

No: 2/91

Ref: EW/G90/10/16

Category: 1a

Aircraft Type and Registration: Boeing 747-436, G-BNLJ

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

Year of Manufacture: 1990

Date and Time (UTC): 30 October 1990 at 0121 hrs

Location: Bangkok, Thailand

Type of flight: Public Transport

Persons on Board: Crew - 19 Passengers - 381

Injuries: Crew - None Passengers - None

Nature of Damage: Damage to No. 11 leading edge Krueger flap

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 45 years

Commander's Total Flying Experience: 9,500 hours

Information Source: Information supplied by the aircraft operator

On arrival at Bangkok a ground engineer advised the crew that a portion of one of the leading edge Krueger flaps was missing. This was the No. 11 section of flap, inboard of the No. 2 engine, and the section missing measured approximately 2 ft x 1 ft. The flight crew had not noticed any abnormalities and not heard or felt anything unusual during flap retraction or extension on that sector.

The damage on the remaining portion of the flap, which is of composite construction, indicated that the final failure had occurred during a flap retraction and as a result of physical interference in mid-travel with the No. 2 engine pylon. There was no evidence of previous ground damage and the operator had not replaced or reworked this flap since the aircraft's delivery. According to the manufacturer, a number of operators had previously reported similar problems and these problems have been attributed to improper trimming of the flap during assembly or subsequent replacement. As well as investigating the quality control during manufacture, the manufacturer draws attention to a 1989 revision to the Maintenance Manual dealing with the trimming of the No. 11 and No. 16 sections of Krueger flap during replacement.