shows, with the words: Error reading LSAP, but the required LSAP does show, then finish the software installation.

(c) If the dialog box shows, and the specified LSAP does not show, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Report this fault to your EFB administrator.

(a) The specified LSAP is not available for installation, and the dialog box shows.

E. Repair Confirmation

(1) If the media load source (or, load from location) shows the specified LSAP, and the dialog box does not show, then you corrected the problem.

——— END OF TASK ———

843. Load Failed Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows.

(a) The EFB display shows a dialog box with the words: LOAD TO [LEFT EFB, or RIGHT EFB] FAILED. The [specified EFB] is not currently in ACCEPT LOAD. Do you wish to retry?

(2) This dialog box shows during media load, or staged load installation, when the offside EFB is not set to ACCEPT LOAD.

NOTE: Instead of referring the equipment as left or right, this task refers to the source, and target . The source refers to the EFB you used to install the LSAPs. The target side refers the EFB that is to receive the LSAP. The specified dialog box will show on the source EFB.

B. Possible Causes

(1) Settings.

(2) Software.

(3) ESMU.

(4) Wiring.

C. Related Data

(1) (LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(2) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, Captain's EFB, Dwg no. 700-28512.

(3) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, First Officer's EFB, Dwg no. 700-28513.

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D. Initial Evaluation

(1) If the specified dialog box shows, do these steps:

(a) Make sure the target EFB shows the words: ACCEPT LOAD IDLE.

(b) On the source EFB, make your selection: RETRY.

(c) If the dialog box shows again, do these steps:

1) Make your selection: CANCEL.

2) Do the fault isolation procedure that follows.

(2) To set-up the EFB to cause the dialog box to show, do this task: (LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) If the LSAP installation is successful, and the dialog box does not show, then the problem is intermittent.

(b) If the dialog box shows again, then do the fault isolation procedure that follows.

E. Fault Isolation Procedure

(1) Cycle power to the two electronic switching module unit (ESMU) at the same time. Do these steps:

(a) From the EFB MAINTENANCE page, make your selection: SHUTDOWN.

NOTE: The EFB takes approximately 20 seconds to go off. You must do the shutdown function before you cycle power, or the EDU will remain energized from the internal back-up battery.

1) When the EDU ON/OFF button shows amber in color, then continue.

(b) Set the EFB power cutoff switch, on the sidewall, to the OFF position.

1) Make sure the switch show the words PWR OFF illuminated.

2) Make sure the EDU ON/OFF button is not illuminated (that is, not amber in color).

(2) Energize the two EFBs again. Do these steps:

(a) Set the EFB Power Cutoff Switch to the EFB position.

1) Make sure the letters EFB show amber in color.

(b) On the EDU, press and hold the ON/OFF button for two seconds, and then release.

1) Let the EFB boot-up until the main menu shows.

(3) Using the source EFB, do this task: (Ethernet Input Monitor Check - Procedure, AMM TASK 46-15-00-710-811).

(a) If the Ethernet input shows the condition PRESENT, then do a software restoration of the target EDU. This is the task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

1) If the source EFB Ethernet input continues to show PRESENT, and the dialog box again shows, then remove the EDU, and install a serviceable EDU. Do these tasks: (Electronic Display Unit Removal, AMM TASK 46-15-01-000-801, and Electronic Display Unit Installation, AMM TASK 46-15-01-400-801).

(b) If the Ethernet input shows ABSENT, then remove the target ESMU, and install a serviceable ESMU. Do these tasks: (Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801, and Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801).

(4) If the problem continues, then do a software restoration of the source EDU. Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

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(5) If the problem continues, then remove the source ESMU, and install a serviceable ESMU. Do these tasks: (Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801, and Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801).

(a) If the problem remains, then continue.

(6) Remove the two ESMUs. This is the task: (Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801).

(7) Do a wiring check of the Ethernet between the two ESMUs.

FLIGHT DECK		
ESMU-L, M9101 D9107P3	**ESMU-R, M9201 D9207P3**	
1	3	0
2	6	0
3	1	0
6	2	0

(b) If you find a problem, then repair the wiring.

(8) Install the two ESMUs. This is the task: (Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801).

F. Repair Confirmation

(1) During media load or crossload, if the LSAP installation to the opposite side is successful, and the specified dialog box does not show, then you corrected the problem.

——— END OF TASK ———

844. EFB INOP Fault Message - Fault Isolation

A. Description

(1) Use this task when the flight crew sees the message that follows:

(a) “EFB INOP. Shutting Down EFB”

[OK]

(2) This fault message shows when the flight crew starts the EFB in the air and one of these conditions are true:

(a) No tail ID is saved.

(b) There is a tail ID mismatch.

NOTE: This fault message does not show again on the ground.

B. Possible Causes

(1) Software

(2) EDU

C. Initial Evaluation

(1) Power on EFB.

(2) Wait for the EFB to start up.

(a) If the MAIN MENU shows, then the fault was intermittent.

(b) If the TAIL ID ENTRY page shows, then do the fault isolation procedure.

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D. Fault Isolation Procedure

(1) Enter and save the correct tail ID on both EFBs. Do this task: (Tail Identification Check - Procedure, AMM TASK 46-15-00-710-804).

(2) If the fault continues, reimage the EDU. Do this task: EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803

(3) If the fault continues, replace the EDU. These are the tasks:

Electronic Display Unit Removal, AMM TASK 46-15-01-000-801

Electronic Display Unit Installation, AMM TASK 46-15-01-400-801

E. Repair Confirmation

(1) From theLOAD MENU, select RETURN TO MAIN. Select OK at the dialog box.

(a) If the ADMW starts up to the MAIN MENU page, then you corrected the fault.

——— END OF TASK ———

845. System Error Problems - Fault Isolation

A. Description

(1) Use this task when you see the message that follows:

(a) “SYSTEM ERROR”

[RESTART][SHUTDOWN]

(2) This fault message shows when the network or firewall settings cannot be setup at ADMW startup or when navigating to LOAD MENU.

B. Possible Causes

(1) Software

(2) EDU

C. Initial Evaluation

(1) Restart the EFB with one of the steps that follow:

(a) If the message “SYSTEM ERROR” shows, then select the RESTART EFB button.

(b) If the MAIN MENU shows, go to the SYSTEM PAGE and select RESTART EFB.

(c) If the LOAD MENU shows, select RETURN TO MAIN.

1) Then, from the MAIN MENU, go to the SYSTEM PAGE and select RESTART EFB.

(2) Wait for the EFB to start up.

(a) If the MAIN MENU or TAIL ID ENTRY shows, then the issue is intermittent.

(b) If the message “SYSTEM ERROR” shows, then do the fault isolation procedure below.

D. Fault Isolation Procedure

(1) Re-image the EFB. Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(2) If the fault continues, replace the EDU and contact Boeing for further assistance. These are the tasks:

Electronic Display Unit Removal, AMM TASK 46-15-01-000-801

Electronic Display Unit Installation, AMM TASK 46-15-01-400-801

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E. Repair Confirmation

(1) Restore power to the EFB.

(2) Wait for the EFB to start up.

(a) If the fault message does not show at startup and the MAIN MENU or TAIL ID ENTRY page shows, then you corrected the fault.

——— END OF TASK ———

846. Crossload Error Problems - Fault Isolation

A. Description

(1) Use this task when you see the message that follows:

(a) “ERROR CROSSLOADING TO EFB. One or more LSAPs failed to crossload”.

(2) This fault message shows when an LSAP fails to load at the CROSSLOAD page after a load retry. An LSAP will fail to load if it is corrupted.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Go to the LOAD MENU.

(2) From the LOAD MENU, select CROSSLOAD.

(3) Select the LSAP(s).

(4) Crossload the LSAP(s) again.

(a) If the LSAP(s) loads successfully and the fault message “ERROR CROSSLOADING TO EFB does not show, then the fault is intermittent.

(b) If the LSAP(s) does not install successfully and the message “ERROR CROSSLOADING TO EFB” shows, then continue.

(c) When the dialog box shows, select RETRY.

1) If the fault message does not show, then the fault is intermittent.

2) If the “ERROR CROSSLOADING TO EFB” message shows again, then do the fault isolation procedure below.

D. Fault Isolation Procedure

(1) Get a non-corrupted version of the failed LSAP(s) and install the software again.

(a) If the part loads successfully and the fault message does not show, then you corrected the fault.

——— END OF TASK ———

847. Unable To Set Date And Time Problems - Fault Isolation

A. Description

(1) Use this task when you see the message that follows:

(a) “Unable to set date and time.”

[RESTART] [SHUTDOWN]?

(2) This fault message shows when the ADMW cannot set the Windows OS date and time. The ADMW resets the EFB system clock if there is 5 seconds or more difference from the airplane date and time.

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B. Possible Causes

(1) Software

(2) Captain's EDU or First Officer's EDU

C. Initial Evaluation

(1) Restart the EFB with one of the steps that follow:

(a) If the message “Unable to set date and time” shows, then select the RESTART option button.

(b) If the message “Unable to set date and time” does not show, then from the MAIN MENU, go to the SYSTEM PAGE and select RESTART EFB.

(2) Wait for the EFB to start up.

(a) If the “Unable to set date and time” message does not show in 30 seconds or less after the MAIN MENU shows, then the fault was intermittent.

(b) If the “Unable to set date and time” message shows in 30 seconds or less after the MAIN MENU shows, then do the fault isolation procedure below.

D. Fault Isolation Procedure

(1) Reimage the operating system. Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(a) If the “Unable to set date and time” message does not show in 30 seconds or less after the MAIN MENU shows, then you corrected the fault.

(b) If the “Unable to set date and time” message shows in 30 seconds or less after the MAIN MENU shows, then continue.

(2) Replace the applicable EDU. These are the tasks:

Electronic Display Unit Removal, AMM TASK 46-15-01-000-801

Electronic Display Unit Installation, AMM TASK 46-15-01-400-801

(a) If the “Unable to set date and time” message does not show in 30 seconds or less after the MAIN MENU shows, then you corrected the fault.

——— END OF TASK ———

848. TIME CHANGED FROM Problems - Fault Isolation

A. Description

(1) This task is for the EFB message:

(a) TIME CHANGED FROM <previous time>.

(2) This fault shows when the EFB time is changed by more than one hour to match airplane time.

B. Fault Isolation Procedure

(1) This fault is for information purposes only. No corrective action is required.

——— END OF TASK ———

849. ERROR LOADING TO Fault Message - Fault Isolation

A. Description

(1) Use this task when you see the message that follows:

(a) “ERROR LOADING TO [LEFT EFB or RIGHT EFB].One or more LSAPs failed to load. [OK]”

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[RETRY] [CANCEL]

(2) This fault message shows when a loadable software airplane part (LSAP) fails to load at the CROSSLOAD, MEDIA LOAD or STAGED LOADS page after a load retry. An LSAP will not load if it is corrupted.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) Go to the LOAD MENU.

(2) From the LOAD MENU, select MEDIA LOAD or STAGED LOADS.

(a) If you select MEDIA LOAD, select the directory that contains the LSAP(s) and then select the LSAP(s).

(b) If you select STAGED LOADS, select the LSAP(s).

(3) Install the LSAP(s) again.

(a) If the LSAP(s) loads successfully and the fault message “ERROR LOADING TO [LEFT EFB or RIGHT EFB]” does not show, then the fault is intermittent.

(b) If the LSAP(s) does not install successfully and the message “ERROR LOADING TO [LEFT EFB or RIGHT EFB]” shows, then continue.

1) When the dialog box shows, select RETRY.

2) If the fault message does not show, then the fault is intermittent.

3) If the “ERROR LOADING TO [LEFT EFB or RIGHT EFB]” message shows again, then do the fault isolation procedure below.

D. Fault Isolation Procedure

(1) Get a non-corrupted version of the failed LSAP(s) and install the software again.

(a) If the part loads successfully and the fault message does not show, then you corrected the fault.

——— END OF TASK ———

850. START CROSSLOAD FAILED Problems - Fault Isolation

A. Description

(1) Use this task when you see the message that follows:

(a) “START CROSSLOAD FAILED The LEFT EFB [or, RIGHT EFB] is not currently in ACCEPT LOAD. Do you wish to retry?”

[RETRY] [CANCEL]

(2) This fault message shows when the offside EFB is not in ACCEPT LOAD mode when you start a crossload of software from the onside EFB to the other EFB.

B. Possible Causes

(1) Software

(2) EDU

(3) ESMU

(4) Wiring

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C. Related Data

(1) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, Captain's EFB, Dwg no. 700-28512.

(2) Electronic Cable Specialist, CAGE 66197, Wiring Diagram, First Officer's EFB, Dwg no. 700-28513.

D. Initial Evaluation

(1) Do this task: LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802.

(a) Make sure the offside EFB is in ACCEPT LOAD mode.

1) If the crossload software task completes and you do not see the “START CROSSLOAD FAILED” message, then the fault was intermittent.

2) If “ACCEPT LOAD IDLE” message shows, then do the fault isolation procedure.

E. Fault Isolation Procedure

(1) Cycle power to the applicable electronic switching module unit (EMSU). Do these steps:

(a) From the EFB MAINTENANCE page, make your selection: SHUTDOWN.

NOTE: The EFB takes approximately 20 seconds to go off.

1) When the EDU ON/OFF button shows amber in color, then continue.

(b) Set the EFB power cutoff switch, on the sidewall, to the OFF position.

1) Make sure the switch show the words PWR OFF illuminated.

2) Make sure the EDU ON/OFF button is not illuminated (that is, not amber in color).

(2) Energize the applicable EFB again. Do these steps:

(a) Set the EFB Power Cutoff Switch to the EFB position.

1) Make sure the letters EFB show amber in color.

(b) On the EDU, press and hold the ON/OFF button for two seconds, and then release.

1) Let the EFB boot-up until the main menu shows.

(3) After EFB restart, do this task: (LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) If the crossload software task completes and you do not see the “START CROSSLOAD FAILED” message, then the fault was intermittent.

(b) If the “START CROSSLOAD FAILED” message shows, then continue.

(4) On the onside EFB (or, EDU), go to the INPUT MONITORING page, and then go to the ETHERNET INPUTS page and look at the status of the offside EFB.

NOTE: The onside EFB is the source EFB with the software installed. The offside EFB is the target EFB to be crossloaded.

(a) If the status of the other EFB shows PRESENT, then do these steps.

1) Reimage the offside EDU. Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

2) If the fault continues, replace the offside EDU.

Electronic Display Unit Removal, AMM TASK 46-15-01-000-801

Electronic Display Unit Installation, AMM TASK 46-15-01-400-801

(b) If the status of the other EFB shows ABSENT, then replace the offside ESMU.

Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801

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Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801

(5) If the fault continues, then reimage the onside EDU. Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

(6) If the fault continues, replace the onside ESMU.

Electronic Switching Module Unit Removal, AMM TASK 46-15-02-000-801

Electronic Switching Module Unit Installation, AMM TASK 46-15-02-400-801

(7) If the fault continues, then examine the wiring for continuity between the Captain's and the First Officer's ESMU.

FLIGHT DECK

ESMU-L, M9101 D9107P3	**ESMU-R, M9201 D9207P3**	
1	3	0
2	6	0
3	1	0
6	2	0

(b) If you find a problem, then repair the wiring.

F. Repair Confirmation

(1) Do this task: (LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) If the “START CROSSLOAD FAILED” message does not show, then you corrected the fault.

——— END OF TASK ———

851. System Settings Changed Problems - Fault Isolation

A. Description

(1) Use this task when you see the message that follows:

(a) “Systems Settings Change – Windows has finished installing new devices. The software that supports your device requires that you restart your computer. You must restart your computer before the new settings will take effect. Do you want to restart your computer now?”

NOTE: This fault message shows when Windows changes configuration because a USB device was installed. The device could be a memory stick, a CD-ROM, or a cellular modem.

B. Fault Isolation Procedure

(1) See your EFB Administrator for guidelines. Your airline policy governs use of USB devices.

(a) In general, select [No] to close the Window.

(b) Then to do a restart, go to the SYSTEM PAGE and select the RESTART button.

——— END OF TASK ———

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852. Unable to Launch OPTADMW Fault Message - Fault Isolation Task

A. Description

(1) Use this task when a dialog box shows the message that follows:

(a) “Unable to launch OPTADMW.”

[SHUTDOWN] [LOAD MENU] [RESTART]?

(2) This dialog box can show when the LSAP identified as OPTxx-ADMW-yyyy is missing, or is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Make your selection: RESTART.

(a) if the EFB boots to show the main menu, and the fault message 'Unable to launch OPTADMW' does not show, then the problem is intermittent.

(b) If the EFB shows the dialog box with the words Unable to launch OPTADMW, do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Install the software part identified as: OPTxx-ADMW-yyyy. Do one of these tasks: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801 or LSAP Installation using Crossload - Procedure, AMM TASK 46-15-00-470-802).

(a) If the EFB now boots to show the main menu, then you corrected the problem.

(b) If the EFB boots but now shows the message: The recently loaded OPTADMW LSAP will not install properly and has been deleted. Reverted to prior version, then do make your selection: OK, and continue to the next step.

(2) Get a new, serviceable LSAP, and do the installation again. This is the task: (LSAP Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-801).

E. Repair Confirmation

(1) If the EFB boots to show the main menu, then you corrected the problem.

——— END OF TASK ———

853. Missing Software Problems - Fault Isolation

A. Description

(1) This task gives the steps to correct the problem that follows.

(a) The EFB display shows a dialog box with the words: Another EFB process is already running.

(2) This dialog box can show when the EFB internal boot sequence is unserviceable.

B. Possible Causes

(1) Software.

C. Initial Evaluation

(1) Make your selection: RESTART.

(a) If the EFB boots to show the main menu, and the fault message “Another EFB process is already running” does not show, then the problem is intermittent.

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(b) If the EFB shows the dialog box with the words: Another EFB process is already running, then do these steps:

1) Make your selection: SHUTDOWN.

2) Do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Do this task: (EFB Drive Erase Procedure, AMM TASK 46-15-00-070-803).

E. Repair Confirmation

(1) If the EFB boots to show the main menu, then you corrected the problem.

——— END OF TASK ———

854. Restore OS Load Error Problems - Fault Isolation

A. Description

(1) Use this task when the Restore OS function gives the result: LOAD ERROR.

B. Possible Causes

(1) Software

C. Initial Evaluation

(1) When doing this task, (EFB Operating System Installation Using Restore - Procedure, AMM TASK 46-15-00-470-812), this condition shows:

(a) If the installation result is serviceable, then the fault is intermittent.

(b) If the result shows the words: LOAD ERROR, then do the fault isolation procedure that follows.

D. Fault Isolation Procedure

(1) Make sure the source of the LSAP with shortened part number OPTADMW is serviceable.

(2) Do the Restore OS using a different method. Use one of these tasks: (EFB Operating System Installation Using Media - Procedure, AMM TASK 46-15-00-470-809 or EFB Operating System Installation Using Crossload - Procedure, AMM TASK 46-15-00-470-810 or EFB Operating System Installation Using Data Loader - Procedure, AMM TASK 46-15-00-470-811).

——— END OF TASK ———

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