

# Pierre Robin R1180T, G-BLZD, 16 August 1996

## AAIB Bulletin No: 10/96 Ref: EW/G96/06/20 Category: 1.3

<b>Aircraft Type and Registration:</b>	Pierre Robin R1180T, G-BLZD
<b>No &amp; Type of Engines:</b>	1 Lycoming O-360-A3AD piston engine
<b>Year of Manufacture:</b>	1979
<b>Date &amp; Time (UTC):</b>	16 June 1996 at 1340 hrs
<b>Location:</b>	In cruise, 3 miles South of Reading
<b>Type of Flight:</b>	Private
<b>Persons on Board:</b>	Crew - 1 Passengers - None
<b>Injuries:</b>	Crew - None Passengers - N/A
<b>Nature of Damage:</b>	Loss of propeller spinner, scoring damage to propeller
<b>Commander's Licence:</b>	Private Pilot 's Licence
<b>Commander's Age:</b>	51 years
<b>Commander's Flying Experience:</b>	474 hours (of which 102 were on type) Last 90 days - 12 hours Last 28 days - 8 hours
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot

The aircraft was on a cross-country flight from Caernarfon to Fairoaks. The flight was uneventful until, about 3 miles south of Reading, the pilot heard a loud noise and the aircraft shook. The pilot thought that the aircraft had hit a bird and that the damage would be around the rear of the aircraft, as that was the area from which the noise appeared to come.

The pilot continued to Fairoaks Airport, where he made a safe and normal landing. Inspecting the aircraft after the flight he found that the propeller spinner was missing and that there did not appear to be any damage around the rear of the aircraft. There was also minor damage to the propeller itself, particularly some scoring where the departing spinner had scraped against the base of the propeller blade.

In this design, common in light aircraft, the fibreglass spinner is mounted around its periphery to a baseplate behind the propeller hub and forward of the starter gear ring. On G-BLZD, the retaining screws had remained in place and had retained pieces of fractured plastic under the heads of the screws, indicating that the failure had been within the spinner. The manufacturer suggests that GBLZD's loss of part of the engine cowling in flight two months previously might have distorted the spinner backplate, causing the spinner to rotate asymmetrically: however, the maintenance organisation notes that the backplate does not appear to be distorted. Another possibility put forward is that the spinner had suffered accidental damage, possibly in the hangar, and that a resulting crack had then propagated to failure.