

# **Boeing 747-136, G-AWNA, 21 April 1996**

**AAIB Bulletin No: 8/96 Ref: EW/G96/04/23 Category: 1.1**

## **INCIDENT**

**Aircraft Type and Registration:** Boeing 747-136, G-AWNA

**No & Type of Engines:** 4 Pratt & Whitney JT9D turbofanengines

**Year of Manufacture:** 1970

**Date & Time (UTC):** 21 April 1996 at 1520 hrs

**Location:** Near London Heathrow Airport

**Type of Flight:** Public Transport

**Persons on Board:** Crew - 18 Passengers - N/K

**Injuries:** Crew - None Passengers - None

**Nature of Damage:** Crack in fibreglass panel between the fuselage and the left wing

**Commander's Licence:** Airline Transport Pilot's Licence

**Commander's Age:** 53 years

**Commander's Flying Experience:** 10,730 hours (of which 5,995 were on type)

Last 90 days - 177 hours

Last 28 days - 65 hours

**Information Source:** Aircraft Accident Report Form submitted by the pilot

The aircraft's departure from Heathrow Airport was normal, but on passing Fl 150 a member of the cabin crew reported to the commander that a worried passenger had noticed a crack in the left wing. The commander sent the flight engineer into the cabin to make an assessment. He reported back that the crack looked 'bad' and suggested that the commander should check it himself. The commander went back and inspected the left wing from the cabin. He saw a crack that was parallel to, and about 2 feet from, the wing leading edge. The crack was some 3 to 4 feet in length and about 2 to 3 inches wide. He noticed that the two sides of the crack were being forced upwards by the effect of lift on the wing and considered that the panel, or part of the panel, might detach and hazard the aircraft, or people on the ground. The panel was in an area just ahead of the high speed aileron, which the commander considered it might strike if it detached. He also considered the possible unnerving effect the crack might have on the passengers if the flight was continued to its

destination, which entailed some further five hours flight time. The commander therefore returned to the flight deck and instructed the crew that the aircraft would be returning. The nearest airfield's weather suggested that there would be turbulence in its vicinity, whereas Heathrow's weather was satisfactory. A 'Pan' call was made, with a request for a 'straight-in' approach to Heathrow. Following a 20 minute period for fuel dumping, an uneventful approach and landing was made.

Subsequent examination of the panel, which had remained in position on the wing, revealed a crack which, with the aircraft on the ground, had closed-up to the extent that made it very difficult to visually identify. Cracking of this particular panel on this type is a known defect and is the subject of ongoing investigation and monitoring by the operator and the aircraft manufacturer. This particular panel was temporarily repaired in accordance with the aircraft's Maintenance Manual, with an engineering note that it was to be replaced at the next maintenance check.