

**No:** 12/90      **Ref:** EW/C1180      **Category:** 3

**Aircraft Type and Registration:** Mainair Sports Gemini Flash IIA, G-MWEI

**No & Type of Engines:** 1 Rotax 503 piston engine

**Year of Manufacture:** 1989

**Date and Time (UTC):** 1 November 1990 at 1645 hrs

**Location:** ½ nm northeast of Cleobury Mortimer, Shropshire

**Type of Flight:** Private

**Persons on Board:** Crew - 1      Passengers - None

**Injuries:** Crew - Fatal      Passengers - N/A

**Nature of Damage:** Trike destroyed and wing severely damaged

**Commander's Licence:** Private Pilot's Licence

**Commander's Age:** 54 Years

**Commander's Total Flying Experience:** 57 hours (all on type)

**Information Source:** AAIB Field Investigation

The microlight had first been registered by the manufacturer in February 1990 and had been flown by the new owner on 7 March 1990 at the start of an approved training course. He completed this on 16 June 1990, having by then achieved 48 hours flying time. On 11 July 1990 he flew the aircraft to his own landing strip at Cleobury Mortimer where he made five landings and take-offs, although his aircraft was based at another farm strip. The owner's strip, which was orientated north/south, was not suitable for use on the day of the accident and consequently the pilot had prepared another strip, which was orientated 075°/255°, in an adjacent field.

When operated at Maximum Authorised Take-off Weight and from a level and firm surface, the declared take-off distance required by this aircraft, from the start of roll to achieving a 15 metres (49 feet) "screen" height, is 181 metres. The declared landing distance, from a similar height to the end of the landing roll is 230 metres. The new strip, to be used for the first time on the accident flight, was soft uneven ground, 90 metres long with a 7° upslope in the direction 075°. Further up the slope, an earth moving vehicle was parked immediately behind a fence 21 metres beyond the end of the strip and, 48 metres beyond that, on higher ground, a coppice of 50 feet high trees was situated. The total height of the trees above the touchdown point on the strip was about 100 feet.

On the day of the accident the wind was 290°/7 kt and was blowing up the slope. Take-off, down the slope, was successfully achieved and the aircraft departed the immediate area for about 10 minutes before returning to carry out a high-level pass, flying downwind, over the new strip. It was then seen to fly a left hand circuit and to descend, on what appeared to be a final approach to land downwind and uphill on the strip. Witness accounts vary as to whether the aircraft flew very low or touched the ground, but, about half way up the slope and a little to the right of the landing strip, the application of full engine power was heard and the aircraft was seen to begin a very steep climb towards the trees. The aircraft brushed through the canopy of an oak tree within the coppice and fell to the ground just beyond the tree line.

The aircraft struck the ground hard, on its right side in a slightly nose down attitude with very little forward speed and with the engine under power. The trike keel frame was broken in the impact, the fibreglass fairing pod was severely damaged and the wing leading edge tubes and keel damaged.

Examination of the wreckage on site revealed no evidence of pre-impact defect or malfunction of the aircraft. All rigging pins and safety connections on both the trike and the wing were installed correctly and the king post over-centre toggle was correctly positioned. The wing tip washout settings were 'normal' with the adjustment pins engaged securely. All rigging cables were intact and secure, and the luff lines were rigged to a 'normal' setting. The velcro trailing edge pocket seals were closed normally.

Appropriate safety recommendations have been made to the CAA.