



Air Accident Investigation Unit Ireland

FACTUAL REPORT

ACCIDENT

**Urban Air Samba UFM-10, EI-DXT
Fethard Airstrip, Co. Tipperary**

22 June 2021



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 22 June 2021, appointed John Owens as the Investigator-in-Charge to carry out an Investigation into this Accident and prepare a Report.

Aircraft Type and Registration:	Urban Air Samba UFM-10, EI-DXT	
No. and Type of Engines:	1 x Jabiru 2200A	
Aircraft Serial Number:	10/10	
Year of Manufacture:	2001	
Date and Time (UTC)⁴:	22 June 2021 @ 11.10 hrs	
Location:	Fethard Airstrip, Co. Tipperary, Ireland	
Type of Operation:	General Aviation	
Persons on Board:	Crew – 1	Passengers – 1
Injuries:	Crew – Nil	Passengers – Nil
Nature of Damage:	Substantial	
Commander's Licence:	Private Pilot Licence (PPL) Microlight (M), issued by the Irish Aviation Authority (IAA)	
Commander's Age:	69 years	
Commander's Flying Experience:	1,300 hours, of 700 were on type	
Notification Source:	Pilot in Command	
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; local time was UTC +1 hour on the day of the accident.

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SYNOPSIS

The Urban Air Samba UFM-10 aircraft, with two persons on board, landed on Runway (RWY) 07 at Fethard Airstrip, Co Tipperary, Ireland. A rapeseed crop was growing adjacent to each side of the grass runway. During the landing roll, the left wingtip made contact with the crop, which caused the aircraft to turn suddenly to the left and depart the runway. The aircraft's landing gear sustained damage. The two occupants were uninjured, and exited the aircraft normally. There was no fire.

NOTIFICATION

The AAIU was notified of the accident by the Pilot shortly after it occurred. Two Inspectors of Air Accidents deployed to the accident site and commenced an investigation.

1. FACTUAL INFORMATION

1.1 History of the Flight

The aircraft, with the Pilot and one passenger on board, took-off from Fermoy Airfield, Co. Cork, Ireland. It flew to Fethard Airstrip, Co, Tipperary, Ireland, where it landed on RWY 07. A rapeseed crop was growing adjacent to each side of the grass runway. During the landing roll, when the speed of the aircraft had reduced to what the Pilot estimated to be 20 to 25 kilometres per hour (10.8 to 13.5 knots), the left wingtip made contact with the crop on the left side of the runway. This caused the aircraft to turn suddenly to the left, depart the runway, and enter the crop adjacent to the left side of the runway (**Photo No. 1**). The nose landing gear partially collapsed, the right main landing gear detached from the aircraft, and the left main landing gear sustained damage. The Pilot shut down the engine and both he and his passenger released their four-point harnesses and exited the aircraft normally. No injuries were reported to the Investigation. There was no fire.

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Photo No. 1: Final resting position of aircraft



1.2 Interview with the Pilot

The Pilot advised the Investigation that he had obtained prior permission to land from the owner of the airstrip but that he had not discussed the runway width or the height of the crops. He stated that he had landed there before but that the crop height was '*much lower*' on previous visits. The Pilot said that as he landed the aircraft, there was a '*crosswind but it was fine*' and that '*after landing, [he realised that] the strip was a bit narrow*'. He said that he may have landed slightly to the left of the centre of the runway and '*must have taken his eyes off looking straight ahead and the left wingtip just clipped the [...] crop at the side*'. He stated that the aircraft's brakes were not used during the landing roll and that both he and his passenger had their four-point harnesses secured.

1.3 Aircraft Information

The Urban Air Samba UFM-10 is a 5.9 metres (m) long, low-wing, all-fibreglass aircraft with two side-by-side seats. The aircraft can be operated from either seat. The aircraft's wingspan is 9.93 m. There is a vertical clearance of approximately 0.95 m between the aircraft's wingtips and the ground. A non-retractable tricycle landing gear, incorporating a steerable nose wheel, is installed.

The subject aircraft, EI-DXT, had a maximum take-off weight of 450 kg. It was fitted with a Jabiru 2200A four-cylinder engine and a two-blade GT fixed-pitch propeller. The aircraft was manufactured in 2001. The Flight Permit was issued by the IAA on 9 April 2021 and was valid until 15 December 2021.

1.4 Damage to Aircraft

The aircraft's nose landing gear partially collapsed, the right main landing gear detached from the aircraft, and the left main landing gear sustained damage. There was some scuffing evident to the underside of the left wing. In addition, the engine and propeller likely sustained shock loading.

1.5 Other Damage

There was some damage to the crop adjacent to the left side of RWY 07.

1.6 Injuries to Persons

No injuries were reported to the Investigation.

1.7 Personnel Information

The Pilot held a PPL(M) Flight Crew Licence, which was issued by the IAA on 9 October 2017 '*in accordance with Irish National Standards*'. The licence expiry date was 8 October 2022. The Pilot's '*Single Pilot Aeroplane (SPA) CLASS RATING (NATIONAL RATING) 3-AXIS MICROLIGHT*' recorded that a training flight with an instructor was carried out on 8 August 2019, and that the Class Rating was valid until 13 September 2021. The Pilot's Class 2 Medical Certificate was issued on 26 April 2021 and was valid until 26 October 2021.

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The Pilot's flying experience is outlined in **Table No. 1**.

Total hours (all types):	1,300 hours
Total on type (P1):	700 hours
Last 90 days (all on type):	7.2 hours
Last 28 days (all on type):	4.5 hours
Last 24 hours (all on type):	0.5 hours

Table No. 1: Pilot's Flying Experience

1.8 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 (**Table No. 2**).

Meteorological Situation:	A ridge of high pressure emanating from the Azores is in decline as fronts in the Atlantic approach the west of Ireland.
Surface Wind:	West to northwest 5-8 KT [knots], with gusts 10-12 KT.
Wind at 2,000 ft:	Northwest 10 KT.
Between Surface and 300 ft:	Similar to surface.
Visibility:	30 km+.
Weather:	Cloudy and dry.
Cloud:	Broken (5-7/8th oktas ⁵) layer of stratocumulus clouds with bases between 3000-4000 ft and another broken layer of cloud with bases around 8,000 ft.
Surface Temperature/Dew Point:	15/6 degrees Celsius.
Mean Sea Level (MSL) Pressure:	1025 hPa [hectoPascals].
Freezing Level:	10,000 ft.
Other Comments:	Nil.

Table No. 2: Aftercast of weather conditions at the time of the accident

1.9 Airstrip Information

Fethard Airstrip is located in County Tipperary in the Irish midlands. It has one prepared grass runway – RWY 07/25. The AAIU measured the runway length as 420 m between the cones at each end. The runway width at the accident location was measured to be between 12.1 m and 12.3 m. A rapeseed crop, approximately 1.2 to 1.5 m in height, was growing in tilled ground adjacent to each side of the runway (**Photo No. 2**).

⁵ **Oktas:** An estimate of cloud coverage in the sky on a scale from 0 to 8; completely clear sky is described as 0 oktas, while completely overcast sky is described as 8 oktas.



Photo No. 2: View along RWY 07 at Fethard Airstrip

1.10 AAIU Investigation Report for Similar Occurrence

AAIU [Report 2015-018](#) relates to a similar event that occurred in 2015 at another location.

2. AAIU COMMENT

The Pilot was appropriately licensed for the flight and the aircraft's airworthiness certification was valid.

The AAIU measured the runway width as approximately 12.1 to 12.3 m at the location of the accident. The aircraft's wingspan is 9.93 m. This resulted in a lateral separation of just over 1 m between each wingtip and the rapeseed crop growing adjacent to each side of the runway. The surface wind, as contained in the meteorological aftercast, was west to north-west at 5 to 8 kts, with gusts of 10 to 12 kts. Therefore, there would have been a crosswind when landing on RWY 07; this was noticed by the Pilot. Landing on the longitudinal centre of an unmarked grass runway and remaining within 1 m of the centre during the landing roll would be challenging, particularly with a crosswind. The height of the rapeseed crop was greater than the height of the aircraft's wingtips, and once lateral separation was lost, contact with the crop was inevitable. The contact with the crop caused the aircraft to turn suddenly to the left and depart the runway. The damage to the aircraft's landing gear was likely due to side loading and the surface conditions experienced once the aircraft departed the prepared runway.

This occurrence highlights the importance of establishing the exact conditions at a planned arrival airstrip before commencement of flight, including runway width, and whether or not crops or other obstacles are present. These details are essential in informing aeronautical decision-making regarding the suitability of an airstrip for the type of aircraft being flown, and whether or not the flight should be undertaken.

3. SAFETY RECOMMENDATIONS

This Investigation does not sustain any Safety Recommendations.

- 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.

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



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