No: 11/84 Ref: EW/C881

Aircraft type and registration: Jodel D-120 F-BHYE (Light single engined fixed wing aircraft)

Year of Manufacture: 1957

Date and time (GMT): 30 July 1984 at about 1401 hrs

**Location:** 4½ miles south of Burton-on-Trent, Derbyshire

Type of flight: Private

**Persons on board:** Crew -1 Passengers - Nil

Injuries: Crew — 1 (fatal) Passengers — N/A

Nature of damage: Aircraft destroyed

Commander's Licence: Private Pilot's Licence

Commander's Age: 56 years

Commander's total flying

experience: 66 hours (of which 15 hours were on type)

Information Source: AIB Field Investigation.

On 26/27 July 1984 the pilot of the subject aircraft flew as a passenger from Blackpool Airport to Brien-le-Chateaux, north west France, in a colleague's Jodel aircraft, G-BHEZ, in order to attend an air rally. Whilst at the rally the purchase of the Jodel F-BHYE was negotiated. F-BHYE had a valid French Certificate of Airworthiness, however it did not have a serviceable radio nor was any radio navigation equipment fitted. It was therefore agreed that the two aircraft would fly back to the UK in loose formation, with G-BHEZ in the lead and responsible for navigation. Before departing Brien-le-Chateaux the pilot of F-BHYE was given a 25 minute demonstration flight by a French pilot.

The two aircraft left France at 1035 hrs on 30 July 1984 and landed at Southend Airport at about 11.15 hrs. After completing Customs and Immigration formalities, F-BHYE was re-fuelled with an additional 4 gallons, and both aircraft took off for a VFR flight to Blackpool Airport at about 1235 hrs. The pilots had booked out by telephone, and the declared routeing was Southend-Lambourne-Luton-Cranfield-Lichfield-Wallasey-Blackpool. Both aircraft climbed to a cruising level of 1500 feet above sea level with F-BHYE flying about 300 feet to the left of and slightly behind the lead aircraft. The flight appears to have proceeded normally until the two aircraft were approaching the Lichfield Non-Directional Beacon (NDB). At this point the lead aircraft carried out a fifteen degree turn to the left, and in so doing flew underneath F-BHYE. The pilot of the lead aircraft reports that he saw F-BHYE slightly ahead and above him on his right side, and expected him to turn left and re-position on his left side. When he next looked, F-BHYE was not in sight, and was not seen again. At the same time, eye-witnesses on the ground reported seeing F-BHYE enter a turn to the left. The aircraft's angle of bank to the left was seen to increase suddenly twice before it entered a spin to the left. After two full turns the rate of rotation increased, the aircraft failed to recover, and, after passing through some high tension cables, crashed into a hedge and a steel fence on the edge of a pasture field. There was no fire, however the pilot was killed instantaneously.

Examination of the ground witness marks and aircraft wreckage showed that it had struck the ground with a high rate of descent, negligible forward speed, and with a rotational momentum indicating a yaw to the left. Immediately prior to impact the aircraft had struck the high tension cables, at a height of about 60 feet above ground level, which severed the left side outer tailplane. Other than this the aircraft had been intact at ground impact, with all flying controls connected and with hinges free. There was evidence that, at the moment of impact, the rudder was almost fully deflected to the left. Witness marks originating from the tachometer needle indicated that the engine had been rotating. There was no evidence of any pre-flight or in-flight unserviceability other than the communications radio. The aircraft log books indicate that it had been maintained regularly in accordance with procedures specified by the French airworthiness authorities.

The weather at the time was fine, although hazy, with in-flight visibility of between 5 and 8 kilometres. There would not have been a clearly discernible horizon, and the aircraft was not fitted with an artificial horizon. All the flight instruments that were fitted were calibrated in metric units. There were no aeronautical documents amongst the wreckage, and no evidence that either a map or a flight plan had been carried.

The pilot held a valid Private Pilot's Licence and Medical Certificate, and there was no medical evidence that would indicate in-flight incapacitation. He had considerable experience as a glider pilot, but was not, however, well experienced at flying powered aircraft. There is also no evidence that he had previously flown an aircraft equipped

with metric flight instruments, apart form the 25 minute demonstration flight, or had ever flown in formation with with another aircraft. No evidence was found that would directly account for the loss of control in flight and subsequent spin; however, due to the position of the rudder, which was almost fully to the left at impact, the possibility that misidentification of the spin direction or alternatively that incorrect spin recovery action had been taken cannot be excluded.