

INCIDENT

Aircraft Type and Registration:	BAe 125-800B, G-OLDD	
No & Type of Engines:	2 Garrett Airesearch TFE731-5R-1H turbofan engines	
Year of Manufacture:	1987	
Date & Time (UTC):	30 December 2005 at 1519 hrs	
Location:	Southend, Essex	
Type of Flight:	Training	
Persons on Board:	Crew - 5	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Minor damage to electrical wiring	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	56 years	
Commander's Flying Experience:	13,500 hours (of which 3,000 were on type) Last 90 days - 100 hours Last 28 days - 25 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and enquiries made of the maintenance company	

Synopsis

During the approach, an electrical short circuit produced a bang, sparks and, briefly, smoke. The circuit protection functioned rapidly and the smoke cleared. A successful landing was carried out.

History of the flight

During an ILS approach to Runway 24 at Southend Airport, a bang was heard from the left side of the cockpit, followed immediately by sparks and smoke issuing from the left pilot's footwell. A distress message was transmitted and oxygen masks donned by both pilots. Emergency drills were performed from memory. The smoke cleared within 30 seconds and the aircraft landed normally with no further untoward indications. At the

end of the landing run all aircraft systems appeared to be operating normally. The aircraft was shut down with the fire crews in attendance.

Aircraft examination

Subsequent examination of the aircraft revealed an area of burnt wiring at the P1 screen heat filter; chafing and burning was found in the region of connections B1, B2 and B3. The remedial action included replacement of damaged wiring as required and general checking of the routing to prevent a recurrence. The P2 windscreen and its heating were checked and found to be in a satisfactory condition. No history of similar problems was recorded on this aircraft.

Discussion

Smoke generated from an electrical failure will present a crew with more of a significant hazard in the smaller volume in the cabin of an executive jet than in the larger cabins of scheduled passenger aircraft. In this particular

event however, the smoke generated by the short circuit dissipated rapidly indicating that the circuit protection functioned rapidly and effectively. The limited area and degree of damage found on examination support this deduction.