

**AAIB Bulletin No:** 6/95

**Ref:** EW/C95/4/2

**Category:** 1.1

**Aircraft Type and Registration:** McDonnell Douglas MD-83, G-DEVR

**No & Type of Engines:** 2 Pratt & Whitney JT8D-219 turbofan engines

**Year of Manufacture:** 1990

**Date & Time (UTC):** 27 April 1995 at 2316 hrs

**Location:** Manchester International Airport

**Type of Flight:** Public Transport

**Persons on Board:** Crew - 7                      Passengers - 169 + 2 infants

**Injuries:** Crew - None                      Passengers - 4 Minor

**Nature of Damage:** Left main landing gear failed; left wingtip and flap

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

**Information Source:** AAIB Field Investigation

The aircraft was engaged on a holiday charter flight from Las Palmas to Manchester with a crew of 7, 169 passengers and 2 infants on board. The flight was uneventful and a normal landing followed the ILS approach to Runway 06 at Manchester. When the speed had reduced to about 40 kt; as the crew applied increased braking there was a loud bang and the left wing went down as the left main landing gear leg collapsed. When the aircraft had stopped the passengers and crew evacuated the aircraft via the front right and rear left service door slides; four passengers suffered minor injury during the evacuation.

It was found that the left main landing gear leg had fractured at the top, close to its attachment to the wing. Close inspection revealed that there was a very small area (approximately 5 mm x 1 mm) of pre-existing metal fatigue associated with the fracture. This area of fatigue is being examined by metallurgists under AAIB direction from both DRA Farnborough and the Douglas Aircraft Company and is currently thought to be responsible for the failure of the leg which occurred under normal operating conditions. The material of the leg is a very high tensile steel which is known to be extremely sensitive to minor defects and cracks.

Good replays of both the Cockpit Voice Recorder and the Digital Flight Data Recorder were obtained which show nothing abnormal in the operation of the aircraft prior to the landing gear collapse.

The Chief Inspector of Air Accidents has ordered a 'Formal Investigation' into the circumstances of this accident.