No: 11/84 **Ref: EW/G84/06/26**

Aircraft type and registration:	Huntair Pathfinder G—MBWT (Microlight powered by Fuji Robin 440)
Year of Manufacture:	
Date and time (GMT):	11 June 1984 at 0900 hrs
Location:	Eaglescott Aerodrome
Type of flight:	Practice/Continuation
Persons on board:	Crew — 1 Passengers — Nil
Injuries:	Crew — Serious Passengers — N/A
Nature of damage:	Severe, damaged beyond economic repair
Commander's Licence:	Student
Commander's Age:	
Commander's total flying experience:	96 hours (of which 79 hours were on type)
Information Source:	Accident Report Form submitted by pilot

After a normal take-off run, whilst climbing through 200 ft agl, the engine rpm suddenly increased and all thrust was lost. The pilot throttled back and pushed the nose of the aircraft down to maintain airspeed, assuming a reduction drive belt problem. On initiating a turn, intending to land back on the airfield, the pilot heard a 'subdued pop' similar to the sound made by the emergency parachute system during ground deployment tests. On seeing that the parachute had indeed deployed and, as there was no chute release facility he prepared for a parachute landing. However, instead of adopting the straight and level flight attitude the aircraft was soon descending vertically nose down. The pilot checked the tightness of his lap straps but before he could adjust the shoulder harness the aircraft struck the ground. He managed to free himself from the machine and walked clear, being concerned of the fire risk as the fuel tank had ruptured soaking his clothing in petrol.

On arrival at hospital the pilot was found to have chipped a bone in his right ankle and suffered an unstable squash fracture of a vertebrae in the small of his back.

The initial loss of thrust was due to a failure of the 25 mm propeller shaft at the point where a 5 mm hole is drilled through it, close to the reduction drive belt pulley. This hole accomodates a pin which normally limits fore and aft movement of the shaft. When this failure occurred the propeller, with a section of shaft attached, struck the tailboom of the aircraft where the parachute deployment cable is routed. An in-line shackle of the release cable exhibited evidence of a propeller strike. On deployment the parachute had passed under some of the tailrigging wires, lifting the tail during the descent.

Some weeks before the accident a length of rope became entangled in the propeller when the engine was running at a fast tick-over. An inspection of the drive after this incident failed to identify any damage, however, it is reported that the failed shaft fracture exhibits some pre-existing weakness. The unit in question had been in use for 50 hrs flying.