



Air Accident Investigation Unit Ireland

FACTUAL REPORT

ACCIDENT

**ATEC v.o.s., Zephyr 2000, EI-DGV
Near Athenry, Co. Galway**

12 June 2021

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An Roinn Iompair
Department of Transport

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 13¹ to the Convention on International Civil Aviation, Regulation (EU) No 996/2010² and Statutory Instrument No. 460 of 2009³, 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.

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

² **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.

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



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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 12 June 2021, appointed Kate Fitzgerald as the Investigator-in-Charge to carry out an Investigation into this Accident and prepare a Report.

Aircraft Type and Registration:	ATEC v.o.s., Zephyr 2000, EI-DGV	
No. and Type of Engines:	1 x Rotax 912 ULS	
Aircraft Serial Number:	Z509702A	
Year of Manufacture:	2002	
Date and Time (UTC)⁴:	12 June 2021 @ 11.00 hrs	
Location:	Private Airfield, near Athenry, Co. Galway	
Type of Operation:	General Aviation	
Persons on Board:	Crew – 1	Passengers – NIL
Injuries:	Crew – 1	
Nature of Damage:	Aircraft destroyed	
Commander's Licence:	National Private Pilot Licence (NPPL) Aeroplanes (A), issued by the Civil Aviation Authority (CAA) of the United Kingdom (UK)	
Commander's Age:	73 years	
Commander's Flying Experience:	1,339 hours, of which 293 were on type	
Notification Source:	Pilot	
Information Source:	AAIU Field Investigation, AAIU Report Form submitted by the Pilot	

⁴ **UTC:** Co-ordinated Universal Time. All times in this report are quoted in UTC unless otherwise stated; local time was UTC + 1 hour on the date of the accident.

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SYNOPSIS

On touchdown at a private airfield near Athenry, Co. Galway, the aircraft, with one Pilot on board, encountered a gust of wind from the west. The gust caused the aircraft to drift left towards a line of trees running parallel to the runway. The Pilot tried to turn the aircraft away from the trees, but was unsuccessful. The Pilot applied full power in an attempt to take-off again. During the attempted take-off, the left wing tip struck several trees. The aircraft continued over the airfield's eastern boundary hedgerow, and came to rest in an agricultural field adjacent to the airfield. The aircraft was destroyed. There was no fire.

NOTIFICATION AND RESPONSE

The Pilot notified the AAIU by telephone. Two Inspectors of Air Accidents deployed to the accident site to commence an Investigation.

1. FACTUAL INFORMATION

1.1 History of the Flight

The aircraft with one Pilot on board departed Ballyboy Airfield (EIMH), Co. Meath, at approximately 10.00 hrs for a flight to a private airfield, near Athenry, Co. Galway. As the aircraft touched down on Runway (RWY) 18 at the private airfield, a gust of wind from the west caused the aircraft to drift left, towards a line of trees running parallel to the runway. The Pilot applied full right aileron and rudder in an attempt to avoid the trees, but the aircraft continued to travel easterly. The Pilot then applied full power in an attempt to abort the landing and take-off again. The aircraft became airborne but the left wing tip struck several trees. The aircraft continued over the airfield boundary hedgerow and came to rest in a field adjacent to the runway.

1.2 Injuries to Persons

The Pilot sustained minor injuries.

1.3 Aircraft Information

The ATEC v.o.s. Zephyr 2000 is a low-wing, ultralight (450 kg) aircraft, designed and manufactured in the Czech Republic. It is powered by a Rotax 912 ULS engine driving a two-bladed propeller, and has a fixed tricycle landing gear with a steerable nose wheel. The aircraft can carry a pilot and one passenger in a side-by-side configuration.

The subject aircraft is categorised by Annex 1 of *'Regulation (EU) 2018/1139 on the common rules in the field of civil aviation'* (which superseded *'Regulation (EC) 216/2008'*), as being exempt from the Regulation. The aircraft was operated on a Flight Permit issued by the Irish Aviation Authority (IAA). The most recent Flight Permit was issued on 10 June 2021 and was valid until 7 July 2022.



1.3.1 Operational Limits

Section 2.11 of the '*Flight and Operations Manual*' for the ATEC 122 Zephyr⁵ specifies a take-off or landing crosswind limit for the aircraft of up to 6 m/s.

1.4 Damage to Aircraft

The left wing of the aircraft was broken at approximately one third of its span. The inboard flap of the right wing had partially separated from the wing and the wing tip was cracked. The lower section of the rudder sustained buckling and tearing damage. The engine casing was cracked and the engine mounting frame was broken. The engine firewall was ruptured. One propeller blade was broken at approximately one third of its length from the blade hub.



Photo No. 1: Final position of aircraft

1.5 Pilot Information

The Pilot held an NPPL (A) issued by the UK CAA. The non-expiring licence was issued on 7 January 2011.

The Pilot also had a Pilot Medical Declaration dated 27 September 2016. This is a self-declaration of the pilot's fitness to fly and is a requirement for a number of licence types issued by the UK CAA including the NPPL (A). The Pilot Medical Declaration remains valid until a pilot reaches the age of 70, after which a new Medical Declaration must be submitted and renewed every three years.

⁵ **ATEC 122 Zephyr:** The Type Certificate for the aircraft type states that the Type Designation for the aircraft type is Zephyr 2000 and the business name is ATEC 122 Zephyr.

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The UK CAA NPPL and associated Pilot Medical Declaration is intended for pilots who wish to fly microlights and other Annex 1 aircraft, which are UK-registered and flown only in UK airspace. The licence and medical may be used in other states with the agreement of the relevant aviation authority.

1.5.1 Other Relevant Regulation

The IAA Aeronautical Notice (AN) P.21, 'Acceptance of Flight Crew Licences', which was first issued in 2010 and most recently re-issued in January 2022, permits holders of the NPPL issued by the UK CAA to fly aircraft in Ireland, subject to prior notification to the IAA and certain other restrictions. The Aeronautical Notice states:

'3. The holder of an appropriate pilot licence or aviation qualification issued by another ICAO signatory state or its national aviation authority or qualified entity, which permits or is accepted as being appropriate to enable the holder to act as pilot-in-command within that state of an aircraft described in Annex II of EU Regulation No 216/2008 (as amended), shall be exempt within the territorial limits of the State from the requirements of Article 5 of the Order while acting as a member of the flight crew of an aircraft being operated as a private aircraft.

4. This Direction shall apply only provided that the appropriate pilot licence or aviation qualification holder has:-

a) given prior notification to the Authority by submitting the appropriate details in the manner published by the Authority on its website;

[...]

c) the valid medical certificate required by the state of issue, but in any case where no such certificate is required or where the certificate required is not an ICAO Class 2 or an EU Part-MED LAPL medical certificate, a minimum of an ICAO Class 2 medical certificate or an EU Part-MED LAPL medical certificate;

[...]

7. The Exemption issued under this Direction shall be valid for a period not exceeding one year, whereupon it may be reissued by the Authority subject to a new application being made therefor.'

The Investigation contacted the IAA to ask for clarification of the medical certificate requirement for pilots holding a UK CAA NPPL. The IAA informed the Investigation that, 'Any pilot wishing to avail of P21 must have a valid medical certificate as outlined in AN P21'.



1.6 Meteorological Information

Met Éireann, the Irish Meteorological Service, provided the Investigation with an aftercast of the weather conditions at the time and location of the accident. The wind information in the aftercast reported surface winds from the south-west of 8-11 knots (kts) with gusts of 10-15 kts.

The Pilot informed the Investigation that prior to the flight he had obtained a weather forecast from the UK Meteorological Office. This forecast winds from the west of 8 kts.

1.7 Airfield Information

The airfield was privately owned and had a single grass runway (RWY) designated 18/36.

2. AAIU COMMENT

In this occurrence, the Pilot reported that an unexpected gust of wind on touchdown caused the aircraft to veer to the left of the runway. The Pilot initially attempted to correct the aircraft track by applying full aileron and rudder deflection, but when this was unsuccessful he elected to take-off again and applied full engine power. The aircraft became airborne, but the left wing of the aircraft made contact with trees that were situated to the left of the runway. The aircraft came to rest in a field beside the runway, and was destroyed during the accident sequence. The Pilot sustained minor injuries. It is possible that the application of full engine power at low ground speed contributed to the aircraft continuing to travel left towards the trees.

The *'Flight and Operations Manual'* for the aircraft type specifies a take-off or landing crosswind limit of up to 6 m/s. The weather forecast used by the Pilot predicted winds from the west of 8 kts (4 m/s), which is within the aircraft operational limits. However, in an aftercast provided to the Investigation, Met Éireann reported surface winds from the south-west of 8-11 kts (4-6 m/s), and that gusts of 10-15 kts (5-8 m/s) could have been experienced in the region of the airfield at the time of the accident. This suggests that a significant crosswind may have been present at the time of the occurrence.

The Pilot held a UK CAA NPPL licence and a UK Pilot Medical Declaration. Prior notification to the IAA, in addition to meeting other conditions specified in AN P.21, is required in order to exercise the privileges of a UK CAA NPPL within Ireland. The UK Pilot Medical Declaration is associated with a number of licences issued by the UK CAA, including the NPPL (A), but does not meet the requirements of Aeronautical Notice P.21 because it is not *'an ICAO Class 2 medical certificate or an EU Part-MED LAPL medical certificate.'*

- END -

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.

Produced by the Air Accident Investigation Unit

AAIU Reports are available on the Unit website at www.aaiu.ie



An Roinn Iompair
Department of Transport

Air Accident Investigation Unit,
Department of Transport,
Leeson Lane,
Dublin 2,
D02TR60,
Ireland.

Telephone: +353 1 804 1538 (24x7)
Email: info@aaiu.ie
Twitter: @AAIU_Ireland