
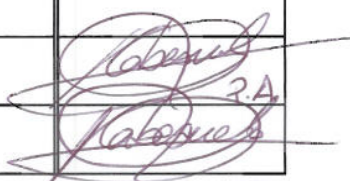
	<b>NOTA TECNICA TECHNICAL REPORT</b>		<b>Núm. No.</b>	<b>NT-FA-SGU-05018</b>
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<b>Título/Title</b>  <b>A330-200 MRTT. ATA 24: Electrical System Ground Test Requirements for Military Configuration</b>				
<b>Palabras clave/Key words</b>  GTR, A330, MRTT, Electrical system			<b>Clasificación acceso Access class</b>  <b>P1</b>	
			<b>Registro de Revisiones Revisions Record</b>  <b>PAG. 2</b>	
<b>Resumen/Summary</b>  The object of this Technical Note is to define the requirements for the on ground tests to be performed on the Electrical System in the A330 MRTT, in order to check its proper functioning.				
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## **1. INTRODUCTION**

### **1.1 GENERAL**

The object of this document is to define the ground test requirements to be performed on the Electrical System in the A330-200 MRTT to verify its proper functioning.

Modification of the ATA24 in the MRTT aircraft will consist only in the extension of the distribution system in order to supply all the new systems and enhancement of generation system in DC side. Basic aircraft systems shall remain supplied as they were before the aircraft conversion. Only galley and commercial loads shedding operations shall be modified in abnormal configurations.

The extension of the Electrical system to supply the Military operations comprises the following:

- Two new AC main busbars (A1XP and A2XP)
- Two new Transformer Rectifiers (TR3 and TR4)
- Four new DC main Busbars (A1PP and A100PP supplied from TR3 and A2PP and A200PP supplied from TR4)
- Associated system contactors in meet power shedding and abnormal conditions requirements.
- Business Class and MEDEVAC power outlets

### **1.2 OBJECTIVE**

The purpose of the tests described in this document is:

- To check the proper operation of the Aircraft Electrical Power System, Military Configuration, in ground conditions.

The results of these tests will be summarised in DT-FA-SGU-05016.

### **1.3 APPLICABILITY**

This Technical Note is applicable to A330-200 MRTT aircraft for the RAAF in its military configuration.

### **1.4 APPLICABLE DOCUMENTS AND SPECIFICATIONS**

Doc Reference	Title
NT-FA-SGU-05021	A330-200 MRTT. ATA 31 MFCD Ground Test Requirements
NT-FA-SGU-05025	A330-200 MRTT. ATA 33 Lights Ground Test Requirements
NT-FA-SGE-05011	A330-200-MRTT- ECS (ATA21). Ground Test Program Requirements
E. AMM ASY	A330 AMM Royal Australian Air Force

**Table 1. Documents referenced**

Electrical Principal Diagrams Reference	Title
ME F252A9000	Power Outlets General Purposes
ME F252A9001	Power Outlets Business
MF F256A7000	Power Outlets for MEDEVAC
PN F246A1000	TR3 Distribution
PN F246A1001	TR4 Distribution
PN F246A1002	DC Re-allocable
PN F246A1003	DC Re-allocable 2
PU F243A2000	TR3
PU F243A2001	TR4
PU F243A2002	TIE CONTACTOR CONTROL
XA F242A6000	Galley Shedding Modification
XN F245A1000	AC Distribution for PODS
XN F245A1001	AAR Power Extension
XN F245A1002	AAR Power Extension II
XN F245A1004	Generator Fail Signal
XN F245A1005	Console Controls
XN F245A1006	Console Master Power

**Table 2. Wiring diagrams**

Modified Electrical Wiring Diagrams Reference	Title
GAC-24-22-06	AC Main Generation Gen 2 SWTG & INDG Sh 2/4 Pag 1
GAC-24-22-07	AC Main Generation Gen 2 SWTG & INDG Sh 2/4 Pag 1
GAC-24-23-02	AC Auxiliary Gen CTL & INDG Sh 2/4 Pag 1
GAC-24-38-02	DC Generation Battery 2
GAC-24-51-01	AC Main Distribution GLC1
GAC-24-51-02	AC Main Distribution GLC2
GAC-24-51-03	AC Main Distribution BTC2
GAC-24-51-04	AC Main Distribution GLC2
GAC-24-51-05	AC Main Distribution Control
GAC-24-53-XX	C/B Monitoring
GAC-24-56-01	Galley Supply CTL. FWD & MID Galley
GAC-24-68-03	DC Ancillary Equipment 105PP 721VU Bus 1
GAC-25-18-01	Equipment/Furnishings Additional Cockpit Electrical Power. Electrical outlet

**Table 3. Modified wiring diagrams of green A/C**

## 1.5 ABBREVIATIONS

AC	Alternating current
A/C	Aircraft
AAR	Air to Air Refuelling
AMM	Aircraft Maintenance Manual
AMS	Aircraft Maintenance System
APU	Auxiliary Power Unit
ARC	Air Refuelling Computer
ARO	Air Refuelling Operator
BAT	Battery
BCCS	Boom Computing Control System
C.B.	Circuit Breaker
CBMU	Circuit Breaker Monitoring Unit
CSL	Console
CTL	Control
DC	Direct current
DU	Display Unit
ECAM	Electronic Centralized Aircraft Maintenance
ECU	Electronic Control Unit
EEN	Electrical Extension Network
EIS	Electronic Instrument System
ELEC	Electrical
ESS	Essential
EWD	Engine Warning Display
EXT	External
GAC	Green Aircraft
GPU	Ground Power Unit
INHIB	Inhibit
L	Left
LH	Left Handside
MAN	Manual
MCO	Mission Coordinator Operator
MFCD	Multi-Function Control Display
MFD	Multi-Function Display
MSTR	Master
NORM	Normal
P/B	Push Button
PU	Processor Unit

PWR	Power
RCCB	Remote Control Circuit Breaker
R	Right
RH	Right Handside
SD	System Display
SEL	Selector
SW	Switch
TR	Transformer rectifier
TRU	Transformer rectifier unit
WCAS	Warnings, Cautions and Advisories System



## **2. AIRCRAFT AND SYSTEM CONFIGURATION**

### **2.1 POWER SUPPLY**

Previously to perform any test, it must be checked that continuity tests of power wires which carry the main electrical power from power sources to bus bars, as well as their return power wires, have been made successfully.

The aircraft shall be supplied by one GPU unless otherwise specified.

### **2.2 AIRCRAFT ENVIRONMENT**

The aircraft shall be on ground. If not specified in the test, all the engines and the APU shall be shut down.

### **2.3 AIRCRAFT CONFIGURATION**

The corresponding system wiring continuity tests shall have been made successfully.

That equipment and components of the corresponding system shall have been properly installed and according to the applicable documentation, and that they are fully operatives.

All the modifications defined in the applicable Principal Diagrams and modified Aircraft Wiring Manual Diagrams listed in paragraph 1.4, table 2 and 3, shall be included prior to the tests.

### **2.4 SYSTEMS REQUIRED TO BE OPERATIONAL BEFORE THE TEST**

In addition to the equipment of basic aircraft, the following systems shall be operative before performing some of the tests:

- TRU fans
- ARC
- MFCD System

When the systems mentioned above are needed for any of the tests, it will be stated at the beginning of the corresponding test description.

### **3. TEST EQUIPMENT AND REQUIRED INSTRUMENTATION**

In order to perform the set of tests described in paragraph 5, a external GPU of 115/200 VAC, 3-phase, 400 Hz (90KVA capacity at least) is required.

For testing the wiring continuity of the Electrical Extension Network (EEN) power wires which carry the main electrical power, and so as to measure the voltage as indicated in the test descriptions, a digital multimeter model Fluke 8060 A or equivalent can be used.

Modified CBMU floppy disk for Military configuration.

#### **4. PREVIOUS REQUIREMENTS TO TEST**

Prior to performing any test, the following requirements must be met:

- Adequate electrical fire, extinguishing equipment shall be available within the aircraft and shall be within calibration / maintenance.
- Batteries will be checked for correct connectivity. They shall also be checked to ensure they are fully charged.
- No other testing shall be executed simultaneously on the aircraft which might interfere with the correct execution of these tests.
- All Operator Safety hazards shall be identified and appropriate clothing, and or precautions shall be taken.
- Check that all control switches, and selectors of the electrical installation are in the OFF position.

## 5. ELECTRICAL SYSTEM TEST DESCRIPTION

The modification of ATA 24 electrical system affects AC and DC distribution, DC generation, control and monitoring of EEN, operation of EEN and galley shedding. The following points provide a brief description of the tests to be performed for these equipment. For a detailed description of ATA24 system enhancement, see DT-FA-SGU-05006 (Electrical Load Analysis, chapter 2 ATA24)

Before performing the tests related to ATA24 EEN, ensure that the "PODS MAN SEL" toggle switch is set to OFF position and Pushbutton Switches listed below (placed in panels in the ARO/MCO Console's intermediate area) are released:

Pushbutton label	Panel Location
MSTR PWR 1	A945VU
MSTR PWR 2	A945VU
PODS RIGHT MSTR	A955VU
PODS LEFT MSTR	A955VU
BOOM MSTR 1	A965VU
BOOM MSTR 2	A965VU
ELEC CONFIG	A955VU
230VAC/50Hz PWR OUTLETS LEFT	N/A
230VAC/50Hz PWR OUTLETS RIGHT	N/A

Also before performing these tests, ensure that the C.B. and RCCB listed below are open:

FIN	Designation	Location	Coordinates	Label
A9XN	LHPOD RCCB	717VU	A52	L POD
A16XN	ECU AC 1 RCCB	717VU	B52	BOOM ECU 3 SPLY
A17XN	ECU AC 2 RCCB	717VU	C52	BOOM ECU 1 SPLY
A18XN	A7XP RCCB	715VU side 1	C54	A7XP
A54XN	A3XP CB	715VU side 1	F55	A3XP
A48XN	A5XP CB	715VU side 1	H54	A5XP
A6PU	TR3 SPLY	715VU side 1	J54	MIL TR3 SPLY
A49XN	AAR PWR 3	721VU	C16	ARO/MCO CSL MSTR 1
A1PU	TIE CONTROL CB1	721VU	Q16	MIL BUS TIE CTL 1
A1PN	DC A7PP CB	721VU	Q17	A7PP
A2PN	DC A9PP CB	721VU	Q18	A9PP
A3PN	DC A5PP CB	721VU	G14	A5PP
A4PN	DC A15PP CB	721VU	G15	A15PP
A5PN	DC A3PP CB	721VU	G16	A3PP
A6PN	DC A11PP CB	721VU	G17	A11PP
A7PN	DC A13PP CB	721VU	G18	A13PP
A37XN	GEN FAIL CB	721VU	J19	GEN FAIL LOGIC CTL 1
A11PU	TR4 MONG	721VU	J20	MIL TR4 MONG

FIN	Designation	Location	Coordinates	Label
A8PN	A3PP 5001VE CB	721VU	K20	5001VE A3PP
A7XN	LH PODS LOGIC	721VU	X16	PODS MSTR 1
A15XN	AAR PWR1	721VU	X17	BOOM MSTR 1
A2XA	GALLEY SHED	721VU	X18	GALLEY FWD MID SHED
A19PN	A12PP CB	722VU	A45	A12PP
A20PN	A14PP CB	722VU	A46	A14PP
A21PN	A6PP CB	722VU	A47	A6PP
A25PN	DC A8PP CB	722VU	A48	A8PP
A26PN	DC A10PP CB	722VU	A49	A10PP
A10PU	TIE CONTROL CB2	722VU	C41	MIL BUS TIE CTL2
A50XN	AAR PWR 4	722VU	C44	ARO/MCO CSL MSTR 2
A18PN	A4PP CB	722VU	F45	A4PP
A21XN	AAR PWR2	722VU	H34	BOOM MSTR 2
A33XN	RH PODS LOGIC	722VU	H35	PODS MSTR 2
A9PU	TR3 MONG	722VU	V32	MIL TR3 MONG
A9PN	A4PP 5001VE CB	722VU	V33	5001VE A4PP
A53XN	GEN FAIL CB 2	722VU	V34	GEN FAIL LOGIC CTL 2
A24XN	A8XP RCCB	715VU side 2	Q56	A8XP
A13XN	A4XP CB	715VU side 2	T56	A4XP
A5XN	A6XP CB	715VU side 2	V57	A6XP
A2PU	TR4 SPLY	715VU side 2	W57	MIL TR4 SPLY
A22XN	ECU AC 3 RCCB	718VU	A59	BOOM ECU 4 SPLY
A8XN	RHPOD RCCB	718VU	A60	R POD
A23XN	ECU AC 4 RCCB	718VU	B59	BOOM ECU 2 SPLY
A1ME	L POWER OUTLETS SPLY	5001VE	E10	MEDEVAC & BUSINESS 230VAC OUTLETS L SUPPLY
A7ME	L POWER OUTLETS CTL	5001VE	E12	MEDEVAC & BUSINESS 230VAC OUTLETS L CTL
A5MF	R POWER OUTLETS CTL	5001VE	E13	MEDEVAC & BUSINESS 230VAC OUTLETS R CTL
A1MF	R POWER OUTLETS SPLY	5001VE	E15	MEDEVAC & BUSINESS 230VAC OUTLETS R SUPPLY

## 5.1 PREVIOUS ASSUMPTIONS

N/A

## 5.2 INTEGRITY TESTS

### 5.2.1 Functional and Integration Testing

#### 5.2.1.1 Test Purpose

The purpose of this test is to check the integrity and functionality of the Aircraft Electrical Power System (ATA24) after the installation of the EEN for powering the new AC Military Systems.

#### 5.2.1.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A. Voltages measured shall also be recorded in the corresponding step result box when applicable.

**NOTE:** Before performing this test, the following circuit breakers shall be closed:

FIN	Designation	Location	Coordinates	Label
A13XN	A4XP CB	715VU side 1	T56	A4XP
A48XN	A5XP CB	715VU side 1	H54	A5XP
A7XN	LH PODS LOGIC	721VU	X16	PODS MSTR 1
A15XN	AAR PWR1	721VU	X17	BOOM MSTR 1
A37XN	GEN FAIL CB	721VU	J19	GEN FAIL LOGIC CTL 1
A49XN	AAR PWR 3	721VU	C16	ARO/MCO CSL MSTR 1
A21XN	AAR PWR2	722VU	H34	BOOM MSTR 2
A33XN	RH PODS LOGIC	722VU	H35	PODS MSTR 2
A50XN	AAR PWR 4	722VU	C44	ARO/MCO CSL MSTR 2
A53XN	GEN FAIL CB 2	722VU	V34	GEN FAIL LOGIC CTL 2
A54XN	A3XP CB	715VU side 2	F55	A3XP
A5XN	A6XP CB	715VU side 2	V57	A6XP

ELECTRICAL SYSTEM GENERAL TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
001-1	Apply procedure 24-00-00-860-053 of AMM (Energize the Aircraft Electrical Circuits from the External Power A).	This is the beginning of a sequence of procedures so as to check the integrity of ATA24 AC electrical power	N/A	N/A
002-1	Check that there are 115V AC (three phases) in the following points: <ul style="list-style-type: none"> <li>Busbar A3XP (3 Ph), placed in panel 721VU, where the C.B. A5UM is placed (coord. A14)</li> <li>Busbar A4XP (3 Ph), placed in panel 722VU, where the C.B. A4UH2 is placed (coord. A33)</li> </ul>			
003-1	Check that there are 0V AC in: <p>a) Panel 721VU, in the following points:</p> <ul style="list-style-type: none"> <li>Busbar A5XP-A, C.B. A1LV (coord. E13)</li> <li>Busbar A5XP-B, C.B. A1LT (coord. E16)</li> <li>Busbar A5XP-C, C.B. A8LZ (coord. E19)</li> <li>Busbar A7XP (3 Ph), C.B. A7YB (coord. H13)</li> </ul> <p>b) Panel 722VU, in the following points:</p> <ul style="list-style-type: none"> <li>Busbar A6XP-A, C.B. A32LT (coord. G41)</li> <li>Busbar A6XP-B, C.B. A12LT (coord. G42)</li> <li>Busbar A6XP-C, C.B. A11LT (coord H41)</li> <li>Busbar A8XP (3 Ph), C.B. A8YB (coord. F33)</li> </ul>			
004-1	Check that the following RCCBs are open: <p>a) Panel 717VU:</p> <ul style="list-style-type: none"> <li>Busbar A9XP (3 Ph), RCCB A9XN (coord. A52)</li> <li>Boom ECU-1 supply (3 Ph), RCCB A17XN (coord. C52)</li> <li>Boom ECU-3 supply (3 Ph),</li> </ul>			

ELECTRICAL SYSTEM GENERAL TEST											
STEP	ACTION	EXPECTED RESULT	STEP RESULT								
			PASS	FAIL							
	RCCB A16XN (coord. B52) b) Panel 718VU: <ul style="list-style-type: none"> <li>Boom ECU-4 supply (3 Ph), RCCB A22XN (coord. A59)</li> <li>Busbar A10XP (3 Ph), RCCB A8XN (coord. A60)</li> <li>Boom ECU-2 supply (3 Ph), RCCB A23XN (coord. B59)</li> </ul>										
005-1	Check that there are 115V AC in the following points (5001VE): <ul style="list-style-type: none"> <li>Busbar A3XP (3 Ph), placed in panel 5001VE, where the C.B. A1ME is placed (E10)</li> <li>Busbar A4XP (3 Ph), placed in panel 5001VE, where the C.B. A1MF is placed (E15)</li> </ul>										
006-1	Check that no amber indication appears in the electrical page on the SD – other than those indicated from the AMM procedure.										
007-1	Do the EIS stop procedure (Ref. TASK 31-60-00-860-802).		N/A	N/A							
008-1	Apply procedure 24-41-00-862-801 of AMM: De-energize the Aircraft Electrical Circuits from the External Power A.		N/A	N/A							
<table border="1"> <tr> <td colspan="2"><b>OVERALL TEST RESULT (TICK BOX)</b></td> <td rowspan="3"><b>COMMENTS:</b></td> </tr> <tr> <td>PASS</td> <td><input type="checkbox"/></td> </tr> <tr> <td>FAIL</td> <td><input type="checkbox"/></td> </tr> </table>					<b>OVERALL TEST RESULT (TICK BOX)</b>		<b>COMMENTS:</b>	PASS	<input type="checkbox"/>	FAIL	<input type="checkbox"/>
<b>OVERALL TEST RESULT (TICK BOX)</b>		<b>COMMENTS:</b>									
PASS	<input type="checkbox"/>										
FAIL	<input type="checkbox"/>										



## 5.2.2 New TR Performance

### 5.2.2.1 Test Purpose

The purpose of this test is to check the operation of the new TRs (TR3 & TR4) connected through the EEN to the Aircraft Electrical Network.

### 5.2.2.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A. Voltages measured shall also be recorded when applicable.

**NOTE:** Before performing this test, the following circuit breakers shall be closed:

FIN	Designation	Location	Coordinates	Label
A6PU	TR3 SPLY	715VU side 1	J54	MIL TR3 SPLY
A11PU	TR4 MONG	721VU	J20	MIL TR4 MONG
A1PN	DC A7PP CB	721VU	Q17	A7PP
A2PN	DC A9PP CB	721VU	Q18	A9PP
A3PN	DC A5PP CB	721VU	G14	A5PP
A4PN	DC A15PP CB	721VU	G15	A15PP
A5PN	DC A3PP CB	721VU	G16	A3PP
A6PN	DC A11PP CB	721VU	G17	A11PP
A7PN	DC A13PP CB	721VU	G18	A13PP
A8PN	A3PP 5001VE CB	721VU	K20	5001VE A3PP
A10PN	105PP 5001VE CB	721VU	S11	5001VE 105PP
A9PN	A4PP 5001VE CB	722VU	V33	5001VE A4PP
A18PN	A4PP CB	722VU	F45	A4PP
A19PN	A12PP CB	722VU	A45	A12PP
A20PN	A14PP CB	722VU	A46	A14PP
A21PN	A6PP CB	722VU	A47	A6PP
A25PN	DC A8PP CB	722VU	A48	A8PP
A26PN	DC A10PP CB	722VU	A49	A10PP
A9PU	TR3 MONG	722VU	V32	MIL TR3 MONG
A2PU	TR4 SPLY	715VU side 2	W57	MIL TR4 SPLY

NEW TR PERFORMANCE				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
001-1	Energize the Aircraft Electrical Circuits (Ref. TASK 24-41-00-861-801)		N/A	N/A
002-1	Do the EIS start procedure (EWD DU, SD DU only) (Ref. TASK 31-60-00-860-801).		N/A	N/A
003-1	On the ECAM control panel, push the EL/AC key	On the SD, on the ELEC AC page: TR3 and TR4 are displayed.		
004-1	On the ECAM control panel, push the EL/DC key	On the SD, on the ELEC DC page: TR3 and TR4 and new busbars are displayed		
005-1	On SD, check and record the voltage and current supplied by the TR3 and TR4.	The voltages shall be approximately 28V and the current shall be around 0A.		
006-1	Check that there are 28V DC in: a) Panel 721VU, in the following points: <ul style="list-style-type: none"> <li>• Busbar A100PP, C.B. A3PN (coord. G14)</li> <li>• Busbar A1PP, C.B. A1PU (coord. Q16)</li> <li>• Busbar A3PP, C.B. A11PU (coord. J20)</li> <li>• Busbar A11PP,C.B.A54QW (coord. B19)</li> <li>• Busbar A13PP,C.B. A302TZ (coord. T18)</li> </ul> b) Panel 722VU, in the following points: <ul style="list-style-type: none"> <li>• Busbar A2PP, C.B. A19PN (coord. A45)</li> <li>• Busbar A200PP,C.B.A18PN (coord F45)</li> <li>• Busbar A4PP, C.B. A39YE (coord. S32)</li> <li>• Busbar A12PP, C.B. A9WT (coord. B36)</li> </ul>			
007-1	Check that there are 0V DC in: a) Panel 721VU, in the following points: <ul style="list-style-type: none"> <li>• Busbar A5PP, C.B. A28TV2 (coord. L19)</li> <li>• Busbar A7PP, C.B. A55YA</li> </ul>			

NEW TR PERFORMANCE				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
	(coord. F20) <ul style="list-style-type: none"> <li>Busbar A9PP, C.B. A5YP (coord. B1)</li> <li>Busbar A15PP, C.B. A30TV (coord. V19)</li> </ul> b) Panel 722VU, in the following points: <ul style="list-style-type: none"> <li>Busbar A6PP, C.B. A39TV (coord. M32)</li> <li>Busbar A8PP, C.B. A56YA (coord. H45)</li> <li>Busbar A10PP, C.B. A3YP (coord. K31)</li> <li>Busbar A14PP, C.B. A21XN (coord. H34)</li> </ul>			
008-1	Check that there are 28V DC in the following points (5001VE): <ul style="list-style-type: none"> <li>Busbar A3PP, placed in 5001VE, where the C.B. A7ME is placed (coord. E12)</li> <li>Busbar A4PP, placed in 5001VE, where the C.B. A5MF is placed (coord. E13)</li> <li>Busbar 105PP, placed in 5001VE, where the C.B. A2NW is placed (coord. B20)</li> </ul>			
009-1	Do the EIS stop procedure (Ref. TASK 31-60-00-860-802).		N/A	N/A
010-1	Apply procedure 24-41-00-862-801 of AMM: De-energize the Aircraft Electrical Circuits from the External Power A		N/A	N/A
OVERALL TEST RESULT (TICK BOX)		COMMENTS:		
PASS	<input type="checkbox"/>			
FAIL	<input type="checkbox"/>			

### 5.2.3 New Electrical Master Switches Performance

#### 5.2.3.1 Test Purpose

The purpose of this test is to check that the new Console, Pods and Boom bus bars of the EEN are energized correctly when commanded to.

"Functional and Integration Testing" in paragraph 5.2.1 and "New TR Performance" test in paragraph 5.2.2 shall have been performed successfully prior to this test. ARO/MCO Console annunciators illumination shall be available.

#### 5.2.3.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A. Voltages measured shall also be recorded when applicable

NEW ELECTRICAL MASTER SWITCHES PERFORMANCE				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
001-1	Apply procedure 24-00-00-860-053 of AMM (Energize the Aircraft Electrical Circuits from the External Power A).		N/A	N/A
002-1	On panel A945VU (CONSOLE CONTROLS Panel) press MSTR PWR 1 p/b to energise the ARO/MCO Console.	ON indication on MSTR PWR 1 p/b is lighted.		
003-1	Check that there are 115V AC in: a) Panel 721VU, in the following points: <ul style="list-style-type: none"> <li>Busbar A5XP-A, C.B. A1LV (coord. E13)</li> <li>Busbar A5XP-B, C.B. A1LT (coord. E16)</li> <li>Busbar A5XP-C, C.B. A8LZ (coord. E19)</li> </ul> b) Panel 722VU, in the following points: <ul style="list-style-type: none"> <li>Busbar A6XP-A, C.B. A32LT (coord. G41)</li> <li>Busbar A6XP-B, C.B. A12LT (coord. G42)</li> <li>Busbar A6XP-C, C.B. A11LT (coord H41)</li> </ul>			
004-1	Check that there are 28 V DC in: a) Panel 721VU, in the following points: <ul style="list-style-type: none"> <li>Busbar A5PP, C.B. A28TV2</li> </ul>			

NEW ELECTRICAL MASTER SWITCHES PERFORMANCE				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
	(coord. L19) <ul style="list-style-type: none"> <li>Busbar A15PP, C.B. A30TV (coord. V19)</li> </ul> b) Panel 722VU, in the following points: <ul style="list-style-type: none"> <li>Busbar A6PP, C.B. A39TV (coord. M32)</li> <li>Busbar A14PP, C.B. A21XN (coord. H34)</li> </ul>			
005-1	At the 721VU, check that DC busbars A7PP (F20), A9PP (B1) and AC busbar A7XP (H13) are not supplied  At the 722VU, check that DC busbars A8PP (H45), A10PP (K31) and AC busbar A8XP (F33) are not supplied  At the 717VU, check that the RCCBs A9XN (A52), A16XN (B52) and A17XN (C52) are open.  At the 718VU, check that the RCCBs A8XN (A60), A22XN (A59) and A23XN (B59) are open.			
006-1	On panel A945VU (CONSOLE CONTROLS Panel) release MSTR PWR 1 p/b to de-energise the ARO/MCO Console	ON indication on MSTR PWR 1 p/b goes off		
007-1	At the 721VU, check that DC busbars A5PP (L19) and A15PP (V19) and AC busbar A5XP (E13, E16, E19) are not supplied.  At the 722VU, check that DC busbars A6PP (M32) and A14PP (H34) and AC busbar A6XP (G41, G42, H41) are not supplied.			
008-1	On panel A945VU (CONSOLE CONTROLS Panel) press MSTR PWR 2 p/b to energise the ARO/MCO Console	ON indication on MSTR PWR 2 p/b is lighted.		
009-1	At the 721VU, check that DC busbars A5PP (L19), A15PP (V19) and AC busbar A5XP (E13, E16, E19) are supplied.  Check that DC busbars A7PP (F20), A9PP (B1) and AC busbar A7XP (H13) are not supplied  At the 722VU, check that DC busbars			

NEW ELECTRICAL MASTER SWITCHES PERFORMANCE				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
	<p>A6PP (M32), A14PP (H34) and AC busbar A6XP (G41, G42, H41) are supplied.</p> <p>Check that DC busbars A8PP (H45), A10PP (K31) and AC busbar A8XP (F33) are not supplied</p> <p>At the 717VU, check that the RCCBs A9XN (A52), A16XN (B52) and A17XN (C52) are open.</p> <p>At the 718VU, check that the RCCBs A8XN (A60), A22XN (A59) and A23XN (B59) are open.</p>			
010-1	On panel A945VU (CONSOLE CONTROLS Panel) press MSTR PWR 1.	ON indication on MSTR PWR 1 p/b is lighted.		
011-1	On panel A955VU (PODS Panel) press the LEFT POD MSTR p/b.	ON indication on LEFT POD MSTR p/b is lighted.		
012-1	<p>At the 721VU check that there are:</p> <ul style="list-style-type: none"> <li>28V DC in Busbar A9PP, (B1)</li> </ul> <p>and that DC Busbar A7PP (F20) and AC Busbar A7XP (H13) are not supplied.</p> <p>At the 722VU check that DC busbars A8PP (H45), A10PP (K31) and AC busbar A8XP (F33) are not supplied.</p> <p>At the 717VU, check that RCCB A9XN (A52) is closed, and that the RCCBs A16XN (B52) and A17XN (C52) are open.</p> <p>At the 718VU, check that the RCCBs A8XN (A60), A22XN (A59) and A23XN (B59) are open.</p>			
013-1	On panel A955VU (PODS Panel) release the LEFT POD MSTR p/b.	ON indication on LEFT POD MSTR p/b goes off		
014-1	<p>At the 721VU, check that DC busbar A9PP (B1) is not supplied</p> <p>At the 717VU, check that the RCCB A9XN (A52) is open.</p>			
015-1	On panel A955VU (PODS Panel) press the RIGHT POD MSTR p/b.	ON indication on RIGHT POD MSTR p/b is lighted.		
016-1	<p>At the 722VU check that there are:</p> <ul style="list-style-type: none"> <li>28V DC in Busbar A10PP, (K31)</li> </ul> <p>and that DC Busbar A8PP (H45) and AC</p>			

NEW ELECTRICAL MASTER SWITCHES PERFORMANCE				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
	<p>Busbar A8XP (F33) are not supplied.</p> <p>At the 721VU, check that DC busbars A7PP (F20), A9PP (B1) and AC busbar A7XP (H13) are not supplied.</p> <p>At the 718VU, check that RCCB A8XN (A60) is closed, and that the RCCBs A22XN (A59) and A23XN (B59) are open.</p> <p>At the 717VU, check that the RCCBs A9XN (A52), A16XN (B52) and A17XN (C52) are open.</p>			
017-1	On panel A955VU (PODS Panel) release the RIGHT POD MSTR p/b.	ON indication on RIGHT POD MSTR p/b goes off.		
018-1	<p>At the 722VU, check that DC busbar A10PP (K31) is not supplied.</p> <p>At the 718VU, check that the RCCB A8XN (A60) is open.</p>			
019-1	On A965VU (BOOM Panel) press MSTR PWR 1 p/b to energise the BOOM Side 1 AC Systems and Side1 and 2 DC Systems.	ON indication on BOOM MSTR PWR 1 p/b is lighted.		
020-1	<p>At the 721VU check that there are:</p> <ul style="list-style-type: none"> <li>28V DC in Busbar A7PP (F20)</li> <li>115V AC in Busbar A7XP (H13),</li> </ul> <p>and that DC Busbar A9PP (B1) is not supplied.</p> <p>At the 722VU check that there are:</p> <ul style="list-style-type: none"> <li>28V DC in Busbar A8PP (H45)</li> </ul> <p>and that DC Busbar A10PP (K31) and AC busbar A8XP (F33) are not supplied.</p> <p>At the 717VU, check that RCCB A9XN (A52) is open, and that the RCCBs A16XN (B52) and A17XN (C52) are closed.</p> <p>At the 718VU, check that RCCB A8XN (A60), RCCBs A22XN (A59) and A23XN (B59) are open.</p>			
021-1	On A965VU (BOOM Panel) release MSTR PWR 1 p/b to de-energise the	ON indication on BOOM MSTR PWR 1 p/b goes off		

NEW ELECTRICAL MASTER SWITCHES PERFORMANCE				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
	BOOM Side 1 AC Systems and Side1 and 2 DC Systems.			
022-1	At the 721VU, check that DC busbar A7PP (F20) and AC busbar A7XP (H13) are not supplied  At the 722VU, check that DC busbar A8PP (H45) is not supplied  At the 717VU, check that the RCCBs A16XN (B52) and A17XN (C52) are open.			
023-1	On A965VU (BOOM Panel) press MSTR PWR 2 p/b to energise the BOOM Side 2 AC Systems and Side1 and 2 DC Systems.	ON indication on BOOM MSTR PWR 2 p/b is lighted		
024-1	At the 721VU check that DC Busbar A7PP (F20) is supplied.  Check that DC Busbar A9PP (B1) and AC Busbar A7XP (H13) are not supplied.  At the 722VU check that there are: <ul style="list-style-type: none"> <li>115V AC in Busbar A8XP (F33)</li> </ul> and that DC Busbar A8PP (H45) is supplied.  Check that DC Busbar A10PP (K31) is not supplied.  At the 717VU, check that the RCCBs A9XN (A52), A16XN (B52) and A17XN (C52) are open.  At the 718VU, check that RCCB A8XN (A60) is open, and that the RCCBs A22XN (A59) and A23XN (B59) are closed.			
025-1	On A965VU (BOOM Panel) release MSTR PWR 2 p/b to de-energise the BOOM Side 2 AC Systems and Side1 and 2 DC Systems.	ON indication on BOOM MSTR PWR 2 p/b goes off		
026-1	At the 721VU, check that DC busbar A7PP (F20) is not supplied  At the 722VU, check that DC busbars A8PP (H45) and AC busbar A8XP (F33) are not supplied  At the 718VU, check that the RCCBs A22XN (A59) and A23XN (B59) are			



NEW ELECTRICAL MASTER SWITCHES PERFORMANCE				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
	open.			
027-1	On A965VU (BOOM Panel) press MSTR PWR 1 & 2 p/bs to energise the BOOM System.	ON indications on BOOM MSTR PWR 1 & 2 p/bs are lighted.		
028-1	On panel A955VU (PODS Panel) press the RIGHT & LEFT POD MSTR p/bs.	ON indications on RIGHT & LEFT POD MSTR p/bs are lighted.		
029-1	On panel A945VU (CONSOLE CONTROLS Panel) release MSTR PWR 1 & 2 p/bs to de-energise the ARO/MCO Console.	ON indications on MSTR PWR 1 & 2 p/bs, RIGHT & LEFT POD MSTR p/bs and BOOM MSTR PWR 1 & 2 p/b go off.		
030-1	<p>At the 721VU, check that DC busbars A5PP (L19), A7PP (F20), A9PP (B1) and A15PP (V19) and AC busbars A5XP (E13, E16, E19) and A7XP (H13) are not supplied.</p> <p>At the 722VU, check that DC busbars A6PP (M32), A8PP (H45), A10PP (K31) and A14PP (H34) and AC busbars A6XP (G41, G42, H41) and A8XP (F33) are not supplied.</p> <p>At the 717VU, check that the RCCBs A9XN (A52), A16XN (B52) and A17XN (C52) are open.</p> <p>At the 718VU, check that the RCCBs A8XN (A60), A22XN (A59) and A23XN (B59) are open.</p>			
031-1	<p>On A965VU (BOOM Panel) release MSTR PWR 1 &amp; 2 p/b to de-energise the BOOM System.</p> <p>On panel A955VU (PODS Panel) release the RIGHT &amp; LEFT POD MSTR p/b.</p>	ON indications on BOOM MSTR PWR 1 & 2 p/bs and RIGHT & LEFT POD MSTR p/bs remain off.		
032-1	Do the EIS stop procedure (Ref. TASK 31-60-00-860-802).		N/A	N/A
033-1	Apply procedure 24-41-00-862-801 of AMM: De-energize the Aircraft Electrical Circuits from the External Power A.		N/A	N/A
<b>OVERALL TEST RESULT (TICK BOX)</b>		<b>COMMENTS:</b>		
<b>PASS</b>				
<b>FAIL</b>				



### 5.3 POWER OUTLETS FUNCTIONING

#### 5.3.1 Test Purpose

The purpose of this test is to check the functionality of the newly installed power outlets in the Business Class seating area and the Medevac Outlets. The additional functionality (shedding logic) of the existing power outlets in the cockpit is tested in section 5.6.2 (Failure Cases- New TR Failure (3 and 4)).

"Functional and Integration Testing" in paragraph 5.2.1 and "New TR Performance" test in paragraph 5.2.2 shall have been performed successfully prior to this test.

#### 5.3.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A. Voltages measured shall also be recorded when applicable.

POWER OUTLETS FUNCTIONING TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
001-1	Apply procedure 24-41-00-861-801 of AMM: Energize the Aircraft Electrical Circuits from the External Power A.		N/A	N/A
002-1	On 230VAC/50Hz PWR Outlets Control Panel, press the LEFT PWR OUTLETS p/b.	On the LEFT PWR OUTLETS p/b legend "OFF" goes off.		
003-1	On the LH of the passenger cabin:  Check that the two outlets in the business class seating area and the outlet in the Medevac area supply a voltage of 230V AC (+/- 6VAC) 50Hz (+/- 0,5Hz).  On the RH of the passenger cabin:  Check that the two outlets in the business class seating area and the outlet in the Medevac area are not supplied.			
004-1	On 230VAC/50Hz PWR Outlets Control Panel, release the LEFT PWR OUTLETS p/b.	On the LEFT PWR OUTLETS p/b legend "OFF" is lighted.		
005-1	Check that the LH and RH MEDEVAC outlets are not supplied.  Check that the two LH and the two RH outlets in business class seating area are not supplied.			

POWER OUTLETS FUNCTIONING TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
006-1	On 230VAC/50Hz PWR Outlets Control Panel, press the RIGHT PWR OUTLETS p/b.	On the RIGHT PWR OUTLETS p/b legend "OFF" goes off.		
007-1	On the RH of the passenger cabin:  Check that the two outlets in the business class seating area and the outlet in the Medevac area supply a voltage of 230V AC (+/- 6VAC) 50Hz (+/- 0,5Hz).  On the LH of the passenger cabin:  Check that the two outlets in the business class seating area and the outlet in the Medevac area are not supplied			
008-1	On 230VAC/50Hz PWR Outlets Control Panel, press the LEFT PWR OUTLETS p/b.	On the LEFT PWR OUTLETS p/b legend "OFF" goes off.		
009-1	Open the C.B. A53XN (on 722VU) and A37XN (on 721VU)			
010-1	Check that the LH and RH MEDEVAC outlets are supplied.  Check that the two LH and the two RH outlets in business class seating area are not supplied.			
011-1	Close the C.B. A53XN (on 722VU) and A37XN (on 721VU)			
012-1	Check that the LH and RH MEDEVAC outlets are supplied.  Check that the two LH and the two RH outlets in business class seating area are supplied.			
013-1	On panel 5001VE - Open the C.B. A5MF (coord E13)	On the RIGHT PWR OUTLETS p/b legend "FAULT" is lighted		
014-1	Close the C.B. A5MF	On the RIGHT PWR OUTLETS p/b legend "FAULT" goes off		
015-1	On panel 5001VE - Open the C.B. A7ME (coord E12)	On the LEFT PWR OUTLETS p/b legend "FAULT" is lighted		
016-1	Close the C.B. A7ME	On the LEFT PWR OUTLETS p/b legend "FAULT" goes off		
017-1	On 230VAC/50Hz PWR Outlets Control Panel, release both LEFT & RIGHT PWR OUTLETS p/bs.	Legend "OFF" on both p/bs is lighted.		

POWER OUTLETS FUNCTIONING TEST											
STEP	ACTION	EXPECTED RESULT	STEP RESULT								
			PASS	FAIL							
018-1	De-energize the aircraft electrical circuits (Ref. TASK 24-41-00-862-801).		N/A	N/A							
<table border="1"> <tr> <td colspan="2">OVERALL TEST RESULT (TICK BOX)</td> <td rowspan="3">COMMENTS:</td> </tr> <tr> <td>PASS</td> <td><input type="checkbox"/></td> </tr> <tr> <td>FAIL</td> <td><input type="checkbox"/></td> </tr> </table>					OVERALL TEST RESULT (TICK BOX)		COMMENTS:	PASS	<input type="checkbox"/>	FAIL	<input type="checkbox"/>
OVERALL TEST RESULT (TICK BOX)		COMMENTS:									
PASS	<input type="checkbox"/>										
FAIL	<input type="checkbox"/>										

#### 5.4 NEW C/B MONITORING FUNCTION

##### 5.4.1 Test Purpose

The purpose of this test is to check the functionality of the CBMU in military configuration.

##### 5.4.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A.

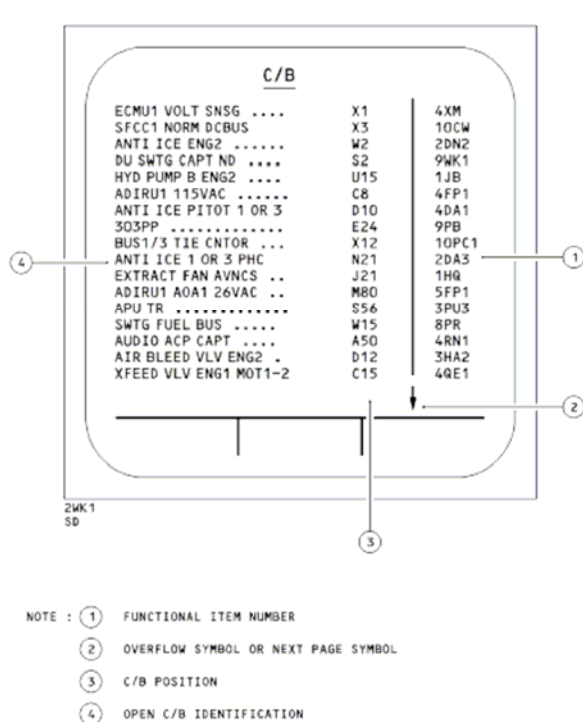
**NOTE:** For the realization of this test, since all the C.B. will be pushed and pulled, all the systems shall have been tested separately before the execution of this test.

**NOTE:** For the realization of this test, the CBMU shall have been uploaded with the floppy disk containing the military configuration.

**NOTE:** Before commencing this test ensure all the Circuit Breakers listed in Annex A are CLOSED.

NEW C/B MONITORING FUNCTION				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
001-1	Apply procedure 24-41-00-861-801 of AMM: Energize the Aircraft Electrical Circuits from the External Power A.		N/A	N/A
002-1	Perform Subtask 24-53-00-860-056 of the AMM			
003-1	Perform subtask 24-53-00-970-052 of the AMM for the uploading of the CBMU Database (using the military configuration floppy disk)			
004-1	Perform subtask 24-53-00-280-052 of the AMM to do a check of the Reference of the Data Loaded into the CBMU			
005-1	Pull all the C.B. referred at the end of this document in the Annex A.	Each time a C.B. is pulled, a message on the C.B. page on the ECAM will appear, see figure 1 below.		
006-1	Push all the C.B. referred at the end of this document in the Annex A.	Ensure that the message related to each OPEN C.B. is cleared after the respective C.B. is CLOSED.		
007-1	Perform Subtask 24-53-00-860-057 of the AMM so as to recover initial configuration			
008-1	De-energize the aircraft electrical circuits (Ref. TASK 24-41-00-862-801).		N/A	N/A

NEW C/B MONITORING FUNCTION				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
OVERALL TEST RESULT (TICK BOX)		COMMENTS:		
PASS				
FAIL				



**Figure 1: ECAM C.B. Page**

## 5.5 AIRSTAIRS FUNCTIONING FROM BATTERY POWER

### 5.5.1 Test Purpose

The purpose of this test is to check the functionality of the Airstairs operating from battery power.

### 5.5.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A.

AIRSTAIRS FUNCTIONING FROM BATTERY POWER TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
001-1	Ensure that the A/C is de-energized and that the batteries 1 and 2 are charged at 80% of their capacity.			
002-1	On the ELEC control panel 235VU, push BAT1, and BAT2 pushbutton switches.			
003-1	Do the EIS start procedure (EWD DU, SD DU only) (Ref. TASK 31-60-00-860-801).		N/A	N/A
004-1	On the ECAM control panel, push the EL/DC key .	ELEC DC page comes into view in the SD.		
005-1	At 5001VE panel, ensure that C.Bs A1NS, A2NS and A3NS (Airstairs CBs) are closed.			
006-1	At the AIRSTAIR CTL PANEL, exercise the controls to perform an extension cycle.	Airstairs will be able to be extended normally.		
007-1	At the AIRSTAIR CTL PANEL , turn the Airstairs Light switch to ON.	Airstairs lights turn ON.		
008-1	At the AIRSTAIR CTL PANEL , turn the Airstairs Light switch to OFF.	Airstairs lights turn OFF.		
009-1	At the AIRSTAIR CTL PANEL, exercise the controls to perform a retraction cycle.	Airstairs will be able to be retracted normally.		
010-1	Do the EIS stop procedure (Ref. TASK 31-60-00-860-802).		N/A	N/A
011-1	On the ELEC control panel 235VU, release BAT1, and BAT2 pushbutton switches			



AIRSTAIRS FUNCTIONING FROM BATTERY POWER TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
OVERALL TEST RESULT (TICK BOX)		COMMENTS:		
PASS	<input type="checkbox"/>			
FAIL	<input type="checkbox"/>			

## 5.6 FAILURE CASES

The following tests are intended to check the reconfiguration ability of ATA24 electrical distribution. These situations do not correspond to the normal operation of the distribution system, but to abnormal operation, when the electrical system works so as to remove the failure or reducing its consequences.

### 5.6.1 GAC TR Failure (1,2 and Essential)

#### 5.6.1.1 Test Purpose

The purpose of this test is to check the functionality and behavior of the Aircraft Electrical Power System (ATA24) due to the failure of green aircraft TRs.

#### 5.6.1.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A.

TR FAILURE (1, 2 and ESS) TEST											
STEP	ACTION	EXPECTED RESULT	STEP RESULT								
			PASS	FAIL							
001-1	Perform task 24-32-00-710-801 of the AMM "Operational Test of the DC Main Generation Switching"	Test of switching of the DC Main Generation (TR1 and TR2)									
002-1	Perform task 24-34-00-710-801 of the AMM "Operational Test of the DC Essential Generation Switching"	Test of switching of the DC Essential Generation (ESS TR)									
<table border="1"> <tr> <td colspan="2"><b>OVERALL TEST RESULT (TICK BOX)</b></td> <td rowspan="3"><b>COMMENTS:</b></td> </tr> <tr> <td>PASS</td> <td><input type="checkbox"/></td> </tr> <tr> <td>FAIL</td> <td><input type="checkbox"/></td> </tr> </table>					<b>OVERALL TEST RESULT (TICK BOX)</b>		<b>COMMENTS:</b>	PASS	<input type="checkbox"/>	FAIL	<input type="checkbox"/>
<b>OVERALL TEST RESULT (TICK BOX)</b>		<b>COMMENTS:</b>									
PASS	<input type="checkbox"/>										
FAIL	<input type="checkbox"/>										

## 5.6.2 New TR Failure (3 and 4)

### 5.6.2.1 Test Purpose

The purpose of this test is to check the functionality and behavior of the Aircraft Electrical Power System (ATA24) due to failures of the newly installed TRs (TR3 and TR4) alone and combined with GAC TR failures.

"New TR Performance" test in paragraph 5.2.2 and "New Electrical Master Switches Performance" test in paragraph 5.2.3 shall have been performed successfully prior to this test.

### 5.6.2.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED AND CHECK THAT THE BREAKERS LISTED BELOW ARE CLOSED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A. Voltages measured shall also be recorded when applicable.

**NOTE:** This test requires the new TR fans and the MFCD System to be operational. As such the fans and the MFCD System shall be required to be installed and functional verified before this test can proceed.

**NOTE:** Before performing this test, the following circuit breakers shall be closed:

FIN	Designation	Location	Coordinates	Label
A1PU	TIE CONTROL CB 1	721VU	Q16	MIL BUS TIE CTL 1
A10PU	TIE CONTROL CB 2	722VU	C41	MIL BUS TIE CTL2

TR FAILURE (3 and 4) TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
001-1	Apply procedure 24-41-00-861-801 of AMM: Energize the Aircraft Electrical Circuits from the External Power A.		N/A	N/A
002-1	Do the EIS start procedure (EWD DU, SD DU only) (Ref. TASK 31-60-00-860-801).		N/A	N/A
003-1	Check that the power outlets 115VAC/60Hz (located in Captain and F/O side consoles) are energized.			
004-1	On panel A945VU (CONSOLE CONTROLS Panel) press MSTR PWR 1 & 2 p/bs to energise the ARO/MCO Console.	ON indications on MSTR PWR 1 & 2 p/bs are lighted.		
005-1	On the panel 715VU side 1: - open the C.B. A6PU TR3 SPLY (coord. J54)	On the EWD: - The TR3 FAULT indication comes into view  On the SD: - The TR3 no longer supplies A1PP (DC		

TR FAILURE (3 and 4) TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
		M3) and A100PP (DC M1) - A1PP and A2PP (DC M4) are supplied by the TR4 and A100PP and A200PP (DC M2) are supplied by the TR1 and TR2 respectively Ensure that the pilot outlets 115VAC/60HZ (NA circuit) are not energized		
006-1	At the 721VU, check that there are 28V DC in busbars A100PP (G14) and A1PP (Q16). At the 722VU, check that there are 28V DC in busbars A2PP (A45) and A200PP (F45).			
007-1	On panel 715VU side 1: Close breaker A6PU TR3 SPLY (coord. J54).	No change.		
008-1	At the top of the MFD, press the WCAS bezel key.	On the MFD, the WCAS page is displayed		
009-1	At the bottom of the MFD, press the AMS key.	On the MFD, the AMS Sub-page is displayed.		
010-1	On the MFD1, press the SYSTEM REPORT/ TEST button.	On the MFD, the SYSTEM REPORT/TEST Sub-page is displayed.		
011-1	On the MFD1, press the TR button.	On the MFD, the TR Sub-page is displayed		
012-1	On the MFD1 press the control TR3 RESET	On the EWD: - the TR3 FAULT indication goes out of view On the SD: The TR3 supplies A100PP and A1PP and the TR4 supplies A200PP and A2PP Ensure that the pilot outlets 115V/60HZ (NA circuit) are energized		
013-1	On the panel 715VU side 2: - open the C.B. A2PU TR4 SPLY (coord. W57)	On the EWD: The TR4 FAULT indication comes into view On the SD: - The TR4 no longer supplies A2PP and A200PP - A1PP and A2PP are supplied by the TR3, A100PP is supplied by the TR1 and A200PP is supplied by the TR2. Ensure that the pilot outlets 115VAC/60HZ (NA circuit) are not energized		

TR FAILURE (3 and 4) TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
014-1	At the 721VU, check that there are 28V DC in busbars A100PP (G14) and A1PP (Q16).  At the 722VU, check that there are 28V DC in busbars A2PP (A45) and A200PP (F45).			
015-1	On panel 715VU side 2:  Close breaker A2PU TR4 SPLY (coord. W57).	No change.		
016-1	On the MFD, press the control TR4 RESET	On the EWD:  - the TR4 FAULT indication goes out of view  On the SD:  - The TR3 supplies A100PP and A1PP and the TR4 supplies A200PP and A2PP  Ensure that the pilot outlets 115V/60HZ (NA circuit) are energized		
017-1	On the panel 715VU side 1:  - open the C.B. A6PU TR3 SPLY (coord. J54)	On the EWD:  - The TR3 FAULT indication comes into view		
018-1	On the panel 715VU side 1:  -open the C.B. 3PU1 TR1 (coord. J55)	On the EWD:  - The TR1 FAULT indication comes into view  On the SD:  - A100PP and A200PP are no longer supplied		
019-1	At the 721VU, check that DC busbar A100PP (G14) is not supplied, and that DC busbar A1PP (Q16) is supplied.  At the 722VU, check that DC busbar A2PP (A45) is supplied, and that DC busbar A200PP (F45) is not supplied.			
020-1	On the panel 715VU side 1:  Close breaker 3PU1 TR1 (coord. J55)	No change		
021-1	On the MCDU push the line key adjacent to the TR1 RESET indication	On the MCDU:  -The RESET OK indication comes into view  On the EWD:  - the TR1 FAULT indication goes out of view  On the SD:		

TR FAILURE (3 and 4) TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
		- The TR1 supplies A100PP and the TR2 supplies A200PP		
022-1	On panel 742VU: Open breaker 4PE ESS TR (coord. R76)	On the EWD: - The ESS TR FAULT indication comes into view  On the SD: - A100PP and A200PP are no longer supplied		
023-1	On panel 742VU: Close breaker 4PE ESS TR (coord. R76)	No change		
024-1	On the MCDU push the line key adjacent to the ESS TR RESET indication	On the MCDU: -The RESET OK indication comes into view  On the EWD: - the ESS TR FAULT indication goes out of view  On the SD: - The TR1 supplies A100PP and the TR2 supplies A200PP		
025-1	On the panel 715VU side 2: -open the C.B. 3PU2 TR2 NORM (coord. W56)	On the EWD: - The TR2 FAULT indication comes into view  On the SD: - A100PP and A200PP are no longer supplied		
026-1	On the panel 715VU side 2: Close breaker 3PU2 TR2 NORM (coord. W56)	No change		
027-1	On the MCDU push the line key adjacent to the TR2 RESET indication	On the MCDU: -The RESET OK indication comes into view  On the EWD: - the TR2 FAULT indication goes out of view  On the SD: - The TR1 supplies A100PP and the TR2 supplies A200PP		
028-1	On panel 715VU side 1: Close breaker A6PU TR3 SPLY (coord. J54).	No change.		

TR FAILURE (3 and 4) TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
029-1	On the MFD, press the control TR3 RESET	On the EWD:  - the TR3 FAULT indication goes out of view		
030-1	On panel A945VU (CONSOLE CONTROLS Panel) release MSTR PWR 1 & 2 p/b to de-energise the ARO/MCO Console.	ON indications on MSTR PWR 1 & 2 p/bs go off.		
031-1	Do the EIS stop procedure (Ref. TASK 31-60-00-860-802).		N/A	N/A
032-1	De-energize the aircraft electrical circuits (Ref. TASK 24-41-00-862-801).		N/A	N/A
OVERALL TEST RESULT (TICK BOX)		COMMENTS:		
PASS				
FAIL				

### 5.6.3 Generator Failure

#### 5.6.3.1 Test Purpose

The purpose of this test is to check the new functionality of the A/C Galley and new AC busbars Shedding Logic with the addition of the EEN to the Aircraft Electrical Power System (ATA24), in generator failure mode.

"Functional and Integration Testing" in paragraph 5.2.1 and "New Electrical Master Switches Performance" test in paragraph 5.2.3 shall have been performed successfully prior to this test.

#### 5.6.3.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A. Voltages measured shall also be recorded when applicable

**NOTE:** This test requires the new TR fans and the ARC to be operational. As such the fans and the ARC shall be required to be installed and functional verified before this test can proceed.

**NOTE:** Before performing this test, the following circuit breakers shall be closed:

FIN	Designation	Location	Coordinates	Label
A2XA	GALLEY SHED	721VU	X18	GALLEY FWD MID SHED

GENERATOR FAILURE SHEDDING LOGIC TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
001-1	Apply procedure 24-41-00-861-801 of AMM: Energize the Aircraft Electrical Circuits from the External Power A.		N/A	N/A
002-1	Do the EIS start procedure (EWD DU, SD DU only) (Ref. TASK 31-60-00-860-801).		N/A	N/A
003-1	Start the APU (Ref. TASK 49-00-00-860-801).		N/A	N/A
004-1	Start the engines (Ref. TASK 71-00-00-860-808).		N/A	N/A
005-1	Ensure the ELEC control panel 235VU is configured as follows: - BAT1, BAT2, GALLEY, COMMERCIAL, AC ESS FEED, BUS TIE, GEN 1 and GEN 2 pushed - EXT A & B and APU GEN released			
006-1	On panel 717VU check that RCCBs 11MC (coord. B51) and 111MC (coord C51) are closed  On panel 715VU side 1 check that RCCBs 12MC (coord. A54) and 113MC (coord. C55) are closed  On panel 715VU side 2 check that RCCBs 23MC (coord. P56) and 223MC (coord. P57) are closed  On panel 718VU check that RCCB 24MC (coord. B60) is closed	All the "MC" system RCCBs are closed.		
007-1	On the ELEC control panel 235VU: - release the GEN1 pushbutton switch.	On the ELEC control panel 235VU: - the OFF legend of the GEN1 pushbutton switch comes on.  On the EWD: - the GEN 1 OFF legend comes into view  On the SD: - the green line between the GEN2 and the AC1 and AC2 busbar indications comes into view - the GALLEY PARTIALLY SHED indication comes into view  On the AC/DC main power center 710VU: - the MC system RCCBs are open but not RCCB 111MC.		



GENERATOR FAILURE SHEDDING LOGIC TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
008-1	On panel 5058VE, check that there are 115V AC in busbar 115XP, C.B. 1DW (coord. B7)			
009-1	On panel A945VU (CONSOLE CONTROLS Panel) press MSTR PWR 1 & 2 p/bs to energise the ARO/MCO Console.	ON indications on MSTR PWR 1 & 2 p/bs are lighted.  On the SD: - the GALLEY SHED indication comes into view		
010-1	At the 721VU, check that DC busbars A5PP (L19), A15PP (V19) and AC busbar A5XP (E13, E16, E19) are supplied.  At the 722VU, check that DC busbars A6PP (M32), A14PP (H34) and AC busbar A6XP (G41, G42, H41) are supplied.  At the 717VU, check that the RCCB 111MC is open.			
011-1	On panel A955VU (PODS Panel) press the LEFT POD MSTR p/b.	On panel A955VU: - ON indication on LEFT POD MSTR p/b is lighted.		
012-1	At the 721VU check that busbar A9PP, (B1) is supplied,  At the 717VU, check that RCCB A9XN (A52) is closed,  On panel 5058VE, check that busbar 115XP(B7) is no longer supplied.			
013-1	On panel A955VU (PODS Panel) release the LEFT POD MSTR p/b.	Busbar 115XP is supplied.		
014-1	On panel A955VU (PODS Panel) press the RIGHT POD MSTR p/b.	ON indication on RIGHT POD MSTR p/b is lighted.		
015-1	At the 722VU check that DC busbar A10PP (K31) is supplied  At the 718VU, check that RCCB A8XN (A60) is closed  On panel 5058VE, check that busbar 115XP(B7) is no longer supplied.			
016-1	On panel A955VU (PODS Panel) press the LEFT POD MSTR p/b.  Check that the POD MAN selector is set to the "OFF" position.	On panel A955VU: - ON indications on RIGHT & LEFT POD MSTR p/bs are lighted - FAULT legend on the ELEC CONFIG p/b is lighted - INHIB legends on RIGHT & LEFT POD		

GENERATOR FAILURE SHEDDING LOGIC TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
		STATE annunciators are lighted		
017-1	At the 717VU, check that RCCB A9XN (A52) is open  At the 718VU, check that RCCB A8XN (A60) is open  On panel 5058VE, check that busbar 115XP(B7) is no longer supplied.			
018-1	On panel A955VU (PODS Panel) press the ELEC CONFIG p/b	On the ELEC CONFIG p/b FAULT legend goes off and MAN legend is lighted		
019-1	On panel A955VU (PODS Panel) set the POD MAN selector to the "L" position	INHIB legend on the LEFT POD STATE annunciator goes off  INHIB legend on the RIGHT POD STATE annunciator remains lighted		
020-1	At the 717VU, check that RCCB A9XN (A52) is closed  At the 718VU, check that RCCB A8XN (A60) is open			
021-1	On panel A955VU (PODS Panel) set the POD MAN selector to the "R" position	INHIB legend on the RIGHT POD STATE annunciator goes off  INHIB legend on the LEFT POD STATE annunciator is lighted		
022-1	At the 717VU, check that RCCB A9XN (A52) is open  At the 718VU, check that RCCB A8XN (A60) is closed			
023-1	On panel A955VU (PODS Panel) set the POD MAN selector to the "OFF" position	INHIB legend on the RIGHT POD STATE annunciator is lighted		
024-1	On panel A955VU (PODS Panel) release the ELEC CONFIG p/b	On the ELEC CONFIG p/b FAULT legend is lighted and MAN legend goes off		
025-1	On panel A955VU (PODS Panel) release the RIGHT & LEFT POD MSTR p/bs.	On panel A955VU: - ON indications on RIGHT & LEFT POD MSTR p/bs go off - FAULT legend on the ELEC CONFIG p/b goes off - INHIB legends on RIGHT & LEFT POD STATE annunciators go off  Ensure that busbar 115XP is supplied.		
026-1	On A965VU (BOOM Panel) press MSTR PWR 1 & 2 p/bs to energise the BOOM System.	ON indications on BOOM MSTR PWR 1 & 2 p/bs are lighted		
027-1	At the 717VU, check that RCCBs A16XN			

GENERATOR FAILURE SHEDDING LOGIC TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
	(B52) and A17XN (C52) are closed. At the 718VU, check that RCCBs A22XN (A59) and A23XN (B59) are open. On panel 5058VE, check that busbar 115XP(B7) is no longer supplied.			
028-1	On A965VU (BOOM Panel) release MSTR PWR 1 & 2 p/bs to de-energise the BOOM System.	ON indications on BOOM MSTR PWR 1 & 2 p/bs go off. Ensure that busbar 115XP is supplied.		
029-1	On the ELEC control panel 235VU: - press the GEN1 pushbutton switch.	On the ELEC control panel 235VU: - the OFF legend of the GEN1 pushbutton switch goes off. On the SD: - the green line between the GEN1 and the AC1 busbar indications comes into view On the AC/DC main power center 710VU: - All the MC system RCCBs are closed.		
030-1	On the ELEC control panel 235VU: - release the GEN2 pushbutton switch.	On the ELEC control panel 235VU: - the OFF legend of the GEN2 pushbutton switch comes on. On the EWD: - the GEN 2 OFF legend comes into view On the SD: - the green line between the GEN1 and the AC1 and AC2 busbar indications comes into view - the GALLEY SHED indication comes into view On the AC/DC main power center 710VU: - All the "MC" system RCCBs are open.		
031-1	On the ELEC control panel 235VU: - press the GEN2 pushbutton switch.	On the ELEC control panel 235VU: - the OFF legend of the GEN2 pushbutton switch goes off. On the SD: - the green line between the GEN1 and the AC1 busbar indications comes into view On the AC/DC main power center		

GENERATOR FAILURE SHEDDING LOGIC TEST				
STEP	ACTION	EXPECTED RESULT	STEP RESULT	
			PASS	FAIL
		710VU: - All the MC system RCCBs are closed.		
032-1	On the ELEC control panel 235VU: - release the GEN2 pushbutton switch. - press the APU GEN pushbutton switch. - release the GEN1 pushbutton switch.	On the ELEC control panel 235VU: - the OFF legend of the GEN1&2 pushbutton switches come on. - the OFF legend of the APU GEN pushbutton goes off.  On the SD: - the green line between the APU GEN and the AC1 and AC2 busbar indications comes into view - the GALLEY SHED indication comes into view  On the AC/DC main power center 710VU: - All the MC system RCCBs are open.		
033-1	On panel A945VU (CONSOLE CONTROLS Panel) release MSTR PWR 1 & 2 p/b.	ON indications on MSTR PWR 1 & 2 p/bs go off.  On the SD: - the GALLEY PARTIALLY SHED indication comes into view  On the AC/DC main power center 710VU: - the MC system RCCBs are open but not RCCB 111MC.		
034-1	On the ELEC control panel 235VU: - press the GEN2 pushbutton switch. - release the APU GEN pushbutton switch. - press the GEN1 pushbutton switch.	On the ELEC control panel 235VU: - the OFF legends of the GEN1&2 pushbutton switches go off. - the OFF legend of the APU GEN pushbutton comes on  On the SD: - the green line between the GEN1 and the AC1 busbar indications comes into view - the green line between the GEN2 and the AC2 busbar indications comes into view -the GALLEY PARTIALLY SHED indication goes off		
035-1	Stop the engines (Ref. TASK 71-00-00-860-809		N/A	N/A

GENERATOR FAILURE SHEDDING LOGIC TEST											
STEP	ACTION	EXPECTED RESULT	STEP RESULT								
			PASS	FAIL							
036-1	Stop the APU (Ref. TASK 49-00-00-860-802).		N/A	N/A							
037-1	Do the EIS stop procedure (Ref. TASK 31-60-00-860-802).		N/A	N/A							
038-1	De-energize the aircraft electrical circuits (Ref. TASK 24-41-00-862-801).		N/A	N/A							
<table border="1"> <tr> <td colspan="2"><b>OVERALL TEST RESULT (TICK BOX)</b></td> <td rowspan="3"><b>COMMENTS:</b></td> </tr> <tr> <td>PASS</td> <td><input type="checkbox"/></td> </tr> <tr> <td>FAIL</td> <td><input type="checkbox"/></td> </tr> </table>					<b>OVERALL TEST RESULT (TICK BOX)</b>		<b>COMMENTS:</b>	PASS	<input type="checkbox"/>	FAIL	<input type="checkbox"/>
<b>OVERALL TEST RESULT (TICK BOX)</b>		<b>COMMENTS:</b>									
PASS	<input type="checkbox"/>										
FAIL	<input type="checkbox"/>										

## 5.7 EMERGENCY CONFIGURATION

### 5.7.1 Test Purpose

The purpose of this test is to check the functionality of the AC Emergency Generation System.

### 5.7.2 Test Description

**WARNING:** BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

**NOTE:** All results are to be recorded in the Results Table below. Where no step result required mark STEP RESULT box with N/A.

EMERGENCY CONFIGURATION TEST											
STEP	ACTION	EXPECTED RESULT	STEP RESULT								
			PASS	FAIL							
001-1	Perform TASK 24-24-00-710-801 of the AMM: Operational Test of the Emergency Generation System.	As per AMM Measurement of currents will be carried out using the flight test instrumentation when applicable.									
002-1	Perform TASK 24-24-00-710-802 of the AMM: Operational Test of the Emergency Generator Manual Connection	As per AMM									
<table border="1"> <tr> <td colspan="2"><b>OVERALL TEST RESULT (TICK BOX)</b></td> <td rowspan="3"><b>COMMENTS:</b></td> </tr> <tr> <td>PASS</td> <td><input type="checkbox"/></td> </tr> <tr> <td>FAIL</td> <td><input type="checkbox"/></td> </tr> </table>					<b>OVERALL TEST RESULT (TICK BOX)</b>		<b>COMMENTS:</b>	PASS	<input type="checkbox"/>	FAIL	<input type="checkbox"/>
<b>OVERALL TEST RESULT (TICK BOX)</b>		<b>COMMENTS:</b>									
PASS	<input type="checkbox"/>										
FAIL	<input type="checkbox"/>										

## ANNEX A. LIST OF NEW CIRCUIT BREAKERS

BUSBAR	ATA/SYSTEM	C.B. FIN	DESIGNATION	LOCATION	COORDINATES	LABEL
105XP	2126	A1HQ	VENT FAN MRTT	721VU	J2	AVNCS EXTRACT FAN
105PP	2126	A2HQ	MRTT FAN CTL CB	721VU	S10	AVNCS EXTRACT FAN CTL
A11PP	2126	A5HQ	DASS FAN 1 CB	721VU	C17	DIRCM SLTA L FAN
A4PP	2126	A6HQ	DASS FAN 2 CB	722VU	V37	DIRCM SLTA R FAN
A5PP	2126	A11HQ	CONSOLE FAN CB 1	721VU	L15	ARO/MCO CSL FAN1
A6PP	2126	A12HQ	CONSOLE FAN CB 2	722VU	N32	ARO/MCO CSL FAN2
A11PP	2126	A19HQ	MIL BLOWING FAN PWR C.B.	721VU	B15	MIL FAN SPLY
A11PP	2126	A26HQ	MIL TR FAN 1 C.B.	721VU	C15	MIL TR 3&4 FAN 1
A12PP	2126	A27HQ	MIL TR FAN 2 C.B.	721VU	C40	MIL TR 3&4 FAN 2
A1PP	2432	A1PU	TIE CONTROL CB1	721VU	Q16	MIL BUS TIE CTL 1
2XP	2432	A2PU	TR4 SPLY	715VU	W57	MIL TR4 SPLY
1XP	2432	A6PU	TR3 SPLY	715VU	J54	MIL TR3 SPLY
A4PP	2432	A9PU	TR3 MONG	722VU	V32	MIL TR3 MONG
A12PP	2432	A10PU	TIE CONTROL CB2	722VU	C41	MIL BUS TIE CTL2
A3PP	2432	A11PU	TR4 MONG	721VU	J20	MIL TR4 MONG
A1PP	2461	A1PN	DC A7PP CB	721VU	Q17	A7PP
A1PP	2461	A2PN	DC A9PP CB	721VU	Q18	A9PP
A100PP	2461	A3PN	DC A5PP CB	721VU	G14	A5PP
A100PP	2461	A4PN	DC A15PP CB	721VU	G15	A15PP
A100PP	2461	A5PN	DC A3PP CB	721VU	G16	A3PP
A100PP	2461	A6PN	DC A11PP CB	721VU	G17	A11PP
A100PP	2461	A7PN	DC A13PP CB	721VU	G18	A13PP
A100PP	2461	A8PN	A3PP 5001VE CB	721VU	K20	5001VE A3PP
A200PP	2461	A9PN	A4PP 5001VE CB	722VU	V33	5001VE A3PP
A200PP	2461	A18PN	A4PP CB	722VU	F45	A4PP
A2PP	2461	A19PN	A12PP CB	722VU	A45	A12PP
A2PP	2461	A20PN	A14PP CB	722VU	A46	A14PP
A2PP	2461	A21PN	A6PP CB	722VU	A47	A6PP
A2PP	2461	A25PN	DC A8PP CB	722VU	A48	A8PP
A2PP	2461	A26PN	DC A10PP CB	722VU	A49	A10PP
A15PP	2426	A2XA	GALLEY SHED	721VU	X18	GALLEY FWD MID SHED
A2XP	2451	A5XN	A6XP CB	715VU	V57	A6XP
A15PP	2451	A7XN	LH PODS LOGIC	721VU	X16	PODS MSTR 1
A2XP	2451	A8XN	RHPOD RCCB	718VU	A60	R POD
A1XP	2451	A9XN	LHPOD RCCB	717VU	A52	L POD
A2XP	2451	A13XN	A4XP CB	715VU	T56	A4XP
A15PP	2451	A15XN	AAR PWR1	721VU	X17	BOOM MSTR 1
A14PP	2451	A21XN	AAR PWR2	722VU	H34	BOOM MSTR 2
A1XP	2451	A16XN	ECU AC 1 RCCB	717VU	B52	BOOM ECU 3 SPLY
A1XP	2451	A17XN	ECU AC 2 RCCB	717VU	C52	BOOM ECU 1 SPLY
A1XP	2451	A18XN	A7XP RCCB	715VU	C54	A7XP
A2XP	2451	A22XN	ECU AC 3 RCCB	718VU	A59	BOOM ECU 4 SPLY
A2XP	2451	A23XN	ECU AC 4 RCCB	718VU	B59	BOOM ECU 2 SPLY
A2XP	2451	A24XN	A8XP RCCB	715VU	Q56	A8XP
A14PP	2451	A33XN	RH PODS LOGIC	722VU	H35	PODS MSTR 2
A3PP	2451	A37XN	GEN FAIL CB	721VU	J19	GEN FAIL LOGIC CTL 1
A1XP	2451	A48XN	A5XP CB	715VU	H54	A5XP
A11PP	2451	A49XN	AAR PWR 3	721VU	C16	ARO/MCO CSL MSTR 1
A12PP	2451	A50XN	AAR PWR 2	722VU	C44	ARO/MCO CSL MSTR 2
A4PP	2451	A53XN	GEN FAIL CB 2	722VU	V34	GEN FAIL LOGIC CTL 2
A1XP	2451	A54XN	A3XP CB	715VU	F55	A3XP
105PP	2461	A10PN	105PP 5001VE CB	721VU	S11	5001VE 105PP
105PP	2574	A2NW	CRC CB	5001VE	B20	FLIGHT CREW REST COMPARTMENT
A3XP	2529	A1ME	L POWER OUTLETS SPLY	5001VE	E10	MEDEVAC & BUSINESS 230VAC OUTLETS L SUPPLY

BUSBAR	ATA/SYSTEM	C.B. FIN	DESIGNATION	LOCATION	COORDINATES	LABEL
A3PP	2529	A7ME	L POWER OUTLETS CTL	5001VE	E12	MEDEVAC & BUSINESS 230VAC OUTLETS L CTL
A4XP	2567	A1MF	R POWER OUTLETS SPLY	5001VE	E15	MEDEVAC & BUSINESS 230VAC OUTLETS R SUPPLY
A4PP	2567	A5MF	R POWER OUTLETS CTL	5001VE	E13	MEDEVAC & BUSINESS 230VAC OUTLETS R CTL
3PP	5260	A1NS	AIRSTAIRS PWR	5001VE	A18	AIRSTAIRS PWR
3PP	5260	A2NS	AIRSTAIRS LTS	5001VE	A20	AIRSTAIRS LTS
3PP	5260	A3NS	AIRSTAIRS CTL	5001VE	A19	AIRSTAIRS CTL
A5PP	2512	A1NK	ARO/MCO FOOTREST	721VU	P20	ARO/MCO FOOTREST
A5PP	3181	A29WT	MFCF ACTIVE SEL	721VU	M16	MFCF ACTIVE SEL
A4PP	3181	A7WT	MFD-PU#1 Primary power	722VU	V35	MFCF 1 PU SPLY 1
A11PP	3181	A8WT	MFD-PU#1 Secondary power	721VU	D17	MFCF 1 PU SPLY 2
A12PP	3181	A9WT	MFD-PU#2 Primary power	722VU	B36	MFCF 2 PU SPLY 1
A11PP	3181	A10WT	MFD-PU#2 Secondary power	721VU	D18	MFCF 2 PU SPLY 2
A12PP	3181	A11WT	MFD-PU#3 Primary power	722VU	B37	MFCF 3 PU SPLY 1
A11PP	3181	A12WT	MFD-PU#3 Secondary power	721VU	D19	MFCF 3 PU SPLY 2
A14PP	3181	A13WT	MFD-DU#1 Primary power	722VU	H36	MFCF 1 DU SPLY 1
A5PP	3181	A14WT	MFD-DU#1 Secondary power	721VU	M17	MFCF 1 DU SPLY 2
A14PP	3181	A15WT	MFD-DU#2 Primary power	722VU	H37	MFCF 2 DU SPLY 1
A5PP	3181	A16WT	MFD-DU#2 Secondary power	721VU	M18	MFCF 2 DU SPLY 2
A14PP	3181	A17WT	MFD-DU#3 Primary power	722VU	H38	MFCF 3 DU SPLY 1
A5PP	3181	A18WT	MFD-DU#3 Secondary power	721VU	M19	MFCF 3 DU SPLY 2
A3PP	3137	A2YS	SHMU#1 Primary Power	721VU	K18	SHMU SPLY 1
A4PP	3137	A3YS	SHMU#2 Secondary Power	722VU	V36	SHMU SPLY 2
A100PP	31 54	A1WV1	Mil DC1 Monit	721VU	G19	SDAC MIL DC1 MONG
A2PP	31 54	A1WV2	Mil DC4 Monit	722VU	A50	SDAC MIL DC4 MONG
A1PP	31 54	A1WV3	Mil DC3 Monit	721VU	Q19	SDAC MIL DC3 MONG
A200PP	31 54	A1WV4	Mil DC2 Monit	722VU	F46	SDAC MIL DC2 MONG
A3PP	2860	A1QW	RCVR PRESS XDGR SPLY	721VU	J13	RCVR PRESS XDGR SPLY
A11PP	2860	A3QW	RCVR FUEL FLMTS SPLY	721VU	B16	RCVR FUEL FLMTS SPLY
A4PP	2860	A8QW	CTR XFR VLV MAN SPLY	722VU	T32	RCVR MAN CTR TK VLV
A4PP	2860	A15QW	L XFR VLV MAN SPLY	722VU	T31	RCVR MAN L TK VLV
A4PP	2860	A21QW	R XFR VLV MAN SPLY	722VU	T33	RCVR MAN R TK VLV
A3PP	2860	A26QW	RCVR MAIN VLV CLOSE SPLY	721VU	J14	RCVR GLRY ISOL SYS
A4PP	2860	A27QW	RCVR MAIN VLV MAN SPLY	722VU	U33	RCVR MAN MAIN VLV
A4PP	2860	A34QW	RCVR MODE MAN CTL	722VU	U34	RCVR MODE MAN CTL
A3PP	2860	A35QW	RCVR MODE AUTO CTL	721VU	J15	RCVR MODE AUTO CTL
A4PP	2860	A39QW	UARRSI DOOR ACT MAN CTL	722VU	U35	UARRSI ACTR MODE MAN
A3PP	2860	A40QW	UARRSI DOOR ACT AUTO CTL	721VU	J16	UARRSI ACTR MODE AUTO
A12PP	2860	A45QW	UARRSI NORM SPLY	722VU	C42	UARRSI NORM SPLY
A11PP	2860	A46QW	UARRSI OVRD SPLY	721VU	B17	UARRSI OVRD SPLY
A11PP	2860	A47QW	UARRSI LTS SPLY	721VU	B18	UARRSI LT SPLY
A11PP	2860	A54QW	UARRSI OVRD/RST CTL	721VU	B19	UARRSI OVRD/RST CTL
A5PP	3363	A1LH	LH INNER LT PWR	721VU	P14	WING INR LT L SPLY
A6PP	3363	A8LH	RH INNER LT PWR	722VU	M33	WING INR LT R SPLY
A5PP	3363	A15LH	LH OUTER LT PWR	721VU	P15	WING OUTR LT L SPLY
A6PP	3363	A22RH	RH OUTER LT PWR	722VU	M34	WING OUTR LT R SPLY
A5PP	3364	A26LH	LH HTP LT PWR	721VU	N19	HTP LT L SPLY
A6PP	3364	A30LH	RH HTP LT PWR	722VU	M35	HTP LT R SPLY
A5XP-B	3362	A1LT	FORM PWR C.B. 1	721VU	E16	FORM LT L SPLY1
A6PP	3362	A19LT	FORM CTL. C.B. 3	722VU	Q33	FORM LT CTL 2
A5XP-A	3362	A2LT	FORM PWR C.B. 2	721VU	E15	FORM LT L SPLY2
A5PP	3362	A3LT	FORM CTL C.B. 1	721VU	N14	FORM LT CTL 1
A6XP-C	3362	A11LT	FORM PWR C.B. 3	722VU	H41	FORM LT R SPLY1
A6XP-B	3362	A12LT	FORM PWR C.B. 4	722VU	G42	FORM LT R SPLY2
A6XP-A	3362	A32LT	FORM PWR C.B. 5	722VU	G41	FORM IR LT R SPLY1



BUSBAR	ATA/SYSTEM	C.B. FIN	DESIGNATION	LOCATION	COORDINATES	LABEL
A5XP-B	3362	A33LT	FORM PWR C.B. 6	721VU	E17	FORM IR LT L SPLY1
A6XP-C	3362	A31LT	FORM PWR C.B. 7	722VU	H42	FORM IR LT R SPLY2
A6PP	3362	A13LT	FORM CTL C.B. 2	722VU	Q32	FORM IR LT CTL 2
A5PP	3362	A61LT	FORM CTL C.B. 4	721VU	N15	FORM IR LT CTL 1
A5XP-A	3362	A63LT	FORM PWR C.B. 8	721VU	E14	FORM IR LT L SPLY2
A6PP	3315	A1LZ	RARO READ CB	722VU	N33	ARO/MCO CSL R/L
A13PP	3315	A43LZ	C.B. OBSERVER READ LTS.	721VU	T15	FDO R/L
A5XP-C	3315	A8LZ	PANEL LT PWR CB	721VU	E19	ARO/MCO PNL LT DIM
A5PP	3315	A9LZ	INTG LT ARO CONSOLE	721VU	P16	ARO/MCO PNL LT SPLY
A5XP-C	3315	A13LZ	CONSOLE ANN DIM	721VU	E20	ARO/MCO ANN LT DIM
A5PP	3315	A14LZ	ANN CTRL	721VU	P17	ARO/MCO ANN LT CTL
A5XP-A	3366	A1LV	UP REND PWR	721VU	E13	RV LT UPR SPLY
A6XP-B	3366	A2LV	DOWN REND PWR	722VU	G43	RV LT LWR SPLY
A5PP	3366	A3LV	REND CTL	721VU	N16	RV LT UPR CTL
A5PP	3366	A12LV	REND FP C.B.	721VU	N17	RV LT FLASH PATTERN
A5PP	3366	A15LV	REND CTL CB 2	721VU	N18	RV LT LWR CTL
202XP-A	3347	A1LY	C/B LH LOGO LT PWR	722VU	B49	LOGO LT L SPLY
A12PP	3347	A2LY	C/B LH LOGO LT CTL	722VU	B41	LOGO LT L CTL
202XP-A	3347	A8LY	C/B RH LOGO LT PWR	722VU	B50	LOGO LT R SPLY
A12PP	3347	A7LY	C/B RH LOGO LT CTL	722VU	B42	LOGO LT R CTL
A7PP	4820	A1YE	L BYP VLV SPLY	721VU	F13	BOOM BYP VLV 1 SPLY
A8PP	4820	A2YE	R BYP VLV SPLY	722VU	K40	BOOM BYP VLV 2 SPLY
A8PP	4820	A3YE	BYP VLV CTL	722VU	K41	BOOM BYP VALVES CTL
A3PP	4820	A14YE	PIPE ISOL VLV CLOSE SPLY	721VU	K19	BOOM ISOL VLV 1 SPLY
A12PP	4820	A19YE	BOOM ISOL VLV CLOSE SPLY	722VU	C37	BOOM ISOL VLV 2 SPLY
A11PP	4820	A25YE	AR1 PMP MAN SPLY	721VU	D7	AAR1 PUMP MAN SPLY
A3PP	4820	A26YE	AR1 PMP HYD FLMTR/XDCR	721VU	J17	AAR1 PUMP FLMTR/XDCR
A11PP	4820	A33YE	L POD ISOL VLV CLOSE SPLY	721VU	D11	L POD ISOL VLV SPLY
A4PP	4820	A39YE	R POD ISOL VLV CLOSE SPLY	722VU	S32	R POD ISOL VLV SPLY
A4PP	4820	A45YE	L WING ISOL VLV CLOSE SPLY	722VU	S33	L WING ISOL VLV SPLY
A11PP	4820	A51YE	R WING ISOL VLV CLOSE SPLY	721VU	D12	R WING ISOL VLV SPLY
A4PP	4820	A65YE	AR2 PMP MAN SPLY	722VU	S35	AAR2 PUMP MAN SPLY
A12PP	4820	A66YE	AR2 PMP HYD FLMTR/XDCR	722VU	C38	AAR2 PUMP FLMTR/XDCR
A11PP	4820	A72YE	AR3 PMP MAN SPLY	721VU	D8	AAR3 PUMP MAN SPLY
A11PP	4820	A73YE	AR3 PMP HYD FLMTR/XDCR	721VU	D9	AAR3 PUMP FLMTR/XDCR
A11PP	4820	A78YE	AR5 PMP MAN SPLY	721VU	D10	AAR5 PUMP MAN SPLY
A3PP	4820	A79YE	AR5 PMP HYD FLMTR/XDCR	721VU	J18	AAR5 PUMP FLMTR/XDCR
A4PP	4820	A84YE	AR4 PMP MAN SPLY	722VU	S36	AAR4 PUMP MAN SPLY
A4PP	4820	A85YE	AR4 PMP HYD FLMTR/XDCR	722VU	S37	AAR4 PUMP FLMTR/XDCR
A4PP	4820	A90YE	AR6 PMP MAN SPLY	722VU	S38	AAR6 PUMP MAN SPLY
A12PP	4820	A91YE	AR6 PMP HYD FLMTR/XDCR	722VU	C39	AAR6 PUMP FLMTR/XDCR
A13PP	4820	A95YE	SCAV PMP SPLY	721VU	T16	BOOM SCAV PUMP SPLY
A10PP	4831	A3YP	R POD DC SPLY	722VU	K31	R POD SPLY
A12PP	4831	A4YP	R POD JETTISON SPLY	722VU	C35	R HOSE JETTISON SPLY
A9PP	4831	A5YP	L POD DC SPLY	721VU	B1	L POD SPLY
A11PP	4831	A6YP	L POD JETTISON SPLY	721VU	D15	L HOSE JETTISON SPLY
A11PP	4831	A17YP	L HOSE DEPLOY SPLY	721VU	D16	L HOSE DEPLOY SPLY
A12PP	4831	A18YP	R HOSE DEPLOY SPLY	722VU	C36	R HOSE DEPLOY SPLY
A3PP	4840	A3YG	ARC1 PWR A	721VU	J10	ARC 1 SPLY1
A11PP	4840	A4YG	ARC1 PWR B	721VU	D13	ARC 1 SPLY2
A3PP	4840	A5YG	ARC1 VALVE PWR 1	721VU	J11	ARC 1 VLV SPLY 1
A11PP	4840	A6YG	ARC1 VALVE PWR 2	721VU	D14	ARC 1 VLV SPLY 2
A3PP	4840	A7YG	ARC1 VALVE PWR 3	721VU	J12	ARC 1 VLV SPLY 3
A4PP	4840	A8YG	ARC2 PWR A	722VU	X32	ARC 2 SPLY1
A12PP	4840	A9YG	ARC2 PWR B	722VU	C32	ARC 2 SPLY2
A12PP	4840	A10YG	ARC2 VALVE PWR 1	722VU	C33	ARC 2 VLV SPLY 1
A4PP	4840	A11YG	ARC2 VALVE PWR 2	722VU	X33	ARC 2 VLV SPLY 2

BUSBAR	ATA/SYSTEM	C.B. FIN	DESIGNATION	LOCATION	COORDINATES	LABEL
A12PP	4840	A12YG	ARC2 VALVE PWR 3	722VU	C34	ARC 2 VLV SPLY 3
A7PP	4850	A1YJ	BOOM FUEL FLMTR SPLY	721VU	F10	BOOM FUEL FLMTR SPLY
A7PP	4845	A1LM	PDL 1 PWR	721VU	F11	BOOM U/D PDL SPLY
A8PP	4845	A2LM	PDL 2 PWR	722VU	J47	BOOM F/A PDL SPLY
A7PP	4845	A3LM	PDL 1 CTL	721VU	F12	BOOM PDL CTL
A8XP-A	4845	A31LM	LH MKR PWR	722VU	H18	MKR LT L
A7XP-A	4845	A32LM	RH MKR PWR	721VU	E31	MKR LT R
A3PP	DIRCM	A10AF	CB RELAY	721VU	K17	EWSP WOW SIGNAL
A3PP	DIRCM	A9AF1	CB1 (PROCESSOR )	721VU	K9	EWSP PROCESSOR
A3PP	DIRCM	A9AF3	CB3 (TRANSMITTER 1 Rear Fuselage Left)	721VU	K11	DIRCM XMTR L
A3PP	DIRCM	A9AF5	CB5 (LASER 1 Rear Fuselage Left)	721VU	K13	DIRCM LASER L
A4PP	DIRCM	A9AF6	CB6 (TRANSMITTER 2 Rear Fuselage Right)	722VU	W34	DIRCM XMTR R
A4PP	DIRCM	A9AF7	CB7 (LASER 2 Rear Fuselage Right)	722VU	W36	DIRCM LASER R
A4PP	DIRCM	A9AF9	MWS1 Nose Fuselage Right	722VU	X35	MWSS FWD R
A3PP	DIRCM	A9AF10	MWS2 Nose Fuselage Left	721VU	K15	MWSS FWD L
A4PP	DIRCM	A9AF11	MWS3 Rear Fuselage Right	722VU	X36	MWSS RWD R
A3PP	DIRCM	A9AF12	MWS4 Rear Fuselage Left	721VU	K16	MWSS RWD L
A4PP	DIRCM	A9AF13	MWS5 Belly Fairing	722VU	X37	MWSS BELLY FAIRING
A4PP	DIRCM	A9AF14	MWS6 Tail Cone	722VU	X38	MWSS TAIL CONE
401PP	Avionics	A4UV1	RT V/UHF1	742VU	B64	V/UHF 1
A12PP	Avionics	A4UV2	RT V/UHF2	722VU	D41	MIL V/UHF 2
A13PP	Avionics	A4UV3	RT V/UHF3	721VU	T17	V/UHF 3
401PP	Avionics	A3UV	Control Unit	742VU	B65	V/UHF 1&3 RCU
A13PP	Avionics	A13UV	RF Amplifier	721VU	U18	MIL SATCOM HPA
A13PP	Avionics	A12UV	Diplexer	721VU	U17	MIL SATCOM DIPLEXER
A13PP	Avionics	A32UV	VDC-300	721VU	U19	MIL SATCOM DATA CTRLR
A3XP-A	Avionics	A26UV1	V/UHF1 FAN1+FAN2	721VU	A18	V/UHF 1 FAN 1+2
A4XP-A	Avionics	A26UV2	V/UHF2 FAN1+FAN2	722VU	A35	V/UHF 2 FAN 1+2
A3XP-B	Avionics	A26UV3	V/UHF3 FAN1+FAN2	721VU	A19	V/UHF 3 FAN 1+2
401XP (3ph)	Avionics	A4UH1	RT1	742VU	C65	MIL HF 1
A4XP	Avionics	A4UH2	RT2	722VU	A33	HF2
A11PP	Avionics	A2UX1	CRYPTO 1	721VU	C7	CAPT CRYPTO HF1
A12PP	Avionics	A2UX2	CRYPTO 2	722VU	E42	F/O CRYPTO HF2
801PP	Avionics	A2SH1	IFF 1	742VU	M68	IFF 1
A12PP	Avionics	A2SH2	IFF 2	722VU	D42	IFF 2
A12PP	Avionics	A2SF	DF antenna	722VU	F41	DF ANT
A11PP	Avionics	A7ST	NC12E	721VU	C9	TACAN
A11PP	Avionics	A6ST	Transponder	721VU	C8	AIRTAC
A11PP	Avionics	A5SN1	GPS 1	721VU	C10	MIL GPS 1 CTL
A12PP	Avionics	A5SN2	GPS 2	722VU	F42	MIL GPS 2 CTL
A3XP (phA)	Avionics	A7SN	AEU	721VU	A17	MIL GPS SPLY
801PP	Avionics	A20UR1	RMS 1	742VU	M69	RMS 1
A12PP	Avionics	A20UR2	RMS 2	722VU	C45	RMS 2
A5XP-B	Avionics	A20UR3	MCDU 3	721VU	E18	ARO/MCO MCDU
403PP	Avionics	A8UZ	AUDIO EIRA1/LA1	742VU	F70	MIL CONFIG AUDIO – EIRA1/LA1
403PP	Avionics	A9UZ1	AUDIO CAPT/FO	742VU	F71	MIL CONFIG AUDIO –
403PP	Avionics	A9UZ7	AUDIO DAMU	742VU	F73	MIL CONFIG AUDIO – DAMU
403PP	Avionics	A9UZ5	AUDIO V/UHF1	742VU	F72	MIL CONFIG AUDIO – V/UHF 1
403PP	Avionics	A9UZ10	AUDIO SCIU2/3	742VU	F74	MIL CONFIG AUDIO – SCIU 2&3
A3XP (phA)	Avionics	A3RK	CVR 2	721VU	A16	ARO/MCO CVR
A11PP	Avionics	A9UZ3	AUDIO SCMU/SCIU1/4	721VU	C18	AUDIO SCMU/SCIU 1&4
A12PP	Avionics	A9UZ8	AUDIO EIRA2/LA2	722VU	D39	AUDIO EIRA2/LA2
A12PP	Avionics	A9UZ9	AUDIO V/UHF2,2	722VU	D40	AUDIO V/UHF 2 & 3
A12PP	Avionics	A9UZ6	AUDIO BIS	722VU	D38	AUDIO BIS
A12PP	Avionics	A9UZ2	AUDIO MC/ARO	722VU	D36	AUDIO ARO & MCO
A12PP	Avionics	A9UZ4	AUDIO AV/FDO	721VU	D37	AUDIO FDO & AVNCS BAY
A3XP (3ph)	Avionics	A5UM	RPS SPLY	721VU	A14	MIDS RPS

BUSBAR	ATA/SYSTEM	C.B. FIN	DESIGNATION	LOCATION	COORDINATES	LABEL
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A11PP	Avionics	A6UM	MIC SPLY	721VU	C11	MIDS INTERFACE CMPTR
A11PP	Avionics	A503TL	MPDOCK CB	721VU	C12	MCO DOCKING STATION
A13PP	Avionics	A302TZ	MS Printer	721VU	T18	MISSION SYS PRINTER
A11PP	Avionics	A303TZ	MCO Keyboard	721VU	C13	MCO KEYBOARD
A11PP	Avionics	A304TZ	ARO Keyboard	721VU	C14	ARO KEYBOARD
101XP-A	Avionics	A45TA1	Captain OIT PU	721VU	B13	CAPT OIT PU SPLY
101XP-A	Avionics	A47TA1	Captain OIT DU	721VU	B14	CAPT OIT DU SPLY
206XP-B	Avionics	A45TA2	F/O OIT PU	722VU	D34	F/O OIT PU SPLY
206XP-B	Avionics	A47TA2	F/O OIT DU	722VU	D35	F/O OIT DU SPLY
A7XP (3PH)	ARBS	A7YB	ACE-1	721VU	H13	RUDDERVATOR L CTL1
A8XP (3PH)	ARBS	A8YB	ACE-2	722VU	F33	RUDDERVATOR L CTL2
A7XP (3PH)	ARBS	A9YB	ACE-3	721VU	H16	RUDDERVATOR R CTL1
A8XP (3PH)	ARBS	A10YB	ACE-4	722VU	F36	RUDDERVATOR R CTL2
A8PP	ARBS	A6YA	BCU#2	722VU	K42	BCU 2
A8PP	ARBS	A12YD	UP-LOCK CTL 2	722VU	K45	BOOM LOCK CTL 2
A8PP	ARBS	A54YA	ARO FCS SPLY 2	722VU	H44	ARO FCS SPLY 2
A8PP	ARBS	A56YA	MCO FCS SPLY 2	722VU	H45	MCO FCS SPLY 2
A8PP	ARBS	A26YA	IRUs_R	722VU	K46	BOOM IRU R
A8PP	ARBS	A30YA	Sply-2 CB	722VU	K47	BOOM SYS MISC SPLY 2
A8PP	ARBS	A8YC	ER ACT-2 DC SPLY	722VU	J45	BOOM E/R ACTR2 SPLY
A8PP	ARBS	A2YD	HOIST ACT-2 DC SPLY	722VU	J46	BOOM HOIST ACTR2 SPLY
A8PP	ARBS	A28YA	IDS COIL R (double sply)	722VU	K43	BOOM IDS COIL R SPLY
A7PP	ARBS	A5YA	BCU#1	721VU	F14	BCU 1
A7PP	ARBS	A11YD	UP-LOCK CTL. 1	721VU	F15	BOOM LOCK CTL 1
A7PP	ARBS	A25YA	IRUs_L	721VU	F16	BOOM IRU L
A7PP	ARBS	A29YA	Sply-1 CB	721VU	F17	BOOM SYS MISC SPLY 1
A7PP	ARBS	A27YA	IDS COIL L (double sply)	721VU	F18	BOOM IDS COIL L SPLY
A7PP	ARBS	A53YA	ARO FCS SPLY 1	721VU	F19	ARO FCS SPLY 1
A7PP	ARBS	A55YA	MCO FCS PWR 1	721VU	F20	MCO FCS SPLY 1
A7PP	ARBS	A7YC	ER ACT-1 DC SPLY	721VU	F7	BOOM E/R ACTR1 SPLY
A7PP	ARBS	A1YD	HOIST ACT-1 DC SPLY	721VU	F8	BOOM HOIST ACTR1 SPLY
A7PP	ARBS	A3YD	HOIST ACT-3 DC SPLY	721VU	F9	BOOM HOIST ACTR3 SPLY
A7XP-B	ARBS	A7YA	BCU 1 FAN	721VU	H19	BCU 1 FAN
A8XP-B	ARBS	A8YA	BCU 2 FAN	722VU	E32	BCU 2 FAN
A15PP	BEVS	A20TV	IR Left Upper Light	721VU	X19	IR LT UPR L
A5PP	BEVS	A21TV	IR Right Upper Light	721VU	L16	IR LT UPR R
A6PP	BEVS	A22TV	IR Left Lower Light	722VU	Q31	L LWR INFRARED LT
A14PP	BEVS	A23TV	IR Right Lower Light	722VU	J32	R LWR INFRARED LT
A5PP	BEVS	A24TV1	IR Central (Tail Cone) Light 1	721VU	L17	IR LT TAIL CONE 1
A6PP	BEVS	A24TV2	IR Central (Tail Cone) Light 2	722VU	Q35	IR LT TAIL CONE 2
A15PP	BEVS	A25TV1	Monitor 3D ARO (up)	721VU	W16	ARO 3D UPR MON SPLY1
A6PP	BEVS	A25TV2	Monitor 3D ARO (up) back up	722VU	P31	ARO 3D UPR MON SPLY2
A6PP	BEVS	A26TV1	Monitor 3D ARO (low)	722VU	P32	ARO 3D LWR MON SPLY1
A5PP	BEVS	A26TV2	Monitor 3D ARO (up) back up	721VU	L18	ARO 3D LWR MON SPLY2
A15PP	BEVS	A27TV1	Monitor 3D MC (up)	721VU	W17	MCO 3D UPR MON SPLY1
A14PP	BEVS	A27TV2	Monitor 3D MC (up) back up	722VU	J33	MCO 3D UPR MON SPLY2
A14PP	BEVS	A28TV1	Monitor 3D MC (low)	722VU	J34	MCO 3D LWR MON SPLY1
A5PP	BEVS	A28TV2	Monitor 3D MC (low) back up	721VU	L19	MCO 3D LWR MON SPLY2
A15PP	BEVS	A29TV	PAN MON L	721VU	V18	L PANORAMIC MON
A14PP	BEVS	A30TV	PAN MON R	721VU	V19	R PANORAMIC MON
A15PP	BEVS	A31TV	PAN MON C	722VU	J35	CTR PANORAMIC MON
A15PP	BEVS	A32TV	Video Management Unit	721VU	V15	AAR VIDEO MGT UNIT 1
A6PP	BEVS	A33TV	VMU back up	722VU	P33	AAR VIDEO MGT UNIT 2
A15PP	BEVS	A34TV	Video recorder 1	721VU	V16	AAR VIDEO RCDR 1
A14PP	BEVS	A35TV	Video recorder 2	722VU	J36	AAR VIDEO RCDR 2
A6PP	BEVS	A36TV	Inspection Bubble left	722VU	P34	L INSP BUBBLE
A14PP	BEVS	A37TV	Inspection Bubble right	722VU	J37	R INSP BUBBLE
A15PP	BEVS	A38TV	Camera Box	721VU	V17	CAMERA BOX SPLY 1

BUSBAR	ATA/SYSTEM	C.B. FIN	DESIGNATION	LOCATION	COORDINATES	LABEL
A6PP	BEVS	A39TV	Camera Box	A6PP	M32	CAMERA BOX SPLY 2
A14PP	BEVS	A46TV	Laser pointer	A14PP	J38	BOOM LASER