AAIB Bulletin No: 8/2005

INCIDENT

Aircraft Type and Registration:	Shorts SD3-60-100, EI-SMB	
No & Type of Engines:	2 P&W PT6A-64ARE turboprop engines	
Year of Manufacture:	1984	
Date & Time (UTC):	6 April 2005 at 0105 hrs	
Location:	15 nm north of Edinburgh, Scotland	
Type of Flight:	Public Transport (Cargo)	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	None	
Commander's Licence:	Air Transport Pilot's Licence	
Commander's Age:	36 years	
Commander's Flying Experience:	2,180 hours (of which 600 were on type) Last 90 days - 80 hours Last 28 days - 42 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and subsequent telephone enquiries	

The aircraft was conducting a Royal Mail cargo flight from Edinburgh to Kinloss at night. The weather was good with a surface wind from 180°/10-15 kt. Runway 12 was in use.

A few minutes after takeoff, whilst passing FL55, the commander smelt something unusual. A visual inspection of the cargo area, through the cockpit door, revealed a white vapour coming from under the cargo net and filling the cargo area. The commander assumed this vapour was smoke; however, there were no smoke or fire warnings on the central warning panel. ATC were informed that they had a fire on board the aircraft and an immediate return to Edinburgh was requested.

Whilst they were being radar vectored for an SRA approach to Runway 12 at Edinburgh a further visual inspection showed that the cargo section was now full of a dense white smoke. The check list for a Cargo Fire was completed and crew oxygen masks and goggles were made available. Once

stabilised on finals for a visual approach, another inspection of the cargo area showed that the smoke had now cleared.

The aircraft landed without further incident and was brought to a halt on the runway and shutdown. The Airport Fire Service (AFS) were immediately in attendance and the crew evacuated the aircraft.

The aircraft was inspected by the AFS with a thermal imaging camera. This revealed no signs of heat or fire within the aircraft. All packages within the cargo hold appeared normal, were intact and showed no signs of damage. The AFS were unable to identify the contents of the cargo due to there being no shipper's declaration available from either the commander or the Royal Mail; however, such a declaration was not required since there were no dangerous goods on board.

The aircraft was taxied to stand where the cargo was off loaded for further investigation with Royal Mail personnel in attendance. During the unloading of the cargo there was nothing untoward found on the aircraft which would have caused the smoke in the cabin.

The cargo from the aircraft was taken by road to Inverness where it was held separately at the sorting office. Royal Mail personnel carried out a visual external search of all the packages before they were released for distribution/delivery. No evidence of any leakage or damage to packaging was found. It has therefore not been possible to identify the source of the smoke or vapour which caused the crew to believe that they had a fire on board the aircraft.