

**Aircraft type and registration:** Shorts SD360 EI-BEM (twin turbo-prop public transport aircraft)

**Year of Manufacture:** 1984

**Date and time (GMT):** 31 January 1986 at 1851 hrs

**Location:** 3.5 km from East Midlands airport

**Type of flight:** Public transport

**Persons on board:** Crew — 3                                  Passengers — 33

**Injuries:** Crew — 0    Passengers — 2

**Nature of damage:** Damage to the undercarriage, nose area, wings and propellers

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

**Commander's Age:** 33 years

**Commander's Total Flying Experience:** 7528 hours (of which 123 were on type)

**Information Source:** AIB Field Investigation.

Following normal pre-flight preparations, the passengers and the crew boarded the aircraft at Dublin airport and took off on schedule, at 1725 hrs, for East Midlands airport.

The weather forecast for East Midlands airport gave the wind as 060°/18—35 kt, 4 km visibility in rain and with a cloudbase of 900 feet. There had also been a report of severe icing between Flight Levels (FL) 30 and 70 in the adjacent area of Birmingham. The en-route forecast suggested that the cloud tops for the entire journey would be at FL 70.

During the climb to the assigned FL 90, the crew checked the aircraft's wing and tail de-icing systems and the flight proceeded without incident until the aircraft was directed by radar to join the instrument landing system (ILS) approach to runway 09 at East Midlands. During the descent to 3000 feet the flight was in almost continuous cloud but the crew reported that no airframe icing was visible and so, in accordance with normal procedures, the crew did not switch on the wing and tail de-icing boots. Before entering cloud, however, they had turned on the anti-icing for the windscreen, propellers, engine nacelles and the pitot and static systems. The ice detector, beneath the nose of the fuselage, was also switched on.

At 3000 feet, still in cloud, the aircraft established on the ILS centreline and glideslope and began the final descent for landing. As the aircraft descended through about 900 feet, the pilots felt the aircraft roll very sharply to the left. Application of aileron and rudder to correct this caused a rapid roll to the right, through the wings level position, into a right bank. When the commander attempted to correct this, the aircraft rolled into another left bank. This alternately left and right rolling motion continued in divergent cycles for some 30 seconds. During the next few seconds the amplitude of roll displacement began to decrease but the descent rate of the aircraft had reached a maximum value of about 3000 feet per minute before reducing in the final seconds to nearly zero.

Before the roll oscillations had completely died out, the aircraft struck an 11KV power cable. It continued through another similar cable and two of its supporting poles and brushed through a tree before the left wing tip struck the ground and the aircraft slid to a halt, with its nose in a small coppice, 3.5 km from the runway threshold.

The undercarriage, wings and nose of the aircraft sustained considerable disruption but the cockpit and passenger cabin were relatively undamaged and there was no fire. The aircraft came to rest lying virtually upright and twenty passengers, followed by the commander, evacuated from the forward port side exit and the remaining thirteen from the rear starboard exit, followed by the air hostess and the co-pilot.

The Chief Inspector of Accidents has ordered an Inspector's Investigation into the accident.