

No: 9/91

Ref: EW/G91/06/13

Category: 1a

Aircraft Type and Registration: Boeing 747-400, G-BNLO

No & Type of Engines: 4 Rolls-Royce RB211-524H turbofan engines

Year of Manufacture: 1990

Date & Time (UTC): 10 June 1991 at 1325 hrs

Location: Near London (Heathrow) Airport

Type of Flight: Public Transport

Persons on Board: Crew - 17 Passengers - 279

Injuries: Crew - None Passengers - None

Nature of Damage: Damage to No. 11 Kruger flap

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 47 Years

Commander's Flying Experience: 9,694 hours (of which 716 were on type)

Information Source: AAIB enquiries and details submitted by the operator

The aircraft was on a scheduled flight from London Heathrow to Singapore. The departure from Heathrow was apparently normal and no problems were encountered during the flight. However after arrival at Singapore it was noted that the outer skin of the No. 11 Kruger flap had been damaged and that a section approximately 7 ft by 1 ft was missing. No other damage was noted. No effect on the aircraft's handling or performance had been noted by the crew. The missing skin section was subsequently located within the perimeter of Heathrow Airport.

The failure of the Kruger flap skin was due to repeated interference between the flap seal and the No. 2 engine pylon. This had resulted in the outer skin separating from the honeycomb core. Similar cases have occurred in the past. As a result of these the manufacturer has advised operators that clearances may reduce after a period in service and that inspections and adjustment are required. The operator of G-BNLO had already introduced a special check across the fleet but G-BNLO was awaiting this check when the incident occurred. Following this incident this special check has been completed on all applicable aircraft in the operators fleet.