

No: 6/92

Ref: EW/G92/03/11

Category: 4

INCIDENT

Aircraft Type and Registration: Handley Page Dart Herald 210, G-STVN

No & Type of Engines: 2 Rolls-Royce Dart 532-9 turboprop engines

Year of Manufacture: 1965

Date & Time (UTC): 24 March 1992 at 2334 hrs

Location: East Midlands Airport

Type of Flight: Public Transport (Cargo)

Persons on Board: Crew - 2 Passengers - None

Injuries: Crew - None Passengers - N/A

Nature of Damage: None

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 61 years

Commander's Flying Experience: 14,457 hours (of which 1,878 were on type)
Last 90 days - 103 hours
Last 28 days - 34 hours

Information Source: Aircraft Accident Report Form submitted by the pilot
and telephone enquiries

The aircraft had recently undergone a Check 1 (500 hour) Inspection. The first officer was handling the aircraft, although the commander took control during the latter stages of the incident. The aircraft was making a visual approach to runway 09 at East Midlands Airport. There was a northerly surface wind of 10 to 15 knots and the runway surface was 'damp'. The first officer controlled the aircraft to touchdown on the runway centreline, holding the left wing down, and the left main wheel made the first runway contact. The aircraft tracked straight initially and the first officer called for "Ground Fine" (propeller pitch), which was selected by the commander. However, at about this time the aircraft swung to the left. The commander took control and attempted to correct the yaw with rudder and right brake, in addition to nose wheel steering. However the aircraft continued to track approximately 070 degrees and ran off the left side of the runway on to the grass, where it came to rest after a further 200 yards, some 20 yards left of the runway. The engines were shut down and the fire bottles discharged, but there was no fire or obvious damage to the aircraft, and no injuries occurred. The commander

checked the left main gear brake pack, which appeared 'cool', but was distracted from checking the right main gear.

Following this incident, the brakes and anti-skid systems were checked and found serviceable. The aircraft was then ferried, with the nose gear locked down, to Bournemouth International Airport where it landed normally. Subsequent checks of the nose gear and steering were made, but no fault was found. The commander had noted, however, that with the nose wheel steering handle centered, the wheels were pointing to the left. The aircraft was then flown to Guernsey when, during the landing on runway 09 with a surface wind of 010°/25 kt, the aircraft again swung left by some 30 or 40 degrees. The application of right rudder and brake had little apparent effect, but the commander managed to regain control by instructing the first officer to select the steering test switch to the 'test' position. The crew had also had some difficulty with retraction of the landing gear on that flight and reported that the previous two departures had required four attempts to retract the landing gear.

The aircraft was therefore subjected to further inspections and some time was spent examining the nose landing gear and steering, but again no fault was found. The aircraft was fitted with a single 'squat switch' which was on the right main landing gear oleo. This switch, which arms the nose wheel steering, can be bypassed by the steering test switch. When functioned, this switch operated normally. However when the oleo was examined, it was found to be very 'stiff' and it did not always compress sufficiently to operate the switch. It was also found that the oleo could not be charged. The oleo was therefore changed and the aircraft subsequently operated without further incident.

The Check Inspection which the aircraft had recently undergone involved raising the aircraft on jacks. The maintenance organisation has amended its procedures to include recharging of the landing gear oleos during this Check. (Recharging the oleos involves functioning the oleos through their full range of movement). In addition, the operator has issued an Operating Staff Instruction to its crews stating that in the event of apparent loss of nose wheel steering, the steering test switch should be selected to the 'test' position. The company is also considering moving the switch to a more prominent position.