

ACCIDENT

Aircraft Type and Registration:	Pierre Robin DR400/180 Regent, G-FCSP	
No & Type of Engines:	1 Lycoming O-360-A3A piston engine	
Year of Manufacture:	1990	
Date & Time (UTC):	11 August 2007 at 1215 hrs	
Location:	Rothesay, Isle of Bute	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Nose landing gear detached, propeller and right wing damaged	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	74 years	
Commander's Flying Experience:	2,708 hours (of which 2,517 were on type) Last 90 days - 30 hours Last 28 days - 13 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and subsequent AAIB enquiries	

Synopsis

The aircraft overran the damp, short grass runway, having touched down 150 m into the 480 m strip.

History of the flight

The pilot reported that he flew from Biggin Hill towards the Isle of Bute, to take part in a commemorative event which he was keen to attend and about which he was somewhat pre-occupied. Crossing the mainland coast, he descended to 600 ft amsl to remain clear of cloud. Arriving at the Isle of Bute he overflew the airfield, noting that the windsock was showing a slight southerly wind and established the aircraft in a teardrop turn onto a final approach for Runway 27. This runway has a short grass surface and recent rain had left the surface damp.

The approach was flown at 56 kt (slower than the 'normal' approach speed of 65 kt) and the aircraft touched down approximately 150 m beyond the beginning of the runway. The aircraft rolled along the remaining length of runway, ran through a fence and over a ditch. It came to rest on its main landing gear and engine cowling, the nose landing gear having become detached. The pilot evacuated the aircraft normally without difficulty and there was no fire.

The pilot recalled that he may not have set the flaps for landing, attributing this to the short time available in the teardrop turn to complete the pre-landing checks, although photographs of the aircraft at rest after the

accident showed the flaps in the landing position. He commented that although he was experienced on type, he seldom landed on short grass runways.

After the accident, the pilot assessed that the wind was from the south-east at 5 kt. This would have given a slight tailwind on Runway 27.

Additional information

The Aircraft Flight Manual suggested that with the conditions at the time of the accident, the landing distance required on a *'dried and plane concrete runway'* would be 451 m, and the landing ground roll would be 201 m; the runway at Bute is 480 m long. The CAA's Safety Sense Leaflet 7c, entitled *'Aeroplane Performance'* suggests safety factors to be added to performance figures. For landing on short wet grass up to 20 cm long, a factor of 35% of the landing distance is suggested, and the Leaflet notes that:

'Very short grass may be slippery, distances may increase by up to 60%.'

The leaflet also suggests that a safety factor of 43% should be incorporated into landing performance calculations, and states that all factors are cumulative. Applying the short wet grass factor would increase the landing roll to 271 m and adding the safety factor of 43% would increase the distances to 387 m. The presence of a slight tailwind would further increase this distance.

It was noted in the Aircraft Flight Manual that the landing ground roll data was presented as *'landing distance'* and the landing distance information was headed *'landing ground roll (over 15 m barrier)'* and this may have caused some confusion to the pilot.

The pilot commented that his keenness and concern to get to the commemorative event had led him to fly when he was not as "cool, calm, and collected" as he should have been.