

**No: 7/86**

**Ref: 1b**

**Aircraft type and registration:** Piper PA-34-220T G-BJEO

**No & Type of engines:** 2 Continental TS10-360-KB1 piston engines

**Year of Manufacture:** 1981

**Date and time (GMT):** 16 May 1986 at 0911 hrs

**Location:** Birmingham Airport

**Type of flight:** Private (business)

**Persons on board:** Crew — 1                      Passengers — None

**Injuries:** Crew — None                      Passengers — N/A

**Nature of damage:** Aircraft destroyed

**Commander's Licence:** Private Pilot's Licence (with Instrument Rating)

**Commander's Age:** 43 years

**Commander's Total Flying Experience:** 832 hours (of which 213 were on type)

**Information Source:** Aircraft Accident Report Form submitted by the pilot.

The aircraft was commencing a planned flight from Birmingham Airport to Wellsbourne Mountford aerodrome, a direct track distance of just under 17 nautical miles. In his report the pilot states that prior to take-off the total fuel on board was 138 lbs. If this was distributed evenly between the main wing tanks the quantities indicated would have been about 9½ imperial gallons per side. When full the main wing tanks hold 38¾ imperial gallons of useable fuel per side.

The pilot reports that after a normal start up and taxi sequence he was cleared to take-off from runway 24. There is no taxi-way directly to the threshold of this runway, and aircraft are required to backtrack along a portion of runway 06 before making a 180° turn to line up at the threshold of runway 24. The report continues that the initial take-off run and acceleration appeared to be normal. However, shortly after rotation, at an airspeed of 75 knots, the aircraft yawed and rolled to the right. The pilot was unable to correct the situation despite full application of left rudder and aileron. He closed the throttles as the right wing tip contacted the ground. Thereafter eye-witnesses report seeing the aircraft cartwheel before coming to rest just south of the main runways intersection. The pilot, who was uninjured, found that the main entrance door had jammed, but managed to break his way through and vacate the aircraft. He had been wearing diagonal upper restraint harness which held throughout the impact. The weather at the time was fine, with a surface wind of less than 5 knots.

Subsequent examination of the wreckage revealed no pre-accident failure of the controls or systems. However, the aircraft manufacturer's approved flight manual contains the following warning: "Avoid fast turns onto the runway, followed by immediate take-off, especially with a low fuel supply. Fast taxi turns immediately prior to take-off run can cause temporary malfunction of one engine on take-off".