

<b>Aircraft Type and Registration:</b>	Jodel D119, G-AXFN	
<b>No &amp; Type of Engines:</b>	1 Continental Motors Corp C90-14F piston engine	
<b>Year of Manufacture:</b>	1959	
<b>Date &amp; Time (UTC):</b>	19 October 2002 at 1510 hrs	
<b>Location:</b>	Hougham Airfield, Lincolnshire	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Damage to propeller and wing	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	63 years	
<b>Commander's Flying Experience:</b>	867 hours (of which 256 were on type) Last 90 days - 9 hours Last 28 days - 5 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

The pilot refuelled the aircraft with 40 litres of unleaded fuel, purchased from a nearby garage, and then flew from Ashbourne, stopped for two hours at Netherthorpe and then flew on to Hougham Airfield. The total flight time for the two flights was 50 minutes.

Prior to departure from Hougham the pilot taxied to the holding point for Runway 18 and completed the pre take-off checks that included the selection of carburettor heat at a high power setting for a period of about 60 seconds. During this check all engine indications were satisfactory. Full power was applied for the takeoff and the acceleration appeared normal. Shortly after becoming airborne the engine lost power, with no attendant rough running. The pilot lowered the nose, applied full carburettor heat and attempted to land straight ahead. During the subsequent forced landing the aircraft tail wheel caught the far bank of a dyke causing the aircraft to pitch nose down. The undercarriage dug into soft ground and the propeller made contact with the surface. The pilot, who was uninjured, switched off the electric master switch, magnetos and the fuel and then vacated the aircraft. There appeared no obvious reason for the power loss.

At the time of the accident the meteorological conditions, recorded at nearby RAF Waddington, gave a surface temperature of + 10°C, a dewpoint of + 2°C, with no cloud below 3,000 feet.

CAA General Aviation Safety Sense Leaflet 14 titled 'Piston Engine Icing' contains data detailing the ambient weather conditions when carburettor icing can be expected. The data, which does not consider the take-off situation, shows that the engine was operating in an environment where carburettor icing would be moderate at cruise power and serious with descent power set. The data however is only generalised and does not take into account specific induction system installations. Furthermore the aircraft had been refuelled with MOGAS which has a greater volatility and a higher water content and had been manoeuvred on damp grass prior to takeoff. Both the fuel type and the ground conditions would have increased the engine's susceptibility to carburettor icing. In the absence of any other evidence it is therefore considered probable that the loss of power after takeoff had been caused by carburettor icing.