

ADVISORY WIRE

AW700-28-0185

DATE: June 7, 2006**PAGE:** 1 OF 4**FROM:** BOMBARDIER CUSTOMER SERVICES BUSINESS AIRCRAFT

ADVISORY WIRE

REFERENCE NO: AW700-28-0185**SUBJECT:** "FUEL QTY DEGRADED" EICAS Message**EFFECTIVITY:** BD700-1A10 (9002 & Subs)
BD700-1A11 (9127 & Subs)**ATA:** 28-41

This Advisory Wire contains Operational and Maintenance Information

Please help us keep our distribution list up-to-date and accurate. To obtain this document by e-mail, report transmission errors or update your distribution profile; please contact (514) 855-2717. Changes to your publications profile can be affected through the distribution e-mail address: bacs.e.dist@aero.bombardier.com. If you require technical information concerning this wire, please call your [Field Service Representative](#)

ADVISORY WIRE

AW700-28-0185

DATE: June 7, 2006**PAGE:** 2 OF 4

1.0 REFERENCES:

- 1.1 [Aircraft Maintenance Manual \(AMM\), Task 12-11-01-650-801 - Pressure Refueling.](#)
- 1.2 Ground Handling & Servicing Information Manual, Section 04, Task 12-11-01-650-801 - Pressure Refueling.
- 1.3 [Fault Isolation Manual \(FIM\), Task 28-41-00-810-807](#)

Note: Applicable to BD-700-1A10 (Global Express), BD-700-1A10 (Global Express XRS) and BD-700-1A11 (Global 5000) Maintenance Manuals.

2.0 INTRODUCTION:

This Advisory Wire is to inform Operators of conditions that may cause the “FUEL QTY DEGRADED” EICAS message to be displayed on the ground following a refueling operation and provides additional precautions to prevent the “FUEL QTY DEGRADED” message.

3.0 DESCRIPTION:

It has been reported by several Operators that the “FUEL QTY DEGRADED” CAS message is displayed following a refueling operation. In some cases, the Fuel Management Quantity Gauging Computer (FMQGC) was replaced to clear the message. The FMQGC was tested at the Vendor’s facilities and returned to service with no fault found.

On the ground, the display of the “FUEL QTY DEGRADED” message is related to the FMQGCs inability to upgrade the fuel density value due to incorrect refueling procedures or system malfunctions. When these conditions occur, the message will be displayed 3 minutes after the completion of the refueling operation.

ADVISORY WIRE

AW700-28-0185

DATE: June 7, 2006**PAGE:** 3 OF 4

3.0 DESCRIPTION...Cont

The “FUEL QTY DEGRADED” message can be triggered by incorrectly terminating the refueling process by:

- Selecting the “MANUAL/AUTO” Mode Selector switch to “OFF” while the Refuel SOV switches are still in the OPEN position when refuelling in manual mode.
- Selecting the “MANUAL/AUTO” Mode Selector switch to “OFF” before the Refuel SOV is fully closed when refuelling in auto mode.
- Switching off the Refuel Defuel Control Panel (RDCP) before the Refuel SOVs are closed.

The following FMQGC system failures may also cause the “FUEL QTY DEGRADED” message to display:

- Fuel quantity calculated by the FMQGC CH A and CH B disagrees.
- A Densitometer or associated wiring failure.
- Compensator failure, or more than 50% of the probes in a tank are failed or contaminated.
- If the forward tank is installed and the center tank is empty, and a dual failure of the forward tank fuel probes is detected.

All these failures will trigger a CAIMS message and are covered in the FIM.

ADVISORY WIRE

AW700-28-0185

DATE: June 7, 2006**PAGE:** 4 OF 4

4.0 ACTION:

To minimize the possibility of triggering a “FUEL QTY DEGRADED” message during or following a refueling procedure, we recommend you follow these steps:

1. Always refuel the aircraft per the Ground Handling & Servicing Information Manual (Ref. 1.2) or the AMM Task 12-11-01-650-801 (Ref 1.1).
2. In the auto refueling mode, terminate the pressure refueling procedure as follows:
 - a. Ensure the “COMPLETE” message is displayed in the RDCP PRESEL window.
 - b. Select the RDCP START/STOP/SOV TEST switch to “STOP”.
 - c. Wait till the “SOV STOP” message is displayed in the pre-select window.
 - d. Select the MANUAL/AUTO mode selector switch to “OFF”.
3. In the manual refueling mode, terminate the pressure refueling procedure as follows:
 - a. Ensure all manual SOV switches are selected to “CLOSE”.
 - b. Select the MANUAL/AUTO mode selector switch to “OFF”.

To reset the fuel system after the “FUEL QTY DEGRADED” message has been displayed on the ground, we recommend the following procedures:

- a. If battery power is in use, power down the FMQGC by selecting the MANUAL/AUTO mode selector switch to “OFF”, or
- b. If other power sources are in use, power down the FMQGC using the EMS CDU by setting to “OUT” the FUEL COMPUTR CH A and CH B circuit breakers.
- c. Wait for 5 seconds, and then set circuit breakers back to in.

If the “FUEL QTY DEGRADED” message is still displayed, troubleshoot the system as per FIM Task 28-41-00-810-807 (Ref. 1.3).