

No: 5/92

Ref: EW/G92/02/10

Category: 1c

Aircraft Type and Registration: Druine D.31 Turbulent, G-ARTF
No & Type of Engines: 1 Stark-Stamo MS 1400 piston engine
Year of Manufacture: 1961
Date & Time (UTC): 26 February 1992 at 1652 hrs
Location: Fullers Hill Farm, Little Gransden, Cambridgeshire
Type of Flight: Private
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
Commander's Age: 65 years
Commander's Flying Experience: 710 hours (of which 16 were on type)
Information Source: Aircraft Accident Report Form submitted by the pilot

The pilot was practicing glide approaches and landings on grass runway 21, preferring not to use the main runway at the farm (30/12) since the reported wind of 180°/12 kt was giving a cross-wind somewhat strong and gusty for a light Turbulent aircraft.

On the final take-off, shortly after becoming airborne, the pilot noticed a short period of unusual vibration. It was too late to abandon the take-off, so he reduced power by about 100 RPM and continued climbing at about 55 kt, but at a height of about 70 feet, the engine cut dead and the propeller stopped immediately. The pilot realised that a straight-ahead landing was obstructed by a hedge and power lines and, at that moment, a gust caught the aircraft and the left wing dropped. He decided to continue turning in that direction with the intention of performing a 270° turn to land crosswind in a field close to the end of the runway.

Unfortunately, the North/South power cables which had prevented a straight-ahead landing were now again in the path of the aircraft although the pilot thought he would clear them. However, the lower propeller blade caught in one of these cables causing the aircraft to drop to the ground in a slightly nose-down and right wing-low attitude at an estimated 25 kt. The right wing separated and the aircraft

slid to a halt on its right side after a couple of metres. The pilot evacuated the aircraft without difficulty, having sustained only a minor graze and bruise on his head from the windscreen.

As he surveyed the scene, he noticed that the power cable, which was still trapped under the engine, began to spark due, he believes, to the power circuit trip being reset. He watched helplessly for about five minutes until the sparking ignited spilt fuel from under the engine and the aircraft burnt out completely.

Subsequent examination of the engine found that it was very stiff to turn and strip inspection revealed that there had been a seizure of the rear main bearing. It was further evident that the cause of the seizure was incorrect assembly of the dowel pin locating the bearing shell which had led to the dowel failing to engage and distorting the shell against the journal. The engine had only flown for a few hours since overhaul by a reputable firm of car racing engine builders.

A report on the findings of the engine strip have been forwarded to the Popular Flying Association.