No: 10/85 **Ref: EW/C921**

Aircraft type and registration:	Monnett Moni G-BKUO (Self-launching motor glider; home build)	
Year of Manufacture:	1984	
Date and time (GMT):	1 July 1985 at about 1830 hrs	
Location:	Tibenham aerodrome, Norfolk	
Type of flight:	Private	
Persons on board:	Crew — 1	Passengers — None
Injuries:	Crew — 1 (fatal)	Passengers — N/A
Nature of damage:	Aircraft destroyed	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	60 years	
Commander's Total Flying Experience:	In excess of 5000 hours (of which 6½ hours were on type)	
Information Source:	AIB Field Investigation.	

The aircraft was on a local flight within the Tibenham aerodrome circuit area. Shortly after take-off eye-witnesses observed it enter a low level turn and carry out a fly past of the hangar and clubhouse at a height of approximately 50 feet above ground level. Returning to the central aerodrome area, it entered a climbing turn to the right before it was next observed in an approximately 45° nose down attitude, spinning towards the ground. The general consensus of eye-witness evidence is that the aircraft initially spun to the right, appeared to partially recover, before spinning in the opposite direction. Evidence from the wreckage showed that it struck the ground in a steep nose down attitude whilst spinning to the left. The aircraft was destroyed and the pilot sustained fatal injuries.

The Monnett Moni is a home build aircraft constructed from an all metal kit. Although small, the aircraft is of largely conventional design, with the exception of the tail unit and the cockpit flying controls. The tail unit is of the 'V' or 'butterfly' type incorporating two moveable control surfaces, rather than the more conventional separate fin and rudder, with horizontal stabiliser and paired elevator surfaces. Control in pitch and roll is achieved by means of a small 'side-stick' control lever mounted on the right side cockpit wall. Control in yaw is affected by conventional rudder pedals. The design of the flying controls is such that maximum effectiveness of the controls about the pitch axis and about the yaw axis cannot be achieved simultaneously. In particular, when related to spin recovery, full rudder authority can only be obtained with the pitch control in the central or neutral position. The only flight instruments fitted are an airspeed indicator and an altimeter; there is no instrument fitted that would warn a pilot that the aircraft is not in balanced flight.

Detailed examination of the aircraft wreckage revealed no evidence of any pre-crash defect or failure of the structure, flying control, or flight instruments. The airspeed indicator was removed for further testing, and found to be functioning accurately. The aircraft appeared to be

constructed to a high standard of workmanship, and at the time of the accident it possessed a valid Permit to Fly, issued by the United Kingdom Civil Aviation Authority. The Permit to Fly prohibited, in the flight limitation section, intentional spinning and aerobatic manoeuvres.

It was not possible to determine the reason for the aircraft's entry into the spin. However, whatever recovery action was taken by the pilot, there would have been insufficient height in which to regain control before the aircraft struck the ground.