

AAIB Bulletin No: 12/93

Ref: EW/G93/09/22

Category: 1.4

Aircraft Type and Registration: CFM Metal-Fax Shadow Series B, G-MNVI

No & Type of Engines: 1 Rotax 447 piston engine

Year of Manufacture: 1986

Date & Time (UTC): 28 September at 1605 hrs

Location: 4 miles from Llanfair Caereinion, Powys, Wales

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - Minor Passengers - N/A

Nature of Damage: Minor to canopy, cabin area, propeller and right wing

Commander's Licence: Private Pilot's Licence

Commander's Age: 45 years

Commander's Flying Experience: 220 hours (of which 156 were on type)
Last 90 days - 12 hours
Last 28 days - 2 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The microlight pilot departed Welshpool at 1545 hrs for a solo pleasure flight in the local area. The weather at the time was fine with scattered cloud, visibility estimated by the pilot to be 10 miles, temperature 20°C with a surface wind of 090°/3 kt.

At approximately 1605 hrs, whilst at 600 feet agl on an easterly heading 9 nm to the west of Welshpool, the pilot suddenly became aware of a Tornado aircraft in a climbing turn, 'belly up' at 550 feet agl very close on his left side. During this manoeuvre the Tornado came to within an estimated 40 to 60 feet of the microlight then climbed vertically disappearing into the cloud layer. The microlight pilot realised that the Tornado had carried out this manoeuvre in order to avoid a collision. Moments later the microlight encountered the jet blast and wake turbulence from the Tornado described by the microlight pilot as "a terrifying noise and explosion type blast which caved in the cockpit canopy as if it were a piece of paper". The blast also damaged the rear canopy and subjected the microlight to substantial acceleration forces.

As a result of the encounter, the aircraft had dropped some 100 feet and had also suffered a severe power loss. Having established that the aircraft controls were still functioning correctly and that the aircraft was capable of maintaining altitude, the pilot decided to transit the 9 nm and land back at his home base.

After landing the pilot discovered further damage to the propeller, a hole in the right wing and a tear in the fuselage. The pilot, who was wearing a full safety harness, suffered minor bruising to his shoulders.

Shortly after the accident the pilot filed an airmiss report by telephone to RAF Shawbury. Further enquiries will be conducted by the Joint Airmiss Section of NATS and the Tornado's operating unit.