

Jetstream 3202, G-OEST

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INCIDENT

Aircraft Type and Registration: Jetstream 3202, G-OEST

No & Type of Engines: 2 Garrett Airesearch TPE 331-12UAR-701H turboprop engines

Year of Manufacture: 1988

Date & Time (UTC): 23 November 2000 at 1408 hrs

Location: Aberdeen Airport

Type of Flight: Public Transport (Passenger)

Persons on Board: Crew - 3 - Passengers - 9

Injuries: Crew - None - Passengers - None

Nature of Damage: Cabin lighting unit overheated

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 42 years

Commander's Flying Experience: 3,383 hours (of which 532 were on type)
Last 90 days - 154 hours
Last 28 days - 61 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and report on examination of lighting unit

History of the event

Just after the aircraft had begun to taxi, having moved about 30 metres, the captain became aware of a smell of burning. On looking back to the cabin he saw a passenger approaching the flight deck who reported smoke in the cabin. He then noticed smoke pouring down the right side passenger cabin windows. He instructed the first officer to shutdown both engines and, using the public address system, called for an evacuation of the passengers. ATC were informed and assistance from the Airport Fire Service was accepted. The captain switched off the aircraft electrics and, following the first officer, evacuated the aircraft. By this time all of the passengers were well clear of the aircraft and re-entering the terminal.

The smoke was observed to be thick, grey-yellow and appeared to be falling from behind the cabin trim in front of the window transparencies. The associated smell was described as 'plastic/wiring/toxic'. The Airport Fire Service arrived promptly but the smoke dispersed quickly once the aircraft electrics had been switched off.

Aircraft examination

The aircraft was taken to the maintenance area where, during ground runs, the source of the smoke was traced to the forward right side power unit for the cabin lighting.

A Jetstream Aircraft Service Bulletin (SB), 33-JA 901142, was issued in February of 1990, calling for replacement of the earlier lighting units, Part No TR992 or TR992-03, with the TR992-10, following failures of the earlier type of units. This SB was complied with on this aircraft on 20 August 1991.

The failed unit from G-OEST was returned to its manufacturer for detailed examination. They concluded that the unit, part no TR992-10, had suffered internal overheating leading to a 'burn-through' of the case. A short circuit on the internal transformer was postulated, leading to the overheating of the varnish impregnated copper coil causing the smoke. More than 7,000 units of this type have been delivered to service and this was the first failure of this type encountered by the manufacturer.