No: 2/92 **Ref: EW/G91/12/03** **Category: 1c**

Aircraft Type and Registration:	Jodel DR1050-M1, G-BTIW	
No & Type of Engines:	1 Rolls-Royce Continental O-200-A piston engine	
Year of Manufacture:	1965	
Date & Time (UTC):	8 December 1991 at 1505 hrs	
Location:	Top Farm airstrip, Croydon, near Cambridge	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to propeller, engine cowling, tailplane fairing, cockpit cage and canopy	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	47 years	
Commander's Flying Experience:	90 hours (of which 30 were on type)	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The aircraft was attempting to land on the westerly runway at the Top Farm grass airstrip, after a flight from Fenland aerodrome. The cruise portion of the flight had been flown at an altitude of 5000 feet, followed by descent at a rate of approximately 500 ft/min into a wide direct approach to the field. Carburettor heat had been selected throughout the descent. The power was increased to 2300 RPM as the aircraft reached an altitude of 1500 feet. The carburettor heat was then deselected and the airfield approach checks were carried out. On a long final approach, the carburettor heat was again selected, and power was reduced. The pilot deselected the carburettor heat at 300 feet during the approach, and reported that the aircraft crossed the threshold at 65 mph, with the engine at idle power. The aircraft floated in ground effect, and touched down approximately 300 m along the 850 m long runway. As the grass surface was wet, the pilot decided to go around rather than apply the brakes. However, on opening the throttle, the engine briefly misfired, then stopped completely. Braking was applied at this point, but was ineffective in stopping the aircraft before it departed the end of the strip. It then crossed a farm track and entered a ploughed field, coming to rest in a short distance and nosing over onto its back. There was no fire, and the occupants, who were both wearing lap and diagonal upper torso restraints, were uninjured and vacated the aircraft through the broken canopy.

The pilot attributed the cause of the loss of engine power to carburettor icing. An aftercast obtained for the area at the time of the accident indicated that the surface wind was calm, with a visibility of 6 km, and no significant weather or cloud. The surface temperature was +3°C, and relative humidity 91%. At 1000 feet AGL, the temperature was +4°C and relative humidity 76%.

The CAA General Aviation Safety Sense leaflet No.14, Piston Engine Icing, indicates that for the given ambient conditions of temperature and relative humidity, the risk of carburettor icing is rated as serious at any power setting.