

**No: 11/89**

**Ref: EW/G89/08/19**

**Category: 1c**

**Aircraft Type and Registration:** Nipper T66, G-AXZM

**No & Type of Engines:** 1 Volkswagen 1558cc piston engine

**Year of Manufacture:** 1976

**Date and Time (UTC):** 21 August 1989 at 1840 hrs

**Location:** 1 ½ nm East of Eshott Airfield, 17 nm north of Newcastle, Northumberland

**Type of Flight:** Private (pleasure)

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

**Injuries:** Crew - 1 (Serious)      Passengers - N/A

**Nature of Damage:** Extensive damage to wings and fuselage

**Commander's Licence:** Private Pilot's Licence with IMC and Night Rating

**Commander's Age:** 52 years

**Commander's Total Flying Experience:** 151 hours (of which 10 were on type)

**Information Source:** Aircraft Accident Report Form submitted by the pilot

The aircraft had descended slowly to 1200 feet during a Dutch Roll exercise, full power was applied to recover to 1500 feet and at 1450 feet a sudden and complete engine failure occurred. There was no misfiring or mechanical noise and the propeller continued to windmill giving 20 psi oil pressure.

The pilot prepared for a forced landing and put out a PAN call, which was later updated to a MAYDAY. His approach, into wind, to the selected field was satisfactory until it became evident, from wheel tracks in the field, that the standing crop was much deeper than it had looked. A course change of 40° was made to an alternative field, but the turn out of wind resulted in a loss of airspeed necessitating lowering the nose. This put the second field out of reach so the pilot altered course back to his first choice. The aircraft failed to reach the field and made a fully flaired mainwheel landing on the top of the bank of a dyke, the aircraft pitched forward, the nosewheel collapsed and the aircraft came to rest over a distance of a metre and a half. The pilot suffered spinal injuries which resulted in four weeks bed rest in hospital.

The cause of the engine failure has not been positively established, but was tentatively attributed to a magneto sprocket failure by both the pilot and the engineer responsible for the recovery of the aircraft. The left magneto had taken some of the force of the crash and its cover was broken. The drive sprocket

and retaining nut and washer were found separated from the left magneto, and the drive chain to the right magneto had been displaced.

The left magneto had been modified to take an impulse coupling; this had been attached to a carrier plate welded to a bush carried on the magneto drive shaft. Signs of wear on the bush indicated that the carrier plate weld may have failed earlier allowing the plate to move relative to the bush.

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| Year of Manufacture:                 | 1976   |
| Date and Time (UTC):                 | 31 August 1984 at 1840 hrs   |
| Location:                            | 1.5 nm East of Easton Airfield, 17 nm north of Newcastle<br>Northumberland |
| Type of Flight:                      | Private (pleasure)   |
| Persons on Board:                    | Crew - 1<br>Passengers - None  |
| Injuries:                            | Crew - 1 (serious)<br>Passengers - N/A                                     |
| Nature of Damage:                    | Extensive damage to wings and fuselage                                     |
| Commander's Licence:                 | Private Pilot's Licence with IMC and Night Rating                          |
| Commander's Age:                     | 52 years   |
| Commander's Total Flying Experience: | 151 hours (of which 10 were on type)                                       |
| Information Source:                  | Aircraft Accident Report Form submitted by the pilot                       |

The aircraft had descended slowly to 1500 feet during a Dutch Roll exercise. Full power was applied to recover to 1500 feet and at 1450 feet a sudden and complete engine failure occurred. There was no misting or mechanical noise and the propeller continued to windmill giving 30 psi oil pressure.

The pilot prepared for a forced landing and put out a PAN call, which was later updated to a MAYDAY. His approach into wind to the selected field was satisfactory until it became evident from wheel tracks in the field that the standing crop was much deeper than it had looked. A course change of 40° was made to an alternative field, but the turn out of wind resulted in a loss of airspeed necessitating lowering the nose. This put the second field out of reach so the pilot altered course back to his first choice. The aircraft failed to reach the field and made a fully flared mainwheel landing on the top of the bank of a dyke, the aircraft pitched forward, the nosewheel collapsed and the aircraft came to rest over a distance of a metre and a half. The pilot suffered spinal injuries which resulted in four weeks bed rest in hospital.

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