





(1) Unless otherwise stated, all times

given in this report are in local time.

Accident to the SCHLEICHER - ASK21 registered F-CLIN

on 31 May 2019 at Bonneville (Haute-Savoie)

Time	Around 17:55 ⁽¹⁾
Operator	Centre Savoyard de Vol à Voile Alpin
Type of flight	Instruction
Persons on board	Pilot in instruction situation
Consequences and damage	Glider severely damaged

This is a courtesy translation by the BEA of the Final Report on the Safety Investigation published in May 2020. As accurate as the translation may be, the original text in French is the work of reference.

Off-field landing, ground loop, solo instruction

1 - HISTORY OF THE FLIGHT

Note: the following information is based mainly on statements and FLARM data from the aircraft.

As part of his cross-country flight training, the pilot, who was alone onboard the glider, made a winch take-off at 13:55 • from Challes-les-Eaux aerodrome (Haute-Savoie) for a north-eastbound flight to Pointe d'Andey.

After the winch release at an altitude of 700 m, the glider gradually gained altitude and reached 2,600 m after Mount Margeriaz at 15:28 ②. The pilot then travelled towards Lake Annecy, flew over it and then made use of the uplift at the Dents de Lanfon, where the glider reached an altitude of 2,150 m, and then flew along the west side of the Massif du Parmelan.

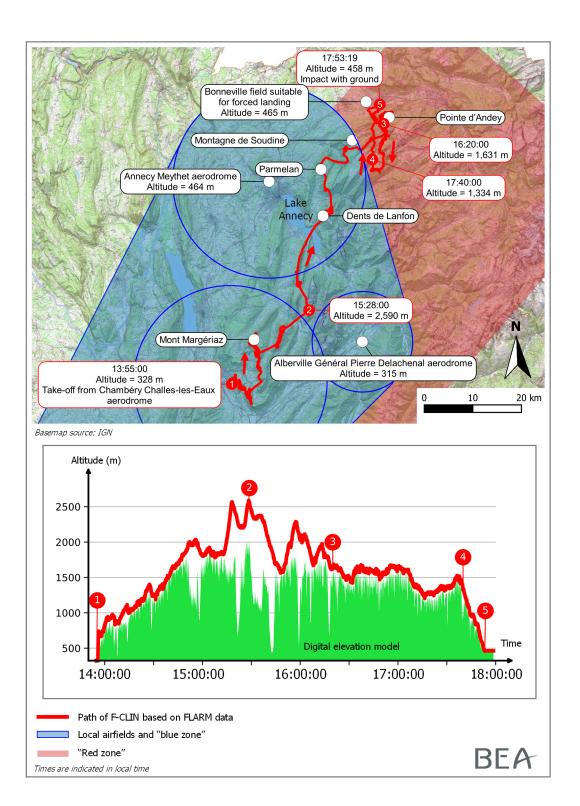
At 16:20 **3**, he reached Pointe d'Andey at an altitude of 1,631 metres. There, the pilot performed manoeuvres for about an hour without managing to gain altitude. He then tried to make use of the uplift further south.

At 17:40 • while the glider was at an altitude of 1,334 m, it flew up the valley to the north. The pilot tried once again to make use of the uplift along the north west slope of Pointe d'Andey, and then exited the valley at an altitude of about 600 m, i.e. at a height of less than 100 m.

The glider headed east, started a very low left turn to head into the wind and landed in a field of tall grass **6**. On touchdown, the right wing hit the ground and the glider entered a ground loop.









(2) Flight less than 30 km from the departure aerodrome (Regulation (EU) No 1178/2011).

2 - ADDITIONAL INFORMATION

2.1 Pilot information

The pilot, who had held a sailplane pilot licence (SPL) since 8 November 2018 with a "Winch" rating, a restriction to non-commercial activities, a prohibition on carrying passengers and a restriction to local flights⁽²⁾, was doing cross-country flight training with the Centre Savoyard de Vol à Voile Alpin located at Challes les-Eaux. He had logged 61 flight hours, all on F-CLIN. In 2019, he had logged 16 hours in dual flight training and 12 hours solo. In the two months preceding the accident, he had flown five dual and one solo cross-country training flights.

In order to lift the local flight restriction, a holder of a restricted SPL licence must perform cross-country flight training, including dual and solo cross-country flights, as well as training in landing at alternate aerodromes or in off-field landings. The pilot indicated that he had never received any off-field landing training.

2.2 Internal training instructions at the Centre Savoyard de Vol à Voile Alpin at Challes-Les-Eaux

The Centre has defined several zones for cross-country flights according to the difficulties they may present for the pilot: blue zone, red zone, "extended southern flight" zone, "extended northern and eastern flight" zone.

These zones, which can be consulted in an internal document and in the pilot training records, were established according to the following criteria:

alternate aerodromes, difficulties relating to fields suitable for a precautionary
landing;
orientation and navigation difficulties;
complexity of air spaces;
high risk of significant sink rates (wind, thunderstorms).

Flights in each zone are cleared for pilots according to their experience. For example, a pilot can access the red zone if he has successfully completed three circuits of at least 150 km in the blue zone, and has flown both north and south in dual flight training. He can also access the red zone with the authorisation of a club instructor.

The chief pilot of the flying club explained that the cross-country flight zones were established a few years previously and that they may have come to be misinterpreted due to a lack of communication and recent dissemination.

He had overseen most of the pilot's training and indicated that the pilot's level of experience was not sufficient to allow him to fly outside the blue zone.

The pilot indicated that he was not aware of the existence of the cross-country flight zones prior to the accident.



2.3 Meteorological information

The meteorological conditions in the geographical area at the time of the accident were as follows:

- □ wind north-westerly, 6 to 12 kt, gusts of 10 to 15 kt locally;
- ☐ clear sky, a few scattered cumulus clouds between 1,000 m and 1,500 m;
- □ visibility greater than 10 km;
- □ low-intensity uplifts and downdraughts.

The chief pilot and the runway manager indicated that, at the time of the accident, the aerological conditions were compatible with gliding and conducive to slope soaring, primarily below 3,000 m. In their opinion, the conditions could have enabled the pilot to gain more altitude during his search for uplift before reaching Pointe d'Andey.

2.4 Statements

2.4.1 Pilot statement

The pilot attended the daily briefing. He then asked the runway manager for clearance to fly towards the Massif du Parmelan and, if possible, Pointe d'Andey. The latter signed the clearance and gave him the route to follow with the altitudes to be complied with and the different points where uplift could be expected.

The pilot indicated that he thought he had sufficient altitude to Pointe d'Andey because his altitude was higher than in his previous instruction flight on 22 May in the same area. He therefore decided to continue to Pointe d'Andey. He indicated that he was aware that he was no longer flying locally with respect to Annecy Meythet aerodrome but was confident in his ability to regain altitude. He tried to regain altitude for 1 h 30 min in the Pointe d'Andey area, without success. According to him, the absence of a westerly wind explains why he did not manage to gain altitude.

The pilot indicated that he was focused on climbing. It was for this reason that he made the late decision to exit the valley to undertake an off-field landing. He therefore did not have time to prepare for the landing. He indicated that, in the last turn, the left wing brushed the grass. He straightened the glider but the right wing hit the ground, the glider spun round and then came to rest.

He stated that he had communicated his position every half-hour over the mountain radio frequency⁽³⁾ during the entire flight, as well as over the radio frequency of Chambéry Challes-Les-Eaux aerodrome during the last hour of the flight. He indicated that he had received no response to his communications.

He was of the opinion that instructors had taken him into flight situations with low safety margins without necessarily emphasising the fact that a pilot in a training situation should not be alone in such situations. This may explain his high level of confidence during the first part of the flight.

⁽³⁾ 122.5.



2.4.2 Statement of the runway manager

The runway manager is an instructor at the flying club. He had never flown with the pilot. He conducted the daily briefing and reported on the prevailing meteorological conditions that day and the fields identified and listed by the club as suitable for a precautionary landing.

He indicated that the presence of a large number of pilots on the day of the accident had created a significant workload for him.

When the pilot came to talk to him about his day's flight, he was not able to consult the club's GESSASO rating and training management software, on which the pilot's training record is stored. He asked him about his skills and experience of cross-country flying in the region both in dual instruction and solo flights.

The pilot initially requested a destination that the runway manager refused based on the pilot's experience. After some discussion, the runway manager signed a clearance to fly to Pointe d'Andey, which would be the northern limit of the flight area. He was convinced that the pilot would not go beyond the Massif du Parmelan. He had reminded him to stay locally around Annecy Meythet aerodrome.

2.4.3 Statement by a club instructor

An instructor, who had only taken one flight with the pilot, indicated that this flight had taken place in the same area as the accident about a month before. On that day, there was a ceiling at 2,000 m and weak uplift, which was difficult to use. He indicated that he had decided to continue the flight despite these unfavourable conditions by taking back the control of the aircraft so that he could introduce the pilot to a new area. He explained that this may have led the pilot to believe that it was possible to continue the flight even in unfavourable conditions.

3 - CONCLUSIONS

The conclusions are solely based on the information which came to the knowledge of the BEA during the investigation. They are not intended to apportion blame or liability.

Scenario

While in cross-country flight training, the pilot expressed a desire to conduct a solo instruction flight in outlying areas that are considered more demanding. After some discussion, the runway manager cleared him to fly in an area where, according to the club's internal training directives, he did not have sufficient experience. However, he emphasised the importance of staying locally with respect to Annecy Meythet aerodrome and was convinced that the student would not go to the farthest authorised destination.

Although aware that he was leaving the local area of the aerodrome, the pilot continued his flight to the final destination. He then experienced difficulties maintaining and regaining altitude. As he was focused on the search for uplift, he made a late decision to abort the flight. His low altitude forced him to land without performing any reconnaissance of the field and its surroundings.



Contributing factors

The following factors contributed to the pilot undertaking a solo instruction flight in an area considered to be too demanding in light of his experience:

- ☐ Ineffective dissemination of information within the flying club concerning the level of difficulty of the cross-country flight zones, which meant that the pilot was not aware of the restrictions established by the club and the runway manager did not take them into account.
- ☐ A flight clearance issued by the runway manager, who was unaware of the pilot's experience and was unable to consult his training record due in part to his heavy workload at the time of flight preparation.

The following factors contributed to the pilot's decision to continue the flight beyond the local area of Annecy Meythet aerodrome:

□ Overconfidence due to having performed training flights under less favourable conditions, which led him to believe that these flights had been performed with sufficient safety margins.

This decision forced him to make an off-field landing in the absence of uplift. There was a field listed by the club as suitable for a precautionary landing in the area, but the pilot, who was focused on his altitude, did not take this into consideration.

The following factors contributed to the damage sustained by the glider during the off-field landing:

- ☐ The belated decision to abort the flight.
- ☐ The lack of reconnaissance and preparation for the off-field landing.

Post-accident measures

Following the accident, the flying club issued a reminder to instructors and students about the different flight zones and improved the distribution of the internal document defining them.

Safety lessons

This accident serves as a reminder of the importance for pilots with low experience or those undergoing training of always being able to reach an aerodrome at any time during cross-country flights.