Boeing 757-28A, G-OOOD

AAIB Bulletin No: 7/2003	Ref: EW/G2003/02/13	Category: 1.1
INCIDENT		
Aircraft Type and Registration:	Boeing 757-28A, G-OOOD	
No & Type of Engines:	2 RB211-535E4-37 turbofan engines	
Year of Manufacture:	1988	
Date & Time (UTC):	17 February 2003 at 0805 hrs	
Location:	Newbury, Berkshire	
Type of Flight:	Public Transport (Positioning)	
Persons on Board:	Crew - 8	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	None	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	40 years	
Commander's Flying Experience:	10,373 hours (of which 4,497 were on type)	
	Last 90 days - 98 hours	
	Last 28 days - 24 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The aircraft was on a positioning flight from Cardiff to Rome with no passengers on board. At a late stage during the takeoff, an Engine Indication and Crew Alerting System (EICAS) message of R ENG HI STAGE was annunciated. The takeoff was continued and when the aircraft was above the minimum safe altitude the crew carried out the relevant quick reference handbook (QRH) drill. As a result the right engine bleed system was switched off. This limited the aircraft to a ceiling of FL350. The crew climbed the aircraft to FL350 and, after discussion with their company engineers, decided to continue to Rome. Approximately one minute after levelling at FL350 an EICAS warning of CABIN ALT occurred, the pilots donned their oxygen masks and an emergency descent was carried out. As they commenced their descent the crew noted that the cabin outflow valve was fully closed yet the cabin altitude was still climbing through 10,500 feet. When the aircraft was established in the descent however the cabin altitude was seen to also descend. As no passengers were being carried, the commander decided that the emergency passenger oxygen system would not be deployed. A MAYDAY call was transmitted and a decision taken to divert to London Gatwick. The aircraft landed at Gatwick without further incident.

There have been several occasions where a lightweight B757 with one bleed system inoperative has been unable to maintain a cabin altitude of less then 10,000 feet. In response, Boeing issued Service Letter 757-SL-21-055 on 12 February 2003 which

Document title

'provides a ground procedure developed to assist operators in determining if the airplane will be able to maintain cabin pressure in flight on a single air conditioning pack'

The operator is currently accomplishing the Service Letter recommendations on two aircraft and will use the results to determine whether a fleet wide maintenance programme modification is required.