Jodel D112, G-BIVB

AAIB Bulletin No: 7/2002 Ref: EW/G2002/04/15 Category: 1.3

Aircraft Type and

Registration:

Jodel D112, G-BIVB

No & Type of Engines: 1 Continental Motors Corp A65-8F

piston engine

Year of Manufacture: 1960

Date & Time (UTC): 19 April 2002 at 1315 hrs

Location: Bodmin Airfield, Cornwall

Type of Flight: Private

Persons on Board: Crew - 1 Passengers -

None

Injuries: Crew - 1 (Minor) Passengers -

N/A

Nature of Damage: Substantial damage to aircraft and

propeller

Commander's Licence: Private Pilot's licence

Commander's Age: 54 years

Commander's Flying

Experience:

544 hours (of which 400 were on type)

Last 90 days - 8 hours

Last 28 days - 6 hours

Information Source: Aircraft Accident Report Form

submitted by the pilot

The pilot had flown the aircraft to Bodmin airfield from its home base of Watchford Farm. The flight took 1 hour and 20 minutes and the aircraft remained serviceable. The engine had a history of being difficult to start when hot so the pilot allowed approximately 50 minutes for it to cool before commencing the start procedure. This involved hand swinging the propeller since the engine was not fitted with a starter motor. The aircraft did not have a hand brake so the pilot placed chocks in front of both main wheels. These chocks were carried in the aircraft and had been used many times for this purpose. The pilot also used a seat strap to restrain the control column in the aft position.

The engine proved reluctant to start and became flooded on two or three occasions. Following each of these events the pilot adopted his usual procedure of opening the throttle and pulling the propeller backwards in order to clear the cylinders. Prior to his final attempt to start the engine the pilot checked that the throttle was just in the open position and that the friction was only slightly tightened.

Immediately after swinging the propeller the engine started and accelerated rapidly. The aircraft 'jumped' the chocks and the pilot ran to the left wing tip in an attempt to arrest its advance. This however caused the tail wheel to castor and the aircraft to continue to accelerate. The aircraft turned rapidly and the right wing tip struck the pilot who sustained multiple cuts and bruises, mild concussion and broken ribs. The aircraft eventually stopped when it collided with the wall of an adjacent hangar. The propeller sheared on impact but the engine continued to run until the airfield manager arrived and switched off both magnetos.

The pilot had started this aircraft many times by hand swinging the propeller and considered that he did not do anything unusual on this occasion. He assumed that the engine was slightly flooded with fuel as it started and the vibration caused by the higher than normal rpm caused the throttle to vibrate towards the fully open position.

This accident, and a further accident reported in AAIB Bulletin 6/2002 (G-PAWS), shows that there are increased risks involved when this method is used for engine starting and that consideration should be given to having the cockpit manned by a suitably briefed assistant.