

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	Pierre Robin R2112, G-BIVA	
<b>No &amp; Type of Engines:</b>	1 Lycoming O-235-L2A piston engine	
<b>Year of Manufacture:</b>	1978	
<b>Date &amp; Time (UTC):</b>	24 March 2007 at 1043 hrs	
<b>Location:</b>	Truro Airfield, Cornwall	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - 1
<b>Injuries:</b>	Crew - None	Passengers - None
<b>Nature of Damage:</b>	Several small dents on leading edge, minor damage to propeller and rear strake	
<b>Commander's Licence:</b>	Commercial Pilot's Licence	
<b>Commander's Age:</b>	48 years	
<b>Commander's Flying Experience:</b>	927 hours (of which 2 were on type) Last 90 days - 22 hours Last 28 days - 17 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

**Synopsis**

The pilot was carrying out a touch-and-go landing at Truro Airfield and the aircraft failed to get airborne.

**History of the flight**

The flight was planned from Royal Naval Air Station Culdrose to Truro. Prior to takeoff, the pilot called Truro Airfield and requested permission to carry out "a couple of approaches". This was approved and the pilot inquired about the runway length. He was informed that the available length was 500 m, with an additional 30 m unavailable due to water-logging and the fact that the grass needed cutting in preparation for a 'fly-in' the following day. He was also informed that the radio may not be manned.

On arrival at Truro the pilot noted from the windsock that the wind was light and an approach to Runway 23 was carried out. The aircraft was flown down the length of the runway at approximately 20 ft agl. It climbed away normally and entered the circuit pattern at 1,000 ft. The pilot, in consultation with the passenger who was also a pilot, decided that the runway looked suitable to carry out a touch-and-go. Downwind checks were completed and the carburettor heat control selected 'ON' where it remained until 100 ft on the final approach. At this stage the carburettor heat was selected 'OFF' in accordance with normal procedures.

The aircraft touched down 40 m beyond the runway

threshold at a speed of around 50 kt, slightly faster than the normal touch-down speed for this aircraft. The pilot stated that the retardation as the aircraft rolled along the surface was noticeable but did not seem excessive. He then applied full power and raised the flaps to the takeoff position. Light back pressure was applied to the control stick, as the aircraft normally becomes airborne in quite a flat attitude due to the presence of a strake on the tail. However, the aircraft did not become airborne. The pilot checked both the flap setting and the carburettor heat selection to ensure it was not selected. A second attempt was made to raise the nose and become airborne without success. The pilot closed the throttle, but re-opened it as he considered that the aircraft would contact a fence beyond the end of the runway if he attempted to stop at this stage. The pilot pulled back on the control column in an attempt to hop over the fence. However, the aircraft went through the fence and came to rest in the field beyond. Both occupants were uninjured and vacated the aircraft normally.

The damage to the aircraft was limited to a number of dents in the leading edge of the left wing and a ‘nick’ in one propeller blade. The fence was constructed of plastic and was intended to be frangible; however, it had a strand of steel supporting wire which caused the damage. The aircraft was recovered to the airfield boundary and, following an inspection by the repair agency, was flown to their overhaul facility. No problems were reported with engine performance.

Witnesses reported hearing the aircraft make a low go-around followed by a circuit and a very low approach. The engine note was heard to increase initially and then splutter.

### Airfield information

Truro is an unlicensed grass airfield at an elevation of 400 ft amsl, with three runways. Runway 14/29 has a length of 531 m, with a 100 m starter extension on Runway 32. Prior permission is required to use the airfield.

### Discussion

The pilot considered that the aircraft had suffered a power loss due to carburettor icing. Meteorological observations between 1000 and 1100 hrs in the Truro area estimated a temperature of 10°C and a dew point of 2°C, with 58% humidity. The wind was light and variable. Reference to the carburettor icing chart in the CAA General Aviation Safety Sense Leaflet 14A showed that these conditions are just within those conducive to serious icing at any power. The pilot stated that this aircraft type was new to him and therefore, as the takeoff position is flatter than he is used to, he may have let the aircraft remain on the runway for too long. Grass, and in this case long grass, can increase the rolling resistance and therefore the takeoff ground run considerably.