

Aircraft type and registration: Gemini/Striker G-MMXX (Microlight)

No & Type of engines: 1 Fuji Robin 440

Year of Manufacture: 1984

Date and time (GMT): 28 September 1985 at 1530 hrs

Location: Fordingbridge, Hampshire

Type of flight: Private

Persons on board: Crew — 1 Passengers — 1

Injuries: Crew — 1 Passengers — Nil

Nature of damage: Aircraft damaged beyond repair

Commander's Licence: Private Pilot's Licence (Group D)

Commander's Age: 34 years

Commander's Total Flying Experience: 47 hours (all of which were on type)

Information Source: AIB Field Investigation.

The local Schools Association had organised a fete, to be held on playing fields 'B' (see diagram) behind Fordingbridge school, and had asked the owner of a Mistral microlight aircraft to carry out a fly past. The pilot refused this request on the grounds of danger to the public and legality but, having inspected the area on foot, asked if he could land in field 'A' in order to attend the fete. This was agreed and the pilot decided that the presence of a farm, a road, and some powerlines at the north east end of the strip dictated that take-off and landing would, wind permitting, be in a south westerly direction. The wind at the time of the accident, later that day, was less than 5 knots and variable but generally from the south.

The pilot then drove to Damerham where he kept his aircraft and, whilst preparing for the flight, met two other microlight pilots who said they would accompany him in their own machines, a Puma and a Gemini/Striker. All three aircraft landed at Fordingbridge without significant incident and parked close to the trees at the south west end of the strip.

Following a short stay at the fete, two of the aircraft taxied out to the take-off point, at the north east end of the strip, and aligned their aircraft to aim slightly to the north of an oak tree 'C'. With about one minute separation they took off and turned to the right to cross the north west boundary of the strip, a wire fence, about two thirds of the way along its length. They then circled the field on the other side of the fence whilst the accident aircraft taxied out and took off.

The Gemini/Striker taxied down the southern side of the strip and the pilot later stated that he performed the take-off and power checks whilst taxiing. Some 25 metres from the boundary fence he made a left 'U' turn and, without stopping, began the take-off run. This manoeuvre provided a Take-Off Distance available (TODA) of 335 metres to the 50 feet high oak tree at the far

end of the strip. The aircraft manual states that 180 metres are required to clear a 50 feet 'screen' height. The ground marks indicated that the take-off run was approximately parallel to the fence on the north west side of the strip and some 24 metres from it. It was also apparent that the aircraft veered slightly to the left just before lift off.

The aircraft was seen to climb rapidly to a height estimated as 10 to 30 feet where it successively levelled or dipped and then assumed a shallow and decreasing climb angle which clearly was not going to take it above the oak tree. It passed to the south east of the oak and marginally cleared a small tree beside it. The aircraft then sank fairly rapidly and hit the ground in a nose-up attitude, 40 metres past the trees, in the area where the fete was taking place. Witnesses state that throughout this ground period the engine was providing some power.

The aircraft continued in an almost straight line through the fete stands and, slewing to the right, continued into the junction of a wall and a wooden fence belonging to the school buildings. The pilot and eight spectators were taken to hospital.

The aircraft was subsequently removed to AIB Farnborough where a detailed examination was carried out. It was established that all damage to the aircraft was consistent with being caused during the accident sequence and that none of the rigging wires had failed. Apart from the propeller, which had been shattered, damage to the power unit had been slight. After fitting a new propeller the engine was test run, using fuel still contained within the aircraft tanks. It was demonstrated that the engine started readily, ran smoothly and was capable of producing the maximum expected power under static conditions. The ignition switch, mounted beneath the front occupant seat, also operated satisfactorily.

In common with most microlight aircraft of the Gemini/Striker configuration, engine power is controlled by a simple foot throttle mounted, in this case, on the right footrest/steering bar for the front occupant. A second, hand operated throttle lever is mounted on the left side of the seat structure and is available for use by both occupants. On test, the engine could be operated from either throttle.

The aircraft was built in 1983 and had flown for approximately 50 hours. It was operated under a Certificate of Exemption, issued by the Civil Aviation Authority.

