



Air Accident Investigation Unit Ireland

SYNOPTIC REPORT

ACCIDENT
Gradient Aspen 2 Paraglider
(No Registration)
Monavullagh Mountain, Co. Waterford
03 March 2012



**An Roinn Iompair
Turasóireachta agus Spóirt**

Department of Transport,
Tourism and Sport

FINAL REPORT

AAIU Report No: 2013-005
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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 S.I. 460 of 2009, the Chief Inspector of Air Accidents, on 03 March 2012 appointed Mr Thomas Moloney as the Investigator-in-Charge to carry out an Investigation into this Accident and prepare a Report. The sole purpose of this Investigation is the prevention of aviation Accidents and Incidents. It is not the purpose of the Investigation to apportion blame or liability.

Aircraft Type and Registration:	Gradient Aspen 2 Paraglider, No Registration	
No. and Type of Engines:	N/A	
Aircraft Serial Number:	N/A	
Year of Manufacture:	2006	
Date and Time (UTC):	03 March 2012 @ 15.20 hrs	
Location:	Monavullagh Mountain, Comeragh Range, Co. Waterford. N52°11.50' W007°38.00'	
Type of Operation:	Paragliding	
Persons on Board:	Crew - 1	Passengers – N/A
Injuries:	Crew - Serious	
Nature of Damage:	Minor	
Commander's Licence:	None (Not required under Irish legislation)	
Commander's Details:	Male, aged 34 years	
Commander's Flying Experience:	400 hours, of which 300 were on type	
Notification Source:	Training & Safety Officer, Irish Hang Gliding & Paragliding Association (IHPA)	
Information Source:	AAIU interview with Pilot	



SYNOPSIS

The Pilot had completed a two hour flight in the morning in good weather conditions. During another two hour flight that afternoon, the weather deteriorated with gusty winds and shower activity developing. On approach to land in difficult wind conditions, about 70% of the left hand side of the paraglider canopy collapsed and the Pilot spun into the ground from about 15 metres (m) height, sustaining serious injuries. He was airlifted by the Coastguard Search and Rescue (SAR) helicopter to hospital in Waterford.

1. FACTUAL INFORMATION

1.1 Interview with the Pilot

The Pilot, a Lithuanian national, was interviewed by the Investigation three weeks after the accident, while still in hospital. He said that he had taken up the sport of paragliding in September 2008, while resident in Ireland, and had received training for about two months. His initial training was carried out near the Blessington Lakes, Co Wicklow. He was taught to fly by a Lithuanian friend with 15 years paragliding experience and he said that he had studied relevant books. Up to the time of the accident he had accumulated about 400 hours, mostly on weekend flying when the weather was suitable. In 2011, he had been paragliding in Italy on holidays where the weather was continuously ideal, he recalled. He contrasted such conditions to those found in Ireland which were sometimes dangerous. He said that he had no licence and no insurance as it was too expensive in Ireland. He did not take part in competitions and was not a member of the IHPA. He said that he flew for pleasure only. He estimated that he had flown 50 to 60 hours in the four months before the accident.

On the day of the accident, he and his brother decided to operate in the Comeragh Mountains. Both of them flew off Monavullagh Mountain for two hours each in the morning in what he described as very good flying conditions. In the afternoon, they flew again for two more hours. His brother landed first and advised the Pilot by radio to terminate the flight as the weather was deteriorating. There was now extensive cloud with showers threatening and the wind was rising. Very shortly after that, as he was coming in to land, he said that he *“was pushed by a very strong wind”*. He stated that 70% of the left hand side of his canopy collapsed, and he recalled spinning to the left onto the mountainside from about 15m height. He stated that he was lifted again to a height of 2 or 3m and then dropped back onto the ground. The first landing broke his right leg in three places, while the second caused a serious back injury.

At the time of the accident, which occurred at about 15.20 hrs, only the Pilot and his brother had been flying in the area. They had one camera between them, which his brother had at the time, but he had not filmed the accident. A member of the public made a 999 call. The Waterford based Irish Coastguard SAR helicopter was dispatched and at 16.05 hrs the Pilot was airlifted to Ardkeen Hospital, Waterford.

The Pilot stated that in the period immediately preceding the accident, the wind had become very strong and gusty. He also said that the wind was *“rotating”* and as the wind strengthened, the *“rotation was bigger”*.

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He said that, when flying, it was difficult to tell how heavy the approaching rain was as it looked like clouds. He had a reserve parachute as part of his equipment but the canopy collapse occurred too close to the ground for him to deploy it.

In a closing comment on the deteriorating weather conditions, the Pilot said that on this occasion he had not been lucky, and that he was a few minutes late in attempting to land.

The Pilot stated that his paraglider equipment was a Gradient Aspen 2 which had been manufactured in 2006. He had flown it for about 300 hours and it was in the DHV2¹ classification of paragliders. His first 100 hours during his first year of paragliding had been flown with a Gradient Bright type which is in the DHV1 class. His harness was a new Gingo 2.

Note: The DHV website classifies paragliders as follows:-

- *DHV1: Paragliders with simple and very forgiving flying characteristics.*
- *DHV2: Paragliders with demanding flying characteristics and potentially dynamic reactions to turbulence and pilot errors. Recommended for regularly flying pilots.*

1.2 Weather Conditions at the Accident Site

The Investigation discussed the weather conditions at the accident site with the Commander of the SAR helicopter shortly after his return to base. He said that there was a gusty westerly wind at the time with showery activity. He said that the S61N helicopter was “*battered around*” as it made its approach to the mountainside site.

1.3 Recent Paragliding Accidents in Ireland

The subject event is the third paragliding accident to have come to the attention of the AAIU within a two year period, each involving a non-national pilot sustaining serious injuries. A common characteristic of these three accidents is that the pilots had not completed any formal flying course nor had they received approved training on paragliders. None were members of a club or association and they did not hold any paraglider rating.

1.4 Safety Regulation and Licensing

European Aviation Safety Agency (EASA) requirements do not apply to foot-launched paragliders and thus national regulations are applicable.

Under the heading “*Sailplane (Glider) Licensing Requirements*” the Irish Aviation Authority (IAA) website states the following:-

“The term 'Glider' refers to various categories of aircraft i.e sailplanes, touring motor gliders, hang-gliders, paragliders and gyrogliders.”

¹ DHV: Deutscher Hängegleiterverband e.V., the German Hang Gliding Association



Ireland is one of the few countries in Europe where a licence is not required for flying gliders. The Irish Aviation Authority (IAA) has filed a difference with ICAO exempting gliding from any form of licensing, except for pilots of touring motor gliders who are required to hold a pilot licence in accordance with the requirements set out for a PPL(A).

Gliding in Ireland has been self-regulated since it started. While there are no "Official" licences, standards similar to those used for PPLs and Gliding Licences in other countries are applied. However, the IAA strongly recommends that no person should fly or attempt to fly these aircraft without receiving an appropriate course of training provided or approved by the relevant sport aviation association covering these aircraft.

Failure to receive such training may result in serious injury or loss of life, as well as damage to aircraft and/or property."

The Investigation asked the IAA about the current situation with respect to regulation of hang gliding and paragliding in Ireland and whether the IAA had considered the delegation of responsibility for the regulation of those forms of self-regulated sport aviation to any organisation.

The IAA responded as follows:

"Currently, the IAA still retains responsibility for hang gliders and paragliders and they are allowed to operate under a General Exemption. We have not delegated this oversight to any outside organisation. This situation is under review as part of the implementation of EASA regulations, however, any body or organisation applying to take over such responsibility may have to meet the requirements for 'Qualified Entity' status as set out by EASA in EC Basic Regulation 216/2008.

We are currently working with the IHPA to produce guidance material to address training and qualifications to operate."

1.5 General Aviation Safety Council of Ireland (GASCI)

The Investigation notes the establishment during 2012 of GASCI. The aim of GASCI is to promote the safety of general aviation in Ireland. To achieve its aim, GASCI seeks to identify flight safety risks and minimise them through education, training and shared experience amongst the aviation community. The Council of GASCI is open to nominees from all the recognised representative bodies involved in general aviation in Ireland and representatives from disciplines such as training organisations, maintenance organisations, aerodrome operators and air traffic service providers. There are also nominees on the Council from the IAA and from the AAIU. The IHPA is represented on the Council of GASCI.

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2. ANALYSIS

The Pilot had flown for two hours in the morning in good conditions. He had then undertaken a second flight in the afternoon, but as the flight continued the weather conditions deteriorated with the winds strengthening and becoming gustier with shower activity approaching. The DHV2 paraglider which the Pilot was flying is classified as having demanding flying characteristics and potentially dynamic reactions to turbulence and pilot errors.

His brother, who had landed, advised the Pilot to land as soon as possible due to the deteriorating conditions. As he was making his final approach to land, it is likely that the paraglider was caught by a swirling gust of wind which was outside the Pilot's experience and proficiency level and which resulted in a partial collapse of the canopy with a subsequent loss of control and rapid spinning descent onto the ground.

The Investigation is concerned about recent accidents involving foreign paraglider pilots in Ireland, who have not completed any formal flying training. As such, these pilots have not received any formal instruction on the theory and practice of flying paragliders, or on macro- and micro-meteorology. These subjects are vital, both for flying safely and for knowing when not to fly. It is also the norm that these pilots are not members of any paragliding association or club. The current legislation does not require paraglider pilots to hold a licence although the IAA strongly recommends that pilots should receive an appropriate training course provided or approved by the relevant sport aviation association.

The Investigation considers that GASCI would be an appropriate forum for the consideration and discussion of "self-regulated" paragliding activity in Ireland and of ways in which particular issues such as those set out in this Investigation might be addressed. In particular, it appears that there is a need to reach out to those involved in paragliding, who may not have received any formal training and who are not involved with any associations, with a view to increasing safety awareness in their activities. To this effect, the Investigation issues a Safety Recommendation to GASCI.

3. CONCLUSIONS

(a) Findings

1. The Pilot held no paragliding licence or rating, nor was he required to do so.
2. The Pilot had been taught to fly paragliders by a friend and had received no formal flying training.
3. The paraglider involved in the accident was classified as having demanding flying characteristics.
4. During the Pilot's second flight of the day, the weather conditions deteriorated with gusty westerly winds and shower activity developing.



5. The Pilot was aware of the deteriorating conditions and attempted to terminate his flight by landing on the mountainside.
6. On his approach to land in difficult wind conditions, 70% of the left-hand side of the paraglider canopy collapsed resulting in a loss of control by the Pilot.
7. The Pilot made a rapid spinning descent from about 15m height and he sustained serious injuries to his right leg and back on impacting the ground.

(b) Probable Cause

Loss of control while attempting to land.

(c) Contributory Cause(s)

1. The difficult meteorological conditions encountered during the landing attempt.
2. A lack of formal training.
3. The demanding flying characteristics of the paraglider type

4. SAFETY RECOMMENDATIONS

No.	It is Recommended that:	Recommendation Ref.
1.	GASCI should consider strategies regarding self-regulated paragliding in Ireland, in particular to develop means to reach out to participants who may have no formal training or affiliations with a view to providing them with appropriate safety guidance and information.	IRLD2013008

[View Safety Recommendations](#) for Report 2013-005

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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