ACCIDENT

Aircraft Type and Registration:	Avid Aerobat (Modified), G-LAPN
No & Type of Engines:	1 Jabiru 2200A piston engine
Year of Manufacture:	1995
Date & Time (UTC):	2 January 2006 at 1205 hrs
Location:	Otherton, Staffordshire
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - 1
Injuries:	Crew - None Passengers - None
Nature of Damage:	Propeller and both wingtips damaged. Mud in engine cooling air intakes
Commander's Licence:	Private Pilot's Licence
Commander's Age:	42 years
Commander's Flying Experience:	106 hours (of which 1 was on type) Last 90 days - 1 hour Last 28 days - 1 hour
Information Source:	Aircraft Accident Report Form submitted by the pilot and data from the Met Office

History of flight

The pilot/owner, having rigged the aircraft, carried out the normal external checks which included taking a fuel sample from the fuel tank drain and checking for contamination; none was observed. Following engine start the pilot taxied the aircraft to the holding point for Runway 25L where power checks were carried out satisfactorily. The aircraft was then taxied onto the runway, the throttle opened, full power rpm observed and the take-off roll started. Approximately three-quarters of the way down the runway the pilot noticed a change in the engine sound and upon checking the engine rpm gauge saw that it had reduced by about 250 rpm. The throttle and choke controls were checked and found to be in their correct positions which led the pilot to abandon the takeoff. At this point there was very little runway remaining in which to stop the aircraft. The aircraft overran the runway and hit a single track road that consisted of two ruts either side of a raised grassy ridge. At this point the aircraft was launched into the air to a height of between 5 and 10 ft from which it fell back to the ground in a nose-down attitude. Later inspection of the aircraft by the pilot showed damage which he thinks indicated that, during the impact with the ground, the aircraft 'cart-wheeled' around its wingtips.

In the pilot's assessment the engine lost power due to either fuel or air starvation, possibly due to carburettor icing. No detailed examination of the aircraft's fuel system has been undertaken.

Meteorology

The Met Office provided an aftercast. At 1200 hrs on 2 January 2006 the synoptic situation showed a ridge of high pressure extending north-east over England and Wales with a light westerly flow covering the area. The weather was hazy, with a surface visibility of 7 to 10 km and a cloud base of around 4,000 ft. The air temperatures and humidity were:

Height agl	Temp	Dewpoint	Humidity
Surface	PS 05	PS 04	90%
500 ft	PS 04	PS 01	80%
1,000 ft	PS 06	PS 01	60%
2,000 ft	PS 03	PS 03	65%

The surface temperature and humidity figures were plotted on the carburettor icing probability chart (Figure 1) as shown in the CAA General Aviation Safety Sense Leaflet 3A titled '*Winter Flying*' and Leaflet 14 titled '*Piston Engine Icing*'. The chart showed a probability of serious carburettor icing at any engine power setting.

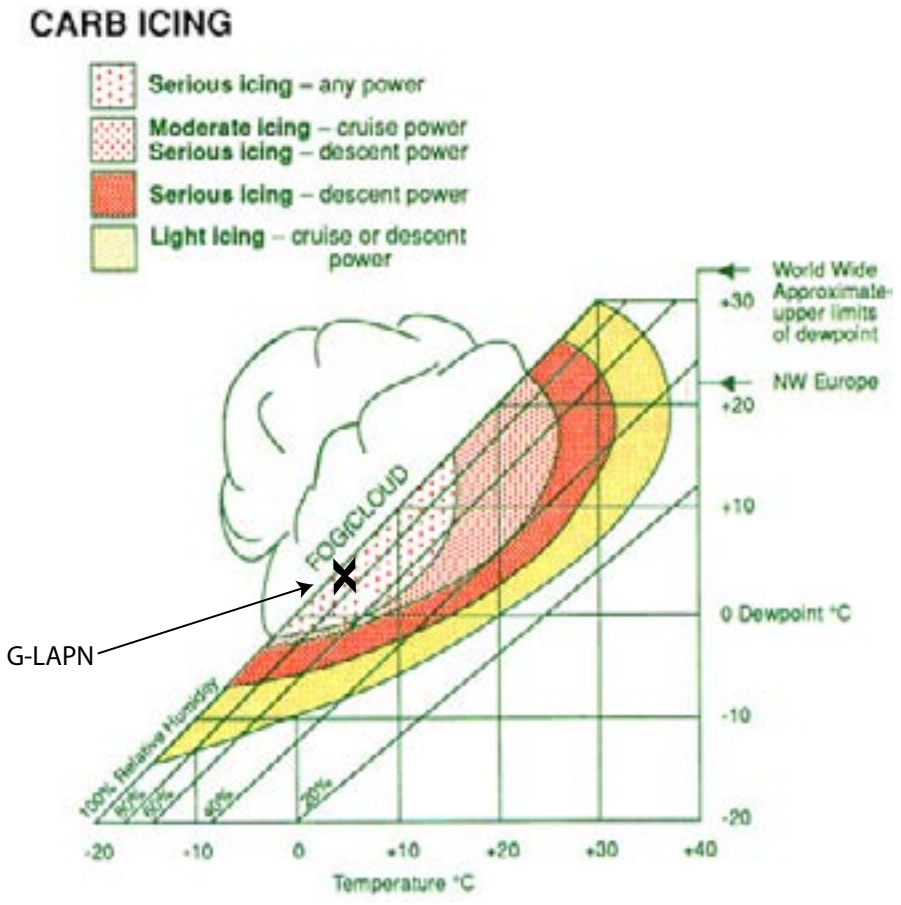

Figure 1

Carburettor icing probability chart