No: 2/85 **Ref: EW/G85/01/01**

Aircraft type and registration:	Grumman AA5A Cheetah G-OGOJ (light single-engined fixed wing aircraft)
Year of Manufacture:	1979
Date and time (GMT):	5 January 1985 at 1210 hrs
Location:	Near Biggin Hill, Kent
Type of flight:	Training
Persons on board:	Crew — 1 Passengers — None
Injuries:	Crew — None Passengers — None
Nature of damage:	Damage to nose, left undercarriage, wings and propeller
Commander's Licence:	Private Pilot's Licence
Commander's Age:	33 years
Commander's total flying experience:	64 hours (all of which were on type)
Information Source:	Aircraft Accident Report Form submitted by pilot and telephone reports to AIB.

The ambient temperature was —3°C and the aircraft, having been parked in the open for the previous day and night, had a light covering of snow. Before flight the pilot brushed away the loose snow and applied de-icing fluid to the wing leading edges and control surface hinges. As the engine was warming up, he selected carburettor heat 3 times and had no indication of carburettor icing. After take-off he experienced what he described as a lack of lift at 400—500 feet and had an impression of loss of power. He saw that the ASI read 70 kt, 10 kt below climb speed, and the VSI showed no rate of climb. He did not, however, notice the reading of the engine rpm gauge. He levelled the aircraft and selected carburettor heat but was unable to maintain height. He raised the nose again shortly afterwards to clear power cables across his flight path and the aircraft stalled. He recovered successfully from the stall, cleared a fence and landed on an upslope in a field beyond the fence. The aircraft ran for approximately 30 metres before coming to rest with the left main and nose landing gears collapsed.

An experienced pilot, who inspected the aircraft one hour after the accident reported that from 6 inches aft of the leading edges, which were clear of ice, up to 40% of the rest of the upper surface of the wings was covered by a layer of hard, lumpy ice between 1/8 and 1/4 inch thick. Subsequent engineering examination of the aircraft revealed no fault with the engine and showed that the left main landing gear had failed in upload. The aircraft had an above-average basic weight due to an extensive avionics fit.