

ALERT BULLETIN

AB 2010:23/2-2
7/2/10
873574

TO: Bombardier Inc. Canadair

INFO: FAA (AFS-200, AFS-230, AFS-300, AFS-400, ANM-100, SEA-AEG, ASA-100), AASC, ALPA, IFALPA, AMFA, APA, ASAP, ATA, IATA, CAPA, IAM, ICASS, IPA, PAMA, RAA, TWU, USAPA

FROM: Linda J. Connell, Director
NASA Aviation Safety Reporting System

SUBJ: CRJ-200 Engine Shutoff Detent

We recently received an ASRS report describing a safety concern which may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the following:

ASRS received a report from an air carrier flight crew describing an abnormality in the engine fuel lever shutoff. The First Officer reporter stated that after gate arrival the Shutdown Checklist was used, but during the subsequent walk around inspection, the Captain noticed #2 engine was still running at a seemingly low idle. The Captain reporter returned to the cockpit where he noticed rising ITT temperature, and that the thrust levers were in fact in the shutoff position, but it wasn't until he tapped on the #2 thrust lever that the engine completed its shutdown. The reporters noted that this aircraft does not use a FADEC system.

(Keywords: CRJ-200 Throttle Lever Shutoff)

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Gary Brauch at (408) 541-2800 or email at gary.j.brauch@nasa.gov.



Aviation Safety Reporting System
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ACN: 873574

Time

Date: 201002

Local Time Of Day: 1201-1800

Place

Locale Reference.Airport: ZZZ.Airport

State Reference: US

Altitude.AGL.Single Value: 0

Environment

Flight Conditions: VMC

Aircraft 1

Make Model Name: Regional Jet 200 ER/LR (CRJ200)

Component 1

Aircraft Component: Powerplant Fuel Valve

Component 2

Aircraft Component: Throttle/Power Level

Person 1

Function.Flight Crew: First Officer

Function.Flight Crew: Pilot Flying

ASRS Report Number: 873574

Person 2

Function.Flight Crew: Captain

Function.Flight Crew: Pilot Not Flying

ASRS Report Number: 873616

Events

Anomaly.Aircraft Equipment Problem: Critical

Anomaly.Deviation - Procedural: Published Material / Policy

Detector.Person: Flight Crew

Result.General: Maintenance Action

Result.Flight Crew: Overcame Equipment Problem

Narrative 1

Upon arrival at the gate, Shutdown Checklist was followed. Captain completed post-flight walk around and I left the aircraft. After I returned, Captain mentioned that during the walk around, the #2 engine appeared to be partially running with engine fuel lever in Shutoff position. Captain said the Inter Turbine Temp (ITT) was slowly climbing when he got back to the cockpit. Dispatch and Maintenance was then contacted. Engine was eventually shutdown. There was no evacuation or injury to passengers or crew. I was not onboard the aircraft and never saw any of the Indications the Captain mentioned about the engine. At my airline, the Captain shuts down the engine at the gate while the First Officer (me), reads the Checklist. It is my assumption that a mechanical failure of a fuel shutoff valve might have caused the improper shutdown of the engine. A safety report was individually submitted by the Captain and I after this incident.

Callback 1

Reporter stated he doesn't know what actually caused the engine to continue to run after they completed the shutdown checklist. He believes the CRJ-200 fuel shutoff is incorporated in the thrust lever when the thrust lever is moved to the shutoff detent. The CRJ-200 does not have an engine FADEC system. The aircraft was grounded for trouble shooting and repair. Reporter stated he and other Pilots have noticed that when they move the thrust lever from the start detent to the idle detent, they sometimes have to move (push) the thrust lever slightly forward to get proper fuel flow for engine start. In his case, even though the Captain told him the engine seemed to be still running with an Interstage Turbine Temp indication in the red zone, no EICAS messages for a JET PIPE OVERHEAT condition appeared. Reporter stated the #2 engine was replaced and he also noticed a new throttle quadrant assembly installed in the center pedestal.

Narrative 2

During walk around inspection, I saw that the right engine was still running. I promptly returned to the cockpit and saw that both of the thrust levers were in the shutoff position. I then tapped back a little bit on the right thrust lever. At this time I observed the Inter Turbine Temp (ITT) gauge in the red zone. Dispatch and Maintenance were then contacted.

Synopsis

A Captain and First Officer report about not realizing their CRJ-200 engine #2 continued to run after they had moved the throttle lever to the shutoff position and completed their shutdown checklist. Captain noticed the engine seemed to be running at a very low idle during his post flight walk around. Engine replaced due to turbine overheat.