Air Accident Investigation Unit Ireland

FORMAL REPORT

ACCIDENT

BRM Land Africa, EI-EOH

Near Ballina, Co. Mayo

4 May 2018

An Roinn Iompair
Turasóireachta agus Spóirt
Department of Transport,
Tourism and Sport

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[1] to the Convention on International Civil Aviation, Regulation (EU) No 996/2010[2] and Statutory Instrument No. 460 of 2009[3], 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.

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[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 4 May 2018, appointed Mr Howard Hughes as the Investigator-in-Charge to carry out an Investigation into this Accident and prepare a Report.

Aircraft Type and Registration:	BRM Land Africa, EI-EOH	
No. and Type of Engines:	1 x Rotax 912ULS	
Aircraft Serial Number:	0162/912ULS/10-LA	
Year of Manufacture:	2010	
Date and Time (UTC)[4]:	4 May 2018 @ 17.14 hrs	
Location:	3 NM South-East of Ballina, Co. Mayo	
Type of Operation:	General Aviation	
Persons on Board:	Crew - 1	Passengers - Nil
Injuries:	Crew - 1 (Fatal)	Passengers - Nil
Nature of Damage:	Aircraft Destroyed	
Commander's Licence:	National Private Pilot Licence (Aeroplanes), NPPL(A), issued by the UK CAA[5]	
Commander's Age:	58 years	
Commander's Flying Experience:	245 hours, of which 151 were on type	
Notification Source:	An Garda Síochána	
Information Source:	AAIU Field Investigation	

[4] **UTC**: Co-ordinated Universal Time. Unless otherwise stated, all timings in this report are quoted in UTC; Local time is UTC + 1 hour.
[5] **UK CAA**: United Kingdom Civil Aviation Authority.

SYNOPSIS

The microlight aircraft departed Lough Conn airfield, Co. Mayo at 16.33 hrs for a local flight towards Tobercurry, Co. Sligo. When the aircraft was returning, and was approximately 4.5 nautical miles (NM) from Lough Conn airfield, it was observed entering a left-hand descending turn. The aircraft impacted terrain, in a near vertical, nose-down attitude. The aircraft was destroyed, and the Pilot, who was the sole occupant, was fatally injured. There was no fire.

NOTIFICATION

An Garda Síochána notified the AAIU Inspector-On-Call by phone, at 17.40 hrs. A team of three Inspectors of Air Accidents deployed to the accident site to commence the Investigation.

1. FACTUAL INFORMATION

1.1 History of the Flight

The Pilot had arrived at Lough Conn airfield, Co. Mayo, at approximately 15.45[6] hrs, on the day of the flight. He started the engine at 16.24 hrs and set up the cockpit for the flight.

At 16.28 hrs, the aircraft taxied onto the grass runway and at 16.33 hrs it commenced its take-off run. The Pilot performed a left-hand turn at 500 ft followed by a left downwind leg at approximately 700 ft. When the aircraft was approximately 0.5 NM from the airfield, the Pilot commenced a turn onto a left base leg, followed by a turn onto final approach. The aircraft carried out a '*touch-and-go*[7]' at the airfield at 16.36 hrs, after which a right turn-out was performed at 500 ft and the aircraft took up an easterly course.

The aircraft climbed to 1,000 ft, which it reached at 16.38 hrs. Eight minutes later, as the aircraft approached the Slieve Gamph/Ox Mountain range, it commenced a further climb, crossing the mountains at 2,300 ft. Once clear of the mountains, at 16.47 hrs, the aircraft commenced a slow descent to 1,000 ft.

At 16.55 hrs, the aircraft arrived overhead a point approximately 2 NM north of Tobercurry, where it performed a number of orbits and a low pass over an area of open ground. Following this, the aircraft then set course to the west, climbed to 2,000 ft and crossed the Slieve Gamph/Ox Mountain range at 17.03 hrs. One minute later, when clear of the mountains, the aircraft descended to 1,500 ft.

At 17.09 hrs, the aircraft was at 1,000 ft and was on a heading of 240 degrees magnetic. The aircraft maintained this altitude and heading until 17.13 hrs, at which point the aircraft started to roll to the left, and began to descend until it impacted terrain at approximately 17.14 hrs.

[6] Times of events used in this report are taken from a number of sources, including witness statements, times logged by the Pilot on a notepad, Global Positioning System (GPS data), and video evidence.
[7] **Touch-and-go**: This involves landing on a runway and taking off again without coming to a full stop.

1.1.1 Witness Observations

The Investigation interviewed a number of witnesses. The observations of three witnesses are given below. **Witness No. 1** observed the aircraft shortly after take-off from Lough Conn airfield. **Witness No. 2** saw the aircraft flying north of Tobercurry. **Witness No. 3** saw the aircraft just prior to impact. Witness locations are shown on **Graphic No. 1**, (**Section 1.11.2**).

Witness No. 1 resides close to Lough Conn airfield. He had known the Pilot for four years, and had flown regularly with him. During the interview the witness stated that he believed the Pilot was very thorough, and "*did everything by the book*". The witness saw the Pilot arrive at the airfield at approximately 15.45 hrs, and talked to him briefly, as the Pilot attended to his aircraft. He told the Investigation that the Pilot was going to go flying later, but had arrived early to affix new decals to the aircraft's instrument panel. The witness informed the Investigation that the Pilot "*appeared in good spirits*".

The witness then left the airfield to carry out some work on his farm that is close by. He told the Investigation that "*the aircraft flew over and headed out again*". The witness thought the time was approximately 16.45 hrs. The witness stated that he was familiar with the sound of the subject aircraft's engine, and it sounded normal.

Witness No. 2 was related to the Pilot. The witness informed the Investigation that the Pilot had told him on the day prior to the accident that he might be flying out towards the relative's home the next day. The witness said that on the day of the accident he heard an aircraft nearby. He went outside and saw that it was the Pilot's aircraft, so the witness phoned him. The witness noted the time was 16.55 hrs. There followed a brief conversation on the phone. The witness told the Investigation that the Pilot sounded normal, and "*did not sound as if he was out of breath or under any stress*".

The witness told the Investigation that, following the conversation on the phone, the Pilot performed a few orbits of the area and then departed in a westerly direction. The witness stated that the aircraft engine sounded normal.

Witness No. 3 told the Investigation that he was at the entrance to his garage, when he heard the sound of an aircraft. He stated that he looked up and saw that the aircraft was flying towards his location. The witness told the Investigation that when the aircraft was quite close to his house, he observed it "*turning to the pilot's left, banking and diving*". The witness assumed initially that the Pilot was performing some sort of aerobatic manoeuvre, but he saw the turning descent continue until the aircraft was out of view behind a field across the road from his house. He then heard the sound of "*a huge impact*". The witness ran to his father's house, next door, and informed him of a possible plane crash. Witness No. 3 stated that his father then went to locate the scene of the accident using his tractor. The witness walked towards the area where he had seen the plane go down, where he met his father who informed him that "*he had seen the plane".* The witness's father called the emergency services. Witness No. 3 went back to the road closest to the accident site, to guide the Emergency Services to the location.

1.2 Injuries to Persons

The Pilot, who was the sole occupant of the aircraft, sustained fatal injuries.

Injuries	Crew	Passengers	Others
Fatal	1	0	0
Serious	0	0	0
Minor /None	0	0	

1.3 Damage to Aircraft

The aircraft was destroyed.

1.4 Other Damage

The aircraft impacted a grass field. There was associated impact damage to the ground surface. The aircraft fuel tanks had ruptured on impact, resulting in ground surface contamination from gasoline.

1.5 Personnel Information

1.5.1 Pilot Details

The Pilot was a male, aged 58 years. Records indicate (**Table No. 1**), that he had been issued with a non-expiring NPPL(A) by the UK CAA in September 2014. The Pilot also underwent regular pilot medical examinations with a UK Aeromedical Examiner (AME), the most recent of which had been carried out on 28 November 2017. Following the medical examination, the Pilot was issued with a European Union LAPL[8] medical certificate, which was valid for two years.

Personal Details:	Male, aged 58 years
Licence:	NPPL(A) issued by the UK CAA
Medical Certificate, Type: Date of Issue:	LAPL 28/11/2017

Table No. 1: Pilot's Licence and Medical Details

The Investigation reviewed extant licencing legislation and relevant associated aeronautical notices within the State. The Investigation asked the IAA as to the validity of the licence documents held by the Pilot. The Investigation was informed by the IAA that the combination of licence type and medical certificate held by the Pilot were valid for use in the State.

1.5.2 Flying Experience

The Investigation obtained copies of the Pilot's personal flying logbooks. Regular entries had been made by the Pilot and the Investigation was of the opinion that the logbook was well maintained. The Pilot's flying experience, to the nearest hour, is shown in **Table No. 2**.

[8] **LAPL**: Light aircraft pilot licence

Total all types:		245	hours
Total on type:		151	hours
Total on type P1:		148	hours
Last 90 days:		10	hours
Last 28 days:		2	hours
Last 24 hours:	Accident flight	48	minutes

Table No. 2: Pilot's Flying Experience

1.5.3 Pre-flight Rest

Family members informed the Investigation that the Pilot's work routine, leading up to, and including, the day of the accident, was normal, and he was well-rested. The Investigation was also informed by members of the Pilot's family that he did not appear to be under any particular stress, and did not suffer from any sleeping disorder.

1.6 Aircraft Information

1.6.1 General

EI-EOH was a factory-built microlight aircraft of all-metal construction (**Photo No. 1**). It had a strut-braced high wing, and an enclosed cockpit with two seats, in a side-by-side configuration. Each seat was equipped with a four-point restraint harness. The aircraft wingspan was 8.63 metres (m). It was equipped with a fixed tricycle landing gear and a Rotax 912ULS four-stroke petrol engine. The aircraft had a maximum take-off weight of 450 kg. The aircraft's airspeed indicator was calibrated in miles-per-hour (mph) and the aircraft never exceed speed (V_{NE}) was 109 mph, or 94 knots (kts).

Photo No. 1: EI-EOH (courtesy of Pilot's family)

EI-EOH was operated on a Flight Permit under the auspices of the National Microlight Association of Ireland (NMAI). The most recent Flight Permit was issued by the IAA on 23 April 2017 and was valid at the time of the accident.

1.6.2 Maintenance

The aircraft's logbooks were made available to the Investigation. The logbooks showed that regular aircraft maintenance entries had been made. The aircraft logbooks also recorded on-going annual airworthiness inspections under the auspices of the NMAI. The most recent inspection recorded was carried out on 18 September 2017, and was valid for 12 months from that date.

When not in use, the aircraft was kept in a hangar at Lough Conn airfield.

1.7 Meteorological Information

Met Éireann, the Irish Meteorological Service, provided the following aftercast for the accident location:

Report Validity	**4 May 2018, 16.00 hrs to 18.00 hrs**
Meteorological Situation	An area of high pressure lay to the south of the country with a moderate airflow extending across the region of interest. Weak frontal troughs approached the west coast but were yet to impact on the area with which this report is concerned
Surface Wind	210 degrees at 10 kts, possibly 10-15 kts in exposed areas and depending on local topography
2,000 ft Wind	210 degrees at 20 kts
Visibility	In excess of 10 km
Precipitation	Nil
Cloud	Cloud at Ireland West Airport Knock (approximately 14 NM south-east of the accident site) was reported as scattered to broken at between 1,800 and 2,500 ft.
Surface Temp / Dew point	14/10 degrees Celsius
Mean Sea Level Pressure[9]	1020 hPa[10]

1.8 Aids to Navigation

The Pilot had a portable GPS device, that he made use of for navigation purposes, (**Section 1.11.2**).

The Pilot also had a navigation application on his smart phone[11], that he was observed using to assist in navigating the aircraft, (**Section 1.11.4**).

[9] Also referred to as QNH.
[10] **hPa**: Hectopascal
[11] The Pilot used a smartphone mount to secure the phone, and was able to receive calls hands-free in flight.

1.9 Communications

Examination of available Air Traffic Control (ATC) recordings for the time of the accident did not reveal any communications with ATC from EI-EOH. The aircraft was operating in Class G (uncontrolled) airspace, and as such, would not have needed to communicate with ATC on a routine basis.

1.10 Aerodrome Information

Not applicable.

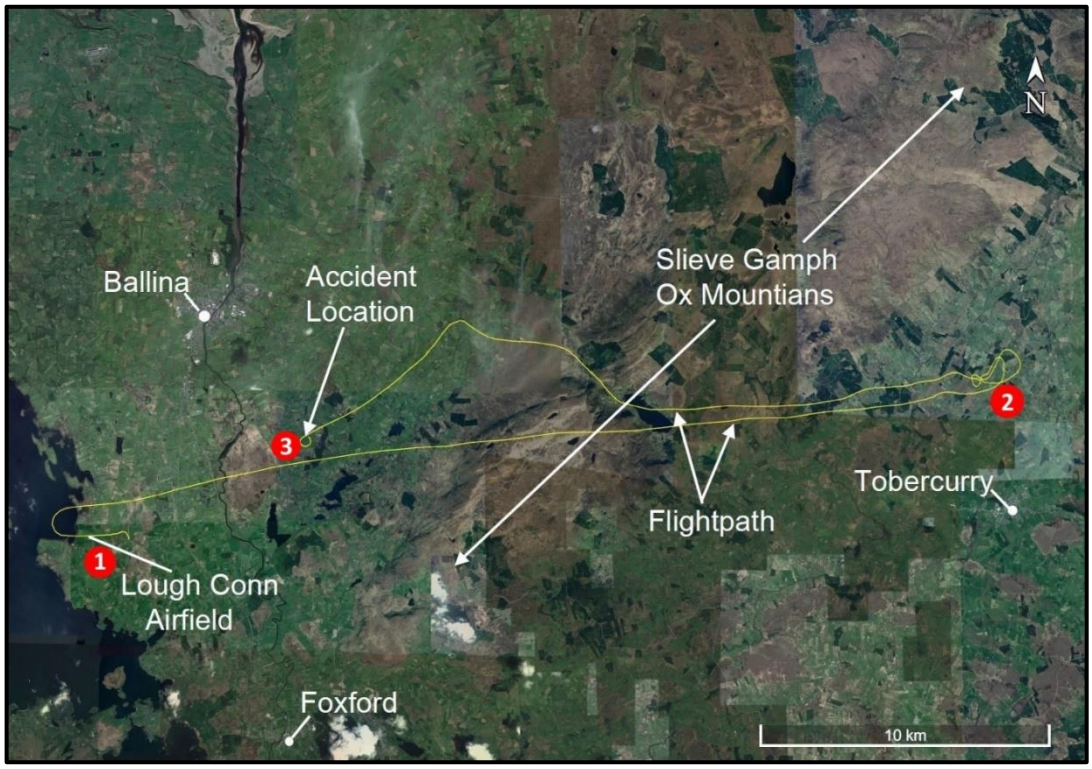
1.11 Recording Devices

1.11.1 General

The aircraft was not equipped with a Flight Data Recorder or a Cockpit Voice Recorder, neither of which were required for this class or category of aircraft.

1.11.2 On Board Global Positioning System (GPS) Device

A Garmin GPS Unit (GPSMap 296) was recovered from the aircraft. It was found in a '*powered on*' state. The unit was powered off at the scene, secured and transported to the AAIU facilities for further examination. When examined, it was found that data logging was enabled, and a successful download of time, position and altitude data was made. The Investigation was able to recreate the flight path of the aircraft from the period prior to the touch-and-go, until just before the accident, (**Graphic No. 1**).



Graphic No. 1: Aircraft track flown, recreated from GPS Data. (*Google Earth*)
Approximate witness Locations in Red Circles (**Section 1.1.1**)

1.11.3 ATC Radar Data

The ATC radar data for the period leading up to the time of the accident was quarantined and retained by the Station Manager at Shannon Air Traffic Services for analysis by the Investigation. The aircraft was equipped with a transponder and the radar data obtained showed a secondary radar return with a conspicuity code 7000[12] painting in the area where the aircraft flew on the date and time in question. The altitude and speed data from the radar returns were consistent with those obtained from the GPS unit.

1.11.4 Video Cameras

During the initial examination of the accident site, three compact video cameras were recovered, each containing a micro SD[13] memory card. Two of the cameras were found in soft camera bags, and had not been mounted on the aircraft during the subject flight. A third camera was located within the wreckage of the cockpit area of the aircraft. All cameras and their micro SD cards were secured and transported to the AAIU for further examination.

The SD cards of the un-mounted cameras were examined and found to contain no relevant data. Examination of the SD card of the third camera indicated that the camera had recorded data from the accident flight, in five files. Four of these files, containing 10 minutes of data, had been written to the SD card correctly and were viewable. The fifth file was interrupted during the recording process, most likely as a result of the accident sequence, and was not readily viewable. The video data from the fifth file was subsequently recovered at the AAIU facilities in Dublin. The associated sound data for the last seven minutes and 48 seconds of recording was found to be corrupted, probably due to an interruption in power supply during the impact sequence. The SD card was taken to the UK by the Investigation for examination at facilities of the UK AAIB,[14] where sound data was extracted. Together, the obtained image data from the five video files covered the period from approximately seven minutes before take-off, until approximately two seconds before impact.

The video commences with the Pilot mounting the camera in the cockpit, behind, and to the right of the Pilot's seat, so that the camera faced forward, showing the aircraft instrument panel, and the view through the cockpit windscreens. The aircraft engine had been started.

The Pilot can be seen using a checklist prior to departure, and setting up the aircraft for flight. Throughout the video, the aircraft and engine are seen responding normally to control inputs made by the Pilot. The video shows the aircraft being operated in Visual Meteorological Conditions (VMC) throughout the flight. The obtained images also show the Pilot using an aviation navigation application that was installed on his smartphone. The application was capable of showing areas of controlled airspace, and the Pilot was observed navigating the aircraft, to remain clear of controlled airspace on his route.

The fifth file showed the Pilot operating the aircraft normally until approximately 27 seconds before the recording ends, at which point the video showed the commencement of a left bank from straight and level flight.

[12] Flights under visual flight rules use the 7000 transponder code to assist in identification by ATC.
[13] **SD:** Secure Digital.
[14] **AAIB**: Air Accidents Investigation Branch.

The Pilot's head was observed to slump forward and his eyes appeared to be closed in a manner that suggested incapacitation due to a state of unconsciousness. The aircraft is seen to continue rolling to the left and commencing a descent towards the ground, with the pilot appearing to remain unconscious throughout. No attempts to correct the aircraft flight path are observed. The recording ended just prior to impact. The final video frame recovered showed the aircraft airspeed in excess of 140 mph, descending at a rate in excess of 2,000 feet per minute.

1.12 Wreckage and Impact Information

The compact accident site was located in a grass field, approximately 9 m south of a field boundary wall. The aircraft was found inverted with all major parts of the aircraft present at the accident site. The inverted fuselage was oriented on a heading of 300 degrees magnetic. There was a crater measuring approximately 0.8 m in diameter and 0.4 m deep, where the engine impacted.

There was a 4 m linear ground scar oriented 240 degrees towards the crater. The beginning of the scar, which was 6 m from the engine impact point, contained the port (left) navigation light cover, and a portion of wingtip fairing from the left wing.

There was evidence of longitudinal compression damage to the metal skin of the fuselage and both wings, resulting in folding and creasing of these structures. There was extensive compression and deformation of the cockpit area.

Examination of the aircraft at the accident site established continuity of the control linkages to the rudder and elevator. Later examination of the aircraft at the AAIU wreckage examination facility revealed damage to the aileron control linkages that was consistent with impact. No evidence of pre-existing damage to the ailerons or aileron control system was found.

1.13 Medical and Pathological Information

1.13.1 Autopsy Report

The Pilot, who was fatally injured, was located within what remained of the cockpit section of the aircraft, which included the pilot seat and restraining harness. The Pilot was removed from the aircraft by the Emergency Services.

The Investigation was provided with a copy of the autopsy report which was conducted on 6 May 2018. The autopsy report notes that the *'medical cause of death is related to his extreme traumatic injuries as according to the postmortem findings he was alive at the time of impact'.* The autopsy report goes on to state that based on the video[15] recording '*it is very likely that he was unconscious at the time of impact and he had no control of the airplane* […].' The autopsy report also stated that, '*The postmortem examination revealed no evidences of the reason of the loss of consciousness. The state laboratory examination is negative. The carbon monoxide test was also negative'.*

[15] To assist the post-mortem analysis, a portion of the image data obtained by the Investigation was shown to the pathologist.

1.13.2 Toxicology Test Report

A post-mortem blood sample was sent for toxicological analysis. The sample was analysed for carbon monoxide, ethanol and a preliminary screen for drugs. The Toxicology Test Report stated that neither ethanol nor drugs were detected. Carboxyhaemoglobin saturation[16] was reported as less than 10%. This is a level not consistent with Carbon Monoxide poisoning.

1.13.3 Medication

Medical records show that the Pilot was taking two prescription medications to reduce both blood pressure and cholesterol levels. Both medications had been prescribed by the Pilot's General Practitioner (GP) in December 2013. Medical records indicate that the GP knew of the Pilot's flying activity, was satisfied that the medication was controlling the Pilot's blood pressure, and that since December 2013, the Pilot was asymptomatic[17].

The Pilot had also informed an AME of the medication he was taking. The medical records submitted in support of his LAPL Medical Certificate application note the use of the prescribed medication. The medical records submitted do not indicate that the Pilot was exhibiting any adverse effects from the medication, and he had passed all medical checks since commencement of the medication.

1.14 Fire

There was no fire.

1.15 Survival Aspects

Examination of the wreckage showed that the Pilot was wearing the aircraft 4-point restraint harness. The aircraft and the Pilot were subject to extremely high deceleration forces during the accident.

1.16 Tests and Research

Nil.

1.17 Organisational and Management Information

Not applicable.

1.18 Additional Information

The Pilot had mounted two opto-chemical carbon monoxide detectors in the cockpit. The detectors consisted of a pad of a coloured chemical, which is designed to change colour upon reaction with carbon monoxide.

Both of these detectors were observed on the recovered video files. The images revealed no evidence of colour change to the carbon monoxide detectors during the flight.

[16] **Carboxyhaemoglobin Saturation**: The test for exposure to carbon monoxide. Carboxyhaemoglobin (COHb) saturation may be toxic at levels between 25-35%, and lethal from 50-60%.
[17] **Asymptomatic**: Having or showing no symptoms.

A page from a notebook was located in the wreckage, upon which the Pilot had logged the following:

- Engine hours, 890.22.
- QNH, 1022 hPa.
- Engine start time, 17.24. (Local Time.)
- Take-off time, 17.32. (Local Time.)

1.19 Useful or Effective Investigation Techniques

Not applicable

2. ANALYSIS

2.1 Maintenance

EI-EOH was kept in a hangar when not in use. Evidence gathered from aircraft records, witness statements, and examination of the aircraft, show that it had been well-maintained. Witness statements indicate that the aircraft engine appeared to be operating normally. This is confirmed by the video evidence, which showed the engine behaving normally throughout the flight.

2.2 Recorded Data

Recorded data, including that from the GPS unit, ATC Radar data, and the on-board video recorder, show the aircraft being operated normally prior to the accident.

The Investigation is therefore of the opinion that the aircraft, engine, and associated controls were in good mechanical order and did not cause, or contribute to, the accident.

The Pilot had installed a forward facing video camera in the cockpit, for personal use. The availability of recordings from this camera greatly assisted the Investigation in determining the probable cause of the accident.

2.3 Wreckage and Impact Analysis

The first point of contact with the ground was with the left wing, as indicated by the location of the linear ground scar containing the port (left) navigation light cover. This indicates that the aircraft impacted the ground whilst in a left, descending turn. The compact nature of the crash site, the compression damage to the aircraft structures, and the impact crater from the engine is consistent with a near vertical impact with terrain. This was confirmed from a witness statement, the video recording, and GPS data, all of which indicated the aircraft was in a steep descending left turn just prior to impact.

2.4 Survivability

The vertical velocity component at impact was such that the aircraft and Pilot were subject to extremely high deceleration forces. The impact was such that it resulted in severe damage to aircraft structures and extreme traumatic injuries to the Pilot. The accident was not survivable.

2.5 Pilot Incapacitation

The Pilot flew on a regular basis, and witnesses that had flown with him told the Investigation that the Pilot was thorough, and '*would do everything by the book*'. Prior to the accident, indications were that the Pilot was in good spirits, rested, and not under any stress that might have affected his ability to operate the aircraft. The Investigation was informed that the Pilot did not suffer from any known sleep disorder.

The Pilot was on medication to reduce both blood pressure and cholesterol levels. Medical records suggest that the medication was not adversely affecting the Pilot, i.e. he was asymptomatic, and the AME, who was aware of the medication, had issued a valid LAPL medical certificate.

The primary source of evidence indicating that the Pilot became incapacitated was obtained from a compact video recorder recovered at the accident site. Prior to the accident, the Pilot is observed operating the aircraft normally. The Pilot is then observed becoming unconscious and slumping forward with his eyes closed, as the aircraft departed from straight and level flight, and began a descending left-hand turn. The Pilot remained unconscious and therefore was unable to intervene to correct the aircraft's flight path.

The autopsy report determined that the post-mortem examination revealed no evidence of a reason for the loss of consciousness.

3. CONCLUSIONS

3.1 Findings

1. The Pilot was suitably qualified and licenced to carry out the flight.
2. The aircraft was well maintained and regularly inspected.
3. All evidence indicates that the aircraft engine was operating normally up to the time of impact.
4. Wreckage examination and video evidence indicate that there was no flight control malfunction up to the time of impact.
5. Meteorological conditions were benign, and the aircraft was flown in VMC throughout the flight.

6. Data from the GPS unit on the aircraft, and video evidence show that the aircraft entered a descending left-hand turn commencing approximately 1,000 ft above the ground, which continued until impact.

7. Video evidence indicates that the Pilot became incapacitated due to unconsciousness, during which time the aircraft departed from normal straight and level flight and commenced a descending left-hand turn. The Pilot remained unconscious during the descent, and no attempts to correct the aircraft flight path were observed.

8. Cockpit-mounted detectors and post-mortem tests show that carbon monoxide saturation was not a factor in this accident.

9. The reason for the loss of consciousness was not determined during the post mortem examination.

10. The availability of image data from a forward facing video camera in the cockpit greatly assisted the Investigation in determining the probable cause of this accident.

3.2 Probable Cause

Pilot incapacitation resulting in impact with terrain.

4. 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

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