

ADVISORY WIRE

REFERENCE NO:	AW700-28-0221, Rev. 2	INFORMATION TYPE:	Maintenance Operational
ATA:	28-15	EFFECTIVITY:	Global Express 9003,9096
SUBJECT:	Fuel System- Unscheduled Fuel in Forward Tank		Global Express XRS 9159 to 9429 Global 6000 9313, 9381, 9432 to 9997

1. REFERENCE:

- 1.1. Observed Fault: Unscheduled Fuel In Forward Tank- Fwd. Fail/Inhibit Annunciation, available on the SmartFix Plus troubleshooting section via the Bombardier Customer Information Center (CIC) web site: <http://cic.bombardier.com/>

2. INTRODUCTION:

Revision 2 to this Advisory Wire is to modify the aircraft effectivity list, in order to accommodate the Global 6000 aircraft.

The original Advisory Wire informed the operators of the possibility of having unscheduled fuel entering and accumulating in the forward tank causing a "FWD FAIL" annunciation on the Refuel Defuel Control Panel (RDCP). It also includes a procedure to transfer the unscheduled fuel from the forward tank to the center tank (Ref. Fig 1).

3. DESCRIPTION:

During normal system operation, there is a possibility for fuel to enter and accumulate in the forward tank during automatic refueling operation, when no fuel is scheduled for this tank.

Normal function of the forward refuel Shutoff Valve (SOV) allows a small quantity of fuel into the forward tank every time the aircraft is refueled in the automatic mode. In some cases, this fuel may cause the RDCP to display the "FWD FAIL" and "INHIBIT" messages, especially if the forward tank ejector is not operated via the center transfer pumps between refueling sessions. Since the center and forward tanks share the same indication, the EICAS and RDCP will also display fuel quantity in the center tank, even though it is actually empty.

Upon experiencing the "FWD FAIL" and "INHIBIT" messages, the following procedure is recommended before starting any further troubleshooting. The procedure (Ref 1.1) is available on the SmartFix Plus troubleshooting tool under the Observed faults section, and is accessible via the Bombardier CIC website at the following address: <http://cic.bombardier.com>.

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You.
First.

4. ACTION:

Bombardier recommends the following refueling procedure (Ref 1.1) if the “FWD FAIL” and/or “INHIBIT” message are displayed on the RDCP, and a center tank fuel quantity is displayed on the EICAS and RDCP when the tank is empty.

- 4.1. Using CAIMS/OMS System Diagnostic, LRU Test Function, access the “FWD Fuel Tank Gauging Sensor Data” and confirm that there is fuel in the forward tank.
- 4.2. If CAIMS/OMS indicates that the forward tank quantity is less than 150 lbs, and the “FWD FAIL” message is displayed on the RDCP, it is an indication that the forward refuel SOV allowed more than 30 lbs of unscheduled fuel into the forward tank. No immediate action required. Transfer fuel out of the forward tank at the next opportunity as per steps 4.4 to 4.8.
- 4.3. If the forward tank quantity is more than 250 lbs, the FWD FAIL and INHIBIT message are displayed on the RDCP, indicating that the forward refuel SOV allowed more than 30 lbs of fuel into the forward tank and 250 lbs has accumulated in it. Transfer the forward tank fuel into the center tank as per steps 4.4 to 4.8.
- 4.4. If you know the center transfer pumps will not be operated during subsequent flight and you want to empty the forward tank, add 1000 lbs minimum of fuel in the center tank.
- 4.5. Ensure the wings quantities are less than 93% full.
- 4.6. Operate the Center Transfer Pumps using the APU or External AC power.
- 4.7. On the Fuel Synoptic page, ensure the center transfer pumps are transferring fuel to the wings until the pumps stop automatically.
- 4.8. Using CAIMS/OMS System Diagnostic, LRU Test Function, access the “FWD Fuel Tank Gauging Sensor Data” and confirm that there is no fuel in the forward tank.

Take note that while using the APU, the transfer of fuel from the forward tank could take up to 15 minutes as per steps 4.4 to 4.8. An option is to do the forward tank fuel transfer during the next flight.

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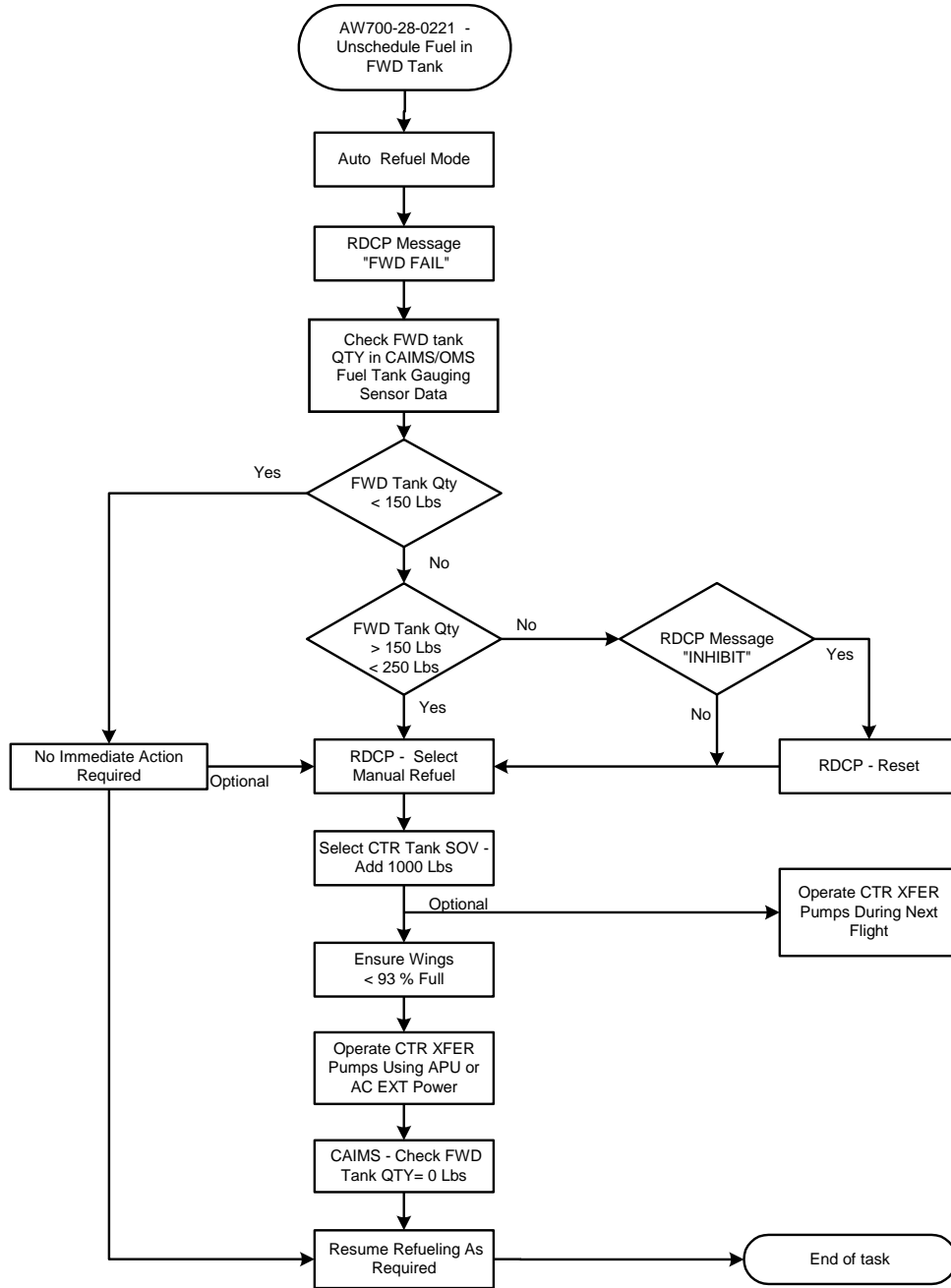


Figure 1