

Accident to the Lange Aviation ANTARES 20E⁽¹⁾ registered HB-2417

on 22 July 2019

at La Javie (Alpes-de-Haute-Provence)

⁽¹⁾ Self-launching glider with a built-in launch system consisting of an electric motor mounted on a retractable pylon installed on the upper section of the fuselage.

⁽²⁾ Unless otherwise stated, all times given in this report are in local time.

Time	Approximately 14:15 ⁽²⁾
Operator	Private
Type of flight	Cross country
Persons on board	Pilot
Consequences and damage	Pilot slightly injured, glider destroyed
This is a courtesy translation by the BEA of the Final Report on the Safety Investigation published in April 2020. As accurate as the translation may be, the original text in French is the work of reference.	

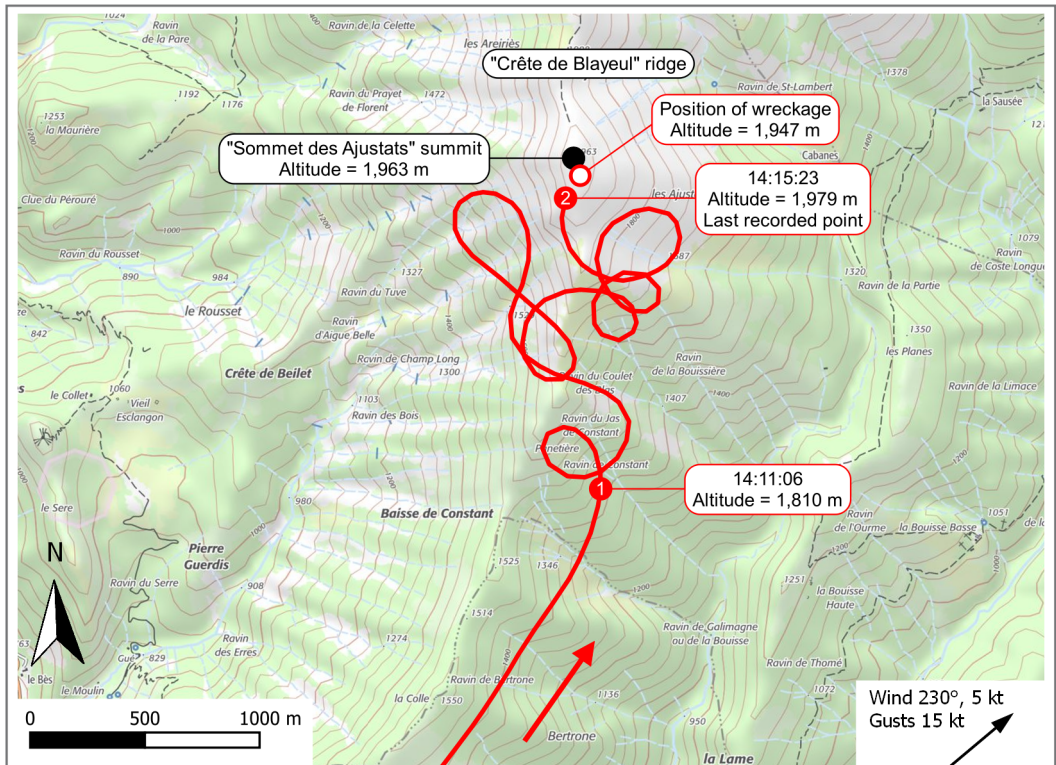
Collision with mountainous terrain

1 - HISTORY OF THE FLIGHT

Note: The following information is mainly based on the pilot's statement and data from an aviation application used by him.

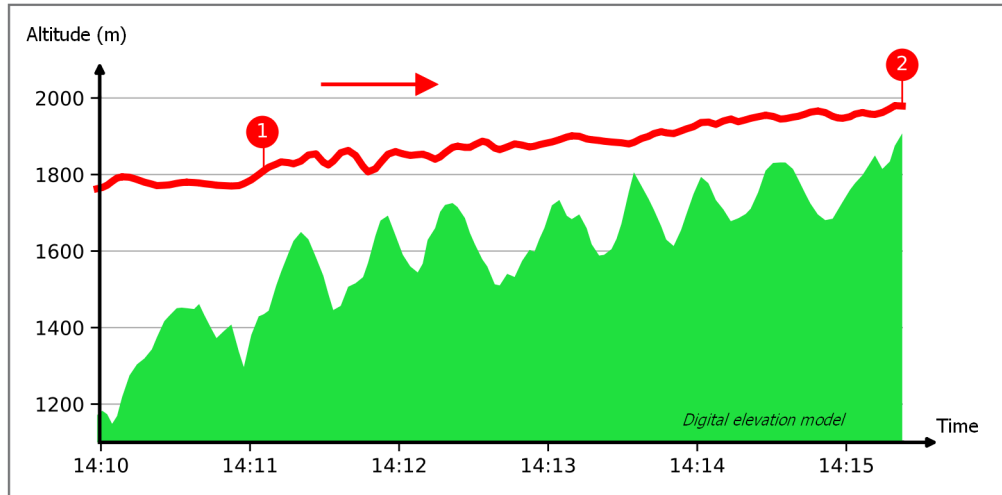
The pilot made a self-launch take-off from Vinon aerodrome (Var) at about 12:55. He followed the Durance valley, and then headed north-east, slope soaring and making use of the thermal uplifts.

At about 14:15, he started performing spirals above the Blayeuil mountain ridge. After a few spirals, he realised that he was too close to the terrain and that he could not make a turn to get clear. He managed to land on the east side of the terrain at an altitude of about 1,950 m.



Basemap source: IGN

Estimated wind at time of accident (Météo France)



— End of HB-2417's flight path based on iGlide lite application, from 14:10 to the last recorded point

The times are local time

Glider flight path

2 - ADDITIONAL INFORMATION

2.1 Site and wreckage

The wreckage was located on the eastern side of the Blayeul mountain ridge, near the Sommet des Ajustats summit, at an altitude of 1,947 m, a few metres below and facing the ridge.

The engine was retracted.

2.2 Meteorological information

The meteorological conditions at the accident site estimated by Météo France were as follows: wind 230°, 5 knots, with gusts of up to 15 knots, visibility greater than 10 km, clear skies with a few small cumulus, cloud base located at 3,600 m, temperature 23°C, moderate to fairly strong turbulence.

2.3 Read-out of data recordings

The glider was equipped with a FLARM, which was not recovered.

The pilot was using the “iGlide Lite” application on an iPod. This application was developed for glider pilots to help with flight preparation and monitoring navigation with the GNSS⁽³⁾. The iPod was connected to the FLARM, from which it received and recorded the data. The accident flight was recorded on the iPod.

The data from the iPod read-out was used to map the flight path, as seen in the figure above. At the last recorded point at 14:15, the glider was above the ridge at a height of approximately 70 m. The last few seconds of the flight were not recorded following the abrupt shutdown of the FLARM system upon impact.

2.4 Pilot Information

The pilot, who is the owner of the glider, held a glider pilot licence issued by the Swiss authorities. He had logged around 4,000 flight hours in a glider, about 3,000 hours of which were logged in the region.

2.5 Pilot’s statement

In the morning, the pilot had followed the safety briefing given by the AAVA’s⁽⁴⁾ chief pilot. He indicated that the aerological conditions encountered during the flight were not very favourable and that there were few thermals. He indicated that he had had to use the engine three times to continue flying.

He reported that, prior to the accident, he had been using the thermals over the Blayeul mountain ridge. He stated that, in hindsight, the glider’s airspeed was too low.

3 - CONCLUSIONS

The conclusions are established solely on the basis of the information that came to the knowledge of the BEA during the investigation. They are in no way intended to apportion blame or liability.

The pilot was performing spirals in the thermals in close proximity to the terrain and at low airspeed. While performing these manoeuvres, he probably found himself on the leeward side of the terrain and the glider suddenly lost altitude. As the glider was then below the ridge facing the terrain and flying at low speed, the pilot was unable to make a safe turn away. He therefore had to make an emergency landing on the slope and did not have time to deploy the landing gear.

⁽³⁾ Global Navigation Satellite System, incorporating various global systems, including the American GPS.

⁽⁴⁾ Association Aéronautique Verdon Alpilles (Verdon Alpilles Aeronautical Association).

It is recalled in the glider pilot's manual that spiralling in thermals must be performed at a sufficient height above the terrain - at least 150 to 200 m. Below this height, alternate figure-of-eight turns should be made, facing the wind, arriving on the slope tangentially by making a wide turn starting at a significant distance from the terrain.