



Accident to the ROLLADEN SCHNEIDER - LS4
registered **F-COKE**
on 15 August 2022
at Aillon-le-jeune

| | |
|---|--|
| Time | Around 16:15 ¹ |
| Operator | Centre Savoyard de Vol à Voile Alpin (CSVVA) |
| Type of flight | Local |
| Persons on board | Pilot |
| Consequences and damage | Pilot injured, glider 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. | |

Collision with trees on a ridge, in slope soaring flight

1 HISTORY OF THE FLIGHT

Note: the following information is principally based on statements and the Open Glider Network (OGN) data.

The pilot carried out a winch take-off (see *Figure 1*, point ①) at around 15:45 from Chambéry – Challes-les-Eaux airport. After using an uplift and reaching an altitude of approximately 1,350 m, the pilot headed towards Peney mountain ②, but in the absence of uplifts, started back towards the airport. He managed to use a new uplift up to 1,600 m ④ before heading towards the west slopes of Bonvillard mountain ⑤ and tracking in slope soaring flight north. The pilot carried out a U-turn ⑥ and still in slope soaring flight headed south. He had just flown over the Col de la Verne pass (1,513 m) ⑦ when the glider's wing caught tree tops situated on the ridge close to the summit of Mont de la Croix (1 616 m). The destabilised glider collided with trees and then the ground. The pilot, slightly injured, was able to contact the flying club by telephone and help guide the rescue services to his position.

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

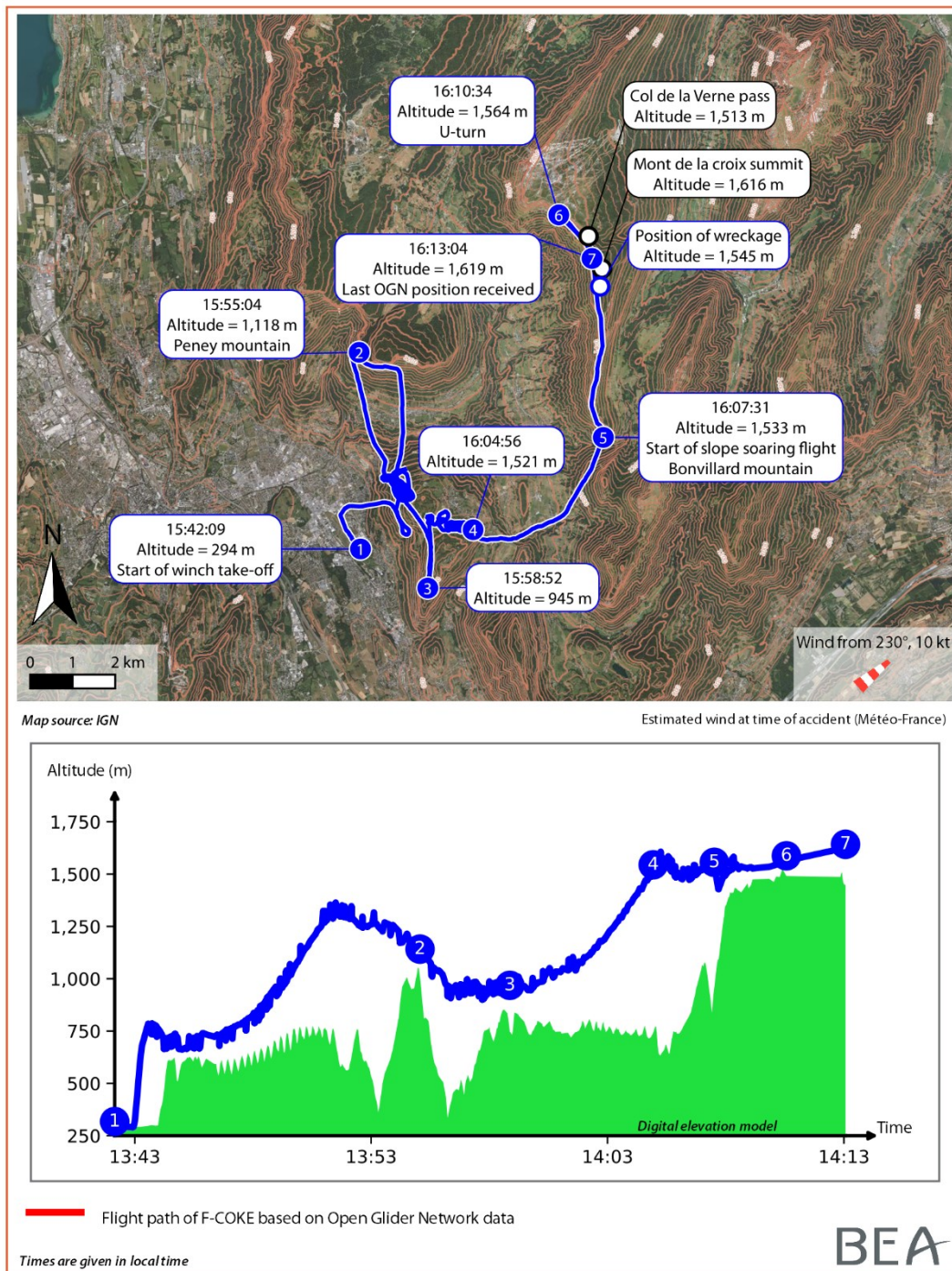


Figure 1: flight path followed by pilot (source: BEA)

2 ADDITIONAL INFORMATION

2.1 Site and wreckage

The accident site (at an altitude of approximately 1,600 m) was situated in a wooded area on a ridge south of the Col de la Verne pass in the Bauges massif, close to the Mont de la Croix summit.

Several tree trunks and branches were damaged when the glider went through the vegetation. The fuselage of the glider was nearly vertical in a 3/4 inverted position, the nose of the glider was damaged and in contact with the ground, the tail was bearing on the trees. The two wings and the tail fin were torn off during the collision with the trees. The glider canopy was broken.

All of the damage observed was the result of the collision with the vegetation and the ground.

2.2 Pilot's experience and statement

The 15-year-old pilot started his training² in February 2021. In July 2021, he obtained the "Pass"³ after having successfully completed the theoretical examination and was authorised to fly solo under the supervision of an instructor. He had totalled 240 flight hours including 200 hours as pilot-in-command. In 2022, the pilot carried out 52 flights including more than 20 lasting between 4 h and 7 h 30 min.

The pilot explained that it was his fourth flight of the afternoon. He indicated that due to unfavourable aerological conditions, the first three flights had only lasted 10 to 20 min. He added that he could no longer remember the circumstances of the accident and cannot explain why the glider's wing caught the trees.

2.3 General meteorological conditions

The meteorological conditions in the region at the time of the accident were the following: north-westerly wind of a mean value of 10 kt, temperature 26°C. In the time window of the accident, the forecast conditions indicated an uplift ceiling at around 2,100 m and uplifts of around 1.75 m/s maximum with stable air little conducive to the development of thermals.

2.4 Other information

The flying club, CSVVA, given the mountainous environment around the airport, had defined on a map of the region, the local flight limits and the minimum altitudes which pilots were to comply with at various key points. The pilots who do not hold a licence but do have a "Pass" must manoeuvre in the local flight volume defined on the map. The accident flight occurred in the lateral limits of the local area. However, the weakness of the uplifts encountered during the slope soaring flight along the west slopes of Montvillard mountain resulted in the pilot descending to the altitude floor of the local flight area defined by the club.

² Glider pilot training can start from the age of 13, solo flight is possible from the age of 14. To obtain a sailplane pilot licence, the pilot must be over the age of 16.

³ The "Pass" enables a pilot without a licence to fly solo without the supervision of an instructor. However, the pilot must fly within 30 km of the aerodrome where s/he is based.

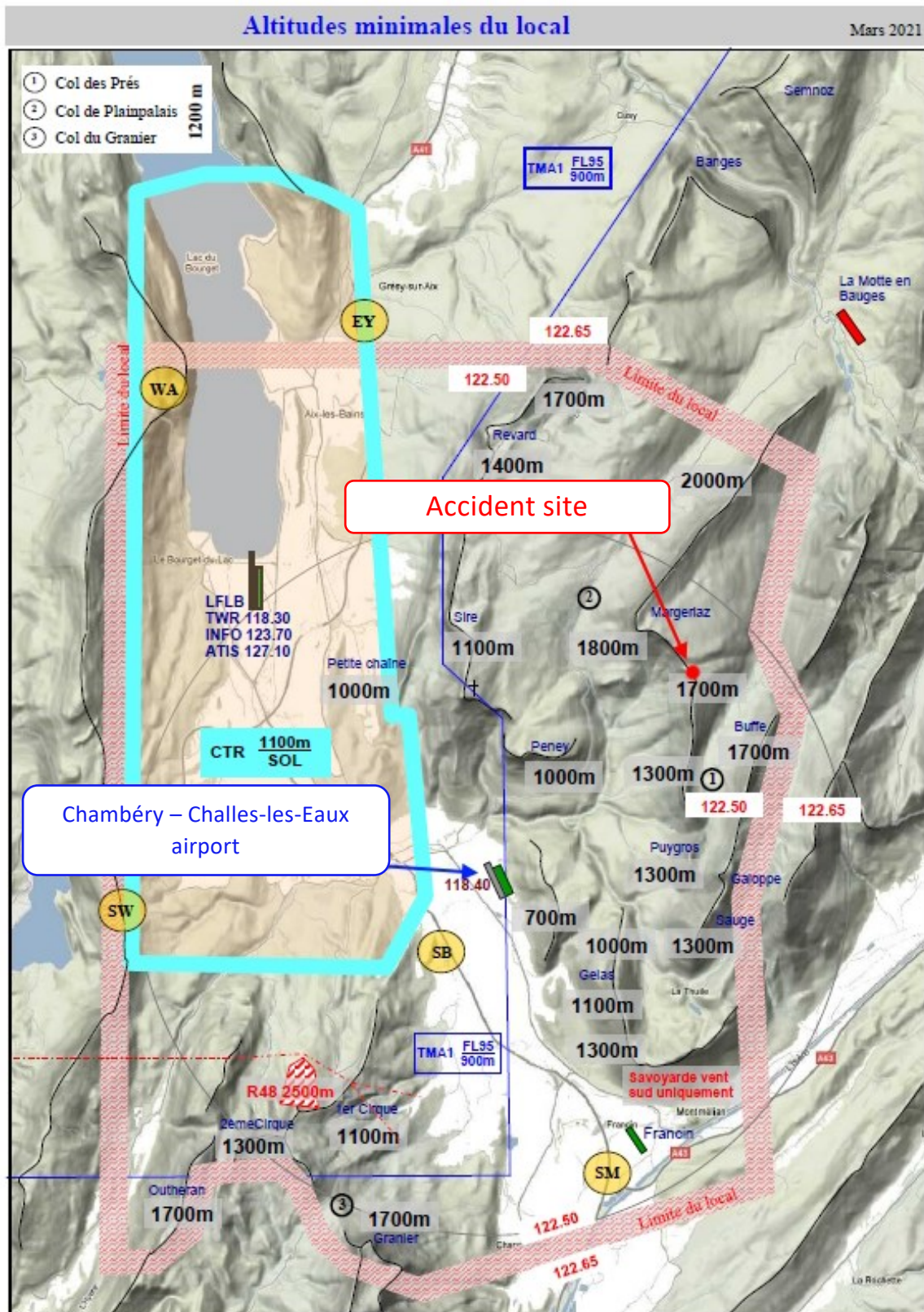


Figure 2: map showing “Minimum altitudes in local area” (source: CSVVA, annotated by BEA)

In the morning, the CSVVA produce a weather file based on data from various specialised web sites ([Meteofrance](#), [Meteociel](#), [Meteox](#), [Meteo-parapente](#), [Windy](#), [Skysight](#), etc.) to inform the pilots of the situation and forecast evolutions during the general briefing before the flights.

3 CONCLUSIONS

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

Scenario

The pilot, in slope soaring flight, was following the ridge southwards using the dynamic uplift created by the north-west wind on the west slopes of Bonvillard mountain. As the glider passed over the Col de Verne pass, at the altitude of the ridge and fairly close to the terrain, its wing caught the top of a tree, which destabilised the glider and led to it colliding with the vegetation on the ridge.

Contributing factor

The following factor may have contributed to the collision with the vegetation:

- Insufficient correction of the drift while flying along the slope which led to the pilot flying over the ridge at a very low height in an area potentially subject to an aerology which could be affected by the surrounding terrain.

Safety lessons

The *Safety in Mountain Flying manual*⁴ reminds pilots that:

- *“The evolution of the air masses in mountains is complex. Local phenomena, linked to the shapes of mountains, and to the interactions between winds, valley breezes, the nature of the ground [...], etc. are sometimes more important than the general meteorological situation. This results in situations that evolve unpredictably and sometimes for the worse.”*
- *“The pilot must always be aware of the flight path of his glider taking into account its speed, its angle of bank and the wind [...]. He must identify his drift and have a visual image of his trajectory when he modifies it.”*
- *“The distance to the slope varies according to the topography, the turbulence and the value of the lift.”*
- *“Follow the general direction of the mountain at an appropriate distance, without trying to follow every notch in the terrain.”*
- *“Apply an appropriate drift correction. Above the crest, the correct flight path allows the pilot to permanently see sideways, under the glider, the wind face of the slope.”*

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

⁴ Previously called [Complément technique au document Objectif Sécurité](#), co-published by the French Glider Federation (FFVP) – CNVV, 2012.