

SERVICE LETTER

In-Service Engineering and Technical Support

DH8-400-SL-71-012A |

Flight Operations Service Letter

ATA: 7100

DATE: 22 August 2011 |

SUBJECT: Engine Malfunctions

MODEL: Q400

REFERENCE: AIRCRAFT FLIGHT MANUAL

APPLICABILITY: All

PURPOSE:

This Flight Operations Service Letter (FOSL) is issued to raise awareness with respect to managing engine malfunctions.

OPERATOR ACTION:

Oil Pressure Warning:

We have recently become aware of two events in which the Flight Crew failed to shutdown an engine following illumination of the Oil Pressure Warning Light, resulting in engine failure and fire.

Continued engine operation after loss of oil pressure can lead to a more serious condition than continued operation on a single engine.

Flight Crews are reminded that an Oil Pressure Warning must be responded to as stated in AFM Section 3.2.5., regardless of oil pressure indication.

Take-off Procedures:

AFM Section 4.2.2-5 "Line-Up and Take-Off Procedures" state that the Power Levers are advanced smoothly to RATING detent with brakes off. Check normal take-off power settings (Figure 5-1-13). Observe torque matches the torque bugs.

If torque does not match the torque bugs, or the propeller RPM does not match the Condition Lever position (1020 rpm), the take-off roll must be aborted.



In-Flight Procedures:

The DHC-8 Aircraft Flight Manual (AFM) Paragraph 3.2 provides procedures with respect to managing Engine Malfunctions. An engine malfunction is defined as an engine not responding to pilot commanded input, or a sustained change in engine operating parameters not commanded by the pilot. In either case, the engine **must** be considered to have malfunctioned and the affected engine secured in accordance with the ENGINE SHUTDOWN procedures of sub paragraph 3.2.1.

NOTE: Isolated short duration, minor torque fluctuations are not considered to be a sustained change in engine operating parameters.

To aid in future troubleshooting, flight crews should press the EVENT MARKER for a minimum of 1 second, as soon as practicable after the event.

Please direct responses and inquiries to your Bombardier Regional Aircraft Field Service Representative or the Technical Help Desk in Toronto at telephone number (416) 375-4000 or facsimile (416) 375-4539 or e-mail: thd.qseries@aero.bombardier.com.



for Wally Warner
Principal Engineering Test Pilot,
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Harlan Simpkins
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At Rev A added Oil Pressure Warning