

Advisory Wire

REFERENCE NO: AW700-79-0911

ATA: 79-12

EFFECTIVITY: Global 7500

**SUBJECT: Oil Replenishment System
(ORS) Check Valve Guidance**

1. REFERENCES:

- 1.1 Aircraft Maintenance Procedures (AMP) - Airframe-mounted oil tank - Drain oil - [BD700-A-J79-12-01-00AAA-222A-A](#)
- 1.2 Line Maintenance Manual (LMM) - Oil Replenish System - special irregular inspection - [PASSPORT20-A-79-00-00-01A-284A-D](#)
- 1.3 GE Fleet Highlites - Oil Replenish System - special irregular inspection - [22-3Q-7900-05](#)
- 1.4 GE Fleet Highlites - Update: Oil Level Variations in Flight [23-1Q-7900-01](#)
- 1.5 Flight Operation Notifications (FON) Manuals ENG-001 - [L(R) ENG OIL LO QTY] (Advisory/Cyan) In Flight

2. INTRODUCTION:

This Advisory Wire (AW) is to inform operators about an on-going investigation regarding oil migrating from the LH or RH engine oil reservoirs to the Oil Replenishment System (ORS) tank but to also provide troubleshooting guidance using the AMP (Ref 1.1) and General Electric (GE) Line Maintenance Manual (LMM) (Ref. 1.2) references to help decreasing the Return to Service (RTS) turnaround time.

3. DESCRIPTION:

Bombardier has received reports from Operators that observed an accumulation of oil on the ground near the aft equipment bay. The condition is typically noticed after the engine oil system is serviced using the ORS and the aircraft remains parked overnight or for an extended period. To date, Bombardier has no evidence of this phenomenon occurring in-flight.

The investigation revealed that the ORS check valve was contaminated with small debris, preventing the check valve from fully sealing. This condition allowed the oil to migrate from the engine reservoir to the ORS tank, leading to a spill through the overflow drain port of the ORS tank.

4. ACTION:

While Bombardier and GE have been working on potential solutions to address this condition, Operators are recommended to review the following instructions to minimize the risk of occurrences and troubleshooting time.

Pre-flight oil level verification:

GE published the Fleet Highlites (Ref 1.4) to provide operators a means to verify the oil qty (for potential leaks) prior to start of the mission by comparing the oil quantity recorded post shutdown (after servicing) to the “cold engine” oil quantity that can be obtained on the ORS page prior to engine start. The Bombardier FON (Ref 1.5) will be updated to reflect the latest updates.

Quick turnarounds:

To address the possibility of the ORS check valve leaking during flight when the turnaround time on the ground is limited, it is recommended to document the oil levels of both the ORS and the engines. These recorded levels can then be compared to the levels from the previous flight to determine if there is a significant decrease in engine oil levels and an increase in ORS oil level.

For suspected contaminated ORS check valve:

A special irregular inspection for the ORS check valve has been developed (Ref 1.2), which includes cleaning and return-to-service (RTS) instructions. This task has proven to be effective in cleaning and preventing an unnecessary replacement of the ORS check valve thus improving the RTS turnaround time.

Should you have any questions pertaining to this AW or require additional information, please contact your Bombardier Field Service Representative (FSR) or the Customer Response Center (CRC 24/7) team.