

**No:** 8/89

**Ref:** EW/G89/06/01

**Category:** 1c

**Aircraft Type and Registration:** Tipsy Nipper T.66 Series 2, G-ARBP

**No & Type of Engines:** 1 Converted Volkswagen piston engine

**Year of Manufacture:** 1960

**Date and Time (UTC):** 4 June 1989 at 1440 hrs

**Location:** Newstead

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

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

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

**Nature of Damage:** Canopy, wing tips, rudder, nose wheel strut, propeller, wing leading edge and elevator

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

**Commander's Age:** 61 years

**Commander's Total Flying Experience:** 6,730 hours (of which 40 were on type)

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

The pilot reported that just over 20 minutes into a flight from Sturgate (North West of Lincoln) to Seighford (West of Stafford) he observed a few drops of oil appearing on the top of the engine cowl. He therefore elected to divert to nearby Hucknall at reduced power. At this time, oil pressure and temperature indications (55 psi and 70°C respectively) were normal, however, when about 5 nautical miles from Hucknall, black smoke appeared from the left side of the engine cowl accompanied by a flow of oil over the wing root. At this point the pilot noted that the oil pressure had reduced to 30 psi. As an apparently suitable landing field appeared ahead, the pilot decided to carry out a forced landing. Unfortunately, half-way through the landing run, the aircraft encountered some rough ground, the nosewheel separated and the aircraft overturned.

On subsequent examination it was found that a core-plug in the rear of the engine was missing, permitting loss of oil from the oil gallery system, leading to engine seizure.

The pilot reports that on shutdown at Sturgate prior to this flight, a small oil leak on the left side of the aircraft was observed, prompting the removal of the engine cowls. An examination of the crankshaft oil seal and the region of the core plug was made after cleaning off oil in that area. All appeared normal

and the oil level did not appear to differ from that at the beginning of the previous flight. It was therefore concluded at that time that the visible oil was the result of over-generous replenishment or a consequence of lubrication of the duplex chain before an earlier flight.

Information Source:	Aircraft Accident Report Form submitted by the pilot and telephone enquiries by AATB	
Commander's Total Flying Experience:	Fixed wing: 155 hours Rotor wing: 68 hours (of which 65 were on type)	
Commander's Age:	48 years	
Commander's Licence:	Private Pilot's Licence (Group A and Helicopter)	
Nature of Damage:	Damage to tail rotor blades, hub and gearbox. Skid extensions broken and lower vertical stabiliser bent	
Injuries:	Crew - None	Passengers - None
Persons on Board:	Crew - 1	Passengers - 1
Type of Flight:	Private (pleasure)	
Location:	Wycombe Air Park near Marlow, Bucks	
Date and Time (UTC):	17 June 1989 at 1309 hrs	
Year of Manufacture:	1980	
No & Type of Engines:	1 Lycoming O-320-A2B piston engine	
Aircraft Type and Registration:	Robinson R22, G-BLME	

The helicopter was approaching to land in a designated training area of the airfield. There was no wind and the air temperature was +26°C. At an indicated airspeed of 10 kt and at a height of 10 feet the pilot applied air cyclic pitch. The tail of the helicopter contacted the ground and it then rotated through 90° to the right bouncing on its right skid. The pilot applied opposite cyclic control, closed the throttle and lowered the collective pitch lever. The helicopter came to rest upright and the pilot completed the shut down drill. The pilot attributes the tail strike to the prevailing conditions of high density altitude with nil wind, a heavily loaded helicopter and his excessive rearwards movement of the cyclic control.