



# Air Accident Investigation Unit Ireland

## FACTUAL REPORT

**Serious Incident  
Robin HR-200, G-GMKE  
Navan Airfield, Co. Meath**

**7 November 2016**



Aonach Éireann  
Turasóireachta agus Spórt

Department of Transport,  
Tourism and Sport

# FINAL REPORT

## Foreword

This safety investigation is exclusively of a technical nature and the Final Report reflects the determination of the AAIU regarding the circumstances of this occurrence and its probable causes.

In accordance with the provisions of Annex 13<sup>1</sup> to the Convention on International Civil Aviation, Regulation (EU) No 996/2010<sup>2</sup> and Statutory Instrument No. 460 of 2009<sup>3</sup>, safety investigations are in no case concerned with apportioning blame or liability. They are independent of, separate from and without prejudice to any judicial or administrative proceedings to apportion blame or liability. The sole objective of this safety investigation and Final Report is the prevention of accidents and incidents.

Accordingly, it is inappropriate that AAIU Reports should be used to assign fault or blame or determine liability, since neither the safety investigation nor the reporting process has been undertaken for that purpose.

Extracts from this Report may be published providing that the source is acknowledged, the material is accurately reproduced and that it is not used in a derogatory or misleading context.

<sup>1</sup> **Annex 13:** International Civil Aviation Organization (ICAO), Annex 13, Aircraft Accident and Incident Investigation.

<sup>2</sup> **Regulation (EU) No 996/2010** of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation.

<sup>3</sup> **Statutory Instrument (SI) No. 460 of 2009:** Air Navigation (Notification and Investigation of Accidents, Serious Incidents and Incidents) Regulations 2009.



**AAIU Report No: 2017 - 016**

**State File No: IRL00916079**

**Report Format: Factual Report**

**Published: 12 December 2017**

In accordance with Annex 13 to the Convention on International Civil Aviation, Regulation (EU) No 996/2010 and the provisions of SI No. 460 of 2009, the Chief Inspector of Air Accidents on 7 November 2016, appointed Mr Paul Farrell as the Investigator-in-Charge to carry out an Investigation into this Serious Incident and prepare a Report.

<b>Aircraft Type and Registration:</b>	Robin HR-200, G-GMKE	
<b>No. and Type of Engines:</b>	1 x Lycoming O-235-L2A	
<b>Aircraft Serial Number:</b>	257	
<b>Year of Manufacture:</b>	1993	
<b>Date and Time (UTC)<sup>4</sup>:</b>	7 November 2016 @ 13.30 hrs	
<b>Location:</b>	Navan Airfield (EIHH), Co. Meath	
<b>Type of Operation:</b>	General Aviation	
<b>Persons on Board:</b>	Crew - 1	Passengers - 1
<b>Injuries:</b>	Crew - Nil	Passengers - Nil
<b>Nature of Damage:</b>	Minor	
<b>Commander's Licence:</b>	Private Pilot Licence (Aeroplane) issued by the Irish Aviation Authority (IAA)	
<b>Commander's Age:</b>	33 years	
<b>Commander's Flying Experience:</b>	68 hours, 16 of which were on type	
<b>Notification Source:</b>	Pilot and the Airfield Operator	
<b>Information Source:</b>	AAIU Report Form submitted by the Pilot, AAIU Field Investigation	

<sup>4</sup> **UTC:** Co-ordinated Universal Time. All timings in this report are quoted in UTC which was coincident with local time on the date of the accident.

# FINAL REPORT

## SYNOPSIS

The aircraft landed on Runway (RWY) 27 at Navan Airfield (EIHH). It overran the grass runway and had a low speed impact with a boundary fence. The aircraft came to a stop and the Pilot and passenger exited the aircraft unaided. There were no injuries and there was no fire.

## NOTIFICATION

The AAIU was notified of the event by the Pilot and the Airfield Operator. A team of two Inspectors of Air Accidents travelled to EIHH to survey the site, examine the aircraft and interview the Pilot.

## 1. FACTUAL INFORMATION

### 1.1 History of the Flight

The aircraft, which was based at EIHH, was returning there from Weston Airport (EIWT). The Pilot informed the Investigation that he made the approach to RWY 27 at EIHH, at an indicated airspeed of 70-75 knots (kts). He assessed that the aircraft was above the ideal visual approach profile by approximately 150 feet (ft). He heard the stall warning horn, which he suspected may have been due to a crosswind. His immediate reaction was to lower the nose of the aircraft which resulted in an increase in his indicated airspeed to 80-85 kts.

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The Pilot reported that as a result of the approach being higher and faster than it would usually be, the aircraft touched down further along the runway than planned. On first contact with the runway, the aircraft bounced and when it next contacted the runway the aircraft was at least half way along the available runway length. Braking was immediately applied, gently at first but the aircraft kept "*sliding and sliding*". When the Pilot realised that the aircraft's speed was not reducing as quickly as expected, he changed from a cadence braking action to a full application of the brakes. The aircraft continued travelling past the runway threshold into an over-run area and impacted, at low speed, with the boundary fence. There were no injuries and the Pilot and passenger exited the aircraft unaided.

The Pilot informed the Investigation that he had no technical difficulties with the aircraft and in particular, he was satisfied with the condition of the tyres and brakes.

### 1.2 Airfield Examination

The Investigation inspected the grass runway surface and noted that it was wet and the grass had been cut recently. The general condition of the surface was observed to be quite slippery. The aircraft tyre tracks were quite pronounced with intermittent patches of scuffing associated with tyre skidding. The tyre tracks indicated that the distance from the first point of brake application (following the bounce) to the boundary fence was approximately 400 metres (m), 250 m of which were runway surface and 150 m was an over run area. The Investigation noted that the initial landing point for the aircraft was in excess of 200 m from the runway threshold.



### 1.3 Aircraft Damage

The aircraft suffered minor damage to the starboard wing root (**Photo No. 1**) and the propeller blades (**Photo No. 2**).



**Photo No. 1:** Brown witness mark from impact with fence post



**Photo No. 2:** Propeller blade exhibiting damage from contact with fence wire

### 2. AAIU COMMENT

The approach was flown higher and faster than normal, resulting in the aircraft initially touching down near the mid-point of the runway. A bounce on initial landing further reduced the remaining runway distance available for braking. Once braking was commenced, the surface conditions were such that only poor braking action was achieved with the result that the aircraft did not decelerate as expected. Despite the availability of an overrun area, the compromised braking action made a slow-speed impact with the boundary fence unavoidable.

**In accordance with Annex 13 to the Convention on International Civil Aviation, Regulation (EU) No. 996/2010, and Statutory Instrument No. 460 of 2009, Air Navigation (Notification and Investigation of Accidents, Serious Incidents and Incidents) Regulation, 2009, the sole purpose of this Investigation is to prevent aviation accidents and serious incidents. It is not the purpose of any such investigation and the associated investigation report to apportion blame or liability.**

**A safety recommendation shall in no case create a presumption of blame or liability for an occurrence.**

Produced by the Air Accident Investigation Unit

AAIU Reports are available on the Unit website at [www.aaiu.ie](http://www.aaiu.ie)



Air Accident Investigation Unit,  
Department of Transport Tourism and Sport,  
2nd Floor, Leeson Lane,  
Dublin 2, D02TR60, Ireland.  
Telephone: +353 1 604 1293 (24x7): or  
+353 1 241 1777  
Fax: +353 1 604 1514  
Email: [info@aaiu.ie](mailto:info@aaiu.ie)  
Web: [www.aaiu.ie](http://www.aaiu.ie)