



Accident to the Sauper Aviation J300 Joker
identified **63ACL**
on 31 December 2022
at Volvic (Puy-de-Dôme)

Time	Around 15:05 ¹
Operator	Private
Type of flight	Local
Persons on board	Pilot and passenger
Consequences and damage	Pilot severely injured, passenger fatally injured, microlight destroyed

This is a courtesy translation by the BEA of the Final Report on the Safety Investigation. As accurate as the translation may be, the original text in French is the work of reference.

Turbulence, loss of control, collision with ground

1 HISTORY OF THE FLIGHT

Note: the following information is principally based on the pilot's statement, radiocommunication recordings, and path data recorded by the pilot's tablet.

The pilot, accompanied by a passenger, took off from runway 09 of Sardon private microlight strip (Puy-de-Dôme) (see **Figure 1**, point **1**) at 14:40 for a local flight lasting approximately one hour. The pilot contacted the Clermont-Ferrand airport controller to say that he was heading towards the Chaîne des Puys volcano range. He headed south-west towards the town of Riom (point **2**) at an altitude of approximately 2,000 ft. He started the climb, still heading in a south-westerly direction, and flew over the town of Volvic (point **3**) at 2,500 ft. As he continued to climb towards 2,850 ft and approached the foothills of the Chaîne des Puys volcano range at a height of around 500 ft, the microlight entered an area of strong turbulence (point **4**). The pilot decided to descend, but a gust of wind destabilised the microlight, which entered into a sharp right turn. The pilot did not manage to regain control of the microlight, which collided with the ground in a field (point **5**).

¹ Except where otherwise indicated, the times in this report are in local time.

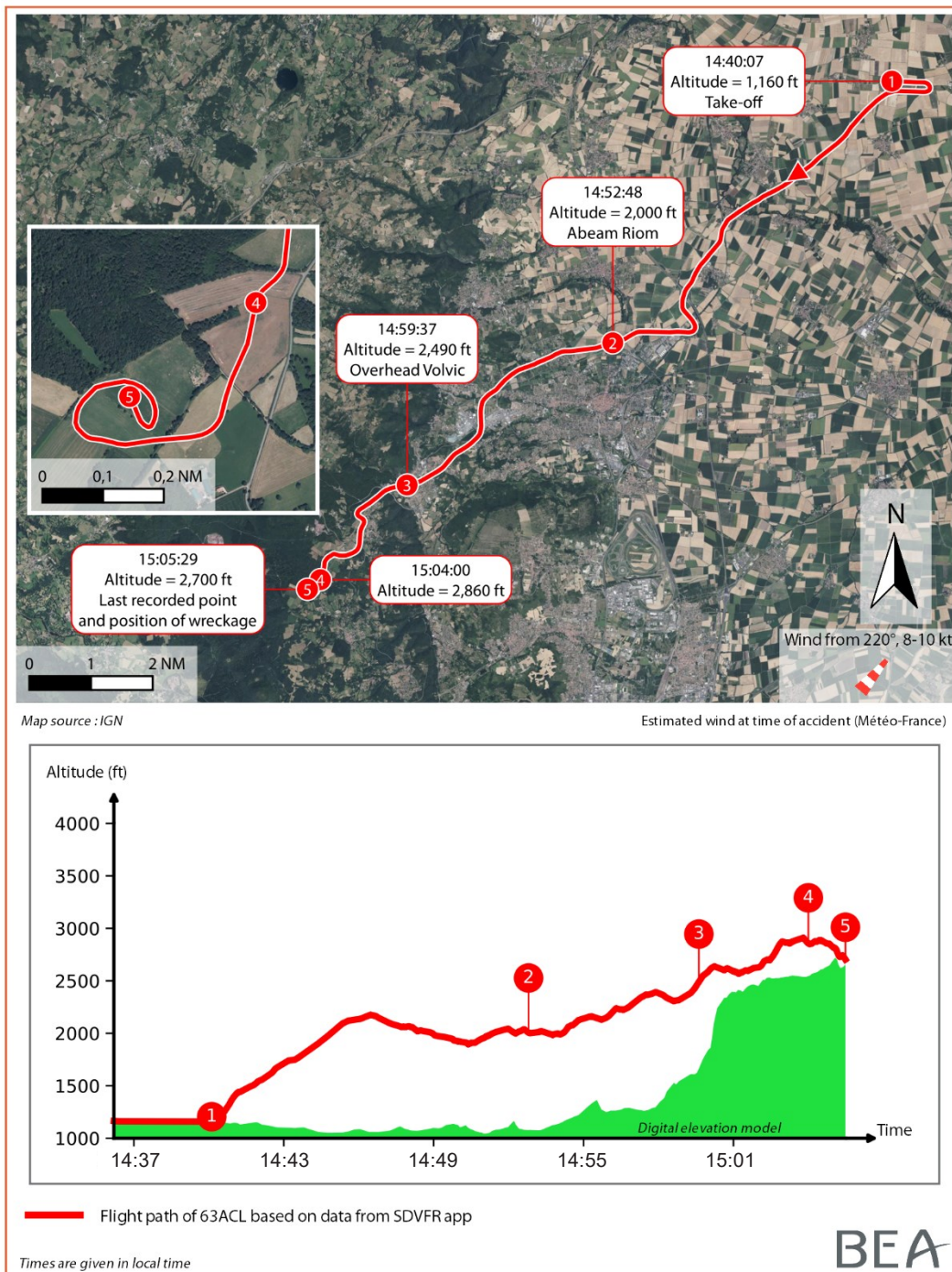


Figure 1: flight path and vertical profile

2 ADDITIONAL INFORMATION

2.1 Examination of site and wreckage

The accident site was located in a field near the hamlet of Égaules (Puy-de-Dôme), in the commune of Volvic, at an altitude of 800 m (2,600 ft).

The wreckage was facing south. The marks on the ground showed that the microlight, in a nose-down attitude, first hit the ground with its propeller, right main landing gear and right wing tip before making a U-turn and coming to a stop.

The microlight's nose was damaged, the main landing gear showed multiple failures, and the cockpit instrument panel and centre console were distorted. The right wing was distorted and the fuselage was ruptured behind the cockpit. The flight control linkages were continuous.

As the pilot did not report any anomalies concerning the engine or flight controls, these elements were not the subject of further examinations.

2.2 Microlight information

The microlight identified 63ACL was a J300 Joker-type fixed-wing microlight. This two-seater microlight with a high wing and conventional landing gear was equipped with a ROTAX 912 ULSFR engine and a wooden three-blade propeller, as well as an airframe parachute. The microlight was built in 1996.

The microlight's hour meter indicated 2,048 operating hours for the engine.

2.3 Meteorological conditions estimated by Météo-France

The Centre region was subject to a very fast south-westerly flow. The sky was hazy with high-altitude clouds.

The area located to the east of the Chaîne des Puys volcano range (in particular the accident site) was downwind of the mountain, which generated an area of disturbance from the ground up to 4,500 ft, with moderate turbulence which increased on getting closer to the ground and to the eastern slopes of the Chaîne des Puys volcano range.

The 12:00 UTC SIGWX chart showed, over a band stretching from the south-west to the north-east of France and including the Centre region, an area of moderate turbulence between the ground and FL040, and up to FL060 in mountainous regions.

The meteorological conditions estimated by Météo-France at the accident site and at the time of the accident were as follows:

- south-westerly (220°) wind of 8 to 10 kt at the surface, of 14 kt at 3,000 ft with gusts between 18 and 20 kt, and of 30 to 45 kt between FL050 and FL070;
- CAVOK;
- turbulence.

The METAR reports for 14:00 and 15:00 at Clermont-Ferrand airport indicated a wind from 180° of 16-17 kt with gusts from 180° of up to 25 kt.

2.4 Pilot's experience and statement

The 56-year-old pilot held a microlight private pilot licence issued in 2004, along with passenger carrying privileges. He held a paramotor microlight (class 1) rating issued in 2004, a flex-wing microlight (class 2) rating issued in 2014 and a fixed-wing microlight (class 3) rating issued in July 2019. He had logged 300 flight hours, 120 hours of which on this microlight, which he purchased in August 2018.

The pilot stated that the flight, initially scheduled for the previous day, had been postponed due to adverse weather conditions. On the day of the accident, he consulted the weather conditions on the Internet and noted that the Clermont-Ferrand area was subject to a southerly flow. He specified that he used this information to select the flight path and set the rhythm of the successive gains in altitude while flying along the Chaîne des Puys volcano range. He added that the flight took place normally until he was north of the commune of Égales. He stated that he entered the area of turbulence very suddenly and the flight controls quickly reached the limit of their effectiveness.

He decided to descend, thinking that the turbulence would be lighter. A gust of wind destabilised the microlight, which adopted a steep right bank angle. He added that he did not have time to regain control of the path before the collision with the ground.

3 CONCLUSIONS

The conclusions are solely based on the information which came to the knowledge of the BEA during the investigation.

Scenario

After flying overhead the town of Volvic, the pilot decided to continue his flight heading towards the Chaîne des Puys volcano range, which he approached from the east at a height of approximately 500 ft, although there was a south-westerly wind blowing in the region. This path resulted in him being downwind of the terrain and exposed to an area of disturbed and turbulent air. The pilot chose to descend, thinking that the turbulence would be lighter, when, in fact, it increased the closer he got to the ground. The microlight was destabilised by a gust of wind and entered into a sharp right turn. The pilot did not manage to regain control of the microlight before it collided with the ground.

Contributing factor

The pilot's incomplete picture of the aerological situation over the Chaîne des Puys volcano range may have contributed to the loss of control in flight. This picture was mainly based on the meteorological information for the Clermont-Ferrand region and resulted in the pilot being in an area of turbulence, located downwind of the terrain, which he had not been aware of.

The BEA investigations are conducted with the sole objective of improving aviation safety and are not intended to apportion blame or liabilities.