No: 3/85	**MICROLIGHT**	**Ref: EW/G84/10/12**

Aircraft type and registration:	Solarwing (UK) Ultrasport Panther XL G-MNAB (single engined two seat microlight aircraft)
Year of Manufacture:	1984
Date and time (GMT):	27 October 1984 at 1705 hrs
Location:	In the sea adjacent to Inverbervie, near Stirling, Scotland
Type of flight:	Private
Persons on board:	Crew — 1 Passengers — 1
Injuries:	Crew — 1 (fatal) Passengers — 1 (fatal)
Nature of damage:	Aircraft lost
Commander's Licence:	Private Pilot's Licence (Group D)
Commander's Age:	28 years
Commander's total flying experience	Approximately 750 hours
Information Source:	British Microlight Aircraft Association Report

The investigation into this accident was carried out by the British Microlight Aircraft Association (BMAA) who forwarded a copy of their report to the AIB. A Precis of that report is presented.

History of the flight

Prior to departure from Easter Culmore Farm at Kippen, Stirling, the pilot stated that he would conduct one of the following flights, depending on the conditions:

(a) A high altitude flight, returning to Easter Culmore;
(b) A cross country flight, terminating at Easter Culmore;
(c) A downwind cross country flight, landing elsewhere.

The aircraft took off at 1445 hrs, with the pilot and one passenger aboard. Another similar aircraft took off a short while later and the pilot saw G-MNAB some 2 to 3 miles ahead over Strathallan airfield at 2000 to 2500 feet, flying north-east towards Perth. The aircraft was also observed by several witnesses to pass in a north-easterly direction until, at 1705 hrs, in the area of Inverbervie, it was seen performing 'S' turns over the sea. A witness then saw the aircraft enter the water in a controlled manner. Both occupants died in the accident. A search was initiated immediately, but the wreckage was not located.

Personnel information

The pilot was in good health at the time of the accident and was dressed suitably for a long flight in a microlight aircraft. He was the Chief Instructor of the Central Scottish Microlight Club at Stirling and his licences and experience were as follows:

(1) Private Pilot's Licence ('D' category aircraft);
(2) Civil Aviation Authority instructor ('D' category aircraft);
(3) British Hang Glider Association registered, observer and instructor;
(4) 434 hours logged on Microlights (since official legislation);
(5) 182 hours logged on Hang Gliders (since official legislation).

It is further suggested that he had achieved at least 100 hours before microlight legislation came into force.

The passenger was also in good health and was dressed in suitable clothing for a long flight. It is also noted that the passenger had flown with the pilot on four previous occasions, totalling some four hours on this type of aircraft and had some experience at the controls of light aircraft and helicopters.

Aircraft information

The aircraft, purchased in June 1984, had been fully serviceable prior to the accident and had been flown for a total of 140 hours. It is estimated that, at the time of the accident, there was fuel remaining on board for between 30 and 60 minutes of powered flight.

The aircraft was powered by a Fuji Robin which, although serviceable at the time of take-off, is reported as having been not totally reliable and having a history of 5 or 6 stoppages.

A half hour supply of oxygen was carried together with one oxygen mask.

Meteorological information

At the time of take-off, the weather was considered to be suitable for student solo flights. However, by the time that the ditching occurred the cloudbase had lowered to 2000 feet (at Inverbervie) and the wind had freshened to 15 kt from the southwest.

Discussion

Witness evidence denies the possibility of the pilot losing control whilst in cloud, and loss of the airframe and engine precluded investigation into any related causes of the accident. The various sightings, however, strongly suggest that the flight was conducted as a downwind, land away, cross country. In the area of the accident there were two suitable landing grounds but a landing at either would have required a final approach from over the sea. During such an approach the terrain can produce considerable rotor turbulence in the existing wind conditions, through which G-MNAB would have been flying immediately prior to the ditching.