

QAC Quickie Q2, G-BNJO

AAIB Bulletin No: 3/97 Ref: EW/G97/01/09 Category: 1.3

Aircraft Type and Registration:	QAC Quickie Q2, G-BNJO
No & Type of Engines:	1 Revmaster R2100D piston engine
Year of Manufacture:	1984
Date & Time (UTC):	17 January 1997 at 1130 hrs
Location:	Crowfield Airfield, Ipswich
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Left landing gear detached and the right canard and tailcone damaged
Commander's Licence:	Private Pilot's Licence
Commander's Age:	38 years
Commander's Flying Experience:	1,560 hours (of which 8 were on type) Last 90 days - None Last 28 days - None
Information Source:	Aircraft Accident Report Form submitted by the pilot

Prior to the flight, the pilot carried out a number of prolonged engine tests which included checks of the magnetos and the carburettor alternate/hot air source; no problems were apparent. The take off and initial climb were normal. At about 350 ft agl the pilot commenced a left turn and about 1 nm upwind of the airfield he sensed that the engine noise was not normal. A quick check of the instruments showed that the engine RPM had dropped to 2,500, the airspeed had decayed and the vertical speed was zero. The pilot checked the throttle, fuel mixture, fuel selector and the fuel quantity, but these were all satisfactory. As the RPM had stabilised and the engine was running very smoothly, the pilot decided to continue in a left-hand circuit to carry out a normal landing back at the departure airfield. He considered carburettor icing as a possible cause of the power loss but decided, in-view of the take-off power setting, the smoothness and stability of the engine RPM, that this was probably not the cause and decided not to disturb the engine further by experimenting with the carburettor alternate/hot air control. However, whilst turning downwind the engine stopped

abruptly. The pilot turned the aircraft towards a field of winter wheat that was orientated into wind and which had a field of stubble in its approach area. An airborne engine restart was attempted, but without success. As the final approach to the wheat field progressed the pilot became aware that the touchdown point would be close to a ditch which intersected the stubble field and the wheat field. He raised the nose of the aircraft and touched down very firmly, in a level attitude, about 100 feet before the ditch. The aircraft came to rest in an upright attitude on the opposite side of the ditch.

The pilot later assessed that the engine failure had been due to either a restriction in the fuel or the air induction system and that carburettor icing was the most likely cause. To date, no detailed examination of the engine and its systems has been conducted.

The reported weather at the time of the accident was wind 180°/10 kt, visibility 6 nm, temperature +4°C, dew point +2°C, cloud nil and significant weather nil. When these temperatures were plotted on a Carburettor Icing Probability Chart, published in Aeronautical Information Circular 133/1992 (Pink 68), they fell within the area designated as 'Serious icing at any power'.