

## Boeing 757-236, G-CPES

<b>AAIB Bulletin No:</b> 12/2004	<b>Ref:</b> EW/G2003/11/21	<b>Category:</b> 1.1
<b>INCIDENT</b>		
<b>Aircraft Type and Registration:</b>	Boeing 757-236, G-CPES	
<b>No &amp; Type of Engines:</b>	2 Rolls-Royce RB211-535E4-37 turbofan engines	
<b>Year of Manufacture:</b>	1998	
<b>Date &amp; Time (UTC):</b>	19 November 2003 at 1055 hrs	
<b>Location:</b>	After takeoff from London Heathrow	
<b>Type of Flight:</b>	Public Transport (Passenger)	
<b>Persons on Board:</b>	Crew - 9	Passengers - 63
<b>Injuries:</b>	Crew - None	Passengers - None
<b>Nature of Damage:</b>	None	
<b>Commander's Licence:</b>	Airline Transport Pilot's Licence	
<b>Commander's Age:</b>	42 years	
<b>Commander's Flying Experience:</b>	12,100 hours (of which 5,100 were on type)	
	Last 90 days - 207 hours	
	Last 28 days - 72 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

### History of the flight

The aircraft was operating a scheduled passenger flight from London Heathrow to Istanbul. As the aircraft rotated on takeoff a 'strong smell of oil' became apparent in the cockpit. The flight crew turned their attention to the problem after completing the after takeoff checks, at which point the smell was still present, although somewhat less intense. The Cabin Services Director was called to the cockpit to verify the presence of the smell.

The flight crew decided that the most prudent option was to return to London Heathrow and planned a diversion accordingly, declaring a PAN to air traffic control. The appropriate Quick Reference Handbook (QRH) procedure was followed, which required the crew to don their oxygen masks. The approach and landing at Heathrow were uneventful and there were no injuries to any of the passengers or crew.

## **Engineering investigation**

Despite extensive troubleshooting, no defects were found that could have produced the oil smell in the cockpit. A check of the engine oil quantities however, showed that they were above the operator's defined limit for the maximum fill level. In-service experience has shown that one possible effect of overfilling the engines with oil is for oil to leak past the compressor front bearing seal and enter the gas path and be drawn into the cabin/cockpit air supply. For this reason, the operator had established an 'in-house' maximum fill level of one litre below the 'FULL' graduation on the oil tank sight glass. The operator has since amended its procedures for servicing the engine oil, to further reduce the likelihood of overfilling.

## **Additional investigations**

On 7 September 2004, the crew of G-CPER, another Boeing 757 operated by the company, experienced, among other events, oil smells in the cockpit. The AAIB 'Inspector's Investigation' into this occurrence, which is still in progress, examines engine oil servicing issues in more detail. The results, in the form of an AAIB Formal Report, will be published separately.