

Barker PE Stern ST80, G-BWVI

AAIB Bulletin No: 10/2002	Ref: EW/G2002/08/20	Category: 1.3
Aircraft Type and Registration:	Stern ST80, G-BWVI	
No & Type of Engines:	1 Volkswagen 1834 piston engine	
Year of Manufacture:	1998	
Date & Time (UTC):	21 August 2002 at 1757 hrs	
Location:	Long Mynd Gliding Site, Shropshire	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Broken nosewheel, propeller, cowlings and engine mounts damaged.	
Commander's Licence:	Private Pilots Licence (A)	
Commander's Age:	46 years	
Commander's Flying Experience:	858 hours (of which 24 were on type)	
	Last 90 days - 22 hours	
	Last 28 days - 7 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The flight was intended to be a round trip from Manchester (Barton) Airfield to the Long Mynd gliding site, which is sited on the edge of a prominent ridge. The pilot knew the Long Mynd site well, as he was a member of the resident Midland Gliding Club and regularly flew gliders and tugs from the airfield. However this was only the second time that he had flown G-BWVI to the field.

As the pilot approached the airfield he was aware of the tug and gliders returning from cross country retrieves. A single seat aircraft landed on the north side of the airfield, as another was approaching from the east, and the pilot established communication with these approaching aircraft to identify their landing intentions. The airfield has a marked smooth strip, which is parallel to the ridge, running north to south, and named the "Vega strip". The approaching aircraft chose to land

on the main field in a left circuit, as sheep occupied this strip. As a result G-BWVI was flown on a right hand circuit with the intention of landing in the middle of the airfield.

The wind was from the north and estimated to be about 5 kt. In a full and frank report provided by the pilot he stated that the landing was to be in a northerly direction, using the upward slope of the field to slow the aircraft down before the flat area to the north, and that the intended landing area was grass and known to be rough. During the turn on to the base leg of the approach the speed was noticed to be 70 kt, the normal approach speed is 60 kt. His aiming point was the bottom of the up slope and, due to a high rate of sink, the aircraft landed heavily and bounced. A go-around was not initiated.

Due to the rough ground, the short-coupled nose under-carriage and the up-slope, the aircraft started a series of pitch oscillations. In a normal landing on grass, the pilot holds the nose wheel off the ground whilst the elevator is still effective; this was not possible during this landing. The nose wheel then dug in and broke off at the yoke pivot point. Ground marks indicated that the remainder of the nose leg remained intact for two more pitch cycles before bending backwards under the aircraft. One of the propeller blades contacted the ground and fractured. The lower cowling also contacted the ground and was pushed back along with the hot air box, housing the carburettor and inlet manifold. In addition, the engine mounts were distorted.

The aircraft came to rest; a four-point harness restrained the pilot. After shutting down and opening the canopy, the pilot alighted uninjured.

The pilot assessed that the cause of the accident was due to several factors, including being tired after a day at work, poor choice of landing area and not going around after the first bounce. He also felt that his familiarity with the airfield overcame his sense of caution due to the fact that he was flying a relatively new type of aircraft.