- For each unique L1-L3 code, maintained across reset/power down, it records the number of occurrences and the time of the last occurrence.
- For every link the LRU has, it records the status: UNKNOWN (default after power on), DISABLED, INACTIVE, NO_LAYER_1 (when applicable), HIGH_PACKET_LOSS, ACTIVE (normal). It also records if the link is causing a mute of the system.
- For every ARINC 429 label the LRU understands, it records the status: DISABLED, UNKNOWN (default after power on), ACTIVE, SSMERROR, MISSING. It also records if the label is causing a mute of the system.
- For every input discrete the LRU possesses, it records the status: ASSERTED, DEASSERTED.
- The LRU maintains in memory the reason, if any, for muting.

(2) LRU Codes

BITE event information is encoded by the LRUs in three values. The values are named L1 thru L3:

- L1 denotes the LRU or interface (generated by an LRU on its behalf) which is generating the event
- L2 denotes the Shop Replaceable Module within an LRU for a event relating to an LRU, or for interfaces it denotes a particular part of the interface which is generating the event.
- L3 further defines the unique event that occurred.

Each fault or event also has an additional text field which can carry additional information helpful to understand the fault or event that happened.

The combination of L1 thru L3 alone uniquely identifies a BITE event in the system.

(3) L1 Codes

(a) The event L1 code uses two hexadecimal digits to identify a LRU or an interface within an AES LRU.

NOTE: All other codes not explicitly stated are spare.

(4) L2 Codes

(a) The event L2 code uses two hexadecimal digits to identify a shop-replaceable module within an AES LRU:

(b) The event L2 code further identifies specific inter LRU interfaces.

(c) The event L2 code further identifies ARINC 429 and ARINC 791 discrete interfaces, coded.

(d) The event L2 code further identifies user interfaces.

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(5) L3 Codes

(a) The L3 code is four hexadecimal digits, used to uniquely identify the fault or event against an L1, L2 code pair.

(b) Each LRU defines their own L3 codes. These are given in the fault table, refer to Table 6-1.

Table 6-1. L1, L2 and L3 Codes

L1		L2		L3			
Code	**Description**	**Code**	**Description**	**Code**	**Description**	**Log type**	**Repair action**
0	System	0	Unknown	1	OAE Not pointed correctly	Status Message	
0	System	1	Mode	0	critical fault mode entry	Critical Faults	look for the contributing critical fault entries
0	System	1	Mode	1	dataload mode entry	Status Message	
0	System	1	Mode	2	Commanded mode entry	Status Message	
0	System	1	Mode	3	Normal mode entry	Status Message	
0	System	3	Configuration	0	Tail number Missing	Critical Faults	configure tail number on the GUI, ensure APM is installed
0	System	3	Configuration	1	Configuration File Missing	Critical Faults	Dataload APM configuration files
0	System	3	Configuration	2	Inter-LRU SW Incompatibility	Critical Faults	Datload the incompatible LRU. Note: could happen on the power up after dataload and that is normal.
0	System	3	Configuration	3	Geographical map missing	Status Message	Normal for first boot up
0	System	3	Configuration	4	Configuration File in APM missing	Critical Faults	Dataload APM configuration files
0	System	3	Configuration	7	ACTIVE MISSION FILE MISSING	Warning	enter the proper mission configurations

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
0	System	3	Configura-tion	8	DISCRETE I/O PIN MAP DUPLICATION	Warning	Check discrete installation and APM configuration parameters
0	System	5	SNMP Engineering	21	Log clearance AES Operational Historical Log	Status Message	
0	System	5	SNMP Engineering	22	Log clearance AES Fault Historical Log	Status Message	
0	System	5	SNMP Engineering	23	Log clearance AES Usage Historical Log	Status Message	
0	System	7	Regulatory Log	0	Regulatory Log Upload Failure	Status Message	Normal for lost connection
0	System	7	Regulatory Log	1	Reg Log Full	Critical Faults	format the drive using EUI tool. If problem reappears, contact service provider
0	System	8	Information Events	0	User Service Enabled	Status Message	
0	System	8	Information Events	1	User Service Disabled	Status Message	
0	System	8	Information Events	2	Geographic Map Stored	Status Message	
0	System	8	Information Events	3	Geographic Map download failed	Status Message	Normal for first boot up
0	System	8	Information Events	4	Aircraft On Ground	Status Message	
0	System	8	Information Events	5	Aircraft In Air	Status Message	
0	System	8	Information Events	6	AES in Network	Status Message	
0	System	8	Information Events	7	AES Out of Network	Status Message	
0	System	8	Information Events	8	AES Network Operating Parameters	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
0	System	8	Information Events	9	JetWave SW Stored	Status Message	
0	System	8	Information Events	A	JetWave SW Download Failed	Status Message	
0	System	8	Information Events	B	JetWave SW Download Initiated	Status Message	
0	System	8	Information Events	C	Temperature	Status Message	
0	System	8	Information Events	D	AES LOG UPLOAD FAILED	Status Message	
0	System	9	MODEM MODE CHANGE	1	INTERNAL MODEM MODE	Status Message	
0	System	9	MODEM MODE CHANGE	2	EXTERNAL MODEM MODE	Status Message	
0	System	DA	MISSION CONFIG FILE UPLOAD	1	SUCCESSFUL FILE TRANSFER	Status Message	
0	System	DA	MISSION CONFIG FILE UPLOAD	2	FAILED FILE TRANSFER	Status Message	
0	System	DB	MISSION CONFIG FILE DOWNLOAD	1	SUCCESSFUL FILE TRANSFER	Status Message	
0	System	DB	MISSION CONFIG FILE DOWNLOAD	2	FAILED FILE TRANSFER	Status Message	
0	System	DC	MISSION CONFIG FILE PURGE	3	SUCCESSFUL	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
0	System	DC	MISSION CONFIG FILE PURGE	4	FAILED	Status Message	
0	System	DD	MISSION CONFIG FILE CREATED FROM GUI	3	SUCCESSFUL	Status Message	
0	System	DD	MISSION CONFIG FILE CREATED FROM GUI	4	FAILED	Status Message	
1	ModMan	0	Unknown	0	Mute State	Status Message	
1	ModMan	0	Unknown	21	Log clearance LRU Operational	Status Message	
1	ModMan	0	Unknown	22	Log clearance LRU Fault	Status Message	
1	ModMan	1	ACM	1	ACM NOT RESPONDING	Status Message	
1	ModMan	1	ACM	2	ACM BIST FAULT	Status Message	
1	ModMan	1	ACM	3	ACM OVER TEMP	Status Message	
1	ModMan	1	ACM	8	ACM POST Failure	Status Message	
1	ModMan	1	ACM	4	ACM NO RESPONSE	Status Message	
1	ModMan	2	Controller/ Router	1	DSP Fault	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	2	Ethernet Main Switch	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	3	Ethernet PODD Switch	Critical Faults	Reboot the system, if problem persists, replace Modman

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
1	ModMan	2	Controller/ Router	4	Ethernet PIES Switch	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	5	Ethernet AISD Switch	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	6	DOWNCON-VERTER	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	7	NOR FLASH	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	8	NAND FLASH	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	9	A429 DRIVER	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	B	RESET CONTROL IO	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	C	BOARD CONFIG IO	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	D	Ethernet FP PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	E	Ethernet ACM PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	F	Ethernet EN3 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	10	Ethernet Server PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	11	Ethernet AV1 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
1	ModMan	2	Controller/ Router	12	Ethernet AV2 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	13	Ethernet AV3 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	14	Ethernet AG1 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	15	Ethernet EN5 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	16	Ethernet EN6 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	17	Ethernet EN7 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	18	Ethernet EN8 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	19	Ethernet EG1 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	1A	Ethernet PA1 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	1B	Ethernet PA2 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	1C	Ethernet PA3 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	1D	Ethernet PA4 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	1E	Ethernet PG1 PHY	Critical Faults	Reboot the system, if problem persists, replace Modman

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
1	ModMan	2	Controller/ Router	1F	MM & ACD ETH LINK STATUS IO	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	20	PIES/PODD ETH LINK STATUS IO	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	21	BITE STATUS INPUTS IO	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	22	SERVER CARD IN/OUT IO	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	23	RSSI Control In/Out	Critical Faults	Reboot the system, if problem persists, replace Modman. Note: this can be a false positive seen regularly before BLv6
1	ModMan	2	Controller/ Router	24	UNIQUE ID CHIP	Critical Faults	Reboot the system, if problem persists, replace Modman. Note: this can be a false positive seen regularly before BLv6
1	ModMan	2	Controller/ Router	30	5V ISO GOOD -POWER FAIL	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	31	12V ISO GOOD -POWER FAIL	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	32	1V2 AR POWER GOOD -POWER FAIL	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	33	APM POWER GOOD - POWER FAIL	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	2	Controller/ Router	34	RSSI VDD POWER GOOD -POWER FAIL	Critical Faults	Reboot the system, if problem persists, replace Modman

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
1	ModMan	2	Controller/ Router	35	RSSI +1V3 POWER GOOD -POWER FAIL	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	3	Power Supply Unit	1	PSU INPUT POWER FAIL	Status Message	could happen as part of normal shut down
1	ModMan	3	Power Supply Unit	2	PSU GOOD POWER FAIL	Status Message	could happen as part of normal shut down
1	ModMan	4	Backplane	1	ACM 18V POWER GOOD	Status Message	could happen as part of normal shut down
1	ModMan	E0	AES SFTP/ SSH	3	successful login	Status Message	
1	ModMan	E0	AES SFTP/ SSH	4	failed login	Status Message	
1	ModMan	E1	AES GUI	3	successful login	Status Message	
1	ModMan	E1	AES GUI	4	failed login	Status Message	
1	ModMan	E2	LRU SFTP/ SSH	3	successful login	Status Message	
1	ModMan	E2	LRU SFTP/ SSH	4	failed login	Status Message	
1	ModMan	E3	SNMP Engineering	3	successful login	Status Message	
1	ModMan	E3	SNMP Engineering	4	failed login	Status Message	
1	ModMan	E4	SNMP ARINC 791	3	successful login	Status Message	
1	ModMan	E4	SNMP ARINC 791	4	failed login	Status Message	
1	ModMan	FA	Operational Information	0	Mode Transition	Status Message	
1	ModMan	FA	Operational Information	1	Parameter	Status Message	
1	ModMan	FA	Operational Information	2	Operational Event	Status Message	
1	ModMan	FA	Operational Information	4	Connect Event	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
1	ModMan	FA	Operational Information	5	Disconnect Event	Status Message	
1	ModMan	FA	Operational Information	6	User Bytes Passed	Status Message	
1	ModMan	FA	Operational Information	A	Standard Electronic Information	Status Message	
1	ModMan	FA	Operational Information	B	Honeywell Electronic Information	Status Message	
1	ModMan	FA	Operational Information	C	Subassemby Information	Status Message	
1	ModMan	FA	Operational Information	20	CABLE CALIBRATION SUCCESS	Status Message	
1	ModMan	FB	IP Security	0	IP Security Event	Status Message	
1	ModMan	FB	IP Security	1	Segregation Fault	Critical Faults	Protect the port from unknown traffic
1	ModMan	FB	IP Security	20	Configuration Fault	Critical Faults	Check the aircraft services configuration and restore as appropriate. Protect the interface
1	ModMan	FC	Reset	0	Power Cycle	Status Message	
1	ModMan	FC	Reset	1	Watchdog	Status Message	
1	ModMan	FC	Reset	2	Software Command	Status Message	
1	ModMan	FC	Reset	3	Reset Pin	Status Message	
1	ModMan	FC	Reset	4	SW exception	Status Message	
1	ModMan	FD	Software Configuration	1	HW SW Compatibility	Critical Faults	Dataload Modman Software
1	ModMan	FD	Software Configuration	2	LRU SW Compatibility	Critical Faults	Dataload Modman Software

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
1	ModMan	FD	Software Configuration	3	Configuration parameter missing	Critical Faults	Dataload the Proper APM for the install
1	ModMan	FD	Software Configuration	4	Primary Image Corruption Warning	Critical Faults	Dataload Modman Software
1	ModMan	FD	Software Configuration	6	LRU PRI-SEC Image Mismatch	Critical Faults	Dataload Modman Software
1	ModMan	FD	Software Configuration	7	A615A DataLoad	Status Message	
1	ModMan	FD	Software Configuration	8	Data Loader Connected	Status Message	
1	ModMan	FD	Software Configuration	9	Data Loader Disconnected	Status Message	
1	ModMan	FD	Software Configuration	A	Operating Image List	Status Message	
1	ModMan	FD	Software Configuration	B	Secondary Image Corruption Warning	Status Message	
1	ModMan	FD	Software Configuration	C	OTA Staged Software DataLoad	Status Message	
1	ModMan	FD	Software Configuration	40	VLAN MAPPING TO SPECIFIC PORTS DISALLOWED	Status Message	Mismatch between APM and provisioned setting
1	ModMan	FD	Software Configuration	41	VLAN TAGGING MISMATCH	Warning	Dataload APM configuration files. If JW1 system, also contact service provider
1	ModMan	FD	Software Configuration	50	Missing Transmit Cable Calibration Data	Warning	Re-run cable calibration. For Modman x.5 (ChinaSat) If problem with running cable calibration, reload TM configuration files

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
1	ModMan	FE	Software Runtime	0	Heartbeat failure	Critical Faults	This could appear in normal power off event. Note: this can show up at power up prior to BLv7
1	ModMan	FE	Software Runtime	1	GENERAL Module Failure	Critical Faults	Look for the acompanied failure log and address those Note: VLAN_IP _mapping can be accompanied by regulatory log full
1	ModMan	FE	Software Runtime	5	LRU mtd partition unlocked	Status Message	
1	ModMan	FE	Software Runtime	6	RSSI	Status Message	Note: this can be a false positive prior to BLv7
1	ModMan	FE	Software Runtime	20	Missing KANDU information - Ground Speed	Status Message	Check Ground speed Label
1	ModMan	FE	Software Runtime	20	Missing KANDU information - Ground Speed	Status Message	Check Ground speed Label
1	ModMan	FE	Software Runtime	4F	Network Service	Critical Faults	Reboot the system, if problem persists, replace Modman
1	ModMan	FE	Software Runtime	50	POST Time Out	Status Message	Reset the sytem, if problem persist. Replace the unit. Note: if the additional text show "Tests not completed: Rssi Manager Post Modman ACM Mgr Post Rssi Down Converter Post " it is a signature of Modem problem and needs to be replaced

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
1	ModMan	FE	Software Runtime	200	Missing KANDU information - Flight Phase	Status Message	flight phase..?
1	ModMan	FE	Software Runtime	200	Missing KANDU information - Flight Phase	Critical Faults	Check KANDU flight phase source
1	ModMan	FE	Software Runtime	201	Missing KANDU information - Ground Condition	Status Message	ground condition label?
1	ModMan	FE	Software Runtime	201	Missing KANDU information - Ground Condition	Critical Faults	Check KANDU ground speed source signal
1	ModMan	FE	Software Runtime	21	File System Full	Critical Faults	Contact Honeywell support
1	ModMan	FF	Tempera-ture	1	C/R TEMPERATURE SENSOR	Status Message	
1	ModMan	FF	Tempera-ture	1	C/R TEMPERATURE SENSOR	Critical Faults	Reset the system, if problem persist, contact Honeywell support
1	ModMan	FF	Tempera-ture	3	ACM TEMPERATURE SENSOR	Status Message	
1	ModMan	FF	Tempera-ture	2	PSU TEMPERATURE SENSOR	Critical Faults	Reset the system, if problem persist, contact Honeywell support
1	ModMan	FF	Tempera-ture	10	1AS TEMPERATURE SENSOR	Status Message	
1	ModMan	FF	Tempera-ture	10	1AS TEMPERATURE SENSOR	Critical Faults	Reset the system, if problem persist, contact Honeywell support
2	BUC-PA	0	Unknown	0	Mute State	Status Message	
2	BUC-PA	0	Unknown	1	Primary power interruption	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
2	BUC-PA	1	Power supply	2	Power Supply Internal fault	Status Message	could be part of normal power down
2	BUC-PA	2	BUC	1	Buc LockLoss: Transmit BITE Status	Status Message	Note: this can be a false positive prior to BLv7
2	BUC-PA	2	BUC	2	Buc LockLoss: Transmit BITE Status	Status Message	Note: this can be a false positive prior to BLv7
2	BUC-PA	4	Power Amplifier	2	PA Overdriven: Transmit BITE Status	Status Message	
2	BUC-PA	5	Monitor and Control	1	Flash Fault	Critical Faults	Reboot the system, if problem persists, replace BUC-PA
2	BUC-PA	5	Monitor and Control	2	RAM Fault	Critical Faults	Reboot the system, if problem persists, replace BUC-PA
2	BUC-PA	5	Monitor and Control	3	Watchdog reset	Status Message	
2	BUC-PA	FA	Operational Information	A	Standard Electronic Information	Status Message	
2	BUC-PA	FA	Operational Information	B	Honeywell Electronic Information	Status Message	
2	BUC-PA	FC	Reset	1	Watchdog	Status Message	
2	BUC-PA	FC	Reset	2	Software Command	Status Message	
2	BUC-PA	FC	Reset	4	SW exception	Status Message	
2	BUC-PA	FC	Reset	5	Power Cycle Or Reset Pin	Status Message	
2	BUC-PA	FD	Software Configuration	1	HW SW Compatibility	Critical Faults	Dataload the BUC-PA software
2	BUC-PA	FD	Software Configuration	4	PRIMARY IMAGE CORRUPTION Warning	Critical Faults	Dataload the BUC-PA software

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
2	BUC-PA	FD	Software Configuration	6	LRU PRI-SEC IMAGE MISMATCH	Status Message	Dataload the BUC-PA software
2	BUC-PA	FD	Software Configuration	7	DataLoad	Status Message	If failed, dataload BUC-PA again
2	BUC-PA	FD	Software Configuration	8	DataLoader Connected	Status Message	
2	BUC-PA	FD	Software Configuration	9	DataLoader Disconnected	Status Message	
2	BUC-PA	FD	Software Configuration	A	Operating Image List	Status Message	
2	BUC-PA	FD	Software Configuration	B	Secondary Image Corruption Warning	Status Message	Dataload the mismatched LRU
2	BUC-PA	FD	Software Configuration	C	OTA Staged Software DataLoad	Status Message	
2	BUC-PA	FE	Software Runtime	0	BUC-PA->KANDU Heartbeat failure	Status Message	If persist, check wiring between KANDU-BUC-PA Note: this can happen as part of power down
2	BUC-PA	FE	Software Runtime	1	KANDU->BUC-PA Heartbeat failure	Status Message	
2	BUC-PA	FF	Tempera-ture	1	BUC-PA Main Temperature Sensor	Status Message	
2	BUC-PA	FF	Tempera-ture	1	BUC-PA Main Temperature Sensor	Status Message	Reset the system, if problem persist, contact Honeywell support
4	FMA	0	Unknown	1	Enter Shed load	Critical Faults	If power drop log is also observed from KANDU, check aircraft power supply. If only Shed load in FMA, check cabling between KANDU and FMA

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
4	FMA	0	Unknown	2	Exit Shed load	Critical Faults	If power drop log is also observed from KANDU, check aircraft power supply. If only Shed load in FMA, check cabling between KANDU and FMA
4	FMA	0	Unknown	21	Log clearance LRU Operational	Status Message	
4	FMA	0	Unknown	22	Log clearance LRU Fault	Status Message	
4	FMA	0	Unknown	81	Azimuth Home Find Fail	Critical Faults	Reboot the system, if there is no obstruction to FMA path, replace FMA
4	FMA	0	Unknown	82	Elevation Home Find Fail	Critical Faults	Reboot the system, if there is no obstruction to FMA path, replace FMA
4	FMA	0	Unknown	87	Azimuth axis out of band	Critical Faults	check for motor/gear damage
4	FMA	0	Unknown	88	Elevation axis out of band	Critical Faults	check for motor/gear damage
4	FMA	5	PCU	1	DSP Fault	Critical Faults	If consistently happen across boots, replace the unit
4	FMA	5	PCU	81	1.2V voltage	Status Message	
4	FMA	5	PCU	82	1.5V voltage	Status Message	
4	FMA	5	PCU	83	1.8V voltage	Status Message	
4	FMA	5	PCU	84	3.3V voltage	Status Message	
4	FMA	5	PCU	85	5V positive voltage	Status Message	
4	FMA	5	PCU	86	1.2V current	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	Descrip-tion	Code	Descrip-tion	Code	Description	Log type	Repair action
4	FMA	5	PCU	87	1.5V current	Status Message	
4	FMA	5	PCU	88	1.8V current	Status Message	
4	FMA	5	PCU	89	3.3V current	Status Message	
4	FMA	5	PCU	8A	5V positive current	Status Message	
4	FMA	6	PSU	3	PSU Low Power Detected	Status Message	
4	FMA	6	PSU	4	PSU Low Power Not Detected	Status Message	
4	FMA	B	MDU	1	1.25V voltage	Status Message	
4	FMA	B	MDU	2	1.5V voltage	Status Message	
4	FMA	B	MDU	3	3.3V voltage	Status Message	
4	FMA	B	MDU	4	12V positive voltage	Status Message	
4	FMA	B	MDU	5	12V negative voltage	Status Message	
4	FMA	B	MDU	6	38.5V voltage	Status Message	
4	FMA	B	MDU	7	1.5V current	Status Message	
4	FMA	B	MDU	8	3.3V current	Status Message	
4	FMA	B	MDU	9	12V positive current	Status Message	
4	FMA	B	MDU	A	12V negative current	Status Message	
4	FMA	B	MDU	B	Serial Communications Failure	Critical Faults	Replace the FMA
4	FMA	B	MDU	C	Azimuth Motor current	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
4	FMA	B	MDU	D	Elevation Motor current	Status Message	
4	FMA	B	MDU	E	CCA Initialization Failed	Status Message	
4	FMA	B	MDU	F	Azimuth Axis Low Temperature High Current	Status Message	
4	FMA	B	MDU	10	Elevation Axis Low Temperature High Current	Status Message	
4	FMA	C	R2D	1	1.5V voltage	Status Message	
4	FMA	C	R2D	2	3.3V voltage	Status Message	
4	FMA	C	R2D	3	5V digital voltage	Status Message	
4	FMA	C	R2D	4	5V positive voltage	Status Message	
4	FMA	C	R2D	5	5V negative voltage	Status Message	
4	FMA	C	R2D	6	12V positive voltage	Status Message	
4	FMA	C	R2D	7	12V negative voltage	Status Message	
4	FMA	C	R2D	8	1.5V current	Status Message	
4	FMA	C	R2D	9	3.3V current	Status Message	
4	FMA	C	R2D	A	12V positive current	Status Message	
4	FMA	C	R2D	B	12V negative current	Status Message	
4	FMA	C	R2D	F	Serial Communications Failure	Critical Faults	Replace the FMA

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
4	FMA	C	R2D	10	CCA Initialization Failed	Critical Faults	Replace the FMA
4	FMA	C	R2D	11	Azimuth Axis Resolver Reading Error	Status Message	
4	FMA	C	R2D	12	Elevation Axis Resolver Reading Error	Status Message	
4	FMA	C	R2D	15	WBDC 12V current	Warning	
4	FMA	C	R2D	16	LNAS 12V current	Warning	
4	FMA	C	R2D	17	WBDC 12V voltage	Warning	
4	FMA	C	R2D	18	LNAS 12V voltage	Warning	
4	FMA	E	TX POLARIZATION SWITCH	1	TRANSMIT POLARIZATION SENSOR MISMATCH WITH COMMAND (POST)	Critical Faults	Reboot the system. Reload TM RF cluster table. If persists, replace WBFMA. Note: reloading TM configuration files require running cable calibration again
4	FMA	E	TX POLARIZATION SWITCH	2	TRANSMIT POLARIZATION SENSOR MISMATCH WITH COMMAND (CM)	Warning	
4	FMA	E	TX POLARIZATION SWITCH	2	TRANSMIT POLARIZATION SENSOR MISMATCH WITH COMMAND (CM)	Critical Faults	Reboot the system. Reload TM RF cluster table. If persists, replace WBFMA Note: reloading TM configuration files require running cable calibration again

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
4	FMA	E	TX POLARIZATION SWITCH	3	TRANSMIT POLARIZATION STATE	Status Message	
4	FMA	F	WBDC	1	Serial Communications Failure (CM)	Warning	
4	FMA	F	WBDC	2	Initialization Failure during POST	Warning	
4	FMA	F	WBDC	3	WBDC Lock Status Failure	Warning	performa Antenna Alignment. Reload TM RF cluster
4	FMA	F	WBDC	4	WBDC Receive Chain fault	Warning	performa Antenna Alignment. Reload TM RF cluster
4	FMA	F	WBDC	5	WBDC Monitor and Control Processor fault	Warning	
4	FMA	F	WBDC	7	WBDC POST Fault	Warning	reboot the system, if persist, replace the WBFMA
4	FMA	F	WBDC	9	WBDC Config Change	Status Message	
4	FMA	F	WBDC	A	WBDC Config Change Fail	Warning	
4	FMA	F	WBDC	B	WBDC Reset	Status Message	
4	FMA	E2	LRU SFTP/ SSH	3	SUCCESFUL LOGIN	Status Message	
4	FMA	E2	LRU SFTP/ SSH	4	FAILED LOGIN	Status Message	
4	FMA	FA	Operational Information	0	Mode Transition	Status Message	
4	FMA	FA	Operational Information	1	Parameter	Status Message	
4	FMA	FA	Operational Information	2	Event	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
4	FMA	FA	Operational Information	A	Standard Electronic Information	Status Message	
4	FMA	FA	Operational Information	B	Honeywell Electronic Information	Status Message	
4	FMA	FA	Operational Information	C	Subassemby Information	Status Message	
4	FMA	FB	IP Security	0	IP Security Event	Status Message	
4	FMA	FC	Reset	0	Power Cycle	Status Message	
4	FMA	FC	Reset	1	Watchdog	Status Message	
4	FMA	FC	Reset	2	Software Command	Status Message	
4	FMA	FC	Reset	3	RESET PIN	Status Message	
4	FMA	FC	Reset	4	SW exception	Status Message	
4	FMA	FD	Software Configuration	1	HW SW Compatibility	Critical Faults	Dataload FMA
4	FMA	FD	Software Configuration	2	LRU SW Compatibility	Critical Faults	Dataload FMA
4	FMA	FD	Software Configuration	3	Configuration parameter missing	Critical Faults	Dataload APM configuration files
4	FMA	FD	Software Configuration	4	PRIMARY IMAGE CORRUPTION Warning	Critical Faults	Dataload FMA
4	FMA	FD	Software Configuration	6	LRU PRI-SEC IMAGE MISMATCH	Critical Faults	Dataload FMA
4	FMA	FD	Software Configuration	7	DataLoad	Status Message	
4	FMA	FD	Software Configuration	8	Data Loader Connected	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
4	FMA	FD	Software Configuration	9	Data Loader Disconnected	Status Message	
4	FMA	FD	Software Configuration	A	Operating Image List	Status Message	
4	FMA	FD	Software Configuration	B	Secondary Image Corruption Warning	Status Message	
4	FMA	FD	Software Configuration	C	OTA Staged Software DataLoad	Status Message	
4	FMA	FD	Software Configuration	81	Missing OAE Factory Alignment Data	Critical Faults	Replace the FMA
4	FMA	FE	Software Runtime	0	Heartbeat failure	Critical Faults	check connection between FMA and KANDU
4	FMA	FE	Software Runtime	1	General Module Failure	Critical Faults	looking for accompanied critical fault and address those
4	FMA	FE	Software Runtime	5	LRU mtd partition unlocked	Status Message	
4	FMA	FE	Software Runtime	20	File System Full	Critical Faults	Run EUI tool to reformat flash
4	FMA	FE	Software Runtime	50	Post Timeout	Critical Faults	check wiring between LRUs. If problem persist, contact support for removal
4	FMA	FE	Software Runtime	4F	Network Service	Critical Faults	reboot the system, if problem persist, replace the FMA
4	FMA	FE	Software Runtime	900	FPGA VERSION INCOMPATIBLE WITH THE WB FMA VARIANT	Critical Faults	Replace the WBFMA
4	FMA	FF	Tempera-ture	1	PCU CCA	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
4	FMA	FF	Tempera-ture	4	R2D CCA	Status Message	
4	FMA	FF	Tempera-ture	5	MDU CCA	Status Message	
4	FMA	FF	Tempera-ture	6	Azimuth Motor	Status Message	
4	FMA	FF	Tempera-ture	7	Elevation Motor	Status Message	
4	FMA	FF	Tempera-ture	8	WBDC Over Temperature Shutdown	Status Message	
5	APM	FD	Software Configuration	7	DataLoad	Status Message	
5	APM	FD	Software Configuration	8	DataLoader Connected	Status Message	
5	APM	FD	Software Configuration	9	DataLoader DisConnected	Status Message	
5	APM	FD	Software Configuration	C	OTA Staged Software DataLoad	Status Message	
5	APM	FD	Software Configuration	A	OPERATING IMAGE LIST	Status Message	
5	APM	FA	Operational Information	A	Standard Electronic Information	Status Message	
5	APM	FA	Operational Information	B	Honeywell Electronic Information	Status Message	
6	KANDU	0	Unknown	0	Mute State	Status Message	
6	KANDU	0	Unknown	1	Primary Power Interruption	Status Message	
6	KANDU	0	Unknown	21	Log clearance LRU Operational	Status Message	
6	KANDU	0	Unknown	22	Log clearance LRU Fault	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
6	KANDU	1	ASC	1	DSP Fault	Critical Faults	reboot the system, if problem persist, replace the FMA
6	KANDU	1	ASC	20	ASC 1.2 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	20	ASC 1.2 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	21	ASC 1.5 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	21	ASC 1.5 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	22	ASC 1.8 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	22	ASC 1.8 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	23	ASC 2.5 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	23	ASC 2.5 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	24	ASC 3.3 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	24	ASC 3.3 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	25	ASC 5 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	25	ASC 5 V: Out-of-spec	Status Message	
6	KANDU	1	ASC	26	ASC 12 V input: Out-of-spec	Status Message	
6	KANDU	1	ASC	26	ASC 12 V input: Out-of-spec	Status Message	
6	KANDU	1	ASC	27	ASC 1.2 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	27	ASC 1.2 V Current: Out-of-spec	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
6	KANDU	1	ASC	28	ASC 1.5 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	28	ASC 1.5 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	28	ASC 1.5 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	29	ASC 1.8 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2A	ASC 2.5 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2B	ASC 3.3 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	29	ASC 1.8 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	29	ASC 1.8 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2A	ASC 2.5 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2B	ASC 3.3 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2B	ASC 3.3 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2C	ASC 5 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2C	ASC 5 V Current: Out-of-spec	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
6	KANDU	1	ASC	2C	ASC 5 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2C	ASC 5 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2C	ASC 5 V Current: Out-of-spec	Status Message	
6	KANDU	1	ASC	2C	ASC 5 V Current: Out-of-spec	Status Message	
6	KANDU	2	Power Supply	0	Power supply out of regulation	Status Message	
6	KANDU	2	Power Supply	0	Power supply out of regulation	Status Message	
6	KANDU	11	ASC BITE EMIFA	0	EMIFA Unresponsive	Critical Faults	If problem persist across power cycle, replace the KANDU
6	KANDU	11	ASC BITE EMIFA	1	EMIFA Incorrect Data	Critical Faults	If problem persist across power cycle, replace the KANDU
6	KANDU	11	ASC BITE EMIFA	2	EMIFA Ok	Status Message	
6	KANDU	11	ASC BITE EEPROM	3	EEPROM Unresponsive	Critical Faults	If problem persist across power cycle, replace the KANDU
6	KANDU	11	ASC BITE EEPROM	4	EEPROM Incorrect Data	Critical Faults	If problem persist across power cycle, replace the KANDU
6	KANDU	11	ASC BITE EEPROM	5	EEPROM Ok	Status Message	
6	KANDU	12	ASC BITE A429 IRS	0	ARINC 429 IRS POST UNRESPONSIVE	Critical Faults	If problem persist across power cycle, replace the KANDU
6	KANDU	12	ASC BITE A429 IRS	1	ARINC 429 IRS INCORRECT DATA	Critical Faults	If problem persist across power cycle, replace the KANDU Note: this can be a false positve

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
6	KANDU	12	ASC BITE A429 IRS	2	ARINC 429 IRS POST OK	Status Message	
6	KANDU	13	ASC BITE A429 AUX	0	ARINC 429 AUX POST UNRESPONSIVE	Critical Faults	If problem persist across power cycle, replace the KANDU
6	KANDU	13	ASC BITE A429 AUX	1	ARINC 429 AUX INCORRECT DATA	Critical Faults	If problem persist across power cycle, replace the KANDU Note: this can be a false positve
6	KANDU	13	ASC BITE A429 AUX	2	ARINC 429 AUX POST OK	Status Message	
6	KANDU	14	ASC BITE Ethernet Switch	0	Ethernet MDIO Unresponsive	Critical Faults	If problem persist across power cycle, replace the KANDU
6	KANDU	14	ASC BITE Ethernet Switch	1	Ethernet MDIO Unexpected Data	Critical Faults	If problem persist across power cycle, replace the KANDU
6	KANDU	14	ASC BITE Ethernet Switch	2	Ethernet MDIO Ok	Status Message	
6	KANDU	E2	LRU SFTP/ SSH	3	successful login	Status Message	
6	KANDU	E2	LRU SFTP/ SSH	4	failed login	Status Message	
6	KANDU	F9	Temperature of LRU's	1	ASC Main Temperature Sensor	Critical Faults	Allow KANDU to cool to below 90 degree
6	KANDU	F9	Temperature of LRU's	2	KANDU PSU Remote Temperature	Critical Faults	Allow KANDU to cool to below 90 degree
6	KANDU	FA	Operational Information	0	Mode Transition	Status Message	
6	KANDU	FA	Operational Information	1	Parameter	Status Message	
6	KANDU	FA	Operational Information	2	Event	Status Message	
6	KANDU	FA	Operational Information	A	Standard Electronic Information	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
6	KANDU	FA	Operational Information	B	Honeywell Electronic Information	Status Message	
6	KANDU	FA	Operational Information	C	Subassemby Information	Status Message	
6	KANDU	FA	Operational Information	80	AUTO ALIGNMENT PASS	Status Message	
6	KANDU	FA	Operational Information	81	AUTO ALIGNMENT START	Status Message	
6	KANDU	FA	Operational Information	82	AUTO ALIGNMENT FAIL INCORRECT MODES	Status Message	Check software version
6	KANDU	FA	Operational Information	83	AUTO ALIGNMENT IN PROGRESS	Status Message	
6	KANDU	FA	Operational Information	84	AUTO ALIGNMENT SOLUTION CHECK PASS	Status Message	
6	KANDU	FA	Operational Information	85	AUTO ALIGNMENT SOLUTION CHECK FAIL-HEADING	Status Message	Check ARINC label value and check installation, heading diffential between FMA and ARINC too large
6	KANDU	FA	Operational Information	86	AUTO ALIGNMENT SOLUTION CHECK FAIL-PITCH	Status Message	Check ARINC label value and check installation, pitch diffential between FMA and calculated peak of signal too large
6	KANDU	FA	Operational Information	87	AUTO ALIGNMENT SOLUTION CHECK FAIL-ROLL	Status Message	Check ARINC label value and check installation, roll diffential between FMA and ARINC too large

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
6	KANDU	FA	Operational Information	88	AUTO ALIGNMENT SOLUTION CHECK FAIL-RF %	Status Message	Check line of sight to the satellite, aircraft on ground, and not moving
6	KANDU	FA	Operational Information	89	AUTO ALIGNMENT CCW CHECK	Status Message	
6	KANDU	FA	Operational Information	8A	AUTO ALIGNMENT CW CHECK	Status Message	
6	KANDU	FA	Operational Information	8B	AUTO ALIGNMENT CHECK FAIL	Status Message	intermediate step
6	KANDU	FA	Operational Information	8C	AUTO ALIGNMENT FAIL-SENSOR FAIL	Status Message	Replace Antenna
6	KANDU	FA	Operational Information	8D	AUTO ALIGNMENT FAIL-OAE COMMS FAIL	Status Message	reboot to see if communication can be re-established, if consistently happen replace antenna
6	KANDU	FA	Operational Information	8E	AUTO ALIGNMENT FAIL-INIT PHYSICAL LOCK FAIL	Status Message	replace antenna if consistently happen
6	KANDU	FA	Operational Information	8F	AUTO ALIGNMENT FAIL-INIT RF LOCK FAIL	Status Message	Check line of sight to the satellite, and target satellite information
6	KANDU	FA	Operational Information	90	AUTO ALIGNMENT FAIL-IN PROGRESS PHYSICAL LOCK FAIL	Status Message	Check line of sight

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
6	KANDU	FA	Operational Information	91	AUTO ALIGNMENT FAIL-IN PROGRESS RF LOCK FAIL	Status Message	Check line of sight and target satellite info
6	KANDU	FA	Operational Information	A0	CABLE CALIBRATION SUCCESS	Status Message	
6	KANDU	FA	Operational Information	100	Auto Alignment LSF Gather Step 0	Status Message	
6	KANDU	FA	Operational Information	101	Auto Alignment LSF Gather Step 1	Status Message	
6	KANDU	FA	Operational Information	102	Auto Alignment LSF Gather Step 2	Status Message	
6	KANDU	FA	Operational Information	103	Auto Alignment LSF Gather Step 3	Status Message	
6	KANDU	FA	Operational Information	104	Auto Alignment LSF Gather Step 4	Status Message	
6	KANDU	FA	Operational Information	105	Auto Alignment LSF Gather Step 5	Status Message	
6	KANDU	FA	Operational Information	106	Auto Alignment LSF Gather Step 6	Status Message	
6	KANDU	FA	Operational Information	107	Auto Alignment LSF Gather Step 7	Status Message	
6	KANDU	FA	Operational Information	200	Auto Alignment LSF RF Lock Status	Status Message	
6	KANDU	FB	IP Security	0	IP Security Event	Status Message	
6	KANDU	FC	Reset	1	Watchdog	Critical Faults	Reboot the system, if persist, replace the KANDU

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
6	KANDU	FC	Reset	2	Software Command	Status Message	
6	KANDU	FC	Reset	4	SW exception	Critical Faults	Reboot the system, if persist, replace the KANDU
6	KANDU	FC	Reset	5	Power Cycle Or Reset Pin	Status Message	
6	KANDU	FD	Software Configuration	1	HW SW Compatibility	Critical Faults	Dataload KANDU
6	KANDU	FD	Software Configuration	2	LRU SW Compatibility	Critical Faults	Dataload KANDU
6	KANDU	FD	Software Configuration	3	Configuration parameter missing	Critical Faults	Dataload APM configuration files
6	KANDU	FD	Software Configuration	4	PRIMARY IMAGE CORRUPTION Warning	Critical Faults	Dataload KANDU
6	KANDU	FD	Software Configuration	6	LRU PRI-SEC IMAGE MISMATCH	Critical Faults	Dataload KANDU
6	KANDU	FD	Software Configuration	7	DataLoad	Status Message	
6	KANDU	FD	Software Configuration	8	Data Loader Connected	Status Message	
6	KANDU	FD	Software Configuration	9	Data Loader Disconnected	Status Message	
6	KANDU	FD	Software Configuration	80	Invalid OAE Configuration Data	Critical Faults	Run EUI tool on OAE
6	KANDU	FD	Software Configuration	81	Missing Transmit Cable Calibration Data	Warning	Re-run cable calibration. For Modman x.5 (ChinaSat)If problem with running cable calibration, reload TM configuration files
6	KANDU	FD	Software Configuration	A	Operating Image List	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
6	KANDU	FD	Software Configuration	B	Secondary Image Corruption Warning	Status Message	
6	KANDU	FD	Software Configuration	C	OTA Staged Software DataLoad	Status Message	
6	KANDU	FE	Software Runtime	0	Heartbeat failure	Status Message	Check LRU serial connection
6	KANDU	FE	software runtime	1	GENERAL Module failure	Critical Faults	Reboot the unit, if persist, replace the KANDU
6	KANDU	FE	Software Runtime	20	FILE SYSTEM FULL	Critical Faults	Use SB6 EUI tool to fix
6	KANDU	FE	Software Runtime	2	RSSI Failure	Status Message	Note: this can be a false positive
6	KANDU	FE	Software Runtime	3	OPENAmip failure	Status Message	If this fault does not clear, Check Modman KADNU and the connection inbetween
6	KANDU	FE	Software Runtime	4	Pointing failure	Status Message	Reboot the system, if cannot complete POST, replace the unit
6	KANDU	FE	Software Runtime	5	LRU mtd partition unlocked	Status Message	
6	KANDU	FE	Software Runtime	31	TX and/or RX LO Config Mismatch: SP _WB_FMA1	warning	check the Part number of BUC and WBFMA. Also check that mission config parameters are correct
6	KANDU	FE	Software Runtime	32	TX and/or RX polarity Mismatch: SP _WB_FMA1	warning	check the Part number of BUC and WBFMA. Also check that mission config parameters are correct
1	ModMan	FE	Software Runtime	4F	Network Service	Status Message	
6	KANDU	FF	Tempera-ture	1	ASC Main Temperature Sensor	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
20	ModMan KANDU Ethernet Bus	1	ModMan Input	0	Ethernet No Layer 1	Critical Faults	Check Modman-KANDU connection
20	ModMan KANDU Ethernet Bus	1	ModMan Input	1	Ethernet No traffic	Critical Faults	Check Modman-KANDU connection
20	ModMan KANDU Ethernet Bus	1	ModMan Input	2	Ethernet High packet loss	warning	Check Modman-KANDU connection
20	ModMan KANDU Ethernet Bus	1	ModMan Input	3	Ethernet Normal	Status Message	
20	ModMan KANDU Ethernet Bus	2	KANDU Input	0	Ethernet No Layer 1	Critical Faults	Check Modman-KANDU connection
20	ModMan KANDU Ethernet Bus	2	KANDU Input	1	Ethernet No traffic	Critical Faults	Check Modman-KANDU connection
20	ModMan KANDU Ethernet Bus	2	KANDU Input	2	Ethernet High packet loss	warning	Check Modman-KANDU connection
20	ModMan KANDU Ethernet Bus	2	KANDU Input	3	Ethernet Normal	Status Message	
21	ModMan APM Serial Bus	1	ModMan Input	1	APM Serial Inactive	Critical Faults	connect the APM and reboot
21	ModMan APM Serial Bus	1	ModMan Input	3	APM Serial Normal	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**		
22	GPS Input	0	Unknown	0	Inactive Link	Critical Faults	Check if the proper configuration files were loaded, and to check the GPS source data to the system
22	GPS Input	11	Latitude Label	1	MISSING	Critical Faults	Check if the proper configuration files were loaded, and to check the GPS source data to the system
22	GPS Input	12	Longitude Label	1	MISSING	Critical Faults	Check if the proper configuration files were loaded, and to check the GPS source data to the system
22	GPS Input	13	Altitude	1	MISSING	Critical Faults	Check if the proper configuration files were loaded, and to check the GPS source data to the system
22	GPS Input	14	Vertical Velocity	1	MISSING	Critical Faults	Check if the proper configuration files were loaded, and to check the GPS source data to the system
22	GPS Input	15	N-S Velocity	1	MISSING	Critical Faults	Check if the proper configuration files were loaded, and to check the GPS source data to the system
22	GPS Input	16	E-W Velocity	1	MISSING	Critical Faults	Check if the proper configuration files were loaded, and to check the GPS source data to the system
22	GPS Input	31	Time Label	1	MISSING	Critical Faults	Check if the proper configuration files were loaded, and to check the GPS source data to the system

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
22	GPS Input	32	Date Label	1	MISSING	Critical Faults	Check if the proper configuration files were loaded, and to check the GPS source data to the system
22	GPS Input	11	Latitude Label	2	SSM FT	Critical Faults	GPS source has faulted
22	GPS Input	12	Longitude Label	2	SSM FT	Critical Faults	GPS source has faulted
22	GPS Input	13	Altitude	2	SSM FT	Critical Faults	GPS source has faulted
22	GPS Input	14	Vertical Velocity	2	SSM FT	Critical Faults	GPS source has faulted
22	GPS Input	15	N-S Velocity	2	SSM FT	Critical Faults	GPS source has faulted
22	GPS Input	16	E-W Velocity	2	SSM FT	Critical Faults	GPS source has faulted
22	GPS Input	31	Time Label	2	SSM FT	Critical Faults	GPS source has faulted
22	GPS Input	32	Date Label	2	SSM FT	Critical Faults	GPS source has faulted
22	GPS Input	11	Latitude Label	3	SSM NCD	Critical Faults	GPS source has faulted
22	GPS Input	12	Longitude Label	3	SSM NCD	Critical Faults	GPS source has faulted
22	GPS Input	13	Altitude	3	SSM NCD	Critical Faults	GPS source has faulted
22	GPS Input	14	Vertical Velocity	3	SSM NCD	Critical Faults	GPS source has faulted
22	GPS Input	15	N-S Velocity	3	SSM NCD	Critical Faults	GPS source has faulted
22	GPS Input	16	E-W Velocity	3	SSM NCD	Critical Faults	GPS source has faulted
22	GPS Input	31	Time Label	3	SSM NCD	Critical Faults	GPS source has faulted
22	GPS Input	32	Date Label	3	SSM NCD	Critical Faults	GPS source has faulted

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
22	GPS Input	11	Latitude Label	4	SSM FW	Critical Faults	GPS source has faulted
22	GPS Input	12	Longitude Label	4	SSM FW	Critical Faults	GPS source has faulted
22	GPS Input	13	Altitude	4	SSM FW	Critical Faults	GPS source has faulted
22	GPS Input	14	Vertical Velocity	4	SSM FW	Critical Faults	GPS source has faulted
22	GPS Input	15	N-S Velocity	4	SSM FW	Critical Faults	GPS source has faulted
22	GPS Input	16	E-W Velocity	4	SSM FW	Critical Faults	GPS source has faulted
22	GPS Input	31	Time Label	4	SSM FW	Critical Faults	GPS source has faulted
22	GPS Input	32	Date Label+J585	4	SSM FW	Critical Faults	GPS source has faulted
22	GPS Input	11	Latitude Label	5	SSM NO (Normal Operation)	Status Message	
22	GPS Input	12	Longitude Label	5	SSM NO (Normal Operation)	Status Message	
22	GPS Input	13	Altitude	5	SSM NO (Normal Operation)	Status Message	
22	GPS Input	14	Vertical Velocity	5	SSM NO (Normal Operation)	Status Message	
22	GPS Input	15	N-S Velocity	5	SSM NO (Normal Operation)	Status Message	
22	GPS Input	16	E-W Velocity	5	SSM NO (Normal Operation)	Status Message	
22	GPS Input	31	Time Label	5	SSM NO (Normal Operation)	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
22	GPS Input	32	Date Label	5	SSM NO (Normal Operation)	Status Message	
22	GPS Input	80	GNSS Sensor Status Word	0	Self Test Mode	Status Message	
22	GPS Input	80	GNSS Sensor Status Word	1	Initialisation Mode	Status Message	
22	GPS Input	80	GNSS Sensor Status Word	2	Acquisition Mode	Status Message	
22	GPS Input	80	GNSS Sensor Status Word	3	Navigational Mode	Status Message	
22	GPS Input	80	GNSS Sensor Status Word	4	Altitude Aiding Mode	Status Message	
22	GPS Input	80	GNSS Sensor Status Word	7	Fault	Status Message	
22	GPS Input	80	GNSS Sensor Status Word	8	Missing	Status Message	
24	ModMan Output Discretes	1	Reset	2	INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail
24	ModMan Output Discretes	2	ARINC TX Mute	2	INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
24	ModMan Output Discretes	3	Filter Select	2	INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail
24	ModMan Output Discretes	4	Keyline Transmit	2	INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail
24	ModMan Output Discretes	5	System Available	2	INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail
24	ModMan Output Discretes	6	Data Link Available	2	INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail
24	ModMan Output Discretes	7	AMU1/IF SWITCH	2	INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail
24	ModMan Output Discretes	2	Arinc TX Mute	3	MODMAN/ KANDU INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail
24	ModMan Output Discretes	3	Filter Select	3	MODMAN/ KANDU INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail
24	ModMan Output Discretes	4	Keyline Transmit	3	MODMAN/ KANDU INPUT OUTPUT MISMATCH	Critical Faults	Check the signal line, refer to Section 3 - Installation for line detail
30	KANDU OAE Ethernet Bus	1	KANDU Input	0	Ethernet No Layer 1	Critical Faults	Check connection from KANDU to OAE
30	KANDU OAE Ethernet Bus	1	KANDU Input	1	Ethernet No traffic	Critical Faults	Check connection from KANDU to OAE

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
30	KANDU OAE Ethernet Bus	1	KANDU Input	2	Ethernet High packet loss	Critical Faults	Check connection from KANDU to OAE
30	KANDU OAE Ethernet Bus	1	KANDU Input	3	Ethernet Normal	Status Message	
30	KANDU OAE Ethernet Bus	2	OAE Input	0	Ethernet No Layer 1	Critical Faults	Check connection from OAE to KANDU
30	KANDU OAE Ethernet Bus	2	OAE Input	1	Ethernet No traffic	Critical Faults	Check connection from OAE to KANDU
30	KANDU OAE Ethernet Bus	2	OAE Input	2	Ethernet High packet loss	Critical Faults	Check connection from OAE to KANDU
30	KANDU OAE Ethernet Bus	2	OAE Input	3	Ethernet Normal	Status Message	
31	KANDU OAE Serial Control Bus	1	KANDU Input	1	Serial Inactive	Critical Faults	Check connection from KANDU to OAE
31	KANDU OAE Serial Control Bus	1	KANDU Input	2	Serial High packet loss	Critical Faults	Check connection from KANDU to OAE
31	KANDU OAE Serial Control Bus	1	KANDU Input	3	Serial Normal	Status Message	
31	KANDU OAE Serial Control Bus	2	OAE Input	1	Serial Inactive	Critical Faults	Check connection from OAE to KANDU

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
31	KANDU OAE Serial Control Bus	2	OAE Input	2	Serial High packet loss	Critical Faults	Check connection from OAE to KANDU
31	KANDU OAE Serial Control Bus	2	OAE Input	3	Serial Normal	Status Message	
32	KANDU OAE Serial IMU Bus	1	KANDU Input	1	Serial Inactive	Critical Faults	Check connection from KANDU to OAE
32	KANDU OAE Serial IMU Bus	1	KANDU Input	2	Serial High packet loss	Critical Faults	Check connection from KANDU to OAE
32	KANDU OAE Serial IMU Bus	1	KANDU Input	3	Serial Normal	Status Message	
32	KANDU OAE Serial IMU Bus	2	OAE Input	1	Serial Inactive	Critical Faults	Check connection from OAE to KANDU
32	KANDU OAE Serial IMU Bus	2	OAE Input	2	Serial High packet loss	Critical Faults	Check connection from OAE to KANDU
32	KANDU OAE Serial IMU Bus	2	OAE Input	3	Serial Normal	Status Message	
33	KANDU BUC-PA/ BUC-HPA Serial Bus	1	KANDU Input	1	Serial Inactive	Critical Faults	Check Connection from KANDU to BUC-PA/BUC Note: this can be part of normal power up log
33	KANDU BUC-PA/ BUC-HPA Serial Bus	1	KANDU Input	2	Serial High packet loss	Critical Faults	asc bite a429
33	KANDU BUC-PA/ BUC-HPA Serial Bus	1	KANDU Input	3	Serial Normal	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
33	KANDU BUC-PA/ BUC-HPA Serial Bus	2	BUC-PA Input	1	Serial Inactive	Critical Faults	Check Connection from BUC-PA/BUC to KANDU
33	KANDU BUC-PA/ BUC-HPA Serial Bus	2	BUC-PA Input	2	Serial High packet loss	Critical Faults	Check Connection from BUC-PA/BUC to KANDU
33	KANDU BUC-PA/ BUC-HPA Serial Bus	2	BUC-PA Input	3	Serial Normal	Status Message	
35	KANDU Input Discretes from ModMan	1	Reset	0	Asserted	Status Message	
35	KANDU Input Discretes from ModMan	1	Reset	1	De-asserted	Status Message	
35	KANDU Input Discretes from ModMan	2	ARINC TX Mute	0	Asserted	Status Message	
35	KANDU Input Discretes from ModMan	2	ARINC TX Mute	1	De-asserted	Status Message	
35	KANDU Input Discretes from ModMan	3	Filter Select	0	Asserted	Status Message	
35	KANDU Input Discretes from ModMan	3	Filter Select	1	De-asserted	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
35	KANDU Input Discretes from ModMan	4	BUC Mute	0	Asserted	Status Message	
35	KANDU Input Discretes from ModMan	4	BUC Mute	1	De-asserted	Status Message	
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	1	Reset	0	Asserted	Status Message	
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	1	Reset	1	De-asserted	Status Message	
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	1	Reset	2	KANDU RESET OF BUC-PA	Critical Faults	Note: this can be a falso positive prior to BLv6
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	2	BUC-PA TX Mute	0	Asserted	Status Message	
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	2	BUC-PA TX Mute	1	De-asserted	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	2	BUC-PA TX Mute	3	BUC-PA NOT MUTED DURING SYSTEM TEST	Critical Faults	Reboot the system, if persist, replace BUC-PA/BUC
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	2	BUC-PA TX MUTE	4	LINE NOT RESPONDING ON BUC-PA	Critical Faults	Check connection from KANDU to BUC-PA. If still not work, replace BUC-PA/BUC
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	3	Filter Select	0	Asserted	Status Message	
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	3	Filter Select	1	De-asserted	Status Message	
41	BUC-PA/ BUC-HPA Input Discrete from KANDU	3	Filter Select	4	LINE NOT RESPONDING ON BUC-PA	Critical Faults	Check connection from KANDU to BUC-PA. If still not work, replace BUC-PA/BUC
70/71	IRU Input Bus/ Aircraft State Input Bus	0	Unknown	0	Inactive Link	Critical Faults	Check connection to IRU source and the IRU source
70/71	IRU Input Bus/ Aircraft State Input Bus	1	Pitch Angle Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
70/71	IRU Input Bus/ Aircraft State Input Bus	2	Roll Angle Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	3	Pitch Rate Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	4	Roll Rate Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	5	Yaw Rate Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	6	Body Longitudinal Acceleration	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	7	Body Vertical Acceleration	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	8	True Heading Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	9	Body Lateral Acceleration	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
70/71	IRU Input Bus/ Aircraft State Input Bus	10	True Track	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	11	Latitude Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	12	Longitude Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	13	Altitude	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	14	Vertical Velocity	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	15	N-S Velocity	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	16	E-W Velocity	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	21	Horizontal stabilization	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
70/71	IRU Input Bus/ Aircraft State Input Bus	31	Time Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	32	Date Label	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	41	Flight Phase	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	42	MLG Ground Condition	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	43	Ground Speed	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	50	Body Pitch Acceleration	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	51	Body Roll Acceleration	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	52	Body Yaw Acceleration	1	MISSING	Critical Faults	Turn on/align A429 signal, check APM systemconfig

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
70/71	IRU Input Bus/ Aircraft State Input Bus	1	Pitch Angle Label	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	2	Roll Angle Label	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	3	Pitch Rate Label	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	4	Roll Rate Label	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	5	Yaw Rate Label	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	6	Body Longitudinal Acceleration	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	7	Body Vertical Acceleration	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	8	True Heading Label	2	SSM FT	Critical Faults	Check A429 signal from source

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
70/71	IRU Input Bus/ Aircraft State Input Bus	9	Body Lateral Acceleration	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	10	True Track	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	11	Latitude Label	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	12	Longitude Label	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	13	Altitude	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	14	Vertical Velocity	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	15	N-S Velocity	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	16	E-W Velocity	2	SSM FT	Critical Faults	Check A429 signal from source

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
70/71	IRU Input Bus/ Aircraft State Input Bus	21	Horizontal stabilization	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	31	Time Label	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	32	Date Label	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	41	Flight Phase	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	42	MLG Ground Condition	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	43	Ground Speed	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	50	Body Pitch Acceleration	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	51	Body Roll Acceleration	2	SSM FT	Critical Faults	Check A429 signal from source

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
70/71	IRU Input Bus/ Aircraft State Input Bus	52	Body Yaw Acceleration	2	SSM FT	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	1	Pitch Angle Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	2	Roll Angle Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	3	Pitch Rate Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	4	Roll Rate Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	5	Yaw Rate Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	6	Body Longitudinal Acceleration	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	7	Body Vertical Acceleration	3	SSM NCD	Critical Faults	Check A429 signal from source

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
70/71	IRU Input Bus/ Aircraft State Input Bus	8	True Heading Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	9	Body Lateral Acceleration	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	10	True Track	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	11	Latitude Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	12	Longitude Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	13	Altitude	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	14	Vertical Velocity	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	15	N-S Velocity	3	SSM NCD	Critical Faults	Check A429 signal from source

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
70/71	IRU Input Bus/ Aircraft State Input Bus	16	E-W Velocity	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	21	Horizontal stabilization	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	31	Time Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	32	Date Label	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	41	Flight Phase	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	42	MLG Ground Condition	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	43	Ground Speed	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	50	Body Pitch Acceleration	3	SSM NCD	Critical Faults	Check A429 signal from source

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
70/71	IRU Input Bus/ Aircraft State Input Bus	51	Body Roll Acceleration	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	52	Body Yaw Acceleration	3	SSM NCD	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	1	Pitch Angle Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	2	Roll Angle Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	3	Pitch Rate Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	4	Roll Rate Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	5	Yaw Rate Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	6	Body Longitudinal Acceleration	4	SSM FW	Critical Faults	Check A429 signal from source

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
70/71	IRU Input Bus/ Aircraft State Input Bus	7	Body Vertical Acceleration	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	8	True Heading Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	9	Body Lateral Acceleration	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	10	True Track	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	11	Latitude Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	12	Longitude Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	13	Altitude	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	14	Vertical Velocity	4	SSM FW	Critical Faults	Check A429 signal from source

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
70/71	IRU Input Bus/ Aircraft State Input Bus	15	N-S Velocity	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	16	E-W Velocity	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	21	Horizontal stabilization	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	31	Time Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	32	Date Label	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	41	Flight Phase	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	42	MLG Ground Condition	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	43	Ground Speed	4	SSM FW	Critical Faults	Check A429 signal from source

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
70/71	IRU Input Bus/ Aircraft State Input Bus	50	Body Pitch Acceleration	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	51	Body Roll Acceleration	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	52	Body Yaw Acceleration	4	SSM FW	Critical Faults	Check A429 signal from source
70/71	IRU Input Bus/ Aircraft State Input Bus	1	Pitch Angle Label	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	2	Roll Angle Label	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	3	Pitch Rate Label	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	4	Roll Rate Label	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	5	Yaw Rate Label	5	SSM NO (Normal Operation)	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
70/71	IRU Input Bus/ Aircraft State Input Bus	6	Body Longitudinal Acceleration	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	7	Body Vertical Acceleration	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	8	True Heading Label	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	9	Body Lateral Acceleration	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	10	True Track	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	11	Latitude Label	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	12	Longitude Label	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	13	Altitude	5	SSM NO (Normal Operation)	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**		
70/71	IRU Input Bus/ Aircraft State Input Bus	14	Vertical Velocity	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	15	N-S Velocity	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	16	E-W Velocity	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	21	Horizontal stabilization	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	31	Time Label	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	32	Date Label	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	41	Flight Phase	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	42	MLG Ground Condition	5	SSM NO (Normal Operation)	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
70/71	IRU Input Bus/ Aircraft State Input Bus	43	Ground Speed	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	50	Body Pitch Acceleration	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	51	Body Roll Acceleration	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	52	Body Yaw Acceleration	5	SSM NO (Normal Operation)	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	80	GNSS Sensor Status Word	0	Self Test Mode	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	80	GNSS Sensor Status Word	1	Initialisation Mode	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	80	GNSS Sensor Status Word	2	Acquisition Mode	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	80	GNSS Sensor Status Word	3	Navigational (Normal) Mode	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
70/71	IRU Input Bus/ Aircraft State Input Bus	80	GNSS Sensor Status Word	4	Altitude Aiding Mode	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	80	GNSS Sensor Status Word	7	Fault	Status Message	Check GNSS source
70/71	IRU Input Bus/ Aircraft State Input Bus	80	GNSS Sensor Status Word	8	Missing	Status Message	Check source, and APM systemconfig
70/71	IRU Input Bus/ Aircraft State Input Bus	81	IRS Discrete Word #1	0	Align Mode/Not Ready	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	81	IRS Discrete Word #1	1	Revisionary Altitude Mode	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	81	IRS Discrete Word #1	2	Normal Mode	Status Message	
70/71	IRU Input Bus/ Aircraft State Input Bus	81	IRS Discrete Word #1	8	Missing	Status Message	Check source, and APM systemconfig
72	ModMan Aircraft Discrete Input	6	WOW	0	Asserted	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
72	ModMan Aircraft Discrete Input	6	WOW	1	De-asserted	Status Message	
72	ModMan Aircraft Discrete Input	8	Ground Transmit Enable	0	Asserted	Status Message	
72	ModMan Aircraft Discrete Input	8	Ground Transmit Enable	1	De-asserted	Status Message	
72	ModMan Aircraft Discrete Input	9	Public Svr Disable	0	Asserted	Status Message	
72	ModMan Aircraft Discrete Input	9	Public Svr Disable	1	De-asserted	Status Message	
72	ModMan Aircraft Discrete Input	C	Local Data Load	0	Asserted	Status Message	
72	ModMan Aircraft Discrete Input	C	Local Data Load	1	De-asserted	Status Message	
73	KANDU Aircraft Discrete Input	C	TX Control	0	Asserted	Status Message	
73	KANDU Aircraft Discrete Input	C	TX Control	1	De-asserted	Status Message	
74	IF Switch	1	SWITCH STATE	1	SWITCH STATE MISMATCH	Warning	Check IF switch installation, refer to Figure 3-12 for details

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
80	AISD Network: Ethernet AG1	1	ModMan Input	0	Ethernet No Layer 1	warning	
80	AISD Network: Ethernet AG1	1	ModMan Input	1	Ethernet No traffic	Status Message	
80	AISD Network: Ethernet AG1	1	ModMan Input	2	Ethernet High packet loss	warning	
80	AISD Network: Ethernet AG1	1	ModMan Input	3	Ethernet Normal	Status Message	
80	AISD Network: Ethernet AG1	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	
81	AISD Network: Ethernet AV1	1	ModMan Input	0	Ethernet No Layer 1	warning	
81	AISD Network: Ethernet AV1	1	ModMan Input	1	Ethernet No traffic	Status Message	
81	AISD Network: Ethernet AV1	1	ModMan Input	2	Ethernet High packet loss	warning	
81	AISD Network: Ethernet AV1	1	ModMan Input	3	Ethernet Normal	Status Message	
81	AISD Network: Ethernet AV1	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
82	AISD Network: Ethernet AV2	1	ModMan Input	0	Ethernet No Layer 1	warning	
82	AISD Network: Ethernet AV2	1	ModMan Input	1	Ethernet No traffic	Status Message	
82	AISD Network: Ethernet AV2	1	ModMan Input	2	Ethernet High packet loss	warning	
82	AISD Network: Ethernet AV2	1	ModMan Input	3	Ethernet Normal	Status Message	
82	AISD Network: Ethernet AV2	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	
83	AISD Network: Ethernet AV3	1	ModMan Input	0	Ethernet No Layer 1	warning	
83	AISD Network: Ethernet AV3	1	ModMan Input	1	Ethernet No traffic	Status Message	
83	AISD Network: Ethernet AV3	1	ModMan Input	2	Ethernet High packet loss	warning	
83	AISD Network: Ethernet AV3	1	ModMan Input	3	Ethernet Normal	Status Message	
83	AISD Network: Ethernet AV3	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
88	PIESD Network: Ethernet EG1	1	ModMan Input	0	Ethernet No Layer 1	warning	
88	PIESD Network: Ethernet EG1	1	ModMan Input	1	Ethernet No traffic	Status Message	
88	PIESD Network: Ethernet EG1	1	ModMan Input	2	Ethernet High packet loss	warning	
88	PIESD Network: Ethernet EG1	1	ModMan Input	3	Ethernet Normal	Status Message	
88	PIESD Network: Ethernet EG1	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	
89	PIESD Network: Ethernet EN5	1	ModMan Input	0	Ethernet No Layer 1	warning	
89	PIESD Network: Ethernet EN5	1	ModMan Input	1	Ethernet No traffic	Status Message	
89	PIESD Network: Ethernet EN5	1	ModMan Input	2	Ethernet High packet loss	warning	
89	PIESD Network: Ethernet EN5	1	ModMan Input	3	Ethernet Normal	Status Message	
89	PIESD Network: Ethernet EN5	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
8A	PIESD Network: Ethernet EN6	1	ModMan Input	0	Ethernet No Layer 1	warning	
8A	PIESD Network: Ethernet EN6	1	ModMan Input	1	Ethernet No traffic	Status Message	
8A	PIESD Network: Ethernet EN6	1	ModMan Input	2	Ethernet High packet loss	warning	
8A	PIESD Network: Ethernet EN6	1	ModMan Input	3	Ethernet Normal	Status Message	
8A	PIESD Network: Ethernet EN6	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	
8B	PIESD Network: Ethernet EN7	1	ModMan Input	0	Ethernet No Layer 1	warning	
8B	PIESD Network: Ethernet EN7	1	ModMan Input	1	Ethernet No traffic	Status Message	
8B	PIESD Network: Ethernet EN7	1	ModMan Input	2	Ethernet High packet loss	warning	
8B	PIESD Network: Ethernet EN7	1	ModMan Input	3	Ethernet Normal	Status Message	
8B	PIESD Network: Ethernet EN7	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3		Log type	Repair action
Code	Descrip-tion	Code	Descrip-tion	Code	Description		
8C	PIESD Network: Ethernet EN8	1	ModMan Input	0	Ethernet No Layer 1	warning	
8C	PIESD Network: Ethernet EN8	1	ModMan Input	1	Ethernet No traffic	Status Message	
8C	PIESD Network: Ethernet EN8	1	ModMan Input	2	Ethernet High packet loss	warning	
8C	PIESD Network: Ethernet EN8	1	ModMan Input	3	Ethernet Normal	Status Message	
8C	PIESD Network: Ethernet EN8	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	
90	PODD Network: Ethernet PG1	1	ModMan Input	0	Ethernet No Layer 1	warning	
90	PODD Network: Ethernet PG1	1	ModMan Input	1	Ethernet No traffic	Status Message	
90	PODD Network: Ethernet PG1	1	ModMan Input	2	Ethernet High packet loss	warning	
90	PODD Network: Ethernet PG1	1	ModMan Input	3	Ethernet Normal	Status Message	
90	PODD Network: Ethernet PG1	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
91	PODD Network: Ethernet PA1	1	ModMan Input	0	Ethernet No Layer 1	warning	
91	PODD Network: Ethernet PA1	1	ModMan Input	1	Ethernet No traffic	Status Message	
91	PODD Network: Ethernet PA1	1	ModMan Input	2	Ethernet High packet loss	warning	
91	PODD Network: Ethernet PA1	1	ModMan Input	3	Ethernet Normal	Status Message	
91	PODD Network: Ethernet PA1	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	
92	PODD Network: Ethernet PA2	1	ModMan Input	0	Ethernet No Layer 1	warning	
92	PODD Network: Ethernet PA2	1	ModMan Input	1	Ethernet No traffic	Status Message	
92	PODD Network: Ethernet PA2	1	ModMan Input	2	Ethernet High packet loss	warning	
92	PODD Network: Ethernet PA2	1	ModMan Input	3	Ethernet Normal	Status Message	
92	PODD Network: Ethernet PA2	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
93	PODD Network: Ethernet PA3	1	ModMan Input	0	Ethernet No Layer 1	warning	
93	PODD Network: Ethernet PA3	1	ModMan Input	1	Ethernet No traffic	Status Message	
93	PODD Network: Ethernet PA3	1	ModMan Input	2	Ethernet High packet loss	warning	
93	PODD Network: Ethernet PA3	1	ModMan Input	3	Ethernet Normal	Status Message	
93	PODD Network: Ethernet PA3	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	
94	PODD Network: Ethernet PA4	1	ModMan Input	0	Ethernet No Layer 1	warning	
94	PODD Network: Ethernet PA4	1	ModMan Input	1	Ethernet No traffic	Status Message	
94	PODD Network: Ethernet PA4	1	ModMan Input	2	Ethernet High packet loss	warning	
94	PODD Network: Ethernet PA4	1	ModMan Input	3	Ethernet Normal	Status Message	
94	PODD Network: Ethernet PA4	10	STATIS-TICS	1	IP FILTER RULE VIOLATIONS	Status Message	

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Table 6-1. L1, L2 and L3 Codes (Cont)

L1		L2		L3			
Code	**Descrip-tion**	**Code**	**Descrip-tion**	**Code**	**Description**	**Log type**	**Repair action**
B0	RF TX ModMan to BUC-PA/ BUC-HPA	0	Unknown	1	TX IF	Critical Faults	Check Signal path from Modman to BUC
B0	RF TX ModMan to BUC-PA/ BUC-HPA	0	Unknown	2	50 MHz Ref	Critical Faults	Check Signal path from Modman to BUC
B1	RF TX BUC-PA/ BUC-HPA to OAE	0	Unknown	1	TX ka Band	Critical Faults	Check Signal path from BUC to OAE
B2	RF RX	0	Unknown	1	RX Cabling	Critical Faults	Check signal path from OAE to BUC, and BUC to Modman, also ensure proper APM (systemconfig) is loaded
B2	RF RX	0	Unknown	2	GLOBAL BEAM LOCK	Status Message	Check for clear line of sight
BB	Ext 50MHz IFIB BUC-PA Tx	0	Unknown	1	50 MHZ REF	warning	Check IF TX line between External modem and BUC HPA. In the case that external modem mode is not desired, change back to internal modem mode
4	FMA	0	Unknown	11	LRU Menu Access - Maintenance	Status Message	

3. <u>System Fails Post-Installation Checks</u>

A. To make sure that the system is correctly installed, do as follows:

(1) Make sure that the APM has been correctly configured and loaded. Refer to ARINC 615A Software Data Load Process and this section to access the GUI to check that the correct APM version is installed.

(2) Make sure that all the LRUs and connections have been correctly installed.

(a) Do continuity checks on wiring, validate communication cabling for Tx, Rx signal integrity via cable analyzers, test RF cables with specialized RF cable testers, and do power on and ground checks with LRUs disconnected for the check.

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(3) Make sure that all LRUs power up and report "OK" status.

(a) System status can be viewed at the AES Home and Status Info Page Figure 5-2.

(4) Check for system internal interconnect faults. Refer to JetWave™ MCS-8562 Terminal.

(5) Make sure the system is connected correctly to the navigation busses, check the system for No traffic faults on the A429 ports. If No traffic faults are received, do as follows:

(a) Check wiring and or make sure that the APM is configured for how the system is wired.

(6) Make sure that the cable calibration procedure has been done. Refer to Cable Calibration.

(7) Make sure that the navigation data is correct and that the antenna alignment has been done.

(8) Check the system for User port Ethernet No layer 1 faults. If faults are received, do as follows:

(a) Check the APM for correct configuration.

(b) Make sure that the connecting equipment is operating correctly.

(c) Check the wiring.

(9) Make sure that the system has the correct software loaded. The GUI screen has a Software Validity Flag, which if it is clear, then ALL system software is OK. If so, do as follows:

(a) Check for LRU software errors.

(b) Check for LRU hardware/software incompatibilities.

(c) Validate the system has the correct overall software load by validating the software version of each LRU that matches with the expected system configuration. Valid system configurations are defined for each Black Label software release and communicated via the service bulletin process.

4. Incorrect Navigation Data

A. If the system is reporting labels missing, do as follows:

(1) Check that the APM is configured to have correct labels with the proper rate, latency on the correct bus.

(2) Make sure that the labels are present on the bus.

B. If the system is reporting an incorrect label status on the bus (FW, NCD, FT), do as follows:

(1) Wait for equipment providing the labels to report Normal Operation.

5. System Will Not Connect to the Network

A. View the AES Home and Status Info Page Figure 5-2 to see reason transmission is muted and address the reasons.

B. If the Radome is not installed, visually make sure that the Antenna is pointing toward the appropriate satellite for the region.

C. The system can only transmit in authorized altidudes and will report if it cannot transmit for this reason.

D. Make sure you have clear line of sight to the satellite.

E. Make sure the interconnection is intact and secured

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F. Make sure the system has been activated by the ISP. Activation should be checked by contacting the ISP provider to ensure service is active before commencing with testing.

G. Make sure that the system is not configured for data loading or in critial fault mode. The system will not transmit while the local data enable input is closed to ground.

H. If external modem will not connect to network, check mission config has the correct setting.

6. Connectivity of Each Ethernet Port

NOTE: The JetWave™ MCS-8562 Terminal configuration files can be updated in the field. Honeywell can create a new system configuration file if needed. On completion of AES system installation activities, the installer can view and verify the AES configuration settings through the GUI as described in this section.

To view and verify the AES system configuration, a web based GUI is supplied. The JetWave™ MCS-8562 Terminal Ethernet configuration data can be viewed and verified by navigating to the “Contents of Aircraft Services Configuration Files” page from “Configuration Files” under the Other Information & Control menu. Figure 5-4 shows the typical configuration file Information page.

The network status and the VLAN ID can be viewed as shown in Figure 6-15.

The IP address assigned can be viewed by pressing the “Display” tab of the Contents of Aircraft Configuration File as shown in Figure 6-6.

ICN-38473-0000726676-001-01

Figure 6-6. Contents of Aircraft Services Configuration File

There are a number of functions that an Ethernet port can support namely, data traffic, data loading, GUI, AES logs extraction (maintenance function) and status/control (through the SNMP).

The terminal can be configured to indicate whether an Ethernet port supports traffic, data loading, SNMP, etc, such as port PA1 configured for engineering SNMP and AES access services. Refer to Figure 6-6. It contains the parameters that follow:

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- User Port PA1/2/3/4/PG1/EN5/6/7/8/EG1/AV1/2/3/AG1 data load
- Data Load IP Modman
- Data Load IP KANDU
- Data Load IP OAE
- User Port PA1/2/3/4/PG1/EN5/6/7/8/EG1/AV1/2/3/AG1 AES services config Modman
- User Port PA1/2/3/4/PG1/EN5/6/7/8/EG1/AV1/2/3/AG1 AES services config KANDU
- User Port PA1/2/3/4/PG1/EN5/6/7/8/EG1/AV1/2/3/AG1 AES services config OAE
- User Port PA1/2/3/4/PG1/EN5/6/7/8/EG1/AV1/2/3/AG1 AES services IP Modman
- User Port PA1/2/3/4/PG1/EN5/6/7/8/EG1/AV1/2/3/AG1 AES services IP KANDU
- User Port PA1/2/3/4/PG1/EN5/6/7/8/EG1/AV1/2/3/AG1 AES services IP OAE
- User Port AES services IP subnet
- User Port PA1/2/3/4/PG1/EN5/6/7/8/EG1/AV1/2/3/AG1 traffic services
- User Port IP filter 1 thru 150.

Once the items have been loaded into the APM the Modman reads the APM once at power-on and passes the appropriate data to the relevant LRU or uses the information locally.

A. If the Ethernet port is not active, do as follows:

(1) Check the APM settings, as follows:

(a) Make sure that the port is enabled.

(b) Check system errors.

(c) Check for system reporting No layer 1 or No traffic faults.

(2) Is the device connecting to it operating correctly? If so, check the wiring.

(3) Make sure that the system in the correct mode.

B. It there is poor performance on one port only, do as follows:

(1) Check for port reporting high packet loss. If so, check wiring and verify that there is traffic.

C. If not supplying access to the correct services, do as follows:

(1) Make sure the APM is configured for the correct services.

(2) Make sure the APM is configured to access the correct VLANs.

Check with the service provider to make sure that the VLANs have been correctly configured for the terminal.

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SECTION 7 – MAINTENANCE AND REPAIR

1. Maintenance Requirements

A. The maintenance-free design of the JetWave™ MCS-8562 Terminal AES system does not require field maintenance to maintain airworthiness.

B. Maintenance of the JetWave™ MCS-8562 Terminal AES system is limited to replacement of LRUs on verified failure.

C. OAE do not require field maintenance, such as lubrication of moving parts.

D. If functional problems occur, the BITE can identify the faulty JetWave™ MCS-8562 Terminal AES LRU and the Modman collates this information which can be accessed through the GUI provided. Refer to BITE Philosophy of this document for information on how to access the BITE data.

If replacement of an LRU is deemed necessary, in consultation with the customer's authorized JetWave product support, It is strongly recommended that all repairs be performed only at the Honeywell authorized facility.

Only qualified technical personnel, familiar with avionics systems, should perform the test procedures provided in this document. Before performing any test or fault isolation procedures, read the safety advisories.

- Remove the primary AC power delivered to the KANDU via aircraft circuit breaker. This will power down the KANDU, including the 38.5 VDC and the 24 VDC power supply to the FMA.
- Wait 1 minute following the removal of power to KANDU before attempting cable disconnect from FMA , or any physical contact with the FMA.
- Disconnect FMA Plug P1 and measure the voltage across Pin A and Pin B using a voltmeter (38.5 VDC voltage line). The measurement should not exceed 1 VDC.
- Disconnect FMA Plug P3 and measure the voltage across Pin 5 and Pin 6 using a voltmeter (24 VDC voltage line). The measurement should not exceed 1 VDC.

2. Continued Airworthiness, FAR 25.1529

The sections that follow supply instructions for continued airworthiness for the JetWave™ MCS-8562 Terminal AES system. The sections that follow are supplied in response to Federal Aviation Regulation 25.1529, Instructions for Continued Airworthiness.

3. Airworthiness Limitations

A. Installation of the JetWave™ MCS-8562 Terminal AES OAE assembly and LRUs on an aircraft by supplemental type certificate (STC) or Form 337 obligates the aircraft operator to include the maintenance information supplied by this manual in the operator's Aircraft Maintenance manual and the operator's Aircraft Scheduled Maintenance Program.

B. It is recommended that this section be appended to the Airplane Maintenance Manuals. The information contained herein supplements the Airplane Maintenance Manuals in areas covered by the JetWave™ MCS-8562 Terminal AES FMA installation.

C. It is recommended to consult basic Airplane Maintenance Manuals for limitations and procedures not contained in this supplement. The inspections and airworthiness limitations specified in this section are FAA approved.

D. Aircraft Manufacturers may also impose return to service criteria on installed aircraft equipment after lightning or bird strike events. This section and the sections that follow specifies the inspections

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and other maintenance required under sections 433.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

Initial and recurring inspections of the JetWave™ MCS-8562 Terminal AES OAE assembly and LRUs and its associated provisions are required. Specific inspection intervals are contained in Table 7-1.

4. General Instructions for Inspection

This section provides general instructions for the inspection of the JetWave™ MCS-8562 Terminal AES OAE assembly and LRUs.

A. Gain access to the installation location on the fuselage for fuselage mount antenna assembly

B. Clean all visible surfaces of the antenna, radome assembly, and base plate.

C. Do the inspections and checks presented in Electrical and Mechanical Inspection and Check.

D. Remove the primary AC power delivered to the KANDU via aircraft circuit breaker. This will power down the KANDU, including the 38.5 VDC and the 24 VDC power supply to the FMA.

E. Wait 1 minute following the removal of power to KANDU before attempting cable disconnect from FMA, or any physical contact with the FMA.

F. In case of FMA, disconnect FMA Plug P1 and measure the voltage across Pin A and Pin B using a voltmeter (38.5 VDC voltage line). The measurement should not exceed 1 VDC.

G. In case of FMA, disconnect FMA Plug P3 and measure the voltage across Pin 5 and Pin 6 using a voltmeter (24 VDC voltage line). The measurement should not exceed 1 VDC.

5. Electrical and Mechanical Inspection and Check

Periodic inspections of the mechanical and electrical interfaces of the JetWave™ MCS-8562 Terminal AES OAE assembly and LRUs to the aircraft should be completed as defined by the governing airworthiness body (such as Transport Canada, the FAA, or the JAA) Instructions for Continued Airworthiness for the installation.

For the general guidelines refer to Visual Inspection and Check and Scheduled Maintenance and Inspections sections.

6. Instructions for Continued Airworthiness

This section supplies the special instructions and maintenance requirements for continued airworthiness of the JetWave™ MCS-8562 Terminal AES subsystems.

JetWave™ MCS-8562 Terminal AES OAE assembly and LRUs are considered “On-Condition” units. No additional or routine maintenance is required for the on-condition JetWave™ MCS-8562 Terminal AES OAE assembly and LRUs.

If a JetWave™ MCS-8562 Terminal AES OAE assembly or an LRU is inoperative, do as follows:

- Collar applicable switches and circuit breakers
- Secure cables and wiring
- Remove the unit
- Placard the JetWave™ MCS-8562 Terminal AES LRU and associated items as “inoperative” in accordance with the Aircraft Maintenance Manual (AMM)
- Before flight, do as follows:

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- Record the removal of the unit in the aircraft log book
- Revise the equipment list. Refer to section 91.213 of the FAR or the aircraft's Minimum Equipment List (MEL)
- Revise the weight and balance data as applicable.
- In case of Modman replacement, the service provider needs to be notified so that the system is prepared to accept the new modem.

JetWave™ MCS-8562 Terminal AES system LRUs are not field-repairable. Return the faulty LRU(s) to the Honeywell authorized facility for repair.

Install repaired or replacement LRUs on the aircraft in accordance with the installation instructions supplied in this manual. Refer to ARINC 615A Software Data Load Process for instructions on how to bring the repaired or replacement LRU up to current software release.

Make sure that all repaired units operate correctly before you approve them for return to service, with the operational verification tests and procedures provided in this SDIM. Approval for return to service must be entered in the logbook as required by section 43.9 of the FAR.

Enter the approval for return to service in the appropriate logbook as required by FAR Section 43.9.

Add the scheduled maintenance tasks to the aircraft operator's appropriate aircraft maintenance program as follows:

- Recommended periodic scheduled servicing tasks: None required.
- Recommended periodic inspections:
- Scheduled maintenance inspections supplied in Table 7-1 and in accordance the aircraft's inspection and maintenance schedule.
- Recommended periodic scheduled preventative maintenance tests (to determine system condition and/or latent failures): None required.

7. Visual Inspection and Check

Do the procedures that follow to examine the JetWave™ MCS-8562 Terminal AES OAE assembly and LRUs after installation of the unit onto the aircraft. Follow all approved safety standards and practices during the inspection.

WARNING: **FAILURE TO DISCONNECT CIRCUIT BREAKERS CAN LEAD TO INJURY TO THE OPERATOR AND DAMAGE TO THE EQUIPMENT.**

A. Disconnect all circuit breakers to the JetWave™ MCS-8562 Terminal AES OAE assembly, LRUs and associated systems.

B. Visually examine the FMA for any damage or defects. Please refer to the radome supplier's Structural Repair Manual (SRM) for the specific radome inspection and damage repair instructions.

8. Scheduled Maintenance and Inspections

A. The JetWave™ MCS-8562 Terminal AES system does not require routine maintenance for continued airworthiness.

B. It is recommended to follow the Standard Practices Chapter of the Aircraft Maintenance Manual and do all required inspections and repairs. Refer to Table 7-1 for scheduled maintenance.

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Table 7-1. Scheduled Maintenance

SI No.	Item	Interval	Potential Damage Inspection	Inspection
	Lightning diverters	In accordance with the aircraft inspection schedule and after flying in known conditions of lightning	Paint damage, structural damage, de-lamination	External visual
	Fuselage mount radome exterior, radome skirt exterior	In accordance with the aircraft inspection schedule and after flying in known conditions of lightning/hail.	Paint damage, structural damage, de-lamination, puncture, dark marks/ streaking	External visual
	Antenna interface mount	In accordance with the aircraft inspection schedule	Corrosion, loose, or missing fasteners	External visual
	OAE – FMA connectors	In accordance with the aircraft inspection schedule	Corrosion, loose, or missing connectors	External visual
	OAE-FMA grounding and bonding	In accordance with the aircraft inspection schedule	Non conform electrical bonding	External visual and 5 mΩ test
	OAE-FMA wiring	In accordance with the aircraft inspection schedule	Chafing, cracks in insulation, breaks	External visual
	KANDU connectors	In accordance with the aircraft inspection schedule	Corrosion, loose, or missing connectors	External visual
	KANDU grounding and bonding	In accordance with the aircraft inspection schedule	Non conform electrical bonding	External visual and 5 mΩ test
	Modman and APM connectors	In accordance with the aircraft inspection schedule	Corrosion, loose, or missing connectors	External visual
	Modman and APM grounding and bonding	In accordance with the aircraft inspection schedule	Non conform electrical bonding	External visual and 5 mΩ test

9. Unscheduled Maintenance

A. Follow the Standard Practices Chapter of the Aircraft Maintenance Manual and do all the required inspections and repairs, as shown in Table 7-2.

Table 7-2. Unscheduled Maintenance

	Item	Potential Damage	Inspection
JetWave™ MCS-8562 Terminal AES FMA OAE OAE	Heavy rain/hail	Paint erosion	External visual
	bird strike	Paint damage/radome puncture	External visual
JetWave™ MCS-8562 Terminal AES system Failure	NA	NA	Removal

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B. JetWave™ MCS-8562 Terminal AES system status can be viewed through the GUI. Refer to Checking Status Information section for description.

C. On the Modman LRU the status indicator LED is on the Modman front panel. The various Modman status indications are shown in Table 7-3.

Table 7-3. Modman LED Status Indications

Status LED	Mode
Off	No electrical power/electrical power is supplied but prior to boot.
Flash green at a minimum of 10 seconds	Modman initialization
On - green	Modman in normal operation
On - red	Modman in Fault Mode

10. Repair Requirements

A. The BITE functionality of JetWave™ MCS-8562 Terminal AES system can identify the faulty LRU in the case of any occurrence of functional problems and this can be accessed through Modman.

B. In accordance with continued airworthiness instructions, if a JetWave™ MCS-8562 Terminal AES system is inoperative, use Standard Practices Chapter of the Aircraft Maintenance Manual to:

- Remove the unit
- Secure cables and wiring
- Collar applicable switches and circuit breakers, and placard them as “inoperative”.

Before flight, revise the equipment list and weight and balance data as applicable, and record the removal of the unit in the log book. Refer to section 91.213 of the FAR or the aircraft’s minimum equipment list. All repairs must be done at the Honeywell factory.

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APPENDIX A – ENVIRONMENTAL CHARACTERISTICS

1. RTCA/DO-160G Environmental Characteristics

A. Modman

The following characteristics are taken from the core equipment qualification program and do not reflect any additional qualification conducted on a per installation basis.

Section	Condition	Category
4	Temperature and altitude	A1(V)
	NOTE: Below 5˚F (-15˚C), user services are not offered. Altitude for all units extended to 55,000 feet (16,764 m) during the qualification test. Overpressure 28.9 PSI (199 kPa), Decompression 8,000 to 55,000 (75.25 to 9.12 kPa) in 15 seconds.	
5	Temperature variation	B
6	Humidity	B
7	Operational shocks and crash safety	B
8	Vibration	CAT S, CURVE B2
9	Explosive atmosphere	X - not required
10	Waterproofness	Y - not qualified for dripping water
11	Fluids specification	X - not required
12	Sand and dust	X - not required
13	Fungus resistance	F
14	Salt fog	X - not required
15	Magnetic effect	A
16	Power input	A (WF) HLPI
17	Voltage spike	A
18	Audio frequency conducted susceptibility	K
19	Induced signal susceptibility	ZW
20	Radio frequency susceptibility	RR
21	Emissions of RF energy	M
22	Lightning induced transient susceptibility	A2K2L3
23	Lightning direct effects	X - not required
24	Icing	X - not required
25	Electrostatic discharge	A
26	Fire, flammability	C - covers 14 CFR 25.853

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B. APM

Section	Condition	Category
4	Temperature and altitude	A1(V)
	NOTE: Altitude test extended to 50,000 feet (15,240 m). Overpressure 28.9 PSI (199 kPa), Decompression 6,000 to 55,000 (1828.8 to 16,764 m) in 2 seconds.	
5	Temperature variation	B
6	Humidity	B
7	Operational shocks and crash safety	B
8	Vibration	CAT S, CURVE B2
9	Explosive atmosphere	X - not required
10	Waterproofness	Y
11	Fluid susceptibility	X - not required
12	Sand and dust	X - not required
13	Fungus resistance	F
14	Salt fog	X - not required
15	Magnetic effect	A
16	Power input	X - not required
17	Voltage spike	X - not required
18	Audio frequency conducted susceptibility	X - not required
19	Induced signal susceptibility	ZC
20	Radio frequency susceptibility	RR
21	Emissions of RF energy	M
22	Lightning induced transient susceptibility	A2K2L3
	NOTE: Modified to extend single stroke to waveform 3 level 3 and multi-stroke to waveform 4 level 2.	
23	Lightning direct effects	X - not required
24	Icing	X - not required
25	Electrostatic discharge	A
26	Fire, flammability	C - covers 14 CFR 25

C. KANDU

Section	Condition	Category
4	Temperature and altitude	D2
	NOTE: Altitude test extended to 51,000 feet (15,544.8 m). Overpressure 28.9 PSI (199 kPa), Decompression 6,000 to 55,000 (1,828.8 to 16,764.0 m).	
5	Temperature variation	A

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Section	Condition	Category
6	Humidity	B
7	Operational shocks and crash safety	E and B
8	Vibration	CAT R, CURVE E CAT R, CURVE E1
	NOTE: The sinusoidal sweep rate not to exceed 0.5 octaves/minute.	
9	Explosive atmosphere	E
10	Waterproofness	Y and R
11	Fluid susceptibility	F
	NOTE: De-ice Ethylene Glycol, Hydraulic fluid phosphate ester AS1241 Type IV and V.	
12	Sand and dust	D
13	Fungus resistance	F
14	Salt fog	S
15	Magnetic effect	Z
16	Power input	A (WF) HZPI
	NOTE: Extended low frequency operation to 320 Hz. NOTE: Power factor – leading greater than 0.98.	
17	Voltage spike	A (modified to 1,000 volts)
18	Audio frequency conducted susceptibility	K
	NOTE: RMS amplitude of the audio signal extended to not less than 10% of the maximum normal AC input voltage and with a power source frequency of 320 Hz in addition to 360 Hz and 800 Hz.	
19	Induced signal susceptibility	CW
	NOTE: Extended low frequency operation to 320 Hz. NOTE: With current and distance modified to 50 A at a distance of 0.4 inch (10 mm) for section 19.3.1.	
20	Radio frequency susceptibility	RY
	NOTE: - 0.4 to 8 GHz: 150 V/m (Pulse repetition frequency of 1 kHz and a duty cycle of 1%, switched on and off at a 1 Hz rate and 50% duty cycle). Pulse width is 10 µsec (1% of 1 kHz). - 0.3 to 6 GHz: 20 V, (Pulse repetition frequency of 200 Hz and a duty cycle of 12.5%). Pulse width is 625 µsec (12.5% of 200 Hz).	

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Section	Condition	Category
21	Emissions of RF energy	Q
	NOTE: Extension of conducted emissions limits to 200 MHz at 20 dBµA and power line limits from 30 MHz to 108 MHz at 20 dBµA. Extension of radiated emissions to start at 45 dBµV/m at 150 kHz to 40 dBµV/m at 2 MHz, and at 30 dBµV/m at 2 MHz to 25 dBµV/m at 25 MHz, and at 25 dBµV/m at 25 MHz to 26.3 dBµV/m at 30 MHz, and at 36.3 dBµV/m at 30 MHz to 44.5 dBµV/m at 100 MHz. All conducted emissions limits, including interconnecting bundles limits, are set in accordance with Category Q power line limit levels.	
22	Lightning induced transient susceptibility	A3K3L3
	NOTE: Extended to include pin injection waveform 5A level 2.	
23	Lightning direct effects	X - not required
24	Icing	A
25	Electrostatic discharge	A
26	Fire, flammability	C - covers 14 CFR 25.853

D. BUC-HPA

Section	Condition	Category
4	Temperature and altitude	D2
	Loss of cooling	Z (30 minutes)
	NOTE: Altitude test extended to 55,000 feet (16764m). Overpressure 28.9 PSI (199 kPa), Decompression 6,000 to 55,000 (1,828.8 to 16,764.0 m).	
5	Temperature variation	A
6	Humidity	B
	NOTE: At least six spot checks required.	
7	Operational shocks and crash safety	E and B
8	Vibration	CAT R, CURVE E CAT R, CURVE E1
	NOTE: The sinusoidal sweep rate not to exceed 0.5 octaves/minute.	
9	Explosive atmosphere	E
10	Waterproofness	Y and R
11	Fluid susceptibility	F
	NOTE: Ethylene Glycol, Propylene Glycol, AEA Type 1, AEA Type 2.	
12	Sand and dust	D
13	Fungus resistance	F
14	Salt fog	S
15	Magnetic effect	Z

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Section	Condition	Category
16	Power input	A (WF) HZPI
	NOTE: Extended low frequency operation to 320 Hz. NOTE: Power Factor – leading greater than 0.98.	
17	Voltage spike	A (modified to 1,000 volts)
18	Audio frequency conducted susceptibility	K
	NOTE: RMS amplitude of the audio signal extended to not less than 10% of the maximum normal AC input voltage and with a power source frequency of 320 Hz in addition to 360 Hz and 800 Hz.	
19	Induced signal susceptibility	CW
	NOTE: Extended low frequency operation to 320 Hz. NOTE: Section 19.3.1 performed with 50 A at a distance of 0.4 inch (10 mm).	
20	Radio frequency susceptibility	MY
	NOTEL: - 0.4 to 8 GHz: 150 V/m (Pulse repetition frequency of 1 kHz and a duty cycle of 1%, switched on and off at a 1 Hz rate and 50% duty cycle). Pulse width is 10 µsec (1% of 1 kHz). - 0.3 to 6 GHz: 20 V/m, (Pulse repetition frequency of 200 Hz and a duty cycle of 12.5%). Pulse width is 625 µsec (12.5% of 200 Hz).	
21	Emissions of RF energy	P
	NOTE: Extension of conducted emissions limits to 200 MHz at 20 dBµA and power line limits from 30MHz to 108MHz at 20 dBµA. Extension of radiated emissions to start at 45 dBµV/m at 150 kHz to 40 dBµV/m at 2 MHz, and at 30 dBµV/m at 2 MHz to 25 dBµV/m at 25 MHz, and at 25 dBµV/m at 25 MHz to 26.3 dBµV/m at 30 MHz, and at 36.3 dBµV/m at 30 MHz to 44.5 dBµV/m at 100 MHz.	
22	Lightning induced transient susceptibility	A3K3L3
	NOTE: Extended to include pin injection waveform 5A level 2.	
23	Lightning direct effects	X - not required
24	Icing	A
25	Electrostatic discharge	A
26	Fire, flammability	C - covers 14 CFR 25.853

E. FMA

Section	Condition	Category
4	Temperature and altitude	F2
	NOTE: Extended operating high to 194˚F (90˚C).	
5	Temperature variation	A

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Section	Condition	Category
6	Humidity	B
	NOTE: At least six spot checks are required.	
7	Operational shocks and crash safety	B and E
8	Vibration	CAT S, CURVE C CAT R, CURVE C1
	NOTE: The sinusoidal sweep rate not to exceed 0.5 octaves/minute	
9	Explosive atmosphere	E
10	Waterproofness	Y and W
11	Fluid susceptibility - De-ice fluids only	F
12	Sand and dust	D and S
13	Fungus resistance	F
14	Salt fog	S
15	Magnetic effect	B
16	Power input	X - not required
17	Voltage spike	X - not required
18	Audio frequency conducted susceptibility	X - not required
19	Induced signal susceptibility	ZC
20	Radio frequency susceptibility	YQ
	NOTE: Q (custom) only - SW/CW (un-modulated) signal Operational: 200V/m for 100 MHz to 12 GHz 0.1 V/m 12 GHz to 16.6 GHz No damage: 200V/m for 12 GHz to 16.6 GHz 0.1 V/m for 16.6 GHz to 18 GHz	
21	Emissions of RF energy	Cat H Modified.
	NOTE: Extension of conducted emissions limits to 200 MHz at 3 dBµA. Extension of radiated emissions to start at 45 dBµV/m at 150 kHz continuing linearly to 40dBuV/m at 2MHz, then continuing linearly to 36.3dBuV/m at 30MHz then continuing linearly to 44.5 dBµV/m at 100 MHz. The standard category H curve to follow beginning at 100 MHz.	
22	Lightning induced transient susceptibility	A3K3L3
	NOTE: Pin Injection waveform 5A level 125V/125A and 400V/4A. Single stroke WF 4, level 3 (extended to 300V/1000A), Multi-stroke WF4 level 3 (extended to 120V/400A 1st stroke, 75V/150A subsequent strokes).	
23	Lightning direct effects	X - not required
24	Icing	B

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Section	Condition	Category
25	Electrostatic discharge	A
26	Fire, flammability	C - covers 14 CFR 25.853

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APPENDIX B – INFORMATION SHEETS

NOTE: The JetWave™ MCS-8562 Terminal LRU labels do contain data such as Software Part No., Software Version No. or Software Mod dots. To see the JetWave™ MCS-8562 Terminal LRUs hardware and software version and part number, navigate to the Version and Manufacturing Information menu on the GUI.

1. Aircraft Information Sheet

Owner	
Tail Number	
Serial Number	
Model/Type	

2. JetWave™ MCS-8562 Terminal AES Subsystem Components

A. JetWave™ MCS-8562 Terminal AES OAE - FMA Installation Information Sheet

Part Number	
Serial Number	
Hardware Revision	
Mod Status	

B. JetWave™ MCS-8562 Terminal AES KANDU Installation Information Sheet

Part Number	
Serial Number	
Hardware Revision	
Mod Status	

C. JetWave™ MCS-8562 Terminal AES BUC-HPA Installation Information Sheet

Part Number	
Serial Number	
Hardware Revision	
Mod Status	

D. JetWave™ MCS-8562 Terminal AES Modman Installation Information Sheet

Part Number	
Serial Number	

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Hardware Revision	
Mod Status	

E. JetWave™ MCS-8562 Terminal AES APM Installation Information Sheet

Part Number	
Serial Number	
Hardware Revision	
Mod Status	

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APPENDIX C – CHECKLISTS

1. Installation Checklist

Aircraft Identification:			
	Name	Signature	Date
Installation/Checks completed by:			
Approved/Witnessed by:			

Section	**Parameter**	**Item**	**NA**	√	**Value**
Maintenance Panel	Applicability	If the system is not wired to another aircraft system, an installer provided maintenance panel is required.			
	Discrete output connections	System available (Modman MP13E) connected to a lamp.			
		Data link available (Modman MP13F) connected to a lamp.			
	Discrete input connections	Local data load enable (Modman MP10B) connected to a normally open switch.			
		Ground transmit enable (Modman MP11D) connected to a normally open switch.			
		Public service disable (Modman MP11E) connected to a normally open switch.			
		Modman reset (Modman MP10C) connected to a normally open switch.			
		Tx mute (KANDU J1D) connected to a normally open switch.			
		External modem mode (Modman J1-B 11C) connected to a switch.			
	Ethernet port connections	AV1 (Modman TP BB1 thru 4) connected to a RJ45 Ethernet connector.			
Additional electrical wiring		Electrically wire and interconnect in accordance with Figure 3-12.			
Modman	Physical	Examine for physical damage.			
		Environmental conditions, refer to Figure 3-6 or Figure 3-7.			
	Mounting tray	Install applicable 4-MCU tray, supplied by customer.			

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Section	Parameter	Item	NA	√	Value
	Clearance	Minimum 1 inch (25.4 mm) from top surface and 0.5 inch (12.7 mm) from all other surfaces.			
	Electrical connector	ARINC 600 mating connector and pins, refer to Table 3-2 ARINC 600 Connectors.			
		ARINC 600 polarized pins.			
	Electrical bonding	Bonding, refer to Modman.			
	Electrical wiring	Electrically wire and interconnect in accordance with Figure 3-6 or Figure 3-7 and Figure 3-12.			
	Electrical RF coaxial	Equalizer in the TX path.			
		TX path loss, refer to Table 3-4 Modman Cable Loss Values.			
		Attenuator in the RX path.			
		RX path loss, refer to Table 3-4 Modman Cable Loss Values.			
APM	Physical	Examine for physical damage.			
		Environmental conditions, refer to Figure 3-8.			
	Mounting	Can be installed in any orientation. Refer to Figure 3-8.			
		Use 0.164-32 UNC-2A corrosion resistant mounting fasteners. Do not exceed 25 in-lb (2.8 Nm) when you torque the screws.			
	Electrical bonding	Electrically bond, refer to APM.			
	Electrical wiring	Electrically wire and interconnect in accordance with Figure 3-12.			
		APM to Modman interconnect cable shall use ARINC 664 compliant 2 Shielded Twisted Pair 24 AWG (or Aerospace Grade Shielded Cat 5/Cat 5E Minimum). Part No. ECS 922404 or Equivalent, with a maximum length of 9.8 feet (3 m).			
KANDU	Physical	Examine for physical damage.			
		Environmental conditions, refer to Figure 3-9.			

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Section	Parameter	Item	NA	√	Value
	Electrical wiring	Electrically wire and interconnect in accordance with Figure 3-9 and Figure 3-12.			
	Mounting	Install location of KANDU is airframe specific. The KANDU is installed inside a pressurized location, the KANDU to BUC-HPA and KANDU to FMA interconnect are routed through a Bulkhead Interface connectors.			
	Electrical Wiring KANDU-FMA	Refer to JetWave™ MCS-8562 Terminal Internal LRU Installation, KANDU.			
	Electrical bonding	Electrically bond, refer to KANDU.			
		KANDU bonding to the aircraft must be achieved through the mounting structure (fasteners) and KANDU A3J1-A.			
		The bulkhead interface connectors should be electrically bonded to the aircraft.			
BUC-HPA	Physical	Examine for physical damage.			
		Environmental conditions, refer to Figure 3-10.			
		Install the thermal pad in accordance with BUC-HPA .			
		The BUC-HPA is installed with the FMA, Refer to FMA Installation Procedure.			
		The BUC-HPA feet are configured differently depending on the part number ordered. Make sure feet are in the correct configuration for the aircraft application.			
	Waveguide	Make sure the waveguide is connected before powering the BUC-HPA.			

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Section	Parameter	Item	NA	√	Value
	Waveguide - BUC-HPA to FMA	Connection must be WR28 for TX and coaxial cable for RX.			
		The TX interconnect path loss.			
		The RX interconnect path loss.			
		RX connection at the BUC-HPA requires a WR42 to coax transition adapter at the BUC-HPA J4.			
	Electrical wiring	Electrically wire and interconnect in accordance with outline drawing Figure 3-10 and interconnect drawing Figure 3-12.			
Electrical bonding		Electrically bond, refer to BUC-HPA - Thermal Conduction Path.			
FMA Installation Procedure	Physical	Examine the FMA AIM/LAIM for physical damage.			
		Examine the FMA assembly for physical damage.			
		Examine the radome for physical damage.			
		Environmental conditions, refer to Figure 3-11.			
	Positioning	The aircraft fuselage mount OAE must be mounted on the top of the fuselage.			
	FMA AIM/ LAIM	Refer to FMA Bonding .			
	Install radome skirt fairing	Install and attach the radome skirt fairing to fuselage.			
	FMA Install	Refer to FMA Installation Procedure .			
	FMA radome	Attach the radome assembly onto the AIM/LAIM/radome skirt fairing.			
FMA bonding		Electrically bond.			
FMA alignment		Automatic alignment, manual alignment, or command, refer to FMA Alignment and Inspection of Waveguide.			

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APPENDIX D – CUSTOMER PORTAL

1. Customer Portal

A. Portal Overview

The Customer Portal enables a customer to request and retrieve JetWave APM Files. It is hosted on the Honeywell MyAerospace site, (https://aerospace.honeywell.com) - Software & Data Services (ASDS).

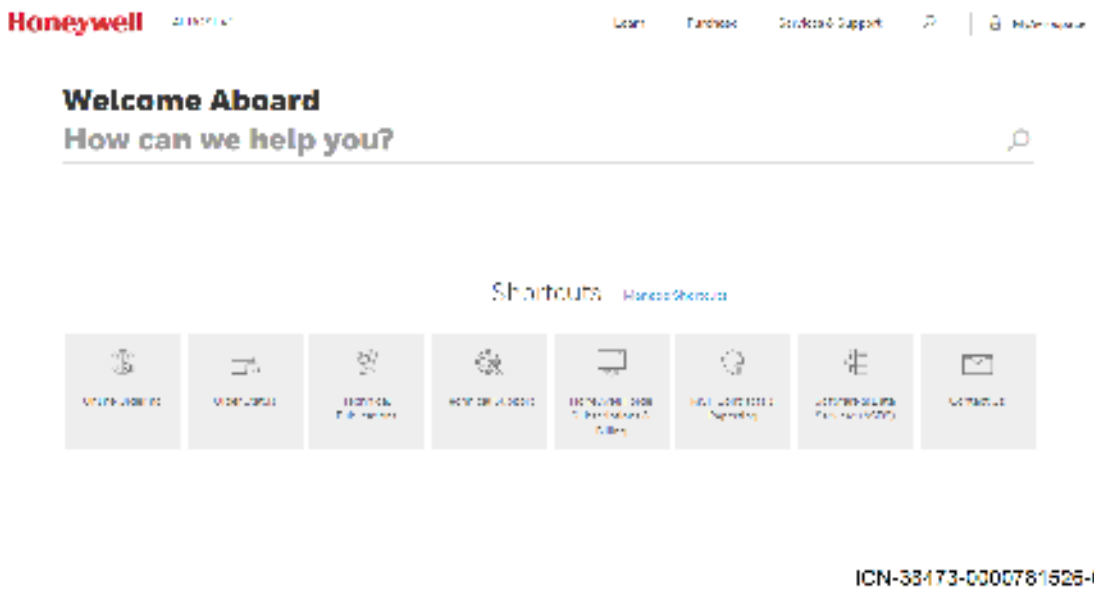

Figure D-1. ASDS Log In

NOTE: If you need to request an ASDS account select - Create an Account [alternatively refer to ASOIB-ADS-20180222 (Aerospace Services Operations Information Bulletin)].

B. Request an APM File

(1) Select Custom Software and EMS.

(2) Select JetWave Configuration File.

(3) Complete the APM File Request Form (Refer To Section 2).

(4) On completion of the APM File Request Form, Contact Honeywell to obtain APM parameter gathering form for MCS-8562 system.

(5) Fill in the sheet for detail regarding the fields, refer to Appendix D.

NOTE: If the customer / requester is unable to complete the APM Parameter File, a Honeywell Lead System Engineer will follow up to obtain the relevant information once the file has been submitted.

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Figure D-2. Upload APM Parameter File

(6) Upload the APM Parameter File.

(7) Submit the APM Parameter File.

On submittal of the APM Parameter File, the customer / requester will receive a confirmation email.

NOTE: It is recommended that the APM Parameter File is completed by a technical person (refer to section 3).

C. Retrieve an APM File

(1) Log into ASDS and then select - *Go To My Downloads*.

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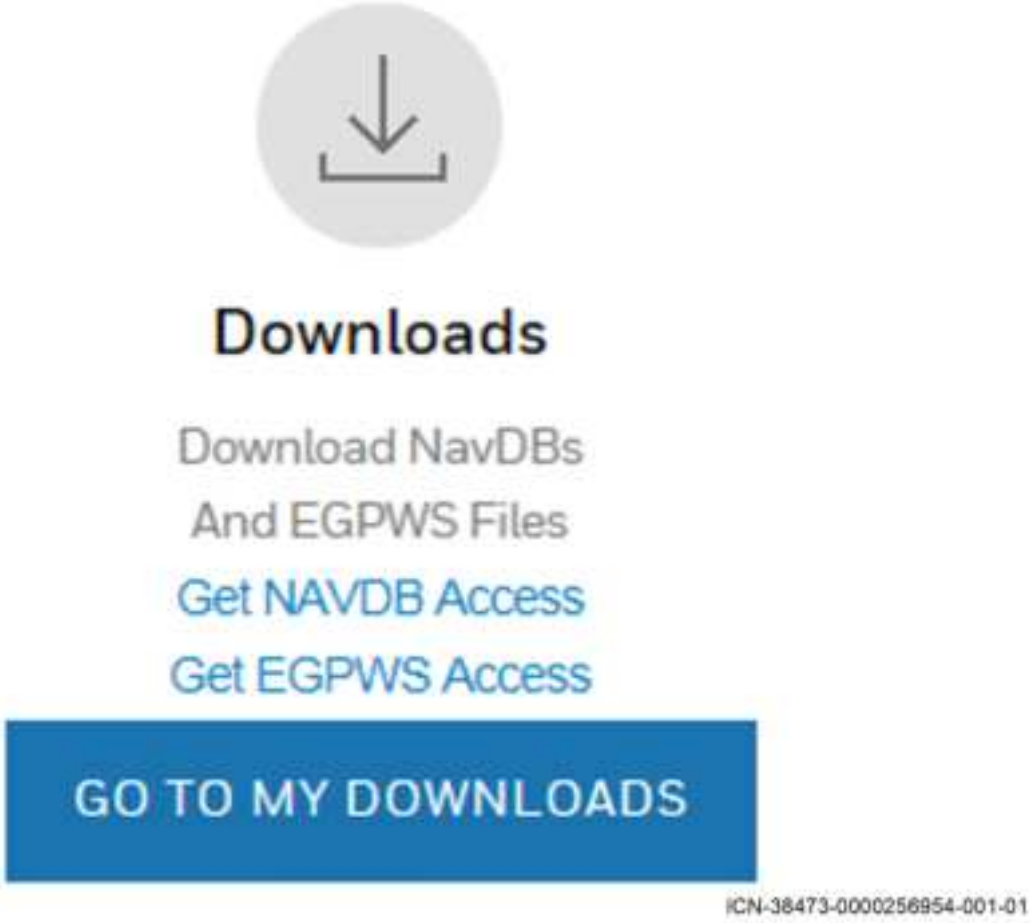

Figure D-3. Obtain Completed APM Files

(2) Select JetWave Configuration Files (Go Direct Electronic Library).

The following information is displayed with each APM File.

- HNI Part Number
- Version Description Document (VDD) Number
- Customer
- Aircraft Make and Model

NOTE: Each APM File is associated with a Customer / Requester, (you can only access and retrieve your own material).

2. <u>APM Request Form</u>

A. Requester Name

The person requesting the APM File

B. Requester Email

The email address of the person requesting the APM File

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This ensures the Requester is included in the email correspondence and allows the Honeywell JetWave APM Development mailbox recipients to contact the Requester if necessary.

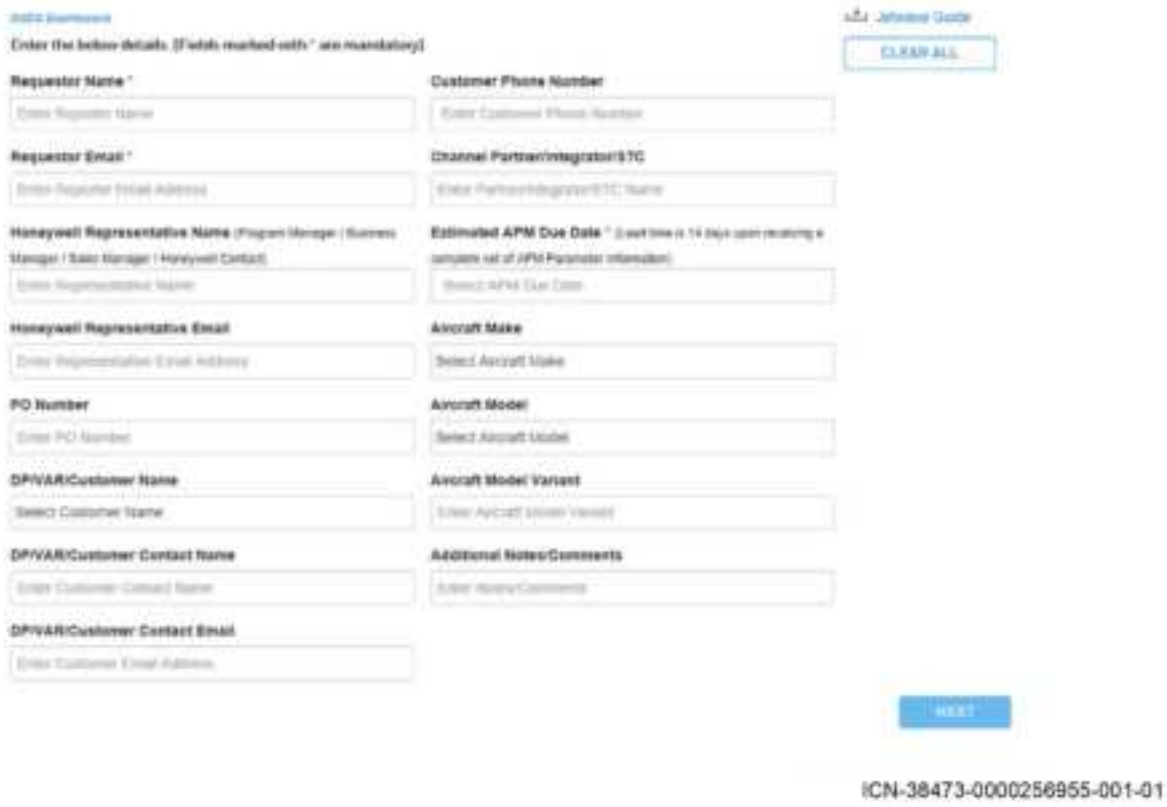

Figure D-4. APM Request Form

C. Honeywell Representative Name

(Program Manager / Business Manager / Sales Manager / Honeywell Contact)

The Honeywell representative - may be a Honeywell sales and marketing contact, a business, program or project contact, an engineering or installation contact.

D. Hon Representative Email

The email address for the Honeywell Representative (above).

If unknown, please leave blank.

This ensures the Honeywell Representative is included in the email correspondence and allows the Honeywell JetWave APM Development mailbox recipients to contact the Honeywell Representative if necessary.

E. PO Number

Please leave blank (this field was added as a future option).

F. DP/VAR/Customer Name

Select the DP/VAR/Customer Name (OEM) or STC Partner from the list.

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The list contains:

- Honeywell Distribution Partners (HON-DP)
- Air Transport Value Added Resellers (AT-VAR)
- Government Value Added Resellers (GOV-VAR)
- Original Equipment Manufacturers (OEM)
- Supplemental Type Certificate Partners (STC)
- Other

If none of the above apply, select Other from the list and enter your company name in the Additional Notes / Comments field.

This ensures the APM request is processed by the appropriate mailbox recipients.

NOTE: Inmarsat GX Aviation services operate as a managed subscription service model and the services are provisioned through various Distribution Partners (DP)/ Value Added Resellers (VAR). To provision the user services, the Airline Operator need to associate the JetWave™ system with any of the Value Added Resellers or Distribution Partners and subscribe to the desired Service Subscription Package services.

G. DP/VAR/Customer Name Contact Name

The DP/VAR/Customer name - the person requesting the APM File.

H. DP/VAR/Customer Name Contact Email

The email address of the DP/VAR/customer/person requesting the APM File.

This ensures the customer (person requesting the APM File) is included in the email correspondence and may be contacted by a Honeywell Lead Systems Engineer for further information.

I. Channel Partner/Integrator/STC

The system integrator / installation partner. This may be an OEM for a line fit solution (factory fit) or an after-market installation performed by a third party, (as a supplemental type certificate (STC)). If the STC number is known, this may be entered.

J. Estimated APM Due Date

(Lead time is 10 working days (14 days) upon receiving a complete set of APM Parameter information).

Select the date from the calendar displayed.

NOTE: Upon receipt of a complete and correct set of APM Parameter information, Honeywell endeavor to provide an AMP File within 10 working days (14 days). The APM Parameter sheet is provided as part of the APM Request.

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K. Aircraft Make / Aircraft Model

Select the Aircraft Make and Model from the List. If the make and / or model is not included in the list, select Other and enter the make and / or model in the Additional Notes / Comments field.

Airbus	A319
	A320
	A319/A320/A321
	A330
	A340
	A350
	A380
Boeing	B737
	B747
	B757
	B767
	B777
	B787
Bombardier	G5000
	G6000
	G7000
	G8000
	G7000/G8000
Dassault	F2000LX
	F7X
	F7X/F8X
	F900
	F900/F2000
Embraer	L1000
Gulfstream	G450
	G500
	G550
	G600
	G650
Other	C130
	Other

L. Aircraft Model Variant

This allows the aircraft model variant to be specified (e.g. for a Boeing 777, the variant may be -300).

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If unknown or not applicable, please leave blank.

M. Additional Notes/Comments

Please enter any other pertinent information.

NOTE: If you require a modified APM File based on an existing APM File, enter "APM Based on" VDD Number in the Additional Notes/Comments field.

3. APM Parameter File

A. Generic

The generic tab specifies the type of APM request:

- A repeat APM File request (the customer will be able to obtain this from the customer portal) by specifying the VDD number (VDD-9040xxxx-REV-xxx). No other information is required.
- An APM File based upon a specified APM File (VDD-9040xxxx-REV-xxx), with the parameter changes detailed in the parameter file (detailed in the following section).
- A new APM File, (provide as much information as possible detailed in the following section).

Specifying the generic parameters (i.e. Aircraft Make, Model and Variant) provides information for the other spreadsheet tabs.

NOTE: If the Aircraft Make, Model and Variant for the required aircraft are not listed in the menus, select Other and specify the Aircraft Make, Model and Variant.

Figure D-5. Generic APM Parameters

B. APM Parameters

The requester / customer is required to provide as much information as possible. This will ensure the APM File is delivered in a timely manner.

As a minimum, the following information is required:

- Aircraft Make, Model and Variant
- Individual Aircraft (Tail Number) or Fleet
- Antenna Type - Fuselage Mount Antenna (FMA)
- Inertial Reference System (IRS) reference.
- Multi Mode Receiver (MMR) or other equipment.
- A429 Labels available on the KANDU port.

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- Use of external Modem.
- Ethernet port selections and addresses.
- Mapping of VLAN ID versus Modman port.

(1) A429 Bus Labels

ARINC429 labels are required for antenna pointing and should be provided by the aircraft Inertial Reference System (IRS).

In some cases labels may required from an alternative bus connected to an Multi Mode Receiver (MMR) or other equipment.

	Manufacturer	Reference Number
IRS		
Multi Mode Receiver (MMR) (if applicable)		

(a) Enter the IRS reference number (refer to IRS).

The IRS must always use a high speed bus but the MMR or other device may use high or low speed bus. This is selectable.

The manufacturer and part number of the IRS is mandatory, ideally the transmission rate and nominal latency should be provided.

NOTE: If the ARINC 429 labels pass through a data concentrator (RDC, ... etc) the latency of this unit must be included.

The following table provides a guide for compatible IRS Numbers for each aircraft type. The selection is based on the Aircraft make and model.

(b) Complete section 1.2, enter the Min Transmission Rate (Hz) and Total Nominal Latency [sensor reading to KANDU] (ms) for the following labels (as appropriate):

Table D-1. Primary Labels

150	UTC Time
140	UTC Time Fine
260	Date
254	Present Position – Latitude
255	Present Position – Longitude
261	Altitude
132	True Heading
324	Pitch Angle
325	Roll Angle
326	Pitch rate

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Table D-1. Primary Labels (Cont)

327	Roll rate
330	Yaw rate
175	Ground Speed

NOTE: Some labels have alternatives, only on of each is required (254 or 110, 255 or 111, 261 or 76 or 361, 132 or 314, 175 or 112 or 312). These are listed as secondary and tertiary labels. When the primary labels are populated, the secondary and tertiary labels are disabled.

(2) Ethernet Configuration

The Ethernet Configuration defines which ports are used for Traffic and which ports are used for the Services (Data Load, GUI, SNMP).

Separate ports may be used for traffic and services, or a single port may be used for both.

Specify which ports are required, the default maintenance port is AV1.

The default local address is are (172.29.55. 1 / 2 / 3), for AV1.

NOTE: The AV1 is the default data loading port, any other Ethernet ports can be selected as long as the APM configuration file is configured to allow that port to data load.

(3) Weight on Wheels Polarity

Use the drop down selection in column B and C to indicate if WOW is wired and the polarity when on ground.

(4) Ground Transmit Enable Polarity

Use the drop down selection in column B the polarity when of the ground transmit enable discrete.

(5) Antenna Alignment Parameters

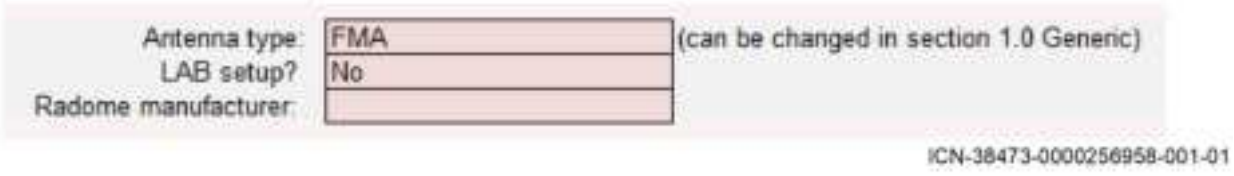

Figure D-6. Antenna Alignment Parameters

Note the antenna type is populated from the generic tab.

An option is provided for a lab simulation (the default is No)

(a) Select the radome manufacturer.

For FMA solutions the antenna alignment angles will automatically populated in the table, for the specified aircraft in the generic tab.

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(6) ARINC TX Mute Wiring

(a) Select option in column B to indicate if ARINCTXMUTE and/or FMAMUTE are wired.

Removal of FMAMUTE requires a safety analysis to be performed to confirm this is acceptable

ARINCTXMUTE if wired connects MP12E MODMAN to J1C on KANDU

(7) OAE Blockage

The Outside Antenna Equipment (OAE) Blockage Parameters are applicable to the FMA antenna type.

Radiation from the antenna may be blocked by the airframe in certain directions, dependent on the aircraft type and the location of the antenna. The antenna must mute the transmitter when airframe scattering leads to non-compliant radiation.

The (OAE) Blockage Parameters are pre-populated using a look up table for the aircraft Make Model and Variant (specified in the Generic Tab). If the default parameters are changed, they are indicated in yellow highlight.

Table D-2. Boeing 737-700 Example

Blockage degrees	
A	1.2
b	-3
C	57.7
d	47
e	2.7
f	17
g	-
h	16.9
i	5.3
k	0.4
m	3.6
p	-4.1

If the aircraft Make Model and Variant is not specified or FMA antenna is not located in the standard ARINC791 position, please calculate the blockage angles a to p as described in ARINC791 Attachment 3.

(8) Mapping of VLAN ID versus Modman port. The user VLAN ID to Modman port mapping need to be indicated as follows:

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Modman Port	User VLAN IDs (Unsigned decimal VLAN number or NONE)	Tagged (TRUE/FALSE/NONE)
CR Port VLAN Mapping		
User Port PA1 VLAN Mapping		
User Port PA2 VLAN Mapping		
User Port PA3 VLAN Mapping		
User Port PA4 VLAN Mapping		
User Port PG1 VLAN Mapping		
User Port EN5 VLAN Mapping		
User Port EN6 VLAN Mapping		
User Port EN7 VLAN Mapping		
User Port EN8 VLAN Mapping		
User Port EG1 VLAN Mapping		
User Port AV1 VLAN Mapping		
User Port AV2 VLAN Mapping		
User Port AV3 VLAN Mapping		
User Port AG1 VLAN Mapping		

(9) Use of OTA software staging and log offload. By default these functions are enabled. These functions allow fast upgrade and periodic log offload for trouble shooting.

(10) External modem parameters specify whether an IF switch is installed and which sources control the modem mode (internal/external). If a descrete is selected to control the modem mode, the polarity should also be selected.

4. Request Assistance

To request assistance for requesting and retrieving APM Files, contact jetwaveapmdevelopment@honeywell.com

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