
BHPA Incident Report: GBR-2019-10480

INCIDENT

Aircraft Type:	Advance Iota 2 (size 23) paraglider. Advance Lightness 2 harness. Parachute unknown. The paraglider, harness and parachute were not available for inspection.
Certification:	EN-B
Manufacture Date:	Unknown.
Location:	Seyne Les Alps, France.
Date and Time:	Tuesday 21 st May 2019. 14:30 local time.
Type of Flight:	Cross country guided flight.
Persons Involved:	Paraglider pilot, Pilot A.
Injuries:	Fatal
Nature of Damage:	Unknown.
Pilot's Rating/Licence:	The pilot held a BHPA Pilot rating. He was awarded the Pilot rating in May 2017 having joined the BHPA under the BHPA "alternative entry" system in July 2016. He also held a Hong Kong advanced paragliding licence and a United States paragliding licence.
Pilot's Age:	55
Pilot's Experience:	The pilot was a former RAF Tornado pilot and was a qualified and current commercial airline pilot. He was a member of the Avon Hang Gliding and Paragliding Club. There was no flight log book available for inspection. Pilot A stated that he had 200 hours paragliding experience and 15 hours on his Iota 2 in documentation relating to the guided trip. Analysis of the flight log in the Flymaster GPS showed 13 hours logged in 2019 with approximately 40 flights ranging from 10 to 70 minutes in duration. Pilot A attended an SIV course in April 2018.
Information Source:	Witness statements, tracklog information from Flymaster GPS unit, BHPA membership database.

1.0 Synopsis

Pilot A was making a cross country flight on his Advance Iota 2 paraglider while on a week long guided paragliding trip. At approximately 1 hour and 25 minutes into the flight Pilot A lost control of his paraglider and was seen by witnesses to spiral into the ground. The emergency services were called, and Pilot A was quickly attended to by two other paraglider pilots. Pilot A was taken by helicopter to hospital but died later that day from the injuries sustained.

2.0 History of the flight

Pilot A was part of a group involving eight other pilots taking part in a guided paragliding trip in the Laragne area in the southern French Alps. Tuesday 21st May was the third day of the guided trip. The pilots did not fly on the Sunday due to unfavourable weather conditions. On Monday they had a short 20 minute flight from St. Vincent Les Forts before the conditions deteriorated.

Shortly after 13:00 on Tuesday the group launched from St. Vincent Les Forts with all pilots being airborne after approximately 20 minutes. Pilot A gained height gradually then headed off in a southerly direction following the west facing side of the Dormillouse ridge. At approximately 14:20 local time, Pilot A altered course to the south west, away from the ridge and into the valley in the direction of Seyne. Two other pilots from the group were also in the area with the intention of landing.

At approximately 14:28 Pilot A lost control of his paraglider. One of the other pilots, Witness A, described how he saw Pilot A in a “left spin” with 50% of the wing collapsed on the left side. He goes on to describe how Pilot A “spirals into the ground” after approximately 4 to 6 rotations. Witness A landed immediately as did one of the other pilots who had been alerted via radio of the incident. A local resident contacted the emergency services while the two pilots attended to Pilot A, who was unconscious but breathing. The emergency services arrived at 15:00 followed by a rescue helicopter at 15:45. Pilot A was airlifted to hospital at 16:25 where he was later pronounced dead.

3.0 Focus

Based on the information available, the Investigation considered the flying area and local flying conditions, Pilot A’s experience and currency, the flight log information extracted from his Flymaster GPS unit, and the part of Pilot A’s flight leading up to the loss of control prior to his impact with the ground.

3.1 Flying area and local conditions.

The area where the incident occurred is in an area of the southern French Alps that is approximately 100km southeast of Grenoble. It is an area that is extremely popular with paraglider pilots. It is a mountainous area with a mix of peaks, mountain ridges and associated valley areas.

Information on the weather conditions for the day come from the witness statements and from a statement given by the lead guide, Witness B. Witness B stated the following:

“We had checked the forecast the night before, checked again before breakfast and rechecked at about 9:45. All indications were for a light Rhone valley Mistral with good flying conditions in St Vincent les Forts, with more cloud further south and the possibility of over development late afternoon/ early evening (17:00-20:00).”

Information about the weather conditions from other witnesses would indicate that the forecast obtained by the lead guide was accurate. Witnesses describe the conditions as benign with light thermic activity. Maximum thermic lift recorded by any of the witnesses was

3.5m/s, which would be considered mild for area and the time of year. Wind speed was estimated by the witnesses to be approximately 12 to 15kph from a north westerly direction.

3.2 Pilot A's paragliding experience and currency

Pilot A's exact experience is unknown. Documentary evidence relating to the guided trip states that Pilot A had 200 hours air time. His Flymaster GPS unit had recorded 79 flights totalling just over 23 hours since August 2018, including 8 flights in May 2019 not including the incident flight. Pilot A had also attended a five day SIV course in April 2018 held at Oludeniz in Turkey. The evidence would suggest that Pilot A was reasonably experienced and current at the time of the incident.

The Investigation does not consider Pilot A's experience and currency, when also considering the prevailing weather conditions on the day, to be a factor in this incident.

3.3 Pilot A's paraglider

Pilot A's Advance Iota 2 paraglider was not available to the Investigation for inspection. At the time of writing the paraglider, harness and parachute were in the custody of the French police.

The Advance Iota 2 paraglider is certified under CEN-926 for paragliders. The Iota 2 was classified as EN-B under the EN flight tests. The EN description of the paraglider classes describes EN-B class gliders as follows;

*"Paragliders with good passive safety and forgiving flying characteristics.
Gliders with some resistance to departures from normal flight.
Designed for all pilots and may be suitable for pilots under training if
recommended by the manufacturer."*

Advance describe the Iota 2 as follows:

"As a XC-Intermediate the IOTA 2 is only suitable for the practised thermal pilot who has, at least, carried out some cross country flying and acquired the necessary feeling for a glider in active air. He flies actively, can recognize and prevent collapses at their onset, and can carry out the normal fast descent manoeuvres. Only if these requirements are met will he will be able to make full use of this wing's performance potential, and fly cross country relaxed and safe."

Based on his experience and currency the Investigation considered the Advance Iota 2 paraglider to be of a suitable type for Pilot A.

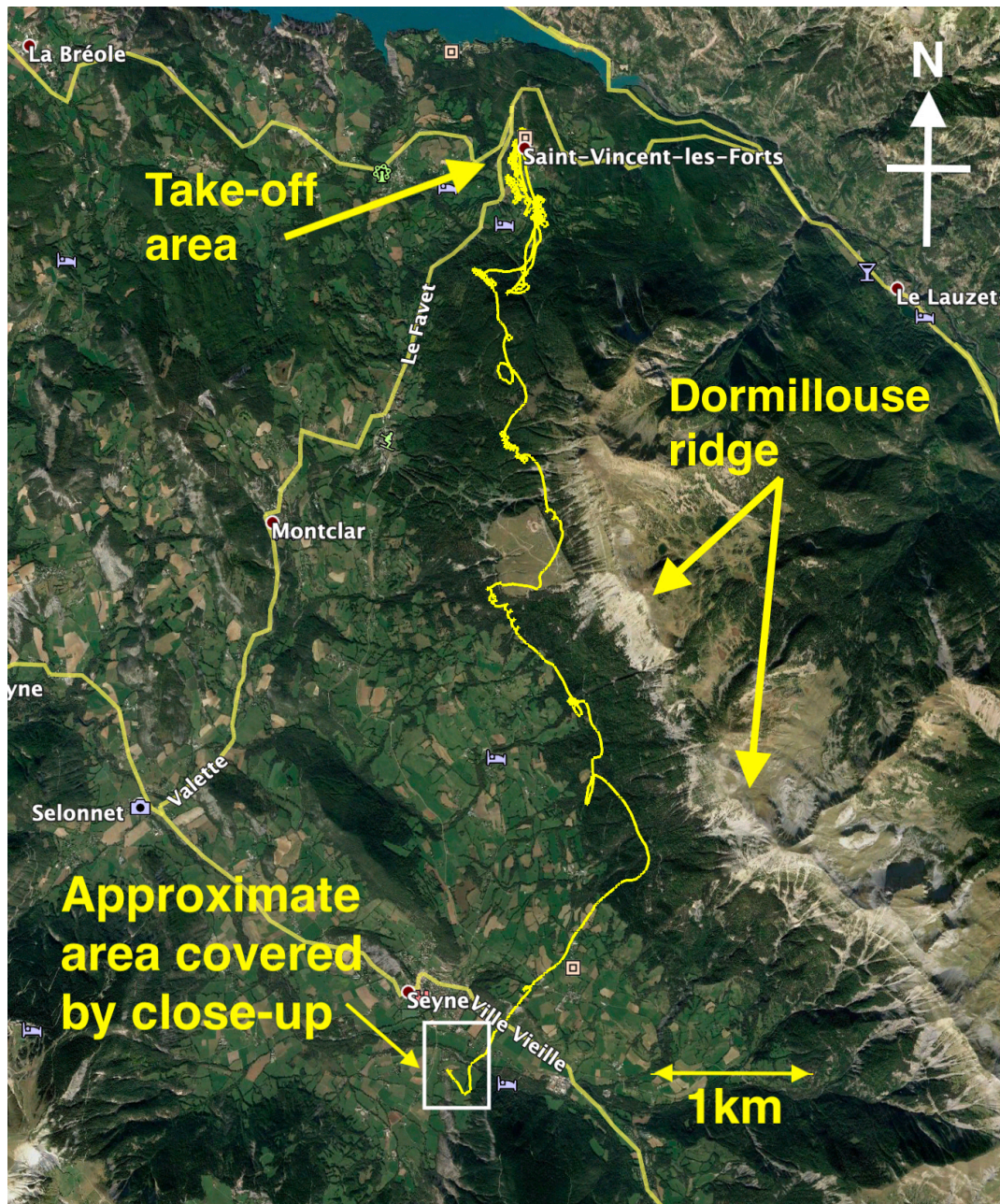
3.4 The incident and flight log analysis

Pilot A took off with the rest of the guided group at approximately 13:20. Analysis of the flight data shows Pilot A working to gain height in the area around take-off before eventually heading off down the Dormillouse ridge in a southerly direction at 13:55. The flight then continues down the ridge with no unusual signs of excessive lift or sink. The maximum lift registered on Pilot A's Flymaster GPS during the flight was 3.3m/s. This is in line with the lift experienced by other members of the guided group on the day.

At 14:20 Pilot A altered his course away from the ridge in the direction of Seyne to the south west. Whilst flying in a south westerly direction away from the ridge Pilot A encounters air that was sinking, ranging from -1m/s to occasionally -3m/s. This would not be considered uncommon or extreme for the area at that time of day.

The flight track is shown on the following Google Earth image:

Google Earth image showing Pilot A's flight track.

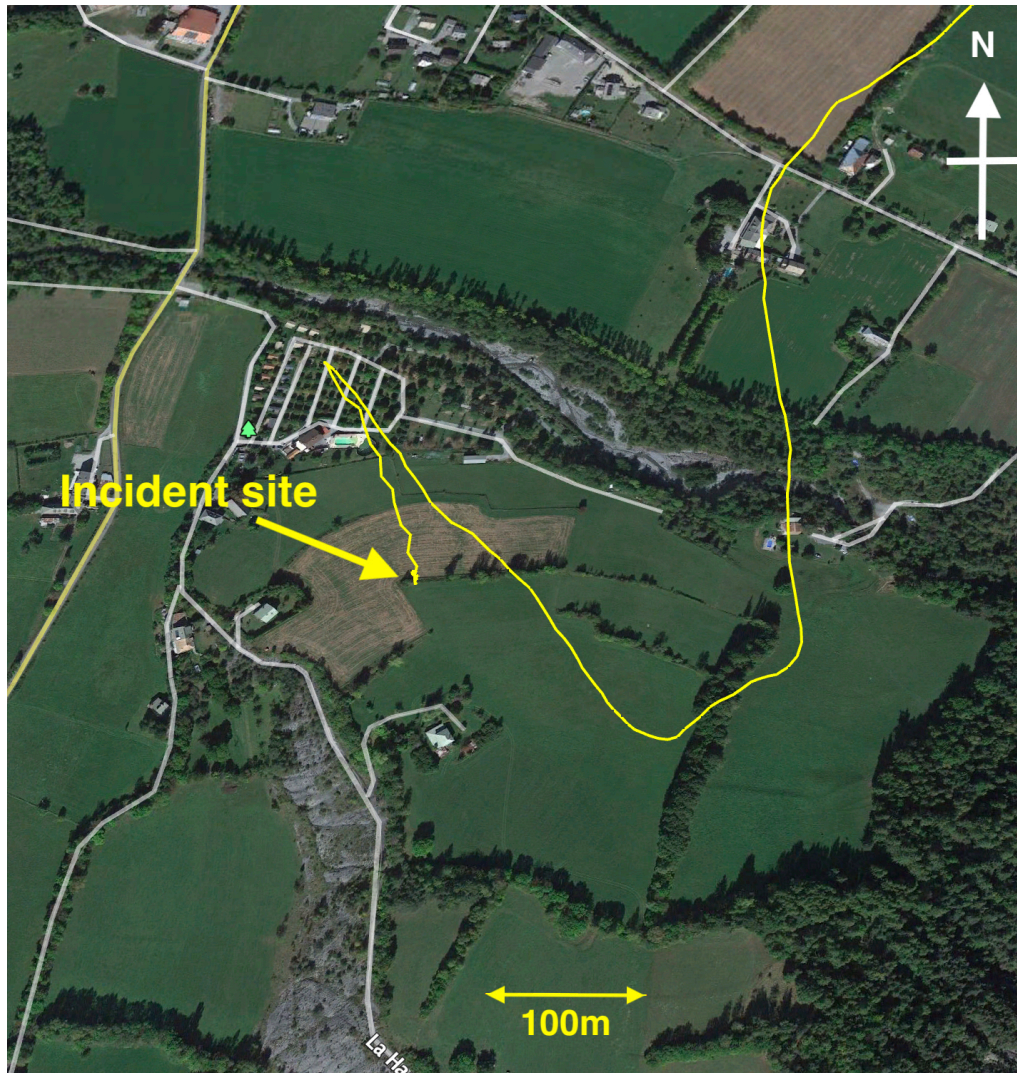


At 14:27 and at an altitude of approximately 1400m, Pilot A made a turn into wind in a north westerly direction towards Seyne. He continued in this direction for one minute before descending rapidly towards the ground. Analysis of the track data shows a rapidly accelerating descent with a very slight drift with the prevailing wind. The descent begins at an altitude of 1380m with the pilot having just flown through an area of gently rising air. His initial descent rate is 2m/s but within 3 seconds has increased to 7m/s and after a further 5 seconds has increased to 14m/s reaching a maximum before impact of 16m/s. The time from loss of control to impact with the ground is 17 seconds during which time the glider loses 200m of altitude.

Witness A described seeing Pilot A in a spiral with half of the wing collapsed. The extreme rate of descent recorded is consistent with a tight spiral dive of a type that can occur after a glider has suffered an asymmetric collapse.

The following Google Earth image shows a close up of the final minutes of the flight:

Google Earth image showing final stages of flight.



17 seconds and 200m of altitude would usually be considered ample time and space for a pilot to either recover from a glider collapse or to deploy his emergency parachute. The evidence suggests that Pilot A's glider suffered an asymmetric collapse and that this collapse was the reason for the rapid spiral descent. In the absence of further evidence, and without having access to the harness and emergency parachute, the investigation can not be certain as to why Pilot A was unable to recover the collapse and/or deploy his parachute. On the basis of the evidence available, the Investigation considers it likely that the rapidly building g force in the spiral dive led to Pilot A becoming disorientated and possibly blacking out, rendering him incapable of taking actions to recover his glider or throw his emergency parachute.

4.0 Findings

The Investigation determined from the available evidence that Pilot A's paraglider experienced an unexpected in-flight event, most likely an asymmetric collapse, that led to a rapid spiral descent. The subsequent impact led to the pilot sustaining fatal injuries.

5.0 Recommendations

The BHPA shall remind its members through Skywings magazine that, in the case of a collapse resulting in a rapid and uncontrolled spiral dive involving high g forces, they should deploy their emergency parachute immediately.