

Advisory Wire

REFERENCE NO: AW700-44-0706 Rev 01

EFFECTIVITY: Global 7500 aircraft

ATA: 44-30

**SUBJECT: Ka-Band Sat Ground transmit
PBA incorrect status**

1. REFERENCE:

- 1.1 Recommended Service Bulletin (SB) [700-34-7518](#) Modification – General – Installation Of Flight Deck Software V2.2 And Aircraft Health Management System V8.4
- 1.2 Global 7500 FCOM volume 2, AIRPLANE GENERAL, page 00-10-15
- 1.3 Flight Operation Notification (FON) AVNC-022, DCS_CAS_Comp or KA-Band GND Enable switch stays cyan

2. INTRODUCTION:

This Advisory Wire (AW) revision 1 is to inform operators of the release of the Bombardier Recommended SB700-34-7518 (Ref. 1.1). This SB address the condition discovered with the KA Sat Ground (GND) transmit (TX) Band Enable Push Button Annunciator (PBA) that could result in misleading status indication that the system is still transmitting.

3. DESCRIPTION:

The KA-Band satellite communications system is interfaced to the weight on wheel (WOW) system and is inhibited when the aircraft is on the ground by default. The system can be overridden on ground by pressing the KA SAT GND TX PBA located on the flight compartment MISC panel. A cyan ENBL label illuminates on the PBA and a cyan Ka SAT GND TX ENBL Advisory Crew Alerting System (CAS) message appears when the system is enabled on the ground.

It was discovered that the Cockpit KA-Band Enable PBA, if pressed under 100 milliseconds, a very quick press, can cause a Data Concentrating Module Cabinet (DMC) mis-compare (see figure 1) under the “DCS CAS Comp” page 11.

M	MAINT	MAINT MENU	RETURN TO LRU/SYS OPS	
DCS CAS Comp CAS Compare				
CAS Word 16:	LA	LB	RA	RB
EVS_HEAT_FAIL_CAS	0	0	0	0
EVS_FAIRING_HEAT_OVHT_CAS	0	0	0	0
ELT_TRANSMITTING_CAS	0	0	0	0
EMER_LIGHTS_OFF_CAS	0	0	0	0
EMER_LIGHTS_ON_CAS	0	0	0	0
OXYGEN_LO_QTY_CAS	0	0	0	0
PAX_OXYGEN_ON_CAS	0	0	0	0
PAX_OXYGEN_AUTO_FAIL_CAS	0	0	0	0
KA_SAT_GND_TX_ENBL_CAS	0	1	0	1
L ENG FUEL LEAK CAS	0	0	0	0
R ENG FUEL LEAK CAS	0	0	0	0
OIL_RES_LO_QTY_CAS	0	0	0	0

Figure 1: DMC CAS Message Display

If this condition occurs, the KA SAT GND TX PBA cyan ENBL will remain illuminated (See Figure 2) and KA SAT GND TX ENBL Advisory CAS message posted. Once this condition is set, even if the PBA is de-pressed, the PBA and associated CAS will not extinguish even if the system is no longer transmitting, resulting in misleading status indication that the system is still transmitting.

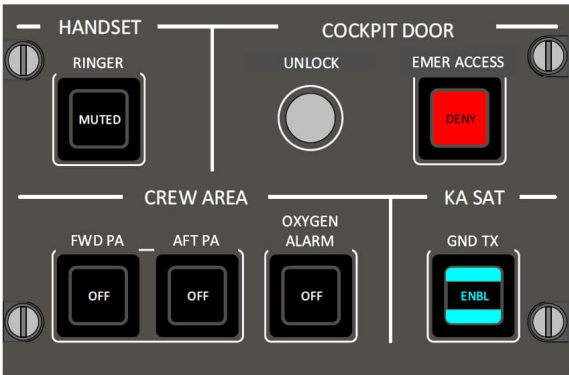


Figure 2: Cockpit KA SAT GND TX PBA illuminated

Consequently, this may mislead the pilots to lose track of whether the KA-Band system is transmitting or not. Since the KA-Band satellite communication system emits radio frequency energy that is harmful, it must not be enabled on ground when personnel are present in the Antenna Hazardous Exposure Area. (Ref 1.2)

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4. ACTION:

Operators and maintenance personnel should be familiar with the condition described in this AW. Bombardier recommends when pressing the KA SAT GND TX PBA to hold it down for two (2) seconds.

If a short press is accidentally done while on ground, the only way to ensure that the system is not transmitting is to set the KA-Band Circuit Breakers (CB) to OUT as bellow:

Status	Name	Location
OUT	KA MODMAN KANDU	MFW CB SYNOPTIC (ATA 23)

Once in air, the CB can be put back IN as the hazard danger for ground personnel is no longer applicable. Also, the KA SAT GND TX ENBL Advisory CAS message will clear and the Ka SAT GND TX PBA cyan ENBL will extinguish.

Also, if the aircraft power is cycled, the system will go back to normal operation.

This issue can be resolved with the incorporation of the recommended SB700-34-7518 (Ref 1.1). This SB introduces a change to the EICAS Logic Software upgrade via avionics suite software upgrade 2.2. The operators that have not already complied with the Service Bulletin (Ref 1.1), can now communicate with the Bombardier In-Service Implementation Team (ISIT) to schedule its incorporation.

Bombardier has also released a Flight Operation Notification (FON) AVNC-022, DCS_CAS_Comp or KA-Band GND Enable switch stays cyan (Ref 1.3) which is describing the condition to the flight crew.

Should you have further technical questions with the Ka-Band System, please contact your local service provider representative, Bombardier Field Service Representative (FSR) or the Customer Response Center (CRC) 24/7.