

Follow-up Action on Occurrence Report

INCIDENT INVOLVING A320-232, G-EUUI, OVERHEAD BIRMINGHAM ON 29 NOVEMBER 2003
(AIRCRAFT, IN CRUISE, DIVERTED AFTER ENGINE SURGE)

CAA FACTOR NUMBER : F52/2004
FACTOR PUBLICATION DATE : 14 December 2004
OPERATOR : BA
CAA OCCURRENCE NUMBER : 2003/08282
AAIB REPORT : Bulletin 11/2004

SYNOPSIS

(From AAIB Report)

On a relatively clear evening, upon reaching the cruise level of Flight Level (FL) 280, the crew and passengers on a scheduled flight from London Heathrow to Edinburgh experienced momentary noise and vibration throughout the aircraft. This was repeated approximately one minute later. It was also reported that an orange flash, associated with the right engine, had been seen. The flight crew identified that No 2 engine had surged and recovered, with the engine indications returning to normal. The aircraft's Quick Reference Handbook, coupled with the training that the flight crew had received, provided them with inadequate guidance with which to fully assess the situation. Their initial intention to continue to Edinburgh was changed upon advice from the operator and the crew initiated a return to Heathrow. The engine then began to surge again and, once more, recovered, but this was followed by another series of surges. At this point the crew believed that the No 1 engine had also surged so they declared a MAYDAY and diverted, uneventfully, to Birmingham Airport. Subsequently, it was determined that a progressive fault in the No 2 engine P2T2 probe had signalled inaccurate values to the No 2 engine computer, resulting in incorrect scheduling of the compressor inlet guide vanes, and this was a direct cause of the engine surges. Four safety recommendations are made as a result of this investigation.

FOLLOW UP ACTION

The four Safety Recommendations, made by the AAIB following their investigation, are reproduced below, together with the CAA's responses.

Recommendation 2004-59

It is recommended that Airbus Industrie and IAE review the EEC logic on the V2500 engine fitted to the A320 aircraft, regarding the selection of a temperature source, in the event that the system detects a greater than normally permitted difference between the available sources, so that an erroneous signal is not used for engine control.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-60

It is recommended that Airbus Industrie review the logic of the Centralised Fault Data Interface Unit (CFDIU) and the Engine Electronic Control (EEC) on A320 aircraft fitted with the V2500 engine, with respect to the Class 3 classification (a fault having no impact on flight safety) of a T2 Sensor Soft Fault (SSF), so that soft faults, such as an erroneous signal, are brought to the attention of flight and maintenance crews at the earliest opportunity.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-61

It is recommended that Airbus Industrie review the ENG 1(2) STALL abnormal procedure for the A320 to reflect the ECAM messages which crews can or cannot expect to see during engine stall events on aircraft fitted with IAE V2500 engines, taking account of the EEC software standard installed.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed

Recommendation 2004-62

It is recommended that Airbus Industrie review the content of the ENG 1(2) STALL checklist, as it appears in their A320 QRH, to ensure that it includes all the advice and information contained in the abnormal procedure for the same event, as laid out in their Flight Crew Operations Manual.

CAA Response

This Recommendation is not addressed to the CAA.

CAA Status - Closed