

Aircraft type and registration: Homebuilt, based on a Hiway Demon G-MMYW

No & Type of engines: One twin cylinder two-stroke piston engine

Year of Manufacture:

Date and time (UTC): 12 October 1986 at 1521 hrs

Location: Butterton, Staffs

Type of flight: Private (pleasure)

Persons on board: Crew — 1 Passengers — None

Injuries: Crew — 1 (moderate) Passengers — N/A

Nature of damage: Damage to the propeller, trike landing gear and flying wires

Commander's Licence: None

Commander's Age: 29 years

Commander's Total Flying Experience: Unknown

Information Source: BMAA Accident Report

After conducting several trial taxi runs, the aircraft became airborne on what is believed to have been the first flight of this microlight and possibly the pilot's first flight. After climbing to approximately 30 feet the microlight was seen to turn through 180 degrees, descend, collide with a small tree and land heavily on its landing gear. The pilot suffered injuries to his back and lungs.

An examination of the wreckage was carried out by the British Microlight Aircraft Association, which has revealed the following.

The trike unit of the microlight was a poorly constructed homebuilt example based on a commercially available model known as a Hiway Demon and fitted with a Hiway wing. The main structure of the trike was fabricated from non-anodised aluminium tube and road vehicle type exhaust pipe u-bolt clamps were used extensively throughout to mount major components onto the frame, in particular the seat frame and engine assembly. The engine was an unmarked twin cylinder two-stroke, and had the appearance of originally being a motorcycle engine. A general examination of this power unit revealed a lack of deposits on the spark plugs and almost no erosion or insect deposits on the propeller blade leading edges.

Damage to both the trike and wing was consistent with a heavy landing, indicated by an overload failure of the left main landing gear, damage to the nose wheel, failure of the seat fabric at its attachment to the seat frame and general distortion of the trike frame. Witness marks indicated a hard impact to have also occurred between the control bar and front strut.

The propeller blade had been shattered by contact with a flying wire, approximately 10 inches in from one tip. It was established that this blade had struck the wing left side flying wire at a

position 9 inches outboard from its attachment at the A-frame. For this to happen, either the trike had excessively yawed to the right relative to the wing or the engine had rotated to the right about the pylon. No evidence was seen to suggest excessive yaw had occurred but it was possible to easily swing the whole engine assembly about the pylon to the left to achieve the correct relative position for such a propeller strike to occur, since its only restraint to this motion was provided by the clamping action of the u-bolts. It proved not possible to conclusively establish whether this strike occurred in-flight or during the impact.

During the BMAA investigation it was determined that this microlight had never been seen by a qualified inspector. In addition, no evidence was found of the existence of a pilot's log book, pilot's licence, aircraft exemption (or Certificate of Airworthiness or Permit to Fly), aircraft log book, engine log book or fire-proof identification plate. Microlight G-MMYW, manufactured by Hiway Hang Gliders Ltd, was first registered in May 1985 as a Demon 195/440, and was originally fitted with a Fuji Robin 440 cc engine.