

Cessna 337B, G-RORO

AAIB Bulletin No: 9/99 Ref: EW/G99/06/32 Category: 1.3

Aircraft Type and Registration: Cessna 337B, G-RORO

No & Type of Engines: 2 Continental IO-360-C piston engine

Year of Manufacture: 1966

Date & Time (UTC): 25 June 1999 at 1900 hrs

Location: Castle Rock, Northern Ireland

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - 4

Injuries: Crew - None - Passengers - None

Nature of Damage: Right wing fuel tank holed; right wing and strut plus landing gear all damaged beyond repair

Commander's Licence: Private Pilot's Licence

Commander's Age: 39 years

Commander's Flying Experience: 611 hours (of which 81 were on type)

Last 90 days - 85 hours

Last 28 days - 46 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The pilot obtained a weather forecast from Ronaldsway before flying from the Isle of Man to Castle Rock. There he landed on Runway 28 which is a grass strip approximately 600 metres long and 15 metres wide; the first part is on level ground but the remainder slopes upwards reaching about 8% gradient at the end. The surface wind at the time was variable in direction between south and south-east at about 8 kt (much as forecast and therefore no headwind component) and the grass was damp.

The aircraft first touched down about 200 metres from the start of the strip and bounced, touching down a second time about half way along the strip. The pilot considered a go-around at this stage but he decided to continue the landing. Before long he realised that the aircraft would not stop in the distance remaining so he applied full left rudder and brake, forcing the aircraft to turn sharply left and depart the strip. It struck the airfield boundary hedge at an angle and penetrated it, coming to rest overhanging a minor road on the other side of the hedge. No one was injured and the occupants vacated the aircraft through the left side emergency window.

The pilot attributed the accident to a misjudged approach and variable wind conditions. However, the landing data chart in the Super Skymaster Owner's Manual states that at maximum landing weight, the landing ground roll with full flaps on a hard surface runway at sea level, 15°C and zero wind is 700 feet (214 metres). For dry grass this distance must be increased by 27% to 272 metres. Consequently, with a tailwind component and damp grass as additional factors, the landing at Castle Rock was likely to be risky unless the aircraft touched down much closer to the runway threshold.