

Evans VP-1 Series 2, G-BLWT

AAIB Bulletin No: 7/97 Ref: EW/G97/01/17 Category: 1.3

Aircraft Type and Registration:	Evans VP-1 Series 2, G-BLWT
No & Type of Engines:	1 Volkswagen 1834 piston engine
Year of Manufacture:	1986
Date & Time (UTC):	2 February 1997 at 1630 hrs
Location:	Finmere Aerodrome, Buckinghamshire
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Section of propeller missing (no secondary damage)
Commander's Licence:	Private Pilot's Licence
Commander's Age:	46 years
Commander's Flying Experience:	218 hours (of which 108 were on type) Last 90 days - 6 hours Last 28 days - 2 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

The pilot carried out a thorough pre-flight inspection, with particular attention being paid to the propeller in light of the stones which tended to accumulate on the taxiways. Nothing abnormal was found, and upon completion of a normal engine start and pre-take off checks, the pilot took off from Runway 28. The take off and climb were normal, and four circuits were then flown without incident. The pilot then departed the field, heading north. Very shortly afterwards, at 1800 feet QFE, and some 20 minutes after the original take off, a sudden and violent vibration began, accompanied by a loud noise. The pilot immediately closed the throttle and the vibration ceased. The engine indications were normal, and he 'gently blipped' the throttle; the severe vibrations returned. Believing that he may have suffered a propeller failure, he commenced an immediate 270° turn to starboard, back to the field, and established himself on finals for Runway 28. The pilot comments that he was surprised by the steep descent angle required to maintain 60 kt, resulting in a rapid rate of descent. He was nevertheless able to execute a safe landing.

Upon examining the propeller after landing, the pilot found that a section of blade from the mid chord position to the trailing edge, and extending from the tip inboard over a distance of

approximately 9 inches, was missing from one blade. Without the missing piece, the pilot was unable to identify the cause of the failure, but believes that it may have resulted from stone damage sustained during the taxi-out and circuits flown immediately prior to the incident.