

FINAL REPORT

AAIU Synoptic Report No: 2004-008

AAIU File No: 2004/0007

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In accordance with the provisions of SI 205 of 1997, the Chief Inspector of Accidents, on 8 February 2004, appointed Jurgen Whyte as the Investigator-in-Charge to carry out a Field Investigation into this occurrence and prepare a Synoptic Report.

Aircraft Type and Registration:	Rallye 100 ST, EI-BFP
No. and Type of Engines:	1 x Continental 0-200-A
Aircraft Serial Number:	2942
Year of Manufacture:	1977
Date and Time (UTC):	8 February 2004 @ 15.25 hrs
Location:	Clonlara, Co Clare
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - 1
Injuries:	Crew - Nil Passengers - Nil
Nature of Damage:	Minor
Commander's Licence:	Irish PPL (A)
Commander's Details:	Male, aged 39 years
Commander's Flying Experience:	480 hours of which 150 were on type
Information Source:	Aircraft Accident report submitted by Pilot, AAIU Field Investigation

1. FACTUAL INFORMATION

1.1 History of the Flight

Earlier in the day, the Pilot, who lives in Clonlara, invited a neighbour (his passenger) on a flight to view the local area from the air. During this flight the Pilot also intended to land in a field close to their houses. The Pilot had received permission from the landowner to carry out a landing and take off in the field. As this was his first time to fly into the field, the Pilot carried out a ground reconnaissance (Recce) prior to leaving for Coonagh to conduct the flight. During this ground Recce, the Pilot entered the field from the northern end (**Appendix A**) and immediately observed two sets of ESB power cables running from left to right across the field. Looking down the length of the field the Pilot did not observe any other power cables in the field. The ground conditions were observed by the Pilot as firm and level, with short grass.

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EI-BFP, which is owned by a flying club, took off from Coonagh Airfield (EICN), in County Limerick at 15.00 hrs on the day of the occurrence with the Pilot and one passenger onboard. After completing two local circuits, the Pilot routed outside of the Shannon Control Zone, direct to Clonlara, County Clare, which is located approximately 5 nautical miles (NM) north north east (NNE) of EICN.

After a brief over flight of the Clonlara area, the Pilot carried out a low level south-to-north Recce of the approach and the intended landing area. Levelling between 20 - 25 feet at the southern end of the field the Pilot saw a set of ESB power cables immediately ahead of the aircraft running across his track. To avoid the cables, the Pilot pitched the aircraft down. The cables cleared the propeller and the canopy. However, immediately after this, the aircraft suddenly pitched nose up followed by a sudden pitch down movement. The Pilot applied full power and flew away from the field (15.25 hrs).

With the aircraft appearing to handle normally, the Pilot elected to return to EICN, where it landed without further incident at 15.30 hrs. An examination of the aircraft (**Appendix B**) determined that the leading edge cowling of the vertical tail fin suffered impact damage from wire cables, as did the port mass balance horn of the elevator, as a result of the cables running across its surface. In addition, the VHF antenna, which is located on top of the fuselage just forward of the vertical tail fin, was severed at its root. The Pilot reported the event to the AAIU Inspector-on-call at 15.45 hrs on the same day and also contacted the ESB advising them that he had struck cables in the Clonlara area. In a frank Incident Report Form submitted to the AAIU, the Pilot attributed the cable strike to:

- His failure to adequately survey the entire landing site on foot
- ESB poles not visible due to their location within the trees/hedgerow
- Visibility impaired by the low sun in the sky

1.2 **Other damage**

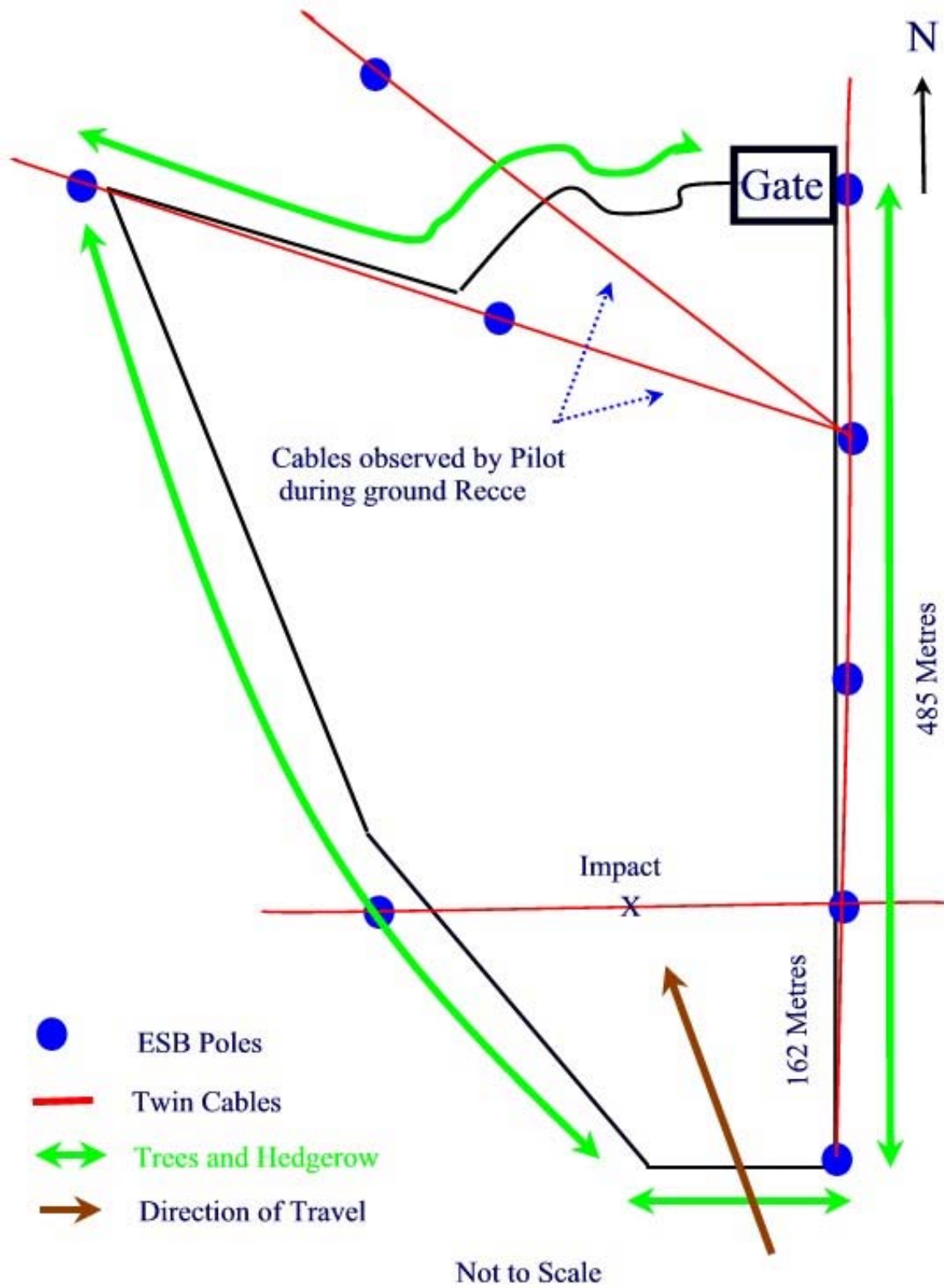
The leading edge of the vertical fin severed both 10,000-volt cables (7 mm thick) at the mid-span of the two poles, which were located within the hedgerows on either side of the field. The cables were subsequently spliced (joined) at the mid-span by the ESB and a wooden ESB pole, which suffered damage downstream of the right side pole had to be replaced. As a result of the cable strike and subsequent repair, approximately 60 - 80 homes suffered a power outage of 21 hours.

2. **Comment**

The Pilot was fortunate that the damage sustained to the aircraft as a result of the cable strike did not impede the controllability of the aircraft. The fact that the cables cleared the propeller/canopy and that they snapped on the leading edge of the vertical tail fin contributed to a safe outcome. Had the cables struck the propeller and or canopy, or had the cables snapped downstream of the aircraft (nearer to the poles) it is considered likely that the outcome would have been far more serious and potentially fatal. (See [Accident: Stampe, EI-BLB, Nr Carrick-on-Shannon Co Roscommon, 1 Jun 1997: Report No 1998-003](#)) The Incident Pilot did recognise his failure to adequately ground survey the entire field prior to the flight. However, in general terms, the Investigation considers the use of unprepared landing strips by Private and Leisure fixed wing pilots as a potentially high risk activity and therefore should be avoided.

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Appendix A



Site map of intended landing area

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Appendix B



Photo No 1. Cable impact damage to leading edge cowling of vertical tail fin



Photo No 2. Damage resulting from cables running across the lower surface edge of the port mass balance horn of the elevator