

No: 5/89

Ref: EW/G89/01/14

Category: 1c

Aircraft Type and Registration: Beechcraft B76 Duchess, G-BGLD

No & Type of Engines: 2 Lycoming O-360-A1G6D piston engines

Year of Manufacture: 1979

Date and Time (UTC): 17 January 1989 at 1115 hrs

Location: Manchester International Airport

Type of Flight: Business

Persons on Board: Crew - 1 Passengers - 2

Injuries: Crew - None Passengers - None

Nature of Damage: Severe damage to both wings and propellers, forward fuselage and right main landing gear.

Commander's Licence: Private Pilot's Licence with Instrument and Night Ratings

Commander's Age: 35 years

Commander's Total Flying Experience: 607 hours (of which 46 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot and additional information obtained by telephone, and from the CAA.

The aircraft was on a flight to Southampton from its main base at Manchester. On approach to Southampton, the pilot found that he was unable to obtain a 'down and locked' indication for the nose landing gear. Since the cloudbase at Southampton was very low, the pilot thought it inadvisable to perform a "low-pass" of the control tower to confirm the nose landing gear position and, having plenty of fuel, elected to return to Manchester.

After returning to Manchester, the pilot was still unable to extend the nose landing gear. In order to minimise the risk of fire if the aircraft suffered damage after touchdown, the pilot decided to shut down the engines before landing. He shut down both engines as the aircraft approached high over the threshold. However, the aircraft developed a much higher sink rate than the pilot had expected and landed very heavily, causing extensive structural damage.

Examination of the aircraft showed that the nose landing gear door mechanism was misrigged. This had resulted in incorrect operation of the mechanism, which led to a situation where the doors became geometrically locked shut, preventing the nose landing gear from extending.

This accident was caused by an identical malfunction to that which occurred at Manston on 22 December 1987 (see AAIB bulletin 3/88 and GASIL 4/88) and involved the same linkage as was the cause of an accident at Glenrothes on 20 September 1988 (see AAIB Bulletin 1/89). As a result of the latter occurrence, the CAA had prepared an Emergency Airworthiness Directive, but had not yet issued

it, because they were awaiting comment from the manufacturer. The first section of this Directive (No.-031-01-89) required that the rigging of the nose landing gear door linkage be checked according to the manufacturers Service Instruction SI No 1209.

The CAA have now issued this Directive, and are awaiting responses from operators of this type of aircraft.

Information Source:	Aviation Accident Report Form Submitted by the Pilot
Commander's Total Flight Experience:	109 hours (of which 144 were on type)
Commander's Age:	39 years
Commander's Experience:	Private Pilot - 1st class
Nature of Damage:	Nose landing gear door towards minor damage to propeller tip
Injuries:	Crew - None Passengers - N/A
Persons on Board:	Crew - 1 Passengers - 10
Type of Flight:	Training
Location:	Meppehall, Belgium
Date and Time (UTC):	30 March 1989 08:55 hrs
Year of Manufacture:	1972
No. & Type of Engines:	1 Continental piston type O-460-A piston engine

The aircraft was on a flight from Clonville to a private landing strip at Meppehall, Belgium. The pilot reports that the left hand circuit breaker (No. 230) fell and rotated 30 degrees of flap at an angle of 0.5 degrees. Touchdown on the main landing gear was normal and he lowered the nose landing gear and applied the wheel brakes. A gusty crosswind along the runway was a dip, and as the aircraft crossed the runway, it lifted back into the air before touching down again firmly on the nose landing gear. The force of the impact was sufficient to bend the nose landing gear towards showing the ground to clear the ground. The main gear was working full upper torso restraint and the aircraft without injury.