North American Aviation Harvard T-6G, G-BRWB

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Category: 1.1

Aircraft Type and

Registration:

North American Aviation Harvard T-6G, G-BRWB

No & Type of Engines: 1 Pratt & Whitney R1340-AN1 piston engine

Year of Manufacture: 1951

Date & Time (UTC): 5 July 2001 at 0928 hrs

Location: Duxford Airfield, Cambridge

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - 1

Injuries: Crew - None - Passengers - None

Nature of Damage: Aircraft damaged beyond economic repair

Commander's Licence: Private Pilots Licence

Commander's Age: 49 years

Commander's Flying

Experience:

1,061 hours (of which 126 were on type)

Last 90 days - 47 hours

Last 28 days - 25 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and telephone

enquiries by the AAIB

After completing his normal power and pre-departure checks, the pilot commenced his take-off from Runway 06; the runway surface was dry grass with a Take Off Run Available (TORA) of 890 metres. The pilot used 10° of flap as he normally did for a grass runway and noted the surface wind as less than 5 kt from the north-east.

He selected a reduced power setting of 30 ins MAP and 2,000 RPM for the take-off to reduce the aircraft noise level. The acceleration was normal but the aircraft ran over a bump in the ground and lifted off at too slow a speed. The pilot put the aircraft back on the ground and continued the acceleration looking for an indicated airspeed of 75 to 80 MPH before lift off. However, G-BRWB hit another bump and again lifted off; the pilot could not recall his precise airspeed but the aircraft seemed to be climbing normally. He selected gear retraction but then felt the aircraft became "sluggish". The aircraft then rolled to the right and the right wingtip contacted the ground; G-BRWB rotated about the wingtip and came to rest at right angles to the runway. The two occupants escaped from the aircraft as a fire started in the engine compartment. The AFS were quickly on the scene and extinguished the fire.

Many operators of older high powered piston aircraft use reduced power for take-off and the figures as used by the pilot of G-BRWB are a normal setting. However, it is also common practice to use full power for the first take-off on each day. On the day of the accident, the pilot had flown in from Earls Colne Airfield and had used full power for his initial take-off. Subsequently, he acknowledged that it would have been more sensible to use full power again for his first take-off that day on the grass runway at Duxford; the runway is known to be bumpy and the temperature was 28° C.