

Table 4.4.4-1 Level 1 (LRU, Interface Bus, etc.) Code Definitions

<u>LRU CODE</u>	<u>DESIGNATION</u>	<u>LRU NAME</u>
00	----	Unknown Level 1
SATCOM LRUs:		
01	SDU	Satellite Data Unit
02	SDUO	"Other" SATCOM system
03	----	Reserved
04	HPAH	HGA/IGA High Power Amplifier
05	----	Spare
06	----	Spare
07	HPAL	Low Gain Antenna High Power Amplifier
08	HSU1	High-Speed data Unit #1
09	HSU2	High-Speed data Unit #2
0A	HPR	High Power Relay
0B	----	Spare
0C	----	Spare
0D	LNATP	Top/Port Low Noise Amplifier/Diplexer
0E	----	Spare
0F	LNAS	Starboard Low Noise Amplifier/Diplexer
10	LNAL	Low Gain Antenna Low Noise Amplifier/Diplexer
11	----	Spare
12	----	Spare
13	BSUTP	Top/Port Beam Steering Unit or Antenna Control Unit
14	----	Spare
15	BSUS	Starboard Beam Steering Unit
16	----	Spare
17	----	Spare
18	----	Spare
19	----	Spare
1A	HGATP	Top/Port High/Intermediate Gain Antenna
1B	----	Spare
1C	HGAS	Starboard High Gain Antenna
1D	----	Spare
1E	----	Spare
1F	LGA	Low Gain Antenna
20	----	Spare

I 21-23: For software packages prior to 4.0:

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Table 4.4.4-1 Level 1 (LRU, Interface Bus, etc.) Code Definitions

<u>LRU CODE</u>	<u>DESIGNATION</u>	<u>LRU NAME</u>
21	SCDU1	Satellite Control/Display Unit #1
22	SCDU2	Satellite Control/Display Unit #2
23	SCDU3	Satellite Control/Display Unit #3
	For software packages 4.0 and subsequent:	
21: TP10H=1:	SCDU1	Satellite Control/Display Unit #1
TP10H=0:	WSC1	Williamsburg SDU Controller #1
22: TP10H=1:	SCDU2	Satellite Control/Display Unit #2
TP10H=0:	WSC2	Williamsburg SDU Controller #2
23: TP10H=1:	SCDU3	Satellite Control/Display Unit #3
TP10H=0:	WSC3	Williamsburg SDU Controller #3
24-2F	-----	Spare
NON-SATCOM-SPECIFIC LRUs:		
30	RMP	Radio Management Panel
31	-----	Spare
32	-----	Spare
33	CMU1	Communications Management Unit #1
34	CMU2	Communications Management Unit #2
35	IRSP	Inertial Reference System on the primary IRS input bus
36	IRSS	Inertial Reference System on the secondary IRS input bus
37	-----	Reserved
38	-----	Reserved
39	CFDS	Central Fault Display System/Central Maintenance Computer
3A	-----	Spare
3B	-----	Spare
3C	-----	Spare
3D	FMC1	Flight Management Computer #1
3E	FMC2	Flight Management Computer #2
3F	-----	Spare
40	429ID	429 ICAO Address Source
41	-----	Spare
42	CTU	Cabin Telecommunications Unit
43	CPDF	Cabin Packet Data Function
44-4F	-----	Spare

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Table 4.4.4-1 Level 1 (LRU, Interface Bus, etc.) Code Definitions

BUS CODE	DESIGNATION	INPUT BUS NAME (ARINC 429 unless otherwise noted)
SDU INPUT BUSES:		
50	HSU1>	SDU MP9E/F: Data Bus from HSU #1
51	HSU2>	SDU TP6A/B: Data Bus from HSU #2
52	CPDF>	SDU MP1E/F: Data Bus from CPDF
53	CMU1>	SDU MP1G/H: Data Bus from CMU #1
54	CTU>	SDU MP2J/K: Cabin Digital Voice/Data In (CEPT-E1)
55, 56, 66:	For software packages prior to 4.0:	
55	CDU1>	SDU MP3C/D: Data from SCDU #1
56	CDU2>	SDU MP3E/F: Data from SCDU #2
66	CDU3>	SDU MP8J/K: Data from SCDU #3
	For software packages 4.0 and subsequent:	
55: TP10H=1:	CDU1>	SDU MP3C/D: Data from SCDU #1
	TP10H=0: WSC1>	SDU MP3C/D: Data from WSC #1
56: TP10H=1:	CDU2>	SDU MP3E/F: Data from SCDU #2
	TP10H=0: WSC2>	SDU MP3E/F: Data from WSC #2
66: TP10H=1:	CDU3>	SDU MP8J/K: Data from SCDU #3
	TP10H=0: WSC3>	SDU MP8J/K: Data from WSC #3
57	CMU2>	SDU MP3G/H: Data Bus from CMU #2
58	SM4A	SDU MP4A/B: Spare
59	CFDS>	SDU MP4C/D: CFDS Interface (604) Input
5A	IRSP>	SDU MP6A/B: Data from IRS on primary input bus
5B	IRSS>	SDU MP6C/D: Data from IRS on secondary input bus
5C	HPAH>	SDU MP6E/F: BITE Input from HGA/IGA HPA
5D	----	SDU Spare
5E	SM6G	SDU MP6G/H: Spare
5F	HPAL>	SDU MP6J/K: BITE Input from LGA HPA
60	SM7A	SDU MP7A/B: Spare
61	----	SDU Spare
62	BSTP>	SDU MP7G/H: BITE Input from Top/Port BSU or ACU
63	----	SDU Spare
64	BSUS>	SDU MP7J/K: BITE Input from Starboard BSU
65	RMP>	SDU MP8C/D: Data Bus from RMP
66	See above after 56	
67	----	SDU : Reserved (formerly MP9E/F)
68	----	SDU MP9J/K: Reserved
69	----	SDU Spare
6A	----	SDU MP10C/D: Reserved
6B	----	SDU Spare
6C	----	SDU MP10G/H: Reserved

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Table 4.4.4-1 Level 1 (LRU, Interface Bus, etc.) Code Definitions

BUS CODE	DESIGNATION	INPUT BUS NAME (ARINC 429 unless otherwise noted)
6D	----	SDU MP10J/K: Reserved
6E	----	SDU : Reserved
6F	----	SDU : Reserved
70	----	SDU Spare
71	SDXT>	SDU MP12A/B: SDU Cross-talk Input from Other SDU
72	SM12E	SDU MP12E/F: Spare
73	FMC1>	SDU MP12G/H: Data Bus from FMC #1
74	FMC2>	SDU MP12J/K: Data Bus from FMC #2
75	----	SDU Spare
76	----	SDU Spare
77	----	SDU Spare
78	----	SDU Spare
79	----	SDU Spare
7A	----	SDU Spare
7B	----	SDU Spare
7C	----	SDU Spare
7D	----	SDU Spare
7E	----	SDU Spare
7F	----	SDU Spare
80-8F	----	Reserved
HGA/IGA HPA INPUT BUSES:		
90	>HPAH	HGA/IGA HPA TP1A/B: Multi-Control
91	HHT2A	HGA/IGA HPA TP2A/B: Spare
92	----	HGA/IGA HPA Spare
93	----	HGA/IGA HPA Spare
94	----	HGA/IGA HPA Spare
95	----	HGA/IGA HPA Spare
LGA HPA INPUT BUSES:		
96	>HPAL	LGA HPA TP1A/B: Multi-Control
97	HLT2A	LGA HPA TP2A/B: Spare
TOP/PORT BSU OR ACU INPUT BUSES:		
98	>BSTP	Top/Port BSU or ACU: Multi-Control
99	----	Top/Port BSU or ACU: Spare

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Table 4.4.4-1 Level 1 (LRU, Interface Bus, etc.) Code Definitions

BUS CODE	DESIGNATION	INPUT BUS NAME (ARINC 429 unless otherwise noted)
PORT BSU INPUT BUSES:		
9A	>BPXT	Port BSU P/R: Cross-Talk
9B	-----	Port BSU: Spare
STARBOARD BSU INPUT BUSES:		
9C	>BSUS	STBD BSU T/U: Multi-Control
9D	>BSXT	STBD BSU P/R: Cross-Talk
HSU #1 INPUT BUS:		
9E	>HSU1	HSU #1 TP21/22: Control (MP9G/H: SDU Output)
HSU #2 INPUT BUS:		
9F	>HSU2	HSU #2 TP21/22: Control (MP7E/F: SDU Output)
A0	-----	Spare
 WSC INPUT BUSES:		
A1	>WSC1	WSC1 Input Bus from this SDU
A2	>WSC2	WSC2 Input Bus from this SDU
A3	>WSC3	WSC3 Input Bus from this SDU
A4-BF	-----	Spare

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Table 4.4.4-1 Level 1 (LRU, Interface Bus, etc.) Code Definitions

<u>CODE</u>	<u>DESIGNATION</u>	<u>MISCELLANEOUS NAME</u>
MISCELLANEOUS ERRORS/FAILURES/WARNINGS:		
C0	STRPS	SDU TP11A: SDU Straps (System Configuration Pins) Error
C1	WOW	SDU MP5B/C: SDU Weight-on-Wheels Miscompare
C2	DSS/D	SDU MP5J/K: SDU Dual System Select/Disable Error
C3	ICAO	SDU (ICAO) Address Bits (Straps) Error
C4	HVSWR	HGA/IGA HPA VSWR Bad
C5	ORTIC	SDU ORT/Configuration Straps Incompatibility
C6	LVSWR	LGA HPA VSWR Bad
C7	HHOT	HGA/IGA HPA Over Temp Warning
C8	GESFR	Invalid Frequency Command from GES
C9	HLOT	LGA HPA Over Temp Warning
CA	LLCDR	LGA LNA Control Driver Fail
CB	HHSDI	[HGA/IGA] HPA Invalid SDI Strapping
CC	HLSDI	LGA HPA Invalid SDI Strapping
CD	SDPOD	SDU Power On Count/Total On-Time Clock Auto/Manual Reset
CE	----	Reserved
CF	HHPOD	HGA/IGA HPA POC/TOTC Auto/Manual Reset
D0	HLPOD	LGA HPA Pwr On Count/Total On-Time Clock Auto/Manual Reset
D1	HHASD	HGA/IGA HPA Wrong A429 SDI Code
D2	HLASD	LGA HPA Wrong A429 SDI Code
D3	BPASD	Top/Port BSU/ACU Wrong A429 SDI Code
D4	BSASD	Starboard BSU Wrong A429 SDI Code
D5	HHCAL	SDU to HGA/IGA HPA Cable Loss
D6	HLCAL	SDU to LGA HPA Cable Loss
D7	----	Reserved
D8	LNPRX	Top/Port HGA/IGA LNA to SDU RF Continuity Fail
D9	LNSRX	Starboard HGA LNA to SDU RF Continuity Fail
DA	LNLRX	LGA LNA to SDU RF Continuity Fail
DB	LGLOT	LGA Log-on Test Failure
DC	CMUNA	No Declared Active (C)MU
DD	ORTSC	SDU Secured ORT Error
DE	ORTUS	SDU User ORT Error
DF	HGLOT	Slave HGA/IGA Log-on Test Failure
E0	----	Reserved
E1	HS1DD	HSU #1 Disable Discrete Failure
E2	HS2DD	HSU #2 Disable Discrete Failure
E3	UNSPH	Unsupported HSU Configuration
E4	HSIV1	HSU1/SDU Interface Version Incompatibility
E5	HSIV2	HSU2/SDU Interface Version Incompatibility

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Table 4.4.4-1 Level 1 (LRU, Interface Bus, etc.) Code Definitions

<u>CODE</u>	<u>DESIGNATION</u>	<u>MISCELLANEOUS NAME</u>
E6	HS1TX	HSU1/HPA Tx RF Signal Path Failure
E7	HS2TX	HSU2/HPA Tx RF Signal Path Failure
E8	HS1RX	DLNA/HSU1 Rx RF Signal Path Failure
E9	HS2RX	DLNA/HSU2 Rx RF Signal Path Failure
I EA	DHSU1	Dual HSU-700 Config Warning
I EB	WSCNA	No Declared Active WSC
I EC-FC -----		Spare
FD	PEM	Pilot Event Marker (CAIMS input only)
FE	EXPWR	External Power Supply Interrupt In-Flight
FF	-----	Reserved

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Table 4.4.4-2 SRU Code Definitions

	<u>SRU DESIGNATION</u>	<u>SRU LOGICAL/PHYSICAL NAME</u>	<u>SRU CODE</u>
SDU	UNKNOWN	-	0
	SMPM	SDU Main Processor Module/MPMM	1
	CODA	Voice Codec Module A/TTCM1	2
	CODB	Voice Codec Module B/TTCM1	3
	SIOM	SDU Input/Output Module/SIOM	4
	SMDM1	SDU Modem Module #1/MPMM	5
	SMDM2	SDU Modem Module #2/TTCM1	6
	SMDM3	SDU Modem Module #3/TTCM1	7
	SRFM	SDU Radio Frequency Module/RFM	8
	-	Reserved	9
	OCXO	Oven-Controlled Crystal Oscillator/OCXO	A
	SMB	SDU Mother Board/MBD	B
	SPSU	SDU AC or DC Power Supply Unit/PSU	C
	SFPDM	SDU Front Panel Display Module/FPDM	D
	CODC	Voice Codec Module C/TTCM1	E
	CODD	Voice Codec Module D/TTCM2	F
	CODE	Voice Codec Module E/TTCM2	G
	CODF	Voice Codec Module F/TTCM2	H
	-	Not Used	I
	SMDM4	SDU Modem Module #4/TTCM1	J
	-	Not Used	K
	SMDM5	SDU Modem Module #5/TTCM2	L
	SMDM6	SDU Modem Module #6/TTCM2	M
	SMDM7	SDU Modem Module #7/TTCM2	N
	-	Not Used	O
	VIM	Voice Interface Module/VIM	P
	-	Not Used	Q
HPA	UNKNOWN	-	0
	HPSU	HPA AC/DC PSU (40W: A1; 20W: A3)	1
	HMPM	HPA MPM (40W: A2; 20W: A1)	2
	DRIV	RF Driver (40W: A3)	3
	SPLT	Splitter (40W: A4)	4
	PWR1	Power Amplifier (1) (40W: A5)	5
	PWR2	Power Amplifier (2) (40W: A6)	6
	PWR3	Power Amplifier (3) (40W: A7)	7
	C/DET	Combiner/Detector (40W: A8)	8
	FPAMP	Final Power Amplifier (40W: A9)	9
	HMB	HPA Mother Board (40W: A10)	A
	RFAM	RF Amplifier Module (20W: A2)	B

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Table 4.4.4-2 SRU Code Definitions

<u>SRU DESIGNATION</u>	<u>SRU LOGICAL/PHYSICAL NAME</u>	<u>SRU CODE</u>
<u>COMMENTARY</u>		
Refer to Section 3.2.1.4.2.5 regarding the architectural changes made in 40W HPA Hardware Mod D. The SRUs listed above for the 40W HPA are inclusive of the pre- and post-Mod D designs. Each HPA uses the SRU codes appropriate to its design.		
<u>COMMENTARY</u>		
	The SRU code definitions for the HSU(s) initially followed a different numbering scheme from that	
	used for the other Honeywell/Thales LRUs. Consequently, the following entries for the HSU(s)	
	include "original" as well as "actual" SRU codes.	

Table 4.4.4-2 SRU Code Definitions

	<u>SRU DESIGNATION</u>	<u>SRU LOGICAL/ PHYSICAL NAME</u>	<u>ORIGINAL SRU CODE</u>	<u>ACTUAL SRU CODE⁽²⁾</u>
HSU	UNKNOWN	-	0	0
	HSCPU	HSU CPU	01	1
	FDSPM	HSU Frame DSP and interfaces	02	2
	VSDPM	HSU VFC DSP and interfaces	03	3
	TTPGA	HSU Turbo FPGA	04	4
	ISDNT	HSU ISDN Transceiver	05	5
	AFPGA	HSU ARINC 429 FPGA	06	6
	CPURM	HSU CPU RAM	07	7
	CEM	HSU Converter EEPROM	08	8
	FLASH	HSU Flash	09	9
	QUART	HSU Quad UART	0A	A
	ETHER	HSU Ethernet	0B	B
	PSPCB	HSU Power Supply PCB	0C	C
	ETIME	HSU External Timer	0D	D
	CSDUI	HSU/SDU Interface	0E ⁽¹⁾	Not Applicable
	-	Not Used	-	E
	HCOMI	HSU/Combiner Interface	0F ⁽¹⁾	Not Applicable
	-	Not Used	-	F
	HCDMI	HSU/CDM Interface	10	G
	ISDNP	HSU/ISDN Phone Interface	11 ⁽¹⁾	Not Applicable
	-	Not Used	-	H
	ETHDM	HSU/Ethernet Device Interface	12 ⁽¹⁾	Not Applicable
	-	Not Used	-	I
	TDRAM	HSU Turbo Decoder RAM	13	J
	BATTM	HSU Battery	14	K
	IUART	HSU Internal UART	15	L
	STAM	HSU Step Attenuator	16	M
	HRFM	HSU RF	17	N
	REOSM	HSU Reference Oscillator	18	O
	BMONM	HSU Burst Duration Monitor	19	P
	DCOMM	HSU Doppler Compensation	1A	Q
	FVFCI	HSU Frame DSP/VFC DSP Interface	1B	R
	FDTFI	HSU Frame DSP/Turbo FPGA Intf	1C	S
	VDTFI	HSU VFC DSP/Turbo FPGA Interface	1D	T
	VDITI	HSU VFC DSP/ISDN Trnscvr Interface	1E	U
	TFTDR	HSU Turbo FPGA/Turbo Dec RAM Intf	1F	V
	PSIPI	HSU Power Supply/ISDN Phone Intf	20	W
	CDM	HSU CDM (Config Data Module)	21	X
	HSPLI	HSU CPU/Splitter Interface	22 ⁽¹⁾	Not Applicable
	-	Not Used	-	Y
	ITPSI	HSU ISDN Trnscvr/Power Supply Intf	23	Z

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Notes:

1. These Level 2 SRU codes are used by the HSU to communicate information to the SDU regarding failures that are external to the HSU itself. They do not represent shop replaceable units within the HSU. These Level 2 codes are only used to communicate failure information from the HSU to the SDU; they never appear in the SDU's system failure log under the HSU's Level 1 codes (08x or 09x), but instead, are mapped by the SDU to other L1/L2/L3 codes.
2. For HSU SRU codes other than 0, the failure is simply communicated to the SDU as a Williamsburg file transfer (Williamsburg message IDs 4Dx and 4Ex). For these failures, the SDU shall manage the failure information in the system failure log and the current failures list using the data in the Williamsburg messages in accordance with the specifications for those failures in Table 4.4.4-3 and in Sections 4.4.5.8.x. The same requirement shall apply for failure codes 9E 0 82, 9E 0 03 and 9E 0 04.

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Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
UNKNOWN LEVEL 1										
UNKNOWN LEVEL 1 UNKNOWN SRU										
00	0	01	-	-	RESERVED	-	-	-	26	-
00	0	02	-	-	SPARE	-	-	-	-	-
00	0	03	-	-	RESERVED	-	-	-	26	-
00	0	04	-	-	RESERVED	-	-	-	26	-
00	0	05	-	-	RESERVED	-	-	-	26	-
00	0	06	-	-	RESERVED	-	-	-	26	-
00	0	07	-	-	RESERVED	-	-	-	26	-
00	0	08	-	-	RESERVED	-	-	-	26	-
SDU										
UNKNOWN SDU SRU										
01	0	01	-	-	SPARE	-	-	-	-	-
01	0	02	CM	HMPM	HPA CMD WORD (143) UPDATE RATE FAIL	1	1	I	-	NONE
01	0	03	CM	HMPM	HPA CMD WORD (143) DATA FAIL	1	1	I	-	NONE
01	0	04	-	-	RESERVED	-	-	-	26	-
01	0	05	-	-	RESERVED	-	-	-	26	-
01	0	06	-	-	RESERVED	-	-	-	26	-
01	0	07	CM	SMPM	HSU1-SDU W'BURG DATA TX FAIL	3	2	I	-	[HSU1]
01	0	08	CM	SMPM	HSU1-SDU W'BURG SOLO WORD ACK FAIL	3	2	I	-	[HSU1]
01	0	09	-	-	SPARE	-	-	-	-	-
01	0	0A	-	-	SPARE	-	-	-	-	-
01	0	0B	CM	SMPM	HSU2-SDU W'BURG DATA TX FAIL	3	2	I	-	[HSU2]
01	0	0C	CM	SMPM	HSU2-SDU W'BURG SOLO WORD ACK FAIL	3	2	I	-	[HSU2]
01	0	0D	-	-	SPARE	-	-	-	-	-
01	0	0E	-	-	SPARE	-	-	-	-	-
01	0	0F	-	-	SPARE	-	-	-	-	-
01	0	10	CM	SMPM	HGA HPA COMMAND WORD (NCD)	1	2	I	-	[HGA_SUBSYS]
01	0	11	-	-	SPARE	-	-	-	-	-
01	0	12	CM	SMPM	LGA HPA COMMAND WORD (NCD)	1	2	I	-	[LGA_SUBSYS]
01	0	13	-	-	RESERVED	-	-	-	26	-
01	0	14	-	-	RESERVED	-	-	-	26	-
01	0	15	-	-	RESERVED	-	-	-	26	-
01	0	96	PP	SMPM	INCOMPLETE ID PROM RESPONSES	3	3	I	-	NONE
SMPM: SDU MAIN PROCESSOR MODULE										
01	1	81	PP	SMPM	SDU H/W-S/W COMPATIBILITY FAIL	3	3	I	-	NONE
01	1	82	PP	SMPM	BATTERY VOLTAGE LOW	3	2	I	-	NONE
01	1	83	PP	SMPM	WATCHDOG TIMEOUT FAIL	3	3	I	-	NONE
01	1	84	PP	SMPM	MICRO BOOT ROM FAIL	3	3	I	-	NONE
01	1	85/05	PP/CM	SMPM	EEPROM FAIL	3	3	I	-	NONE
01	1	86/06	PP/CM	SMPM	FLASH FAIL	3	3/2	I	-	NONE
01	1	87/07	PP/CM	SMPM	SRAM FAIL	3/1	3/2	I	-	NONE/[COMMON]
01	1	88/08	PP/CM	SMPM	REAL TIME CLOCK FAIL	1/3	1/3	I	-	NONE
01	1	89	PP	SMPM	QUART FAIL	3	3	I	-	NONE
01	1	0A	CM	SMPM	SOFTWARE ERROR (SYSFAIL)	3	3	I	-	NONE
01	1	0B	CM	SMPM	FLASH-PSRAM MISCOMPARE	3	3	I	-	NONE
01	1	0C	CM	SMPM	FLASH-PSRAM MISCOMPARE EXTENSION 1	3	3	I	-	NONE
01	1	0D	CM	SMPM	FLASH-PSRAM MISCOMPARE EXTENSION 2	3	3	I	-	NONE
CODA: SDU VOICE CODEC MODULE A										

Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
01	2	81/01	PP/CM	CODA	<CODEC-A> PROGRAM MEMORY CRC FAIL	3	3	I	-	[CODEC_A]
01	2	82	-	-	<CODEC-A> RESERVED	-	-	-	26	-
01	2	83	-	-	<CODEC-A> RESERVED	-	-	-	26	-
01	2	84	-	-	<CODEC-A> RESERVED	-	-	-	26	-
01	2	05	-	-	<CODEC-A> RESERVED	-	-	-	26	-
01	2	86	-	-	<CODEC-A> RESERVED	-	-	-	26	-
01	2	87/07	PP/CM	CODA	<CODEC-A> TIMING GENERATOR FAIL	3	3	I	-	[CODEC_A]
01	2	88	PP	CODA	<CODEC-A> DUAL PORT RAM FAIL CODEC SIDE	3	3	I	-	[CODEC_A]
01	2	89	-	-	<CODEC-A> RESERVED	-	-	-	26	-
01	2	8A/0A	PP/CM	CODA	<CODEC-A> PROGRAM MEMORY W/R FAIL	3	3	I	-	[CODEC_A]
01	2	8B	PP	CODA	<CODEC-A> DSP INTERNAL MEMORY W/R FAIL	3	3	I	-	[CODEC_A]
01	2	8C/0C	PP/CM	CODA	<CODEC-A> DSP COMPREHENSIVE FAIL	3	3	I	-	[CODEC_A]
01	2	0D	CM	SMPM	<CODEC-A> HEALTH COUNT UPDATE	3	3	I	-	[CODEC_A]
01	2	8E	PP	SMPM	<CODEC-A> DUAL PORT RAM FAIL SMPM SIDE	3	3	I	-	[CODEC_A]
01	2	0F	-	-	<CODEC-A> SPARE	-	-	-	-	-
01	2	90	PP	SMPM	<CODEC-A> BUS ERROR	3	3	I	-	[CODEC_A]
01	2	91	PP	SMPM	<CODEC-A> SELF TEST MISOPERATION	3	3	I	-	[CODEC_A]
01	2	12	CM	SMPM	<CODEC-A> COMMUNICATION PROBLEM	3	3	I	-	[CODEC_A]
01	2	93/13	-	-	<CODEC-A> RESERVED	-	-	-	26	-
01	2	94	PP	SMPM	<CODEC-A> ST BUS AUDIO LOOPBACK FAIL	3	3	I	-	[CODEC_A]
01	2	95	PP	SMPM	<CODEC-A> SW DOWNLOAD FAIL	3	3	I	-	[CODEC_A]

CODB: SDU VOICE CODEC MODULE B

01 3 Same entries as for CODA above except substitute CODB for CODA, SRU code 3 for code 2, [CODEC_B] for [CODEC_A] and <CODEC-B> for <CODEC-A>.

Fault codes for codecs C-F have Level 2 (SRU) codes E-H. They are listed in the appropriate section of this table for those SRU codes.

SIOM: SDU INPUT/OUTPUT MODULE (EXCLUSIVE TO SIOM)

01	4	81	PP	SMPM	A429 XMTR LOOP-BACK TO OTHER SDU FAIL	3	2	I	-	NONE
01	4	82	PP	SMPM	A429 XMTR LOOP-BACK TO CFDS FAIL	3	2	I	-	NONE
01	4	83	PP	SMPM	A429 XMTR LOOP-BACK TO ADL FAIL	3	3	I	-	NONE
01	4	84	PP	SMPM	A429 XMTR LOOP-BACK TO PDL FAIL	3	3	I	-	NONE
01	4	85	PP	SMPM	A429 XMTR LOOP-BACK TO (C)MUs FAIL	1	1	I	-	NONE
01	4	86	PP	SMPM	A429 XMTR LOOP-BACK TO SCDUs FAIL	3	2	I	-	NONE
01	4	87	PP	SMPM	A429 XMTR LOOP-BACK TO MULTI-CNTRL FAIL	1	2	I	-	NONE
01	4	88	-	-	RESERVED	-	-	-	26	-
01	4	89	PP	SMPM	A429 XMTR LOOP-BACK TO RMP/CAP FAIL	-	-	-	2	NONE
01	4	8A	PP	SMPM	A429 XMTR LOOP-BACK TO SNU/CPDF FAIL	3	3	I	-	NONE
01	4	8B	PP	SMPM	A429 XMTR LOOP-BACK TO HSU1 FAIL	3	2	I	-	NONE
01	4	8C	PP	SMPM	A429 XMTR LOOP-BACK TO HSU2 FAIL	3	2	I	-	NONE
01	4	8D	PP	SMPM	A429 XMTR LOOP-BACK SPARE	-	-	I	2	-
01	4	8E	PP	SMPM	A429 XMTR LOOP-BACK SPARE	-	-	I	2	-
01	4	8F	PP	SMPM	A429 XMTR LOOP-BACK SPARE	-	-	I	2	-
01	4	90	PP	SMPM	A429 XMTR LOOP-BACK SPARE	-	-	I	2	-
01	4	91-AA	-	-	RESERVED	-	-	-	-	-
01	4	AB	PP	SMPM	SIOM BUS ERROR	1	1	I	-	[COMMON]
01	4	2C	CM	SMPM	A429 TX TO OTHER SDU BUFFER FULL	3	2	I	-	NONE
01	4	2D	CM	SMPM	A429 TX TO CFDS BUFFER FULL	3	2	I	-	NONE
01	4	2E	CM	SMPM	A429 TX TO ADL BUFFER FULL	3	2	I	-	NONE
01	4	2F	CM	SMPM	A429 TX TO PDL BUFFER FULL	3	2	I	-	NONE
01	4	30	CM	SMPM	A429 TX TO (C)MUs BUFFER FULL	3	2	I	-	NONE
01	4	31	CM	SMPM	A429 TX TO SCDUs BUFFER FULL	3	2	I	-	NONE
01	4	32	CM	SMPM	A429 TX TO MULTI-CTRL BUFFER FULL	3	2	I	-	NONE

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Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
01	4	33	-	-	RESERVED	-	-	-	26	-
01	4	34	CM	SMPM	A429 TX TO RMP/CAP BUFFER FULL	3	2	I	-	NONE
01	4	35	CM	SMPM	A429 TX TO SNU/CPDF BUFFER FULL	3	2	I	-	NONE
01	4	36	CM	SMPM	A429 TX TO HSU1 BUFFER FULL	3	2	I	-	NONE
01	4	37	CM	SMPM	A429 TX TO HSU2 BUFFER FULL	3	2	I	-	NONE
01	4	38	CM	SMPM	A429 TX BUFFER FULL SPARE	3	2	I	2	-
01	4	39	CM	SMPM	A429 TX BUFFER FULL SPARE	3	2	I	2	-
01	4	3A	CM	SMPM	A429 TX BUFFER FULL SPARE	3	2	I	2	-
01	4	3B	CM	SMPM	A429 TX BUFFER FULL SPARE	3	2	I	2	-
01	4	BC	PP	SMPM	SIOM INTERRUPT FAIL	1	1	I	-	[COMMON]
01	4	3D	CM	SMPM	IRS ASIC MATCHING PROBLEM	3	2	I	-	NONE
SMDM1: SDU MODEM MODULE #1										
01	5	81	PP	SMDM1	<MODEM-1> PROCESSOR FAIL	3	3	I	20	[MODEM_1]
01	5	82/02	-	-	RESERVED	-	-	-	26	-
01	5	83/03	-	-	RESERVED	-	-	-	26	-
01	5	84/04	PP/CM	SMDM1	<MODEM-1> PROGRAM CRC FAIL	3	3	I	20	[MODEM_1]
01	5	85/05	-	-	RESERVED	-	-	-	26	-
01	5	86/06	-	-	RESERVED	-	-	-	26	-
01	5	87	-	-	RESERVED	-	-	-	26	-
01	5	88/08	-	-	RESERVED	-	-	-	26	-
01	5	89/09	-	-	RESERVED	-	-	-	26	-
01	5	0A	CM	SMDM1	<MODEM-1>MODEM TO RFM INTERFACE FAIL	3	3	I	20	[MODEM_1]
01	5	8B	PP	SMDM1	<MODEM-1> TIMER/INTERRUPT FAIL	3	3	I	20	[MODEM_1]
01	5	8C	-	-	RESERVED	-	-	-	26	-
01	5	8D	-	-	RESERVED	-	-	-	26	-
01	5	8E	PP	SMDM1	<MODEM-1> EXTERNAL MEMORY FAIL	3	3	I	20	[MODEM_1]
01	5	8F/0F	-	-	RESERVED	-	-	-	26	-
01	5	90/10	-	-	RESERVED	-	-	-	26	-
01	5	91	PP	SMDM1	<MODEM-1> MODEM DPR FAIL	3	3	I	20	[MODEM_1]
01	5	92	-	-	RESERVED	-	-	-	26	-
01	5	93/13	-	-	RESERVED	-	-	-	26	-
01	5	94/14	-	-	RESERVED	-	-	-	26	-
01	5	95	PP	SMPM	<MODEM-1> SMPM SIDE DPR FAIL	3	3	I	20	[MODEM_1]
01	5	16	CM	SMPM	<MODEM-1> SW DOWNLOAD FAIL	3	3	I	20	[MODEM_1]
01	5	17	CM	SMPM	<MODEM-1> HEALTH COUNT UPDATE FAIL	3	3	I	20	[MODEM_1]
01	5	18	-	-	RESERVED	-	-	-	26	-
01	5	99	PP	SMPM	<MODEM-1> BUS ERROR	3	3	I	20	[MODEM_1]
01	5	9A	PP	SMPM	<MODEM-1> SELF TEST MISOPERATION	3	3	I	20	[MODEM_1]
01	5	1B	CM	SMDM1	<MODEM-1> SOFTWARE FAIL	3	3	I	20	[MODEM_1]
01	5	1C	CM	SMPM	<MODEM-1> COMMUNICATIONS PROBLEM	3	2	I	20	[MODEM_1]
01	5	1D	-	-	RESERVED	-	-	-	26	-
01	5	9E	PP	SMPM	<MODEM-1> RFM SSI LOOPBACK FAIL	3	3	I	20	[MODEM_1]
01	5	9F	-	-	RESERVED	-	-	-	25	-

SMDM2: SDU MODEM MODULE #2

01 6 Same entries as for SMDM1 above except substitute SMDM2 for SMDM1, SRU code 6 for code 5, [MODEM_2] for [MODEM_1] and <MODEM-2> for <MODEM-1>.

SMDM3: SDU MODEM MODULE #3

01 7 Same entries as for SMDM1 above except substitute SMDM3 for SMDM1, SRU code 7 for code 5, [MODEM_3] for [MODEM_1] and <MODEM-3> for <MODEM-1>.

Fault codes for modems 4-7 have Level 2 (SRU) codes J, L, M and N. They are listed in this table in the appropriate section for those SRU codes.

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Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
SRFM: SDU RADIO FREQUENCY MODULE										
01	8	81	-	-	RESERVED	-	-	-	26	-
01	8	82	-	-	RESERVED	-	-	-	26	-
01	8	83	-	-	RESERVED	-	-	-	26	-
01	8	84	-	-	RESERVED	-	-	-	26	-
01	8	85	-	-	RESERVED	-	-	-	26	-
01	8	86	-	-	RESERVED	-	-	-	26	-
01	8	87	-	-	RESERVED	-	-	-	26	-
01	8	88	-	-	RESERVED	-	-	-	26	-
01	8	89	-	-	RESERVED	-	-	-	26	-
01	8	0A	-	-	SPARE	-	-	-	-	-
01	8	0B	-	-	SPARE	-	-	-	-	-
01	8	0C	-	-	SPARE	-	-	-	-	-
01	8	0D	-	-	SPARE	-	-	-	-	-
01	8	8E/0E	PP/CM	SMPM	RF SYNTH CHAN1 LOCK DETECT FAIL	3	3	I	-	NONE/[RFM_CHAN_1]
01	8	8F/0F	-	-	RESERVED	-	-	-	26	-
01	8	90/10	PP/CM	SMPM	RF SYNTH CHAN2 LOCK DETECT FAIL	3	3	I	-	NONE/[RFM_CHAN_2]
01	8	91/11	-	-	RESERVED	-	-	-	26	-
01	8	92/12	PP/CM	SMPM	RF SYNTH CHAN3 LOCK DETECT FAIL	3	3	I	-	NONE/[RFM_CHAN_3]
01	8	93/13	-	-	RESERVED	-	-	-	26	-
01	8	94/14	-	-	RESERVED	-	-	-	26	-
01	8	95/15	-	-	RESERVED	-	-	-	26	-
01	8	96/16	PP/CM	SMPM	RF SYNTH CHAN4 LOCK DETECT FAIL	3	3	I	-	NONE/[RFM_CHAN_4]
01	8	97/17	PP/CM	SMPM	RF SYNTH CHAN5 LOCK DETECT FAIL	3	3	I	-	NONE/[RFM_CHAN_5]
01	8	98/18	PP/CM	SMPM	RF SYNTH CHAN6 LOCK DETECT FAIL	3	3	I	-	NONE/[RFM_CHAN_6]
01	8	99/19	PP/CM	SMPM	RF SYNTH CHAN7 LOCK DETECT FAIL	3	3	I	-	NONE/[RFM_CHAN_7]
01	8	9A/1A	PP/CM	SMPM	RF SYNTH CHAN8 LOCK DETECT FAIL	3	3	I	-	NONE/[RFM_CHAN_8]
01	8	9B/1B	PP/CM	SMPM	RF SYNTH TX BLOCK PLO LOCK DETECT FAIL	3/1	3/1	I	-	NONE/[COMMON]
01	8	9C/1C	PP/CM	SMPM	RF SYNTH RX BLOCK PLO LOCK DETECT FAIL	3/1	3/1	I	-	NONE/[COMMON]
01	8	9D/1D	PP/CM	SMPM	RF SYNTH RX CHAN PLO LOCK DETECT FAIL	3/1	3/1	I	-	NONE/[COMMON]
01	8	9E/1E	PP/CM	SMPM	RF SYNTH TX DOPPLER PLO LOCK DETECT FAIL	3/1	3/1	I	-	NONE/[COMMON]
01	8	A0	PP	SMPM	RFM CHAN 1 L-BAND LOOP-BACK (TX) FAIL	3	3	I	-	[RFM_CHAN_1]
01	8	A1	PP	SMPM	RFM CHAN 1 L-BAND LOOP-BACK (RX) FAIL	3	3	I	-	[RFM_CHAN_1]
01	8	A2	PP	SMPM	RFM CHAN 2 L-BAND LOOP-BACK (TX) FAIL	3	3	I	-	[RFM_CHAN_2]
01	8	A3	PP	SMPM	RFM CHAN 2 L-BAND LOOP-BACK (RX) FAIL	3	3	I	-	[RFM_CHAN_2]
01	8	A4	PP	SMPM	RFM CHAN 3 L-BAND LOOP-BACK (TX) FAIL	3	3	I	-	[RFM_CHAN_3]
01	8	A5	PP	SMPM	RFM CHAN 3 L-BAND LOOP-BACK (RX) FAIL	3	3	I	-	[RFM_CHAN_3]
01	8	A6	PP	SMPM	RFM CHAN 4 L-BAND LOOP-BACK (TX) FAIL	3	3	I	-	[RFM_CHAN_4]
01	8	A7	PP	SMPM	RFM CHAN 4 L-BAND LOOP-BACK (RX) FAIL	3	3	I	-	[RFM_CHAN_4]
01	8	A8	PP	SMPM	RFM CHAN 5 L-BAND LOOP-BACK (TX) FAIL	3	3	I	-	[RFM_CHAN_5]
01	8	A9	PP	SMPM	RFM CHAN 5 L-BAND LOOP-BACK (RX) FAIL	3	3	I	-	[RFM_CHAN_5]
01	8	AA	PP	SMPM	RFM CHAN 6 L-BAND LOOP-BACK (TX) FAIL	3	3	I	-	[RFM_CHAN_6]
01	8	AB	PP	SMPM	RFM CHAN 6 L-BAND LOOP-BACK (RX) FAIL	3	3	I	-	[RFM_CHAN_6]
01	8	AC	PP	SMPM	RFM CHAN 7 L-BAND LOOP-BACK (TX) FAIL	3	3	I	-	[RFM_CHAN_7]
01	8	AD	PP	SMPM	RFM CHAN 7 L-BAND LOOP-BACK (RX) FAIL	3	3	I	-	[RFM_CHAN_7]
01	8	AE	PP	SMPM	RFM CHAN 8 L-BAND LOOP-BACK (TX) FAIL	3	3	I	-	[RFM_CHAN_8]
01	8	AF	PP	SMPM	RFM CHAN 8 L-BAND LOOP-BACK (RX) FAIL	3	3	I	-	[RFM_CHAN_8]
01	8	30	CM	SMPM	RFM CHAN 1 TX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_1]
01	8	31	CM	SMPM	RFM CHAN 2 TX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_2]
01	8	32	CM	SMPM	RFM CHAN 3 TX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_3]
01	8	33	CM	SMPM	RFM CHAN 4 TX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_4]
01	8	34	CM	SMPM	RFM CHAN 5 TX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_5]
01	8	35	CM	SMPM	RFM CHAN 6 TX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_6]
01	8	36	CM	SMPM	RFM CHAN 7 TX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_7]
01	8	37	CM	SMPM	RFM CHAN 8 TX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_8]
01	8	38	CM	SMPM	RFM CHAN 1 RX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_1]

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Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
01	8	39	CM	SMPM	RFM CHAN 2 RX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_2]
01	8	3A	CM	SMPM	RFM CHAN 3 RX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_3]
01	8	3B	CM	SMPM	RFM CHAN 4 RX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_4]
01	8	3C	CM	SMPM	RFM CHAN 5 RX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_5]
01	8	3D	CM	SMPM	RFM CHAN 6 RX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_6]
01	8	3E	CM	SMPM	RFM CHAN 7 RX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_7]
01	8	3F	CM	SMPM	RFM CHAN 8 RX CALIBRATION ERROR	3	3	I	-	[RFM_CHAN_8]
01	8	C0/40	PP/CM	SMPM	RFM CHAN 1 AGC TELLBACK FAIL	3	3	I	32	NONE
01	8	C1/41	PP/CM	SMPM	RFM CHAN 2 AGC TELLBACK FAIL	3	3	I	32	NONE
01	8	C2/42	PP/CM	SMPM	RFM CHAN 3 AGC TELLBACK FAIL	3	3	I	32	NONE
01	8	C3/43	PP/CM	SMPM	RFM CHAN 4 AGC TELLBACK FAIL	3	3	I	32	NONE
01	8	C4/44	PP/CM	SMPM	RFM CHAN 5 AGC TELLBACK FAIL	3	3	I	32	NONE
01	8	C5/45	PP/CM	SMPM	RFM CHAN 6 AGC TELLBACK FAIL	3	3	I	32	NONE
01	8	C6/46	PP/CM	SMPM	RFM CHAN 7 AGC TELLBACK FAIL	3	3	I	32	NONE
01	8	C7/47	PP/CM	SMPM	RFM CHAN 8 AGC TELLBACK FAIL	3	3	I	32	NONE
01	8	C8/48	PP/CM	SMPM	RFM BLOCK AGC TELLBACK FAIL	3	3	I	32	NONE
01	8	C9	PP	SMPM	I/Q CALIBRATION FAIL	3	3	I	-	NONE
01	8	D0	PP	SMPM	RFM CHAN 1 AGC CALIBRATION ERROR	3	3	I	-	NONE
01	8	D1	PP	SMPM	RFM CHAN 2 AGC CALIBRATION ERROR	3	3	I	-	NONE
01	8	D2	PP	SMPM	RFM CHAN 3 AGC CALIBRATION ERROR	3	3	I	-	NONE
01	8	D3	PP	SMPM	RFM CHAN 4 AGC CALIBRATION ERROR	3	3	I	-	NONE
01	8	D4	PP	SMPM	RFM CHAN 5 AGC CALIBRATION ERROR	3	3	I	-	NONE
01	8	D5	PP	SMPM	RFM CHAN 6 AGC CALIBRATION ERROR	3	3	I	-	NONE
01	8	D6	PP	SMPM	RFM CHAN 7 AGC CALIBRATION ERROR	3	3	I	-	NONE
01	8	D7	PP	SMPM	RFM CHAN 8 AGC CALIBRATION ERROR	3	3	I	-	NONE
01	8	D8	PP	SMPM	RFM BLOCK AGC CALIBRATION ERROR	3	3	I	-	NONE
SCFM: SDU CHANNEL FILTER MODULE										
01	9	81/01	-	-	RESERVED	-	-	-	26	-
01	9	82/02	-	-	RESERVED	-	-	-	26	-
01	9	83/03	-	-	RESERVED	-	-	-	26	-
01	9	04	-	-	RESERVED	-	-	-	26	-
01	9	05	-	-	RESERVED	-	-	-	26	-
01	9	06	-	-	RESERVED	-	-	-	26	-
01	9	07	-	-	RESERVED	-	-	-	26	-
01	9	08	-	-	RESERVED	-	-	-	26	-
01	9	09	-	-	RESERVED	-	-	-	26	-
01	9	0A	-	-	RESERVED	-	-	-	26	-
OCXO: SDU OVEN CONTROLLED CRYSTAL OSCILLATOR										
01	A	01	CM	SMPM	OVEN READY FAIL	1	1	I	-	[COMMON]
SMB: SDU MOTHER BOARD										
01	B	NONE								
SPSU: SDU AC OR DC POWER SUPPLY UNIT										
01	C	01	CM	SMPM	PSU TEMP LIMITS FAIL	3	2	I	-	NONE
01	C	02	-	-	SPARE	-	-	-	-	-
01	C	03	CM	SMPM	PSU SECONDARY VOLTAGE FAIL	1	1	I	-	NONE
SFPDM: SDU FRONT PANEL DISPLAY MODULE										
01	D	01	CM	SMPM	TEST (PAST) SWITCH STUCK	3	3	I	-	NONE

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Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
01	D	02	CM	SMPM	MANUAL SCROLL SWITCH STUCK	3	3	I	-	NONE
CODC: SDU VOICE CODEC MODULE C										
01	E				Same entries as for CODA (01 2 xx) above except substitute CODC for CODA, SRU code E for code 2, [CODEC_C] for [CODEC_A] and <CODEC-C> for <CODEC-A>.					
CODD: SDU VOICE CODEC MODULE D										
01	F				Same entries as for CODA (01 2 xx) above except substitute CODD for CODA, SRU code F for code 2, [CODEC_D] for [CODEC_A] and <CODEC-D> for <CODEC-A>.					
CODE: SDU VOICE CODEC MODULE E										
01	G				Same entries as for CODA (01 2 xx) above except substitute CODE for CODA, SRU code G for code 2, [CODEC_E] for [CODEC_A] and <CODEC-E> for <CODEC-A>.					
CODF: SDU VOICE CODEC MODULE F										
01	H				Same entries as for CODA (01 2 xx) above except substitute CODF for CODA, SRU code H for code 2, [CODEC_F] for [CODEC_A] and <CODEC-F> for <CODEC-A>.					
01	I				Not used.					
SMDM4: SDU MODEM MODULE #4										
01	J				Same entries as for SMDM1 (01 5 xx) above except substitute SMDM4 for SMDM1, SRU code J for code 5, [MODEM_4] for [MODEM_1] and <MODEM-4> for <MODEM-1>.					
01	K				Not used.					
SMDM5: SDU MODEM MODULE #5										
01	L				Same entries as for SMDM1 (01 5 xx) above except substitute SMDM5 for SMDM1, SRU code L for code 5, [MODEM_5] for [MODEM_1] and <MODEM-5> for <MODEM-1>.					
SMDM6: SDU MODEM MODULE #6										
01	M				Same entries as for SMDM1 (01 5 xx) above except substitute SMDM6 for SMDM1, SRU code M for code 5, [MODEM_6] for [MODEM_1] and <MODEM-6> for <MODEM-1>.					
SMDM7: SDU MODEM MODULE #7										
01	N				Same entries as for SMDM1 (01 5 xx) above except substitute SMDM7 for SMDM1, SRU code N for code 5, [MODEM_7] for [MODEM_1] and <MODEM-7> for <MODEM-1>.					
VIM: VOICE INTERFACE MODULE										
01	P	81	PP	SMPM	CABIN INTERFACE 1 AUDIO LOOPBACK FAIL	3	3	I	-	[CABIN_AUDIO_1]
01	P	82	PP	SMPM	CABIN INTERFACE 2 AUDIO LOOPBACK FAIL	3	3	I	-	[CABIN_AUDIO_2]
01	P	83	PP	SMPM	COCKPIT INTERFACE 1 AUDIO LOOPBACK FAIL	3	3	I	-	[COCKPIT_AUDIO_1]
01	P	84	PP	SMPM	COCKPIT INTERFACE 2 AUDIO LOOPBACK FAIL	3	3	I	-	[COCKPIT_AUDIO_2]
01	P	85	PP	SMPM	CTU CEPT-E1 AUDIO LOOPBACK FAIL	3	3	I	-	[CCS]

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Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
01	P	06	-	-	SPARE	-	-	-	-	-
01	P	07	CM	SMPM	CABIN AUDIO DISCRETE OUTPUTS LOOPBACK FAIL	3	3	I	-	NONE
01	P	08	CM	SMPM	COCKPIT AUDIO DISCRETE OUTPUTS LOOPBACK FAIL	3	3	I	-	NONE
01	P	89	PP	SMPM	CTU CEPT-E1 HDLC LOOPBACK FAIL	3	2	I	-	[CCS]
01	P	8A	PP	SMPM	CABIN INTERFACE 1 BUS ERROR	1	1	I	-	[CABIN_AUDIO_1]
01	P	8B	PP	SMPM	CABIN INTERFACE 2 BUS ERROR	1	1	I	-	[CABIN_AUDIO_2]
01	P	8C	PP	SMPM	COCKPIT INTERFACE 1 BUS ERROR	1	1	I	-	[COCKPIT_AUDIO_1]
01	P	8D	PP	SMPM	COCKPIT INTERFACE 2 BUS ERROR	1	1	I	-	[COCKPIT_AUDIO_2]
01	P	8E	PP	SMPM	CTU CEPT-E1 BUS ERROR	1	1	I	-	[CCS]

"OTHER" SATCOM SYSTEM

02	0	01	CM	SMPM	PROTOCOL VERSION NUMBER INCOMPATIBLE	3	2	I	-	[OTHER_SATCOM]
02	0	02	CM	SMPM	SDU/SDU MESSAGE PROTOCOL ERROR	3	2	I	-	[OTHER_SATCOM]

RESERVED

03	-	-	-	-	-	-	-	-	26	-
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HGA/IGA HPA

This section lists failure codes inclusive of all HPA designs. Each HPA uses the SRU codes appropriate to its design. Refer to Table 4.4.4-2 regarding the distinctions of SRUs between the 40W and 20W HPAs, and Section 3.2.1.4.2.5 regarding the architectural changes made in 40W HPA Hardware Mod D.

UNKNOWN HGA/IGA HPA SRU

04	0	01	CM	SMPM	<HGA HPA> STATUS WORD (143) UPDATE RATE FAIL	1	1	I	-	[HGA_SUBSYS]
04	0	02	CM	SMPM	<HGA HPA> STATUS WORD (143) DATA FAIL	1	1	I	-	[HGA_SUBSYS]
04	0	03	CM	SMPM	<HGA HPA> MNTNC WORD (350) UPDATE RATE FAIL	3	2	I	-	NONE
04	0	04	CM	SMPM	<HGA HPA> MNTNC WORD (350) DATA FAIL	3	2	I	-	NONE
04	0	05	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	0	06	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	0	87	PP	SMPM	<HGA HPA> SELF-TEST MISOPERATION	3	2	I	-	NONE
04	0	08	CM	HMPM	<HGA HPA> RF OVERDRIVE ERROR	3	3	I	-	NONE
04	0	09	CM	HMPM	<HGA HPA> RF SUPPLY CURRENT FAIL	1	1	I	-	NONE
04	0	0A	CM	HMPM	<HGA HPA> OVER TEMP (COMB/DET) SHUTDOWN	1	1	I	11,16	NONE
04	0	0B	CM	SMPM	<HGA HPA> NO RESPONSE TO CARRIER COMMAND	1	1	I	-	[HGA_SUBSYS]
04	0	0C	CM	SMPM	<HGA HPA> FAILURE WARNING W/NO DISC'S SET	1	1	I	27	[cond_HGA_SUBSYS]
04	0	0D	CM	SMPM	<HGA HPA> 429 MNTNC WORD PSU FAIL (350)	1	1	I	27	[cond_HGA_SUBSYS]
04	0	0E	CM	SMPM	<HGA HPA> 429 MNTNC WORD INTERNAL RAM FAIL	1	1	I	27	[cond_HGA_SUBSYS]
04	0	0F	CM	SMPM	<HGA HPA> 429 MNTNC WORD INTERNAL ROM FAIL	1	1	I	27	[cond_HGA_SUBSYS]
04	0	10	CM	SMPM	<HGA HPA> CLASS C HPA MAX AVAIL PWR FAIL	3	2	I	-	NONE

HPSU: HPA AC OR DC POWER SUPPLY UNIT

04	1	01	CM	HMPM	<HGA HPA> PSU OVER TEMP SHUTDOWN	1	1	I	11	NONE
04	1	02	CM	HMPM	<HGA HPA> PSU TEMP SENSOR FAIL	3	2	I	-	NONE
04	1	03	CM	HMPM	<HGA HPA> PSU BIAS +5VDC FAIL	1	1	I	-	NONE
04	1	04	CM	HMPM	<HGA HPA> PSU +28/+25.5 VDC FAIL	1	1	I	17	NONE
04	1	05	CM	HMPM	<HGA HPA> PSU +5 VDC FAIL	1	1	I	-	NONE
04	1	06	CM	HMPM	<HGA HPA> PSU +15 VDC FAIL	1	1	I	-	NONE
04	1	07	CM	HMPM	<HGA HPA> PSU -15 VDC FAIL	1	1	I	-	NONE
04	1	08	CM	HMPM	<HGA HPA> PSU -85 VDC FAIL	1	1	I	15	NONE
04	1	09	CM	HMPM	<HGA HPA> PSU +8 VDC FAIL	1	1	I	15	NONE

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Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
04	1	0A	CM	HMPM	<HGA HPA> PSU +16 VDC FAIL	1	1	I	15	NONE
HMPM: HPA MAIN PROCESSOR MODULE										
04	2	81	PP	HMPM	<HGA HPA> H/W-S/W COMPATIBILITY FAIL	1	1	I	-	NONE
04	2	02	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	83/03	PP/CM	HMPM	<HGA HPA> BOOT FLASH MEMORY FAIL	1	1	I	-	NONE
04	2	04	CM	HMPM	<HGA HPA> A429 SDU XMTR LOOP-BACK FAIL	1	1	I	-	NONE
04	2	05	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	06	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	87	PP	HMPM	<HGA HPA> A429 MULTICNT RCVR FAIL	1	1	I	-	NONE
04	2	88	PP	HMPM	<HGA HPA> A429 ADL RCVR FAIL	3	3	I	-	NONE
04	2	89	PP	HMPM	<HGA HPA> A429 PDL-TO-HPA RCVR FAIL	3	3	I	-	NONE
04	2	0A	CM	HMPM	<HGA HPA> MAINTENANCE MEMORY CRC FAIL	3	2	I	-	NONE
04	2	0B	CM	HMPM	<HGA HPA> MAINTENANCE MEMORY WRITE FAIL	3	2	I	-	NONE
04	2	8C/0C	PP/CM	HMPM	<HGA HPA> CALIBRATION MEMORY CRC FAIL	1	1	I	-	NONE
04	2	0D	CM	HMPM	<HGA HPA> CALIBRATION MEMORY WRITE FAIL	1	1	I	-	NONE
04	2	8E/0E	PP/CM	HMPM	<HGA HPA> PROGRAM FLASH MEMORY FAIL	1	1	I	-	NONE
04	2	0F	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	90	PP	HMPM	<HGA HPA> RAM FAIL	1	1	I	-	NONE
04	2	11	CM	HMPM	<HGA HPA> CPU OVER TEMP SHUTDOWN	1	1	I	11	NONE
04	2	12	CM	HMPM	<HGA HPA> CPU TEMP SENSOR FAIL	3	2	I	-	NONE
04	2	93/13	PP/CM	HMPM	<HGA HPA> CPU GND REF FAIL	3	2	I	-	NONE
04	2	94/14	PP/CM	HMPM	<HGA HPA> FAN RELAY DRIVER FAIL	3	2	I	16	NONE
04	2	95/15	PP/CM	HMPM	<HGA HPA> BIAS ENABLE LOOPBACK FAIL	1	1	I	-	NONE
04	2	96/16	PP/CM	HMPM	<HGA HPA> VAR ATTN DRIVER FAIL	1	1	I	-	NONE
04	2	17	CM	HMPM	<HGA HPA> FRONT PANEL TEST SWITCH STUCK	3	3	I	-	NONE
04	2	98	PP	HMPM	<HGA HPA> WATCHDOG TIMEOUT FAIL	3	2	I	-	NONE
04	2	19	CM	HMPM	<HGA HPA> DRIVER GND FAIL	3	2	I	-	NONE
04	2	1A	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	1B	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	9C/1C	PP/CM	HMPM	<HGA HPA> DRIVER TEST - MUX	1	1	I	-	NONE
04	2	9D	PP	HMPM	<HGA HPA> DRIVER TEST - GREEN LED	3	3	I	-	NONE
04	2	9E	PP	HMPM	<HGA HPA> DRIVER TEST - RED LED	3	3	I	-	NONE
04	2	1F	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	A0	PP	HMPM	<HGA HPA> DRIVER TEST-MUTE ATTENUATOR	1	1	I	-	NONE
04	2	21	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	A2	PP	HMPM	<HGA HPA> DRIVER TEST - SER DATA CONCATENATE	1	1	I	-	NONE
04	2	23	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	24	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	A5	PP	HMPM	<HGA HPA> MUTE INPUT TEST	1	1	I	-	NONE
04	2	A6	PP	HMPM	<HGA HPA> CPU DEVICE TEST	1	1	I	-	NONE
04	2	A7	PP	HMPM	<HGA HPA> ACTUAL POWER CALIBRATION	3	2	I	-	NONE
04	2	A8	PP	HMPM	<HGA HPA> VALIDATION OF UPLOAD	1	1	I	-	NONE
04	2	29	CM	HMPM	<HGA HPA> MUTE ATTN P OUT OF LIMITS	1	1	I	-	NONE
04	2	2A	CM	HMPM	<HGA HPA> CODE VPP OUT OF LIMITS	3	3	I	-	NONE
04	2	2B	CM	HMPM	<HGA HPA> MAINT LOG VPP OUT OF LIMITS	3	2	I	-	NONE
04	2	2C	CM	HMPM	<HGA HPA> CAL MEM VPP OUT OF LIMITS	3	3	I	-	NONE
04	2	AD/2D	PP/CM	HMPM	<HGA HPA> ADC REF OUT OF LIMITS	1	1	I	-	NONE
04	2	2E	CM	HMPM	<HGA HPA> PWR LO OUT OF LIMITS	3	2	I	-	NONE
04	2	2F	CM	HMPM	<HGA HPA> PSU TEMP LO OUT OF LIMITS	3	2	I	-	NONE
04	2	30	CM	HMPM	<HGA HPA> AMPS LO OUT OF LIMITS	3	2	I	-	NONE
04	2	31	CM	HMPM	<HGA HPA> SOFTWARE FAULT	3	2	I	-	NONE
04	2	32	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	2	B3/33	PP/CM	HMPM	<HGA HPA> DISC OUTPUT TEST - FAN	3	3	I	16	NONE
04	2	B4	PP	HMPM	<HGA HPA> RS-422 INTERNAL LOOPBACK FAIL	3	3	I	15	NONE
04	2	35	CM	HMPM	<HGA HPA> IGA LNA/DIP ON/OFF DISC LOOP FAIL	1	1	I	15	NONE

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Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
DRIV: HPA RF DRIVER										
04	3	01	CM	HMPM	<HGA HPA> DRIVER RF OUTPUT FAIL	1	1	I	16	NONE
04	3	02	CM	HMPM	<HGA HPA> DRIVER TEMP SENSOR FAIL	3	2	I	16	NONE
04	3	03	CM	HMPM	<HGA HPA> DRIVER OVER TEMP SHUTDOWN	1	1	I	11,16	NONE
04	3	04	CM	HMPM	<HGA HPA> DRIVER VCC FAIL	1	1	I	16	NONE
04	3	05	-	-	<HGA HPA> SPARE	-	-	-	-	-
SPLT: HPA RF SPLITTER										
04	4	01	-	-	<HGA HPA> SPARE	-	-	-	-	-
PWR1: HPA RF POWER AMPLIFIER (1)										
04	5	01	CM	HMPM	<HGA HPA> <AMP 1> RF BALANCE FAIL	1	1	I	16	NONE
04	5	02	CM	HMPM	<HGA HPA> <AMP 1> VCC FAIL	1	1	I	16	NONE
04	5	03	-	-	<HGA HPA> SPARE	-	-	-	-	-
PWR2: HPA RF POWER AMPLIFIER (2)										
04	6				Same as for PWR1 except sub. SRU code 6 for 5 and <AMP-2> for <AMP-1>.	-	-	-	9,16	-
PWR3: HPA RF POWER AMPLIFIER (3)										
04	7				Same as for PWR1 except sub. SRU code 7 for 5 and <AMP-3> for <AMP-1>.	-	-	-	9,16	-
C/DET: HPA RF POWER COMBINER/DETECTOR										
04	8	01	CM	HMPM	<HGA HPA> FORWARD OUTPUT POWER DET 1 FAIL	1	1	I	16	NONE
04	8	02	CM	HMPM	<HGA HPA> FORWARD OUTPUT POWER DET 2 FAIL	1	1	I	16	NONE
04	8	03	CM	HMPM	<HGA HPA> FORWARD OUTPUT PWR COMPARE FAIL	1	1	I	16	NONE
04	8	04	CM	HMPM	<HGA HPA> REFLECTED OUTPUT PWR DET FAIL	3	2	I	16	NONE
04	8	05	CM	HMPM	<HGA HPA> COMBINER TEMP SENSOR FAIL	3	2	I	16	NONE
04	8	06	-	-	<HGA HPA> SPARE	-	-	-	-	-
FPAMP: HPA RF FINAL POWER AMPLIFIER										
04	9	01	CM	HMPM	<HGA HPA> FINAL AMP 1 RF BALANCE FAIL	1	1	I	10,16	NONE
04	9	02	CM	HMPM	<HGA HPA> FINAL AMP 1 VCC FAIL	1	1	I	10,16	NONE
04	9	03	-	-	<HGA HPA> SPARE	-	-	-	-	-
04	9	04	CM	HMPM	<HGA HPA> FINAL AMP 2 RF BALANCE FAIL	1	1	I	10,16	NONE
04	9	05	CM	HMPM	<HGA HPA> FINAL AMP 2 VCC FAIL	1	1	I	10,16	NONE
04	9	06	-	-	<HGA HPA> SPARE	-	-	-	-	-
HMB: HPA MOTHER BOARD										
04	A				NONE					
RFAM: 20W HPA RF AMPLIFIER MODULE										
04	B	01	CM	HMPM	<HGA HPA> OVER TEMP SHUTDOWN	1	1	I	11,15	NONE
04	B	02	CM	HMPM	<HGA HPA> RFAM VCC FAIL	1	1	I	15	NONE
04	B	03	CM	HMPM	<HGA HPA> AMP 1 VCC FAIL	1	1	I	15	NONE
04	B	04	CM	HMPM	<HGA HPA> FORWARD OUTPUT POWER DET 1 FAIL	1	1	I	15	NONE
04	B	05	CM	HMPM	<HGA HPA> FORWARD OUTPUT POWER DET 2 FAIL	1	1	I	15	NONE
04	B	06	CM	HMPM	<HGA HPA> REFLECTED OUTPUT PWR DET FAIL	3	2	I	15	NONE
04	B	07	CM	HMPM	<HGA HPA> TEMP SENSOR FAIL	3	2	I	15	NONE

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Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
04	B	08	CM	HMPM	<HGA HPA> FORWARD OUTPUT POWER FAIL	1	1	I	15	NONE
04	B	09	CM	HMPM	<HGA HPA> AMP 2 RF BALANCE FAIL	1	1	I	15	NONE
04	B	0A	CM	HMPM	<HGA HPA> AMP 2 VCC FAIL	1	1	I	15	NONE

SPARE Level 1 Codes

05
06

LGA HPA

07 Same entries as for HGA/IGA HPA above except substitute LRU code 7 for code 4, <LGA HPA> for <HGA HPA>, and [LGA_SUBSYS] for [HGA_SUBSYS]. For the cases of conditional HGA subsystem indictments ([cond_HGA_SUBSYS]), the equivalent LGA HPA failures shall UNconditionally indict [LGA_SUBSYS].

HSU #1

UNKNOWN <HSU1> SRU

08	0	01	CM	SMPM	<HSU1> SELF-DECLARED FAILURE	3	2	I	31	[HSU1]
08	0	02	CM	SMPM	<HSU1> WILLIAMSBURG PROTOCOL ALO/ALR FAIL	3	2	I	-	[HSU1]
08	0	03	CM	SMPM	<HSU1> WILLIAMSBURG PROTOCOL DATA XFER FAIL	3	2	I	-	[HSU1]
08	0	84	PP	SMPM	<HSU1> SELF-TEST MISOPERATION	3	2	I	-	[HSU1]
08	0	05	CM	SMPM	<HSU1> CHANNEL RELEASE ACKNOWLEDGE FAILURE	3	2	I	-	[HSU1]
08	0	86/06	PP/CM	SMPM	<HSU1> RF LOOPBACK INHIBIT FAILURE	3	2	I	-	[HSU1]

HSCPU: <HSU1> CPU

08	1	01-79	-	-	SPARE	-	-	-	-	-
08	1	FA	PP	HSCPU	<HSU1> ACCESS LEVEL DEVELOPMENT	3	2	I	31	NONE
08	1	FB	PP	HSCPU	<HSU1> ACCESS LEVEL PRODUCTION	3	2	I	31	NONE
08	1	FC	PP	HSCPU	<HSU1> ACCESS LEVEL PRODUCTION FAST STARTUP	3	2	I	31	NONE
08	1	FD	PP	HSCPU	<HSU1> SW VERSIONS INCONSISTENCY	3	2	I	31	NONE
08	1	7E	-	-	SPARE	-	-	-	-	-
08	1	7F	CM	HSCPU	<HSU1> ENVIRONMENT TEMP AT POWER-UP FAIL	3	2	I	31	NONE
08	1	80-90	-	-	SPARE	-	-	-	-	-
08	1	91	PP	HSCPU	<HSU1> TEMP SENSOR FAILURE	3	2	I	31	NONE

FDSMP: <HSU1> FRAME DSP (AND INTERFACES)

08	2	01-14	-	-	SPARE	-	-	-	-	-
08	2	95	PP	HSCPU	<HSU1> FRAME DSP/CPU INTERFACE FAILURE	3	2	I	31	NONE

VSDPM: <HSU1> VFC DSP (AND INTERFACES)

08	3	01-17	-	-	SPARE	-	-	-	-	-
08	3	98	PP	HSCPU	<HSU1> VFC DSP/CPU INTERFACE FAILURE	3	2	I	31	NONE

TFPGA: <HSU1> TURBO FPGA

08	4	01-05	-	-	SPARE	-	-	-	-	-
08	4	86	PP	HSCPU	<HSU1> TURBO FPGA FAIL	3	2	I	31	NONE

ISDNT: <HSU1> ISDN TRANSCEIVER

08	5	01-06	-	-	SPARE	-	-	-	-	-
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4.4.4-24

Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
08	5	87	PP	HSCPU	<HSU1> ISDN TRANSCEIVER FAILURE	3	2	I	31	NONE
AFPGA: <HSU1> ARINC 429 FPGA										
08	6	NONE								
CPURM: <HSU1> CPU RAM										
08	7	01-03	-	-	SPARE	-	-	-	-	-
08	7	84	PP	HSCPU	<HSU1> CPU RAM FAILURE	3	2	I	31	NONE
CEM: <HSU1> CONVERTER EEPROM										
08	8	81	PP	HSCPU	<HSU1> EEPROM FAILURE	3	2	I	31	NONE
FLASH: <HSU1> FLASH										
08	9	81	-	-	SPARE	-	-	-	-	-
08	9	82	PP	HSCPU	<HSU1> PARAMETER BLOCK CHECKSUM FAILURE	3	2	I	31	NONE
08	9	83	PP	HSCPU	<HSU1> CPU BIOS/APPLICATION CRC FAILURE	3	2	I	31	NONE
08	9	04-06	-	-	SPARE	-	-	-	-	-
08	9	87	PP	HSCPU	<HSU1> MISSING FILE IN FLASH	3	2	I	31	NONE
08	9	88	PP	HSCPU	<HSU1> CORRUPTED FILE IN FLASH/INCORRECT CRC	3	2	I	31	NONE
QUART: <HSU1> QUAD UART										
08	A	01-10	-	-	SPARE					
08	A	91	PP	HSCPU	<HSU1> EXTERNAL UART FAILURE	3	2	I	31	NONE
ETHER: <HSU1> ETHERNET										
08	B	NONE								
PSPCB: <HSU1> POWER SUPPLY PCB										
08	C	01-0A	-	-	SPARE	-	-	-	-	-
08	C	0B	CM	HSCPU	<HSU1> POWER FAILURE	3	2	I	31	NONE
ETIME: <HSU1> EXTERNAL TIMER										
08	D	NONE								
SPARE										
08	E	NONE								
SPARE										
08	F	NONE								
HCDMI: <HSU1>/CDM INTERFACE										
08	G	01-71	-	-	SPARE	-	-	-	-	-
08	G	F2	PP	HSCPU	<HSU1> CDM INTERFACE FAILURE	3	2	I	31	NONE
08	G	73-7D	-	-	SPARE	-	-	-	-	-
08	G	FE	PP	HSCPU	<HSU1> CDM NOT FITTED	3	2	I	31	NONE

4.4.4-25

Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
SPARE										
08	H	NONE								
SPARE										
08	I	NONE								
TDRAM: <HSU1> TURBO DECODER RAM										
08	J	81-89	-	-	SPARE	-	-	-	-	-
08	J	8A	PP	HSCPU	<HSU1> TURBO DECODER RAM FAILURE	3	2	I	31	NONE
BATTM: <HSU1> BATTERY										
08	K	01-04	-	-	SPARE	-	-	-	-	-
08	K	85	PP	HSCPU	<HSU1> BATTERY CHECK FAILURE	3	2	I	31	NONE
IUART: <HSU1> INTERNAL UART										
08	L	NONE								
STAM: <HSU1> STEP ATTENUATOR										
08	M	01-04	-	-	SPARE	-	-	-	-	-
08	M	B5	PP	HSCPU	<HSU1> STEP ATTENUATOR FAILURE	3	2	I	31	NONE
HRFM: <HSU1> RF										
08	N	81	PP	HSCPU	<HSU1> 1.LO LOCK DETECTOR FAILURE	3	2	I	31	NONE
08	N	82	PP	HSCPU	<HSU1> 2.LO LOCK DETECTOR FAILURE	3	2	I	31	NONE
08	N	83	PP	HSCPU	<HSU1> 3.LO LOCK DETECTOR FAILURE	3	2	I	31	NONE
08	N	04-10	-	-	SPARE	-	-	-	-	-
08	N	91	PP	HSCPU	<HSU1> 1.LO MIN FREQUENCY TEST FAILURE	3	2	I	31	NONE
08	N	92	PP	HSCPU	<HSU1> 2.LO MIN FREQUENCY TEST FAILURE	3	2	I	31	NONE
08	N	93	PP	HSCPU	<HSU1> 3.LO MIN FREQUENCY TEST FAILURE	3	2	I	31	NONE
08	N	14-20	-	-	SPARE	-	-	-	-	-
08	N	A1	PP	HSCPU	<HSU1> 1.LO MAX FREQUENCY TEST FAILURE	3	2	I	31	NONE
08	N	A2	PP	HSCPU	<HSU1> 2.LO MAX FREQUENCY TEST FAILURE	3	2	I	31	NONE
08	N	A3	PP	HSCPU	<HSU1> 3.LO MAX FREQUENCY TEST FAILURE	3	2	I	31	NONE
08	N	24-2F	-	-	SPARE	-	-	-	-	-
08	N	B0	PP	HSCPU	<HSU1> ALC - CARRIER OFF FAILURE	3	2	I	31	NONE
08	N	B1	PP	HSCPU	<HSU1> ALC - CARRIER ON FAILURE	3	2	I	31	NONE
08	N	B2	PP	HSCPU	<HSU1> RF LOOPBACK FAILURE	3	2	I	31	NONE
08	N	B3	PP	HSCPU	<HSU1> AVERAGE AMPLITUDE FAILURE	3	2	I	31	NONE
08	N	B4	PP	HSCPU	<HSU1> 16QAM SCPC FRAME SYNC FAILURE	3	2	I	31	NONE
08	N	35-39	-	-	SPARE	-	-	-	-	-
08	N	BA	PP	HSCPU	<HSU1> INTERNAL RX COAX CABLE FAILURE	3	2	I	31	NONE
08	N	BB	PP	HSCPU	<HSU1> TX/RX CHANNEL FREQUENCY ERROR	3	2	I	31	NONE
08	N	BC	PP	HSCPU	<HSU1> CARRIER_ON OFF CONTROL FAILURE	3	2	I	31	NONE
08	N	BD	PP	HSCPU	<HSU1> RF LOOP_BACK OFF CONTROL FAILURE	3	2	I	31	NONE
08	N	BE	PP	HSCPU	<HSU1> TX_ON/OFF CONTROL FAILURE	3	2	I	31	NONE
08	N	BF-40	-	-	SPARE	-	-	-	-	-
08	N	41	CM	HSCPU	<HSU1> AGC LEVEL OUTSIDE LIMITS WARNING	3	2	I	31	NONE
08	N	42	-	-	SPARE	-	-	-	-	-
08	N	C3	PP	HSCPU	<HSU1> LINEARITY OUTSIDE LIMITS WARNING	3	2	I	31	NONE
08	N	44-50	-	-	SPARE	-	-	-	-	-

4.4.4-26

Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
	08	N	51	CM	HSCPU <HSU1> 1.LO LOCK FAILURE	3	2	I	31	NONE
	08	N	52	CM	HSCPU <HSU1> 2.LO LOCK FAILURE	3	2	I	31	NONE
	08	N	53	CM	HSCPU <HSU1> 3.LO LOCK FAILURE	3	2	I	31	NONE
REOSM: <HSU1> REFERENCE OSCILLATOR										
	08	O	01-41	-	-	SPARE	-	-	-	-
	08	O	42	CM	HSCPU <HSU1> REF OSC WARNING: SEND HSU TO CAL	3	2	I	31	NONE
	08	O	43-62	-	-	SPARE	-	-	-	-
	08	O	63	CM	HSCPU <HSU1> REF OSC FAILURE/VOLTAGE TOO LOW	3	2	I	31	NONE
	08	O	64	CM	HSCPU <HSU1> REF OSC FAILURE/VOLTAGE TOO HIGH	3	2	I	31	NONE
BMONM: <HSU1> BURST DURATION MONITOR										
	08	P	81	PP	HSCPU <HSU1> BURST DURATION MONITOR CIRCUIT	3	2	I	31	NONE
	08	P	02-03	-	-	SPARE	-	-	-	-
	08	P	04	CM	HSCPU <HSU1> TDM BURST DURATION FAILURE	3	2	I	31	NONE
	08	P	85	PP	HSCPU <HSU1> CARRIER ON SIGNALS	3	2	I	31	NONE
DCOMM: <HSU1> DOPPLER COMPENSATION										
	08	Q	01-38	-	-	SPARE	-	-	-	-
	08	Q	39	CM	HSCPU <HSU1> REF OSC COMPENSATION ERROR	3	2	I	31	NONE
FVFCI: <HSU1> FRAME DSP/VFC DSP INTERFACE										
	08	R	01-16	-	-	SPARE	-	-	-	-
	08	R	17	CM	HSCPU <HSU1> FRAME DSP/VFC DSP FAILURE	3	2	I	31	NONE
FDTFI: <HSU1> FRAME DSP/TURBO FPGA INTERFACE										
	08	S	01-15	-	-	SPARE	-	-	-	-
	08	S	96	PP	HSCPU <HSU1> FRAME TURBO FPGA INTERFACE FAILURE	3	2	I	31	NONE
VDTFI: <HSU1> VFC DSP/TURBO FPGA INTERFACE										
	08	T	NONE							
VDITI: <HSU1> VFC DSP/ISDN TRANSCEIVER INTERFACE										
	08	U	NONE							
TFTDR: <HSU1> TURBO FPGA/TURBO DECODER RAM INTERFACE										
	08	V	NONE							
PSIPI: <HSU1> POWER SUPPLY PCB/ISDN PHONE INTERFACE										
	08	W	01-07	-	-	SPARE	-	-	-	-
	08	W	88	PP	HSCPU <HSU1> ISDN SUPPLY VOLTAGE FAILURE	3	2	I	31	NONE
CDM: <HSU1> CONFIGURATION DATA MODULE										
	08	X	01-70	-	-	SPARE	-	-	-	-
	08	X	F1	PP	HSCPU <HSU1> INVALID SERIAL NUMBER	3	2	I	31	NONE
	08	X	72	-	-	SPARE	-	-	-	-
	08	X	F37	PP	HSCPU <HSU1> CDM ESSENTIAL DATA FAILURE	3	2	I	31	NONE

4.4.4-27

Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
08	X	F4	PP	HSCPU	<HSU1> CDM DATA ACCESS ERROR	3	2	I	31	NONE
08	X	F5	PP	HSCPU	<HSU1> CDM MISSING WRITE PROTECTION	3	2	I	31	NONE
08	X	F6	PP	HSCPU	<HSU1> CDM INCORRECT VERSION	3	2	I	31	NONE
SPARE										
08	Y	NONE								
ITPSI: <HSU1> ISDN TRANSCEIVER/POWER SUPPLY PCB INTERFACE										
08	Z	01-08	-	-	SPARE					
08	Z	89	PP	HSCPU	<HSU1> ISDN RX VOLTAGE	3	2	I	31	NONE
HSU #2										
09					Same entries as for HSU #1 above except substitute LRU code 09 for code 08, <HSU2> for <HSU1>, and [HSU2] for [HSU1].					
HIGH POWER RELAY										
UNKNOWN HPR SRU										
0A	0	01	CM	SMPM	(PORT) MNTNC WORD HPR FAIL	1	1	I	27	[cond_HGA_SUBSYS]
0A	0	02	CM	SMPM	(STBD) MNTNC WORD HPR FAIL	1	1	I	27	[cond_HGA_SUBSYS]
SPARE										
0B										
0C										
TOP/PORT LNA/DIPLEXER										
UNKNOWN TOP/PORT LNA/DIPLEXER SRU										
0D	0	01	CM	SMPM	<T/P LNA/DIP> MNTNC WORD FAIL	1	1	I	19,27	[cond_HGA_SUBSYS]
SPARE										
0E										
STARBOARD LNA/DIPLEXER										
0F					Same entries as for TOP/PORT LNA/Diplexer above except substitute STBD BSU for T/P BSU, LRU code 0F for code 0D and <STBD LNA/DIP> for <T/P LNA/DIP>.					
LGA LNA/DIPLEXER										
UNKNOWN LGA LNA/DIPLEXER SRU										
10	0	01	CM	SMPM	LGA LNA/DIP FAIL	1	1	I	-	NONE
SPARE										
11										

4.4.4-28

Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
12										
TOP/PORT BSU OR ACU										
UNKNOWN TOP/PORT BSU OR ACU SRU										
13	0	01	CM	SMPM	<T/P B/A> MNTNC WORD (350) UPDATE RATE FAIL	1	2	I	-	NONE
13	0	02	CM	SMPM	<T/P B/A> MNTNC WORD (350) DATA FAIL	1	2	I	-	NONE
13	0	03	CM	SMPM	<T/P B/A> STATUS WORD (144) UPDATE RATE FAIL	1	1	I	-	[HGA_SUBSYS]
13	0	04	CM	SMPM	<T/P B/A> STATUS WORD (144) DATA FAIL	1	1	I	-	[HGA_SUBSYS]
13	0	05	CM	SMPM	<T/P B/A> MNTNC WORD RAM FAIL	1	1	I	27	[cond_HGA_SUBSYS]
13	0	06	CM	SMPM	<T/P B/A> MNTNC WORD ROM FAIL	1	1	I	27	[cond_HGA_SUBSYS]
13	0	07	CM	SMPM	<T/P B/A> MNTNC WORD PSU FAIL	1	1	I	27	[cond_HGA_SUBSYS]
13	0	08	CM	SMPM	<T/P B/A> MNTNC WORD PARAMETER FAIL	1	1	I	27	[cond_HGA_SUBSYS]
13	0	09	CM	SMPM	<T/P B/A> MNTNC WORD TEMP FAIL	1	2	I	27	[cond_HGA_SUBSYS]
13	0	8A	PP	SMPM	<T/P B/A> SELF-TEST MISOPERATION	1	2	I	-	NONE

SPARE

14

STARBOARD BSU

15 Same entries as for TOP/PORT BSU or ACU above except substitute LRU code 15 for code 13 and <STBD BSU> for <T/P B/A>.

SPARE

16

17

18

19

TOP/PORT HGA/IGA

UNKNOWN TOP/PORT HGA/IGA SRU										
1A	0	01	CM	SMPM	<T/P HGA/IGA> MNTNC WORD FAIL	1	1	I	19,27	[cond_HGA_SUBSYS]
1A	0	02	CM	HMPM	IGA FAILURE	1	1	I	15	NONE
1A	0	03	CM	HMPM	IGA RS-422 INPUT BUS LINK FAULT	1	1	I	15	NONE
1A	0	04	CM	HMPM	IGA HPA RS-422 INPUT BUS ERROR/INACTIVE	1	1	I	15	NONE

SPARE

1B

STARBOARD HGA

1C Same entries as for TOP/PORT HGA above except substitute LRU code 1C for code 1A, <STBD BSU> for <T/P B/A>, and <STBD HGA> for <T/P HGA>.

4.4.4-29

Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
SPARE										
1D										
1E										
LGA										
UNKNOWN LGA SRU										
1F RESERVED										
SPARE										
20										
SCDU/WSC #1										
UNKNOWN SCDU/WSC #1 SRU										
21	0	01	CM	SMPM	<SCDU-1> PROTOCOL ERROR	3	3	E	-	[SCDU1]
21	0	02	CM	SMPM	<WSC-1> STATUS (270) BAD SSM	3	1	E	-	[SCDU1]
21	0	03	CM	SMPM	<WSC-1> MASTER PROTOCOL ERROR	3	3	E	-	[SCDU1]
21	0	04	CM	SMPM	<WSC-1> DATA TRANSMISSION FAILURE	3	3	E	-	[SCDU1]
21	0	05	CM	SMPM	<WSC-1> SLAVE PROTOCOL ERROR	3	3	E	-	[SCDU1]
21	0	06	-	-	SPARE	-	-	-	-	-
21	0	07	CM	SMPM	<WSC-1> MASTER TEST LOOP FAILURE	3	3	E	-	[SCDU1]
21	0	08	CM	SMPM	<WSC-1> SLAVE TEST LOOP FAILURE	3	3	E	-	[SCDU1]
SCDU/WSC #2										
22 Same entries as for SCDU/WSC #1 above except substitute LRU code 22 for code 21, <WSC-2> for <WSC-1>, and <SCDU-2> for <SCDU-1>.										
SCDU/WSC #3										
23 Same entries as for SCDU/WSC #1 above except substitute LRU code 23 for code 21, <WSC-3> for <WSC-1>, and <SCDU-3> for <SCDU-1>.										
SPARE										
24-2F										
RMP										
UNKNOWN RMP SRU										
30 RESERVED										
SPARE										
31										
32										

4.4.4-30

Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
(C)MU #1										
UNKNOWN (C)MU #1 SRU										
33	0	01	-	-	<(C)MU-1> SPARE	-	-	-	-	-
33	0	02	CM	SMPM	<(C)MU-1> STATUS (270) BAD SSM	3	1	E	-	NONE
33	0	03	CM	SMPM	<(C)MU-1> MASTER PROTOCOL ERROR	3	3	E	-	[CMU]
33	0	04	CM	SMPM	<(C)MU-1> DATA TRANSMISSION FAILURE	3	3	E	-	[CMU]
33	0	05	CM	SMPM	<(C)MU-1> SLAVE PROTOCOL ERROR	3	3	E	-	[CMU]
33	0	06	CM	SMPM	<(C)MU-1> SELF-DECLARED FAILURE	3	1	E	-	NONE
33	0	07	CM	SMPM	<(C)MU-1> MASTER TEST LOOP FAILURE	3	3	E	-	[CMU]
33	0	08	CM	SMPM	<(C)MU-1> SLAVE TEST LOOP FAILURE	3	3	E	-	[CMU]

(C)MU #2

34 Same entries as for CMU #1 above except substitute LRU code 34 for code 33 and <(C)MU-2> for <(C)MU-1>.

IRS-PRI

UNKNOWN IRS-PRI SRU										
35	0	01	-	-	SPARE	-	-	-	12	-
35	0	02	CM	SMPM	<IRS-PRI> LAT DATA (310) FAIL	1	2	E	12	[IRS_PRI]
35	0	03	-	-	SPARE	-	-	-	12	-
35	0	04	CM	SMPM	<IRS-PRI> LON DATA (311) FAIL	1	2	E	12	[IRS_PRI]
35	0	05	-	-	SPARE	-	-	-	12	-
35	0	06	CM	SMPM	<IRS-PRI> GND SPD DATA (312) FAIL	1	2	E	12	[IRS_PRI]
35	0	07	-	-	SPARE	-	-	-	12	-
35	0	08	CM	SMPM	<IRS-PRI> TRK DATA (313) FAIL	1	2	E	12	[IRS_PRI]
35	0	09	-	-	SPARE	-	-	-	12	-
35	0	0A	CM	SMPM	<IRS-PRI> TRUE HDG DATA (314) FAIL	1	2	E	12	[IRS_PRI]
35	0	0B	-	-	SPARE	-	-	-	12	-
35	0	0C	CM	SMPM	<IRS-PRI> PITCH DATA (324) FAIL	1	2	E	12	[IRS_PRI]
35	0	0D	-	-	SPARE	-	-	-	12	-
35	0	0E	CM	SMPM	<IRS-PRI> ROLL DATA (325) FAIL	1	2	E	12	[IRS_PRI]

IRS-SEC

36 Same entries as for IRS-PRI above except substitute LRU code 36 for code 35 and <IRS-SEC> for <IRS-PRI>.

RESERVED

37	-	-	-	-	-	-	-	-	26	-
38	-	-	-	-	-	-	-	-	26	-

CFDS/CMC

UNKNOWN CFDS/CMC SRU										
39	0	01	CM	SMPM	INVALID OMS PARAMETER(S)	3	3	E	29	NONE

SPARE

4.4.4-31

Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
3A-3C										
FMC #1										
UNKNOWN FMC #1 SRU										
3D RESERVED										
FMC #2										
3E Same entries as for FMC #1 above except substitute LRU code 3E for code 3D and <FMC-2> for <FMC-1>.										
SPARE										
3F										
429 ICAO ADDRESS SOURCE										
UNKNOWN 429 ICAO ADDRESS SOURCE SRU										
40	0	01	CM	SMPM	429 ICAO ADDRESS FAIL	1	1	E	-	[429_ID]
40	0	02	CM	SMPM	DUAL SYSTEM DIFFERENT 429 AES ID	3	2	I	-	NONE
SPARE										
41										
CABIN TELECOMMUNICATIONS UNIT										
UNKNOWN CABIN TELECOMMUNICATIONS UNIT SRU										
42	0	01	CM	SMPM	CCS ECL NOT ESTABLISHED	3	2	E	-	[CCS]
42	0	02	CM	SMPM	CCS CCL NOT ESTABLISHED	3	2	E	-	[CCS_VOICE]
42	0	03	CM	SMPM	CCS CTU NOT AVAILABLE	3	2	E	-	[CCS]
42	0	04	CM	SMPM	CCS PDL NOT ESTABLISHED	3	2	E	-	[CCS_DATA]
CPDF										
43 Same entries as for CMU #1 above except substitute LRU code 43 for code 33, <CPDF> for <(C)MU-1> and make the class of all CPDF failure 2.										
SPARE										
44 - 4F										
SDU INPUT BUSES AND RELATED										
50	0	01	CM	SMPM	SDU HSU1 BUS INACTIVE	3	2	I	-	[HSU1]
50	0	02	CM	SMPM	HSU1 SELF-TEST MISOPERATION	3	2	I	-	[HSU1]
50	0	03	CM	SMPM	HSU1 PERIODIC DATA RATE FAIL	3	2	I	-	[HSU1]
50	0	04	CM	SMPM	HSU1 SOLO WORD DATA RATE FAIL	3	2	I	-	[HSU1]

4.4.4-32

Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
50	0	05	CM	SMPM	HSU1 W'BURG DATA RATE FAIL	3	2	I	-	[HSU1]
51	0	01	CM	SMPM	SDU HSU2 BUS INACTIVE	3	2	I	-	[HSU2]
51	0	02	CM	SMPM	HSU2 SELF-TEST MISOPERATION	3	2	I	-	[HSU2]
51	0	03	CM	SMPM	HSU2 PERIODIC DATA RATE FAIL	3	2	I	-	[HSU2]
51	0	04	CM	SMPM	HSU2 SOLO WORD DATA RATE FAIL	3	2	I	-	[HSU2]
51	0	05	CM	SMPM	HSU2 W'BURG DATA RATE FAIL	3	2	I	-	[HSU2]
52	0	01	CM	SMPM	SDU CPDF BUS INACTIVE	3	2	E	-	[CPDF]
53	0	01	CM	SMPM	SDU CMU-1 BUS INACTIVE	1	1	E	-	[CMU1]
54	0	01	CM	SMPM	SDU CTU CEPT-E1 BUS INACTIVE	3	1	I	-	[CCS]
55	0	01	CM	SMPM	SDU SCDU/WSC-1 BUS INACTIVE	3	2	E	-	[SCDU1]
56	0	01	CM	SMPM	SDU SCDU/WSC-2 BUS INACTIVE	3	2	E	-	[SCDU2]
57	0	01	CM	SMPM	SDU CMU-2 BUS INACTIVE	1	2	E	-	[CMU2]
58	0	01	-	-	SPARE MP4A/B	-	-	-	-	-
59	0	01	CM	SMPM	SDU CFDS BUS INACTIVE	3	2	E	-	NONE
5A	0	01	CM	SMPM	SDU PRI IRS BUS INACTIVE	1	2	E	-	[IRS_PRI]
5B	0	01	CM	SMPM	SDU SEC IRS BUS INACTIVE	1	2	E	-	[IRS_SEC]
5C	0	01	CM	SMPM	SDU HGA/IGA HPA BITE BUS INACTIVE	1	1	I	-	[HGA_SUBSYS]
5C	0	02	CM	SMPM	HGA/IGA HPA SELF-TEST MISOPERATION	1	2	I	-	[HGA_SUBSYS]
5D	-	-	-	-	SPARE	-	-	-	-	-
5E	-	-	-	-	SPARE MP6G/H	-	-	-	-	-
5F	0	01	CM	SMPM	SDU LGA HPA BITE BUS INACTIVE	1	1	I	-	[LGA_SUBSYS]
5F	0	02	CM	SMPM	LGA HPA SELF-TEST MISOPERATION	1	2	I	-	[LGA_SUBSYS]
60	-	-	-	-	SPARE MP7A/B	-	-	-	-	-
61	-	-	-	-	SPARE	-	-	-	-	-
62	0	01	CM	SMPM	SDU TOP/PORT BSU/ACU BITE BUS INACTIVE	1	1	I	-	[HGA_SUBSYS]
62	0	02	CM	SMPM	TOP/PORT BSU/ACU SELF-TEST MISOPERATION	1	2	I	-	[HGA_SUBSYS]
63	-	-	-	-	SPARE	-	-	-	-	-
64	0	01	CM	SMPM	SDU STBD BSU BITE BUS INACTIVE	1	1	I	-	[HGA_SUBSYS]
64	0	02	CM	SMPM	STBD BSU/ACU SELF-TEST MISOPERATION	1	2	I	-	[HGA_SUBSYS]
65	0	01	CM	SMPM	SDU RMP BUS INACTIVE	1	1	E	2	-
66	0	01	CM	SMPM	SDU SCDU/WSC-3 BUS INACTIVE	3	2	E	-	[SCDU3]
67	0	01	-	-	RESERVED	-	-	-	26	-
68	0	01	-	-	RESERVED	-	-	-	26	-
69	-	-	-	-	SPARE	-	-	-	-	-
6A	0	81	-	-	RESERVED	-	-	-	26	-
6B	0	01	-	-	SPARE	-	-	-	-	-
6C	0	81	-	-	RESERVED	-	-	-	26	-
6D	0	81	-	-	RESERVED	-	-	-	26	-
6E	0	81	-	-	RESERVED	-	-	-	26	-
6F	0	81	-	-	RESERVED	-	-	-	26	-
70	-	-	-	-	SPARE	-	-	-	-	-
71	0	01	CM	SMPM	SDU CROSS-TALK BUS INACTIVE	3	2	I	-	[OTHER_SATCOM]
72	-	-	-	-	SPARE MP12E/F	-	-	-	-	-
73	0	01	CM	SMPM	SDU FMC-1 BUS INACTIVE	3	3	E	2	-
74	0	01	CM	SMPM	SDU FMC-2 BUS INACTIVE	3	3	E	2	-
75	-	-	-	-	SPARE	-	-	-	-	-
76	-	-	-	-	SPARE	-	-	-	-	-

4.4.4-33

Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
77	-	-	-	-	SPARE	-	-	-	-	-
78	-	-	-	-	SPARE	-	-	-	-	-
79	-	-	-	-	SPARE	-	-	-	-	-
7A	-	-	-	-	SPARE	-	-	-	-	-
7B	-	-	-	-	SPARE	-	-	-	-	-
7C	-	-	-	-	SPARE	-	-	-	-	-
7D	-	-	-	-	SPARE	-	-	-	-	-
7E	-	-	-	-	SPARE	-	-	-	-	-
7F	-	-	-	-	SPARE	-	-	-	-	-
RESERVED										
80-8F	-	-	-	-	-	-	-	-	-	26
HGA/IGA HPA INPUT BUSES										
90	0	01	CM	SMPM	HGA/IGA HPA 429 MNTNC WORD CTL BUS INACTIVE	1	1	I	-	[HGA_SUBSYS]
90	0	02	CM	HMPM	HGA/IGA HPA MULTICONTROL BUS INACTIVE	1	1	I	3	NONE
91	-	-	-	-	SPARE TP2A/B	-	-	-	-	-
92	-	-	-	-	SPARE	-	-	-	-	-
93	-	-	-	-	SPARE	-	-	-	-	-
94	-	-	-	-	SPARE	-	-	-	-	-
95	-	-	-	-	SPARE	-	-	-	-	-
LGA HPA INPUT BUSES										
96	0	01	CM	SMPM	LGA HPA 429 MNTNC WORD CONTROL BUS INACTIVE	1	1	I	-	[LGA_SUBSYS]
96	0	02	CM	HMPM	LGA HPA MULTICONTROL BUS INACTIVE	1	1	I	3	NONE
97	-	-	-	-	SPARE TP2A/B	-	-	-	-	-
TOP/PORT BSU/ACU INPUT BUSES										
98	0	01	CM	SMPM	MNTNC WORD T/P BSU/ACU MULTICTL BUS INACTIVE	1	1	I	-	[HGA_SUBSYS]
99	-	-	-	-	SPARE	-	-	-	-	-
PORT BSU INPUT BUSES										
9A	0	01	CM	SMPM	MNTNC WORD PORT BSU CROSSTALK BUS INACTIVE	1	1	I	-	NONE
9B	-	-	-	-	SPARE	-	-	-	-	-
STARBOARD BSU INPUT BUSES										
9C	0	01	CM	SMPM	MNTNC WORD STBD BSU MULTICTL BUS INACTIVE	1	1	I	-	[HGA_SUBSYS]
9D	0	01	CM	SMPM	MNTNC WORD STBD BSU CROSSTALK BUS INACTIVE	1	1	I	-	NONE
HSU #1 INPUT BUS										
9E	0	01	CM	SMPM	<HSU1> 429 CONTROL BUS INACTIVE	3	2	I	31	NONE
9E	0	02	CM	SMPM	<HSU1> ICAO ADDRESS INVALID	3	2	I	31	NONE
9E	0	03	CM	SMPM	<HSU1> POSITION UNAVAILABLE	3	2	I	31	NONE

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Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
9E	0	04	CM	SMPM	<HSU1> VELOCITY UNAVAILABLE	3	2	I	31	NONE

HSU #2 INPUT BUS

9F Same as entries for HSU #1 above except substitute Level 1 code 9F for code 9E and <HSU2> for <HSU1>.

SPARE

A0	-	-	-	-	SPARE	-	-	-	-	-
----	---	---	---	---	-------	---	---	---	---	---

WSC INPUT BUSES

A1	0	01	CM	SMPM	WSC1 429 CNTRL BUS FROM THIS SDU INACTIVE	1	1	E	-	[SCDU1]
A2	0	01	CM	SMPM	WSC2 429 CNTRL BUS FROM THIS SDU INACTIVE	1	1	E	-	[SCDU2]
A3	0	01	CM	SMPM	WSC3 429 CNTRL BUS FROM THIS SDU INACTIVE	1	1	E	-	[SCDU3]

SPARE

A4-BF

4.4.4-35

Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
<u>MISCELLANEOUS ERRORS, FAILURES AND WARNINGS</u>										
SDU SYSTEM CONFIGURATION STRAP ERRORS										
C0	0	81	PP	SMPM	SDU STRAPS PARITY ERROR	1	1	I	-	NONE
C0	0	82	PP	SMPM	SDU ANT CONFIG STRAPS ERROR	1	1	I	-	NONE
C0	0	83	PP	SMPM	SDU CFDS CONFIG STRAPS ERROR	1	2	I	-	NONE
C0	0	84	PP	SMPM	SDU STRAPS INCONSISTENCY	1	2	I	-	NONE
C0	0	05	CM	SMPM	DUAL SYSTEM CONFIG STRAPS ERROR	1	1	I	-	NONE
C0	0	06	CM	SMPM	DUAL REMOTE COCKPIT STRAPS INCOMPATIBLE	1	2	I	-	NONE
C0	0	87	PP	SMPM	MANUFACTURER-SPECIFIC STRAPS PARITY ERROR	1	1	I	-	NONE
MISC										
C1	0	81/01	PP/CM	SMPM	SDU WOW MISCOMPARE ERROR	3	1	E	-	NONE
C2	0	81	PP	SMPM	SDU DUAL SYSTEM SELECT/DISABLE TEST ERROR	3	2	I	-	NONE
C2	0	82	PP	SMPM	SDU DUAL SYSTEM SEL/DIS TEST NOT INITIATED	3	3	I	-	NONE
C3	0	81	PP	SMPM	SDU (ICAO) ADDRESS BITS (STRAPS) ERROR	1	1	I	-	[STRAPS_ID]
C3	0	02	CM	SMPM	DUAL SYSTEM DIFFERENT STRAPS AES ID	1	2	I	-	NONE
C4	0	01	CM	SMPM	HGA/IGA HPA 429 MNTNC WORD OUTPUT VSWR BAD	1	1	I	-	NONE
C4	0	02	CM	HMPM	HGA/IGA HPA REFLECTED OUTPUT POWER ERROR	1	1	I	3	NONE
C5	0	81/01	PP/CM	SMPM	ORT/LOCAL CONFIG STRAPS INCOMPATIBILITY	3	2	I	-	NONE
C5	0	02	CM	SMPM	DUAL ORT/COMBINED CONFIG STRAPS INCOMP	3	2	I	-	NONE
C6	0	01	CM	SMPM	LGA HPA 429 MNTNC WORD OUTPUT VSWR BAD	1	1	I	-	NONE
C6	0	02	CM	HMPM	LGA HPA REFLECTED OUTPUT POWER ERROR	1	1	I	3	NONE
HGA/IGA HPA OVER TEMP WARNINGS										
C7	0	01	CM	SMPM	HGA HPA MNTNC WORD LRU OVER TEMP	3	3	I	11	NONE
C7	1	01	CM	HMPM	HGA HPA PSU OVER TEMP WARNING	3	3	I	11	NONE
C7	2	01	CM	HMPM	HGA HPA CPU OVER TEMP WARNING	3	3	I	11	NONE
C7	3	01	CM	HMPM	HGA HPA DRIVER OVER TEMP WARNING	3	3	I	11,16	NONE
C7	8	01	CM	HMPM	HGA HPA OVER TEMP (COMBINER) WARNING	3	3	I	11,16	NONE
C7	B	01	CM	HMPM	HGA HPA RFAM OVER TEMP WARNING	3	3	I	11,15	NONE
MISC										
C8	0	01	CM	SMPM	INVALID FREQ CMD FROM GES	3	3	I	5	NONE
C8	0	02	CM	SMPM	GNSS INTERFERENCE RISK FROM GES	3	3	I	5	NONE
LGA HPA OVER TEMP WARNINGS										
C9	0	01	CM	SMPM	LGA HPA MNTNC WORD LRU OVER TEMP	3	3	I	-	NONE
C9	1	01	CM	HMPM	LGA HPA PSU OVER TEMP WARNING	3	3	I	-	NONE
C9	2	01	CM	HMPM	LGA HPA CPU OVER TEMP WARNING	3	3	I	-	NONE
C9	3	01	CM	HMPM	LGA HPA DRIVER OVER TEMP WARNING	3	3	I	-	NONE
C9	8	01	CM	HMPM	LGA HPA OVER TEMP (COMBINER) WARNING	3	3	I	-	NONE

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Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
MISC										
CA	0	01	CM	SMPM	LGA LNA CONTROL DRIVER FAIL	3	2	I	-	NONE
CB	0	01	PP	HMPM	HGA/IGA HPA INVALID SDI STRAPPING	1	1	I	6	NONE
CC	0	01	PP	HMPM	LGA HPA INVALID SDI STRAPPING	1	1	I	6	NONE
TOTC/POC RESETS										
CD	0	81/01	PP/CM	SMPM	SDU TOTC AUTO/MANUAL RESET	-	3	I	28	NONE
CD	0	82/02	PP/CM	SMPM	SDU POC AUTO/MANUAL RESET	-	3	I	28	NONE
CE	0	81/01	-	-	RESERVED	-	-	-	26	-
CE	0	82/02	-	-	RESERVED	-	-	-	26	-
CF	0	81/01	PP/CM	HMPM	HGA/IGA HPA TOTC AUTO/MANUAL RESET	-	3	I	28	NONE
CF	0	82/02	PP/CM	HMPM	HGA/IGA HPA POC AUTO/MANUAL RESET	-	3	I	28	NONE
D0	0	81/01	PP/CM	HMPM	LGA HPA TOTC AUTO/MANUAL RESET	-	3	I	28	NONE
D0	0	82/02	PP/CM	HMPM	LGA HPA POC AUTO/MANUAL RESET	-	3	I	28	NONE
WRONG SDI CODES										
D1	0	01	CM	SMPM	HGA/IGA HPA WRONG A429 SDI CODE	1	1	I	-	[COMMON]
D2	0	01	CM	SMPM	LGA HPA WRONG A429 SDI CODE	1	1	I	-	[COMMON]
D3	0	01	CM	SMPM	TOP/PORT BSU/ACU WRONG A429 SDI CODE	1	1	I	27	[cond_HGA_SUBSYS]
D4	0	01	CM	SMPM	STARBOARD BSU WRONG A429 SDI CODE	1	1	I	27	[cond_HGA_SUBSYS]
RF INTER-LRU FAILURES										
D5	0	01	CM	SMPM	SDU TO HGA/IGA HPA CALIBRATION ERROR	1	2	I	27	[cond_HGA_SUBSYS]
D5	0	02	CM	SMPM	SDU TO LINEAR HGA/IGA HPA RF CONTIN. FAIL	1	1	I	27, 30	[cond_HGA_SUBSYS]
D5	0	03	CM	SMPM	SDU TO CLASS C HGA/IGA HPA RF CONTIN. FAIL	1	1	I	27, 30	[cond_HGA_SUBSYS]
D6	0	01	CM	SMPM	SDU TO LGA HPA CALIBRATION ERROR	1	2	I	-	NONE
D6	0	02	CM	SMPM	SDU TO LINEAR LGA HPA RF CONTINUITY FAIL	1	1	I	-	NONE
D6	0	03	CM	SMPM	SDU TO CLASS C LGA HPA RF CONTINUITY FAIL	1	1	I	-	NONE
D7	0	01	-	-	RESERVED	-	-	-	26	-
D7	0	82	-	-	RESERVED	-	-	-	26	-
D8	0	81	PP	SMPM	T/P HGA LNA TO SDU RF CONTINUITY FAIL	1	1	I	27	[cond_HGA_SUBSYS]
D9	0	81	PP	SMPM	STBD HGA LNA TO SDU RF CONTINUITY FAIL	1	1	I	27	[cond_HGA_SUBSYS]
DA	0	81	PP	SMPM	LGA LNA TO SDU RF CONTINUITY FAIL	1	1	I	-	NONE
MISC										
DB	0	01	CM	SMPM	LGA LOG-ON TEST FAILURE	1	2	I	-	NONE
DB	0	02	CM	SMPM	SLAVE LGA LOG-ON TEST NOT INITIATED	1	3	I	-	NONE
DC	0	01	CM	SMPM	NO DECLARED ACTIVE (C)MU	-	1	E	28	NONE

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Table 4.4.4-3: Failure Overview

L1	L2	L3	MON	TESTER	FAILURE DESCRIPTION	CA	C	I/E	NOTES	RESOURCE
SDU ORT ERRORS										
SDU SECURED ORT ERRORS										
DD	0	01	CM	SMPM	(I) STARTUP LOG-ON POLICY	3	2	I	-	NONE
DD	0	02	-	-	RESERVED	-	-	-	-	-
DD	0	03	CM	SMPM	(VIII) RESPONSE CAPABILITY TO LOG-ON INTRRGTN	3	2	I	-	NONE
DD	0	04	CM	SMPM	(XVIII) NOISE INSERTION LEVEL	3	2	I	-	NONE
DD	0	05	CM	SMPM	(XXII) TX GAIN THRESHOLD	3	2	I	-	NONE
DD	0	06	CM	SMPM	(XXIII) APHONE SYSTEM MANAGEMENT COMMANDS	3	2	I	-	NONE
DD	0	07	-	-	RESERVED	-	-	-	26	-
DD	0	08	CM	SMPM	(XXVIII) HPA BACKOFF LIMITS	3	2	I	-	NONE
DD	0	09	CM	SMPM	(XXIX) HPA MIN REPORTABLE ACTUAL PWR OUT	3	2	I	-	NONE
DD	0	0A	CM	SMPM	(XXX) DEFAULT ASSUMED GLOBAL INITIAL C-CH EIRP	3	2	I	-	NONE
DD	0	0B	CM	SMPM	(XXXI) SCDU TELEPHONE NUMBER PRESELECT	3	2	I	-	NONE
DD	0	0C	CM	SMPM	(XXXII) ACP CALL INITIATION	3	2	I	-	NONE
DD	0	0D	CM	SMPM	(XXXVIII) FAILURE MASKING DATA	3	2	I	-	NONE
DD	0	0E	CM	SMPM	(XXXIX) ELEVATION HANDOVER THRESHOLD	3	2	I	-	NONE
DD	0	0F	CM	SMPM	(XLI) AUTOMATIC TRANSIT CALL GES TABLE	3	2	I	-	NONE
DD	0	10	CM	SMPM	(XLII) AIR-TO-GROUND CHIME	3	2	I	-	NONE
DD	0	11	CM	SMPM	(XLIII) SCDU CALL PROMPTS	3	2	I	-	NONE
DD	0	12	CM	SMPM	(XLIV) EIRP OVERDRAFT CHECKING PRIORITY	3	2	I	-	NONE
DD	0	13	CM	SMPM	(XLVI) COCKPIT AUDIO LEVEL SETTINGS	3	2	I	-	NONE
DD	0	14	CM	SMPM	(XLVII) HGA RETRY PERIOD	3	2	I	-	NONE
DD	0	15	CM	SMPM	(XLVIII) COCKPIT CHAN INTERFACE TYPE FOR DUAL	3	2	I	-	NONE
DD	0	16	CM	SMPM	(L) "DIS/REENABLE OTHER SATCOM" SCDU PROMPTS	3	2	I	-	NONE
DD	0	17	CM	SMPM	(LI) SCDU SATCOM SUBSYSTEM PROMPTS	3	2	I	-	NONE
DD	0	18	CM	SMPM	(LII) SCDU CHANNEL LABEL SUFFIXES	3	2	I	-	NONE
DD	0	19	CM	SMPM	(LIII) SECURED ORT DESCRIPTION	3	2	I	-	NONE
DD	0	1A	CM	SMPM	(LIV) COMPOSITE ORT FILE UPLOAD ALLOWED	3	2	I	-	NONE
DD	0	1B	CM	SMPM	SECURED ORT MISMATCH WITH OTHER SDU	1	1	I	-	[OTHER_SATCOM]
DD	0	1C	CM	SMPM	(LVI) ACCESS TO ZERO-PREFERENCE GESS	3	2	I	-	NONE
DD	0	1D	CM	SMPM	(LV) SECURED ORT MODIFIED FLAG	3	2	I	-	NONE
DD	0	1E	CM	SMPM	(LVII) L-BAND REFERENCE OFFSET CAL THRESHOLDS	3	2	I	-	NONE
DD	0	1F	CM	SMPM	(LIX) APHONE AUDIO LEVEL SETTING	3	2	I	-	NONE
DD	0	20	CM	SMPM	(LX) AERO-H ONLY OPERATION	3	2	I	-	NONE
SDU USER ORT ERRORS										
DE	0	01	CM	SMPM	(II) SATELLITE/GES NAMES	3	2	I	-	NONE
DE	0	02	CM	SMPM	(III) GES PREFERENCE VALUES	3	2	I	-	NONE
DE	0	03	CM	SMPM	(IV) MAINTENANCE PAGE ACCESS	3	2	I	-	NONE
DE	0	04	CM	SMPM	(V) COCKPIT TELEPHONE NUMBERS	3	2	I	-	NONE
DE	0	05	CM	SMPM	(VII) RESOURCES RESERVED FOR HEADSET	3	2	I	-	NONE
DE	0	06	-	-	SPARE	-	-	-	-	-
DE	0	07	CM	SMPM	(X) GROUND-TO-AIR CIRCUIT-MODE DATA	3	2	I	-	NONE
DE	0	08	CM	SMPM	(XIII) GROUND-TO-AIR CALLS	3	2	I	-	NONE
DE	0	09	CM	SMPM	(XIV) CALL CAMP-ON DURATION	3	2	I	-	NONE
DE	0	0A	CM	SMPM	(XV) CAMP-ON TIMEOUT ACTION	3	2	I	-	NONE
DE	0	0B	CM	SMPM	(XVI) STORE APHONE TELEPHONE NUMBERS	3	2	I	-	NONE
DE	0	0C	CM	SMPM	(XIX) GROUND-TO-AIR CALL PREEMPTION	3	2	I	-	NONE
DE	0	0D	CM	SMPM	(XX) PREFERRED COCKPIT CALL ROUTING	3	2	I	-	NONE
DE	0	0E	CM	SMPM	(XXI) PREFERRED APHONE CALL ROUTING	3	2	I	-	NONE
DE	0	0F	CM	SMPM	(XXIV) APHONE OUTGOING CALL BARRING LEVEL	3	2	I	-	NONE
DE	0	10	CM	SMPM	(XXV) CALL BARRING SECURITY CODE	3	2	I	-	NONE
DE	0	11	CM	SMPM	(XXVI) SHARED APHONE PHONE NUMBER STORAGE	3	2	I	-	NONE
DE	0	12	CM	SMPM	(XXXIII) ORT DESCRIPTION	3	2	I	-	NONE
DE	0	13	CM	SMPM	(XXXIV) AIRLINE CODE	3	2	I	-	NONE

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Table 4.4.4-3: Failure Overview

<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>MON</u>	<u>TESTER</u>	<u>FAILURE DESCRIPTION</u>	<u>CA</u>	<u>C</u>	<u>I/E</u>	<u>NOTES</u>	<u>RESOURCE</u>
DE 0	14	CM	SMPM	(XXXV) HEADSET OUTGOING CALL BARRING LEVEL	3	2	I	-		NONE
DE 0	15	CM	SMPM	(XXXVI) HEADSET TRANSIT CALL	3	2	I	-		NONE
DE 0	16	CM	SMPM	(XL) HIGH RATE DATA TRANSMIT SUPPORT	3	2	I	-		NONE
DE 0	17	CM	SMPM	(XLV) APHONE CALLED TERMINAL ID ASSIGNMENT	3	2	I	-		NONE
DE 0	18	CM	SMPM	(IL) MASTERY HANDOVER ALGORITHM WEIGHTING	3	2	I	-		NONE
DE 0	19	CM	SMPM	(LVIII) AES POSITION REPORTING	3	2	I	-		NONE
DE 0	1A	CM	SMPM	(LXI) HSD PREEMPTION FOR PRIORITY 4 CALLS	3	2	I	-		NONE
DE 0	1B	CM	SMPM	(LXII) ONGOING HSD CALL EIRP	3	2	I	-		NONE
DE 0	1C	CM	SMPM	(XXXVII) ORT MODIFIED FLAG	3	2	I	-		NONE
MISC										
DF 0	01	CM	SMPM	SLAVE HGA/IGA LOG-ON TEST FAILURE	3	2	I	-		NONE
DF 0	02	CM	SMPM	SLAVE HGA/IGA LOG-ON TEST NOT INITIATED	3	3	I	-		NONE
E0 0	81	-	-	RESERVED	-	-	-	26		-
E1 0	01	CM	SMPM	HSU1 SYSTEM DISABLE DISCRETE FAILURE	1	2	I	-		NONE
E2 0	01	CM	SMPM	HSU2 SYSTEM DISABLE DISCRETE FAILURE	1	2	I	-		NONE
E3 0	01	CM	SMPM	UNSUPPORTED HSU1 CONFIGURATION	3	2	I	-		[HSU1]
E3 0	02	CM	SMPM	UNSUPPORTED HSU2 CONFIGURATION	3	2	I	-		[HSU2]
E4 0	81	PP	SMPM	HSU1/SDU INTERFACE VERSION INCOMPATIBILITY	3	2	I	-		[HSU1]
E5 0	81	PP	SMPM	HSU2/SDU INTERFACE VERSION INCOMPATIBILITY	3	2	I	-		[HSU2]
E6 0	01	CM	SMPM	HSU1/HPA TX RF SIGNAL PATH FAILURE	3	2	I	-		[HSU1]
E7 0	01	CM	SMPM	HSU2/HPA TX RF SIGNAL PATH FAILURE	3	2	I	-		[HSU2]
E8 0	81	PP	SMPM	DLNA/HSU1 RX RF SIGNAL PATH FAILURE	3	2	I	-		[HSU1]
E9 0	81	PP	SMPM	DLNA/HSU2 RX RF SIGNAL PATH FAILURE	3	2	I	-		[HSU2]
EA 0	01	CM	SMPM	DUAL HSU-700 CONFIG WARNING	3	2	I	-		NONE
EB 0	01	CM	SMPM	NO DECLARED ACTIVE WSC	1	1	E	-		NONE
SPARE										
EC - FC										
FD 0	01-16	N/A	SMPM	EXTERNAL PILOT EVENT MARKER TO SDU	1	1	E	14		NONE
FE 0	01	POST	SMPM	EXTERNAL POWER SUPPLY INTERRUPT TO SDU	1	1	E	-		NONE
RESERVED										
FF										

COMMENTARY

The following information translates the HSU failure codes to their "original" codes (for correlation with non-SYP documentation).

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Table 4.4.4-3: Failure Overview

<u>HSU FAILURES</u>	<u>ORIGINAL CODE</u>
08 0 01	-
08 0 02	-
08 0 03	-
08 0 84	-
08 1 FA	UH7A
08 1 FB	UH7B
08 1 FC	UH7C
08 1 FD	UH7D
08 1 7F	UHB0
08 1 91	UHB1
08 2 95	UH95
08 3 98	UH98
08 4 86	UHA6
08 5 87	UHA7
08 7 84	UH84
08 8 81	UHEU
08 9 82	UH82
08 9 83	UH83
08 9 87	UH87
08 9 88	UH88
08 A 91	UH91
08 C 0B	UHAB
08 G F2	UH72
08 G FE	UH7E
08 J 8A	UHAA
08 K 85	UH85
08 M B5	UH35
08 N 81	UH01
08 N 82	UH02
08 N 83	UH03
08 N 91	UH11
08 N 92	UH12
08 N 93	UH13
08 N A1	UH21
08 N A2	UH22
08 N A3	UH23
08 N B0	UH30
08 N B1	UH31
08 N B2	UH32
08 N B3	UH33

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Table 4.4.4-3: Failure Overview

<u>HSU FAILURES</u>	<u>ORIGINAL CODE</u>
08 N B4	UH34
08 N BA	UE01
08 N BB	UH3B
08 N BC	UH3C
08 N BD	UH3D
08 N BE	UH3E
08 N 40	UHW0
08 N 41	UHW1
08 N C3	UHW3
08 N 51	UH51
08 N 52	UH52
08 N 53	UH53
08 O 42	UHW2
08 O 63	UH63
08 O 64	UH64
08 P 81	UHA1
08 P 04	UHA4
08 P 85	UHA5
08 Q 39	UH39
08 R 17	UH97
08 S 96	UH96
08 W 88	UHA8
08 X F1	UH71
08 X F3	UH73
08 X F4	UH74
08 X F5	UH75
08 X F6	UH76
08 Z 89	UHA9
9E 0 02	UH77
9E 0 03	UH78
9E 0 04	UH79

NOTES:

1. This note not used for MCS7000.
2. Not implemented.
3. Failure codes 90/0/02, 96/0/02, C4/0/02 and C6/0/02 are implemented only in the HPA (i.e., they are ignored by the SDU and are not copied into the system failure log).
4. This note not applicable for MCS7000.
5. This failure is declared "Internal," even though it is believed to be caused by the GES, in order to permit it to be logged if it occurs while the aircraft is on the ground (since the defined response is to reset the SDU, whereupon the failure is lost while on the ground due to external failure logging being inhibited at that time).
6. See Sections 4.4.5.203 and 4.4.5.204 for related details. Failure CB 0 01 is used by either the SDU in the system failure log ("HGA HPA INVALID ...") or generically by either HPA in its LRU failure log ("HPA INVALID ..."), hence the bracketed "[HGA]" in the failure description entry (because the "HGA" part only applies to the SDU usage). Failure CC 0 01 is used exclusively by the SDU, hence "LGA" is not bracketed. Contrary to the usual convention, the CM failure code 01 is used (rather than the POST/PAST code 81) even though the failures are only detected during POST/PAST.
7. This note not applicable to MCS7000.

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