Boeing 757-200, G-BIKF

AAIB Bulletin No: 2/97 Ref: EW/C96/9/8 Category: 1.1

Aircraft Type and Registration: Boeing 757-200, G-BIKF

No & Type of Engines: 2 Rolls-Royce RB211-535C turbofan engines

Year of Manufacture: 1982

Date & Time (UTC): 11 September 1996 at 0954 hrs

Location: Over Forest Dale Estate, Croydon

Type of Flight: Scheduled Passenger

Persons on Board: Crew - 7 - Passengers - Not known

Injuries: Crew - Nil - Passengers - N/A

Nature of Damage: Fairing departed aircraft

Commander's Licence: Air Transport Pilot's Licence

Commander's Age: 50 years

Commander's Flying Experience: 11,604 hours (of which 1,645 were on type)

Last 90 days - 160 hours

Last 28 days - 33 hours

Information Source: AAIB Field Investigation

A large metal assembly, approximately 5 feet by 18 inches andweighing some 25 lb, fell into a car park in Croydon at about0954 hours. There was no resulting injury or damage. AAIB examination of recorded radar data identified two possible aircraft from which the panel might have fallen, and it was subsequently confirmed that the panel was a strut-to-aft fairing seal assembly from aBoeing 757 aircraft registration G-BIKF. The commander reported that he had been unaware of any untoward event during the flightfrom Lisbon to Heathrow, either in terms of aircraft handlingor vibration.

The operator's engineering personnel reported that the seal wasmissing on arrival of the aircraft at Heathrow, and that no damagewas found on the aircraft. No evidence of engagement of the sealassembly retaining bolt was apparent, and the bolt was not found. The seal is located at the lower rear face of the pylon betweenthe jet pipe and the pylon. It is installed by sliding the assemblyforwards into four locating bushes and is secured by an attachmentbolt at the rear. In the past, problems have occurred on similaraircraft because of apparent non-fitment of the bolt. On theprevious day, a hydraulic leak had occurred. Corrective actionhad been taken to retighten a pipe

on the right engine pylon filtermodule. A pylon panel had been removed for this work, howeverthere was no recorded work on the seal and no apparent need forthis assembly to have been disturbed. The seal would normallyonly be removed during an engine change. Examination of the aircraftmaintenance records showed that the engine had been installed two years previously.

Following the accident, both seal assemblies on G-BIKF were inspected for security and a Special Check was raised to inspect the remainder of the operator's Boeing 757 fleet. The task has now been upgraded by the operator to a 'critical maintenance task' which requires a duplicate inspection.