



**Accident** to the CAPRONI Calif A-21S  
registered **F-CALI**  
on Friday 26 July 2024  
at Aspres-sur-Buëch

Time	14:55 <sup>1</sup>
Operator	Private
Type of flight	Local
Persons on board	Pilot and passenger
Consequences and damage	Pilot and passenger 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.	

**Cable release by the glider pilot during a towed take-off,  
attempted U-turn, collision with an obstacle then  
the ground**

**1 HISTORY OF THE FLIGHT**

*Note: the following information is principally based on statements and FLARM data from the glider.*

The glider pilot carried out a towed take-off from runway 18<sup>2</sup> at Aspres-sur-Buëch aerodrome. At a height of approximately 100 ft, in initial climb and approaching the end of the runway, the tug pilot observed an irregular operation of the engine. He immediately adopted a nose-down attitude before switching the fuel selector to the opposite tank. Following this tank change, the engine delivered rated power again. The tug pilot adopted a climb attitude and realised that the glider pilot had released the cable.

After releasing the cable, the glider pilot initiated a U-turn to come back to the runway. During this manoeuvre at low height, the right wing tip struck the fence of a photovoltaic array field bordering the aerodrome. The glider collided with a row of photovoltaic panels and came to a stop.

<sup>1</sup> Except where otherwise indicated, the times in this report are in local time.

<sup>2</sup> Unpaved runway measuring 895 m x 100 m, downward slope of 1.7%.

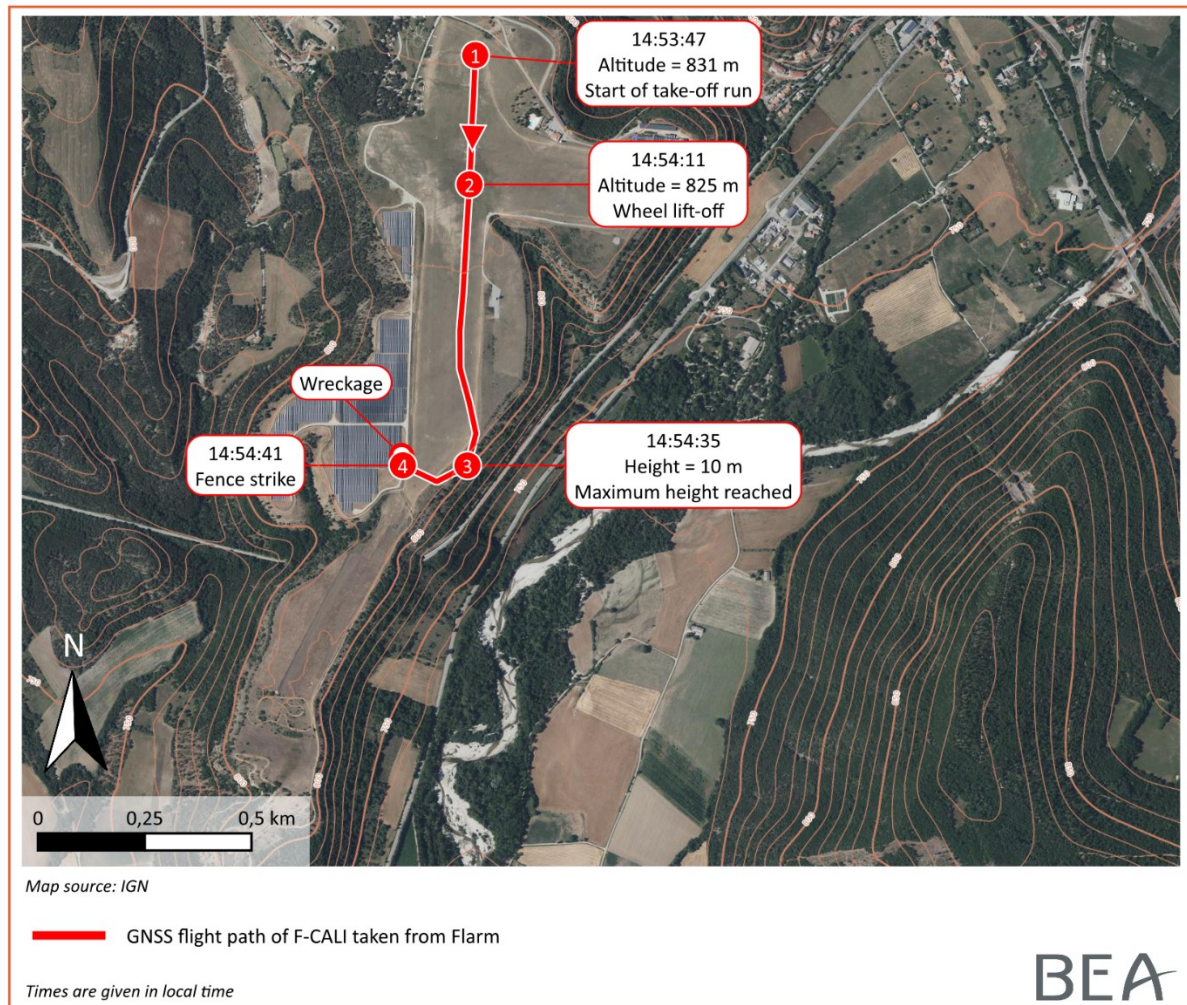


Figure 1: glider's path

## 2 ADDITIONAL INFORMATION

### 2.1 Site and wreckage

The accident site was located in a photovoltaic array field adjoining the aerodrome to the west of runway 18/36. Examination of the site and the wreckage showed that the glider's right wing came into contact with the field fence, which destabilised the glider. The latter then hit the ground, slid and embedded itself in the first row of photovoltaic panels.





*Figure 2: overview of the accident site (Source: BEA)*

The Aspres-sur-Buëch aerodrome is located on a plateau and its reference altitude is 830 m. Runway 18 slopes downhill, with a 15 m height difference between the start and the end of the runway. The valley is located in the extended centreline of the runway.

## **2.2 Meteorological information**

At the time of the accident, the weather conditions were as follows: slight southerly wind, CAVOK, temperature 30°C, QNH 1,013 hPa.

## **2.3 Pilot information**

The 66-year-old pilot held a glider pilot licence issued in 2008. He had logged 700 flight hours. He was the owner of the glider and carried out maintenance on it. He did not fly from October 2020 to January 2024. On 5 and 8 July 2024, he made two resumption flights with an instructor, lasting 6 h and 40 min and 5 h and 40 min, respectively. On 14 July, he made a proficiency check flight lasting 1 h and 37 min with an examiner. He then made three flights as pilot-in-command for a total of eight flight hours, the last flight of which was made the day before the accident.

## 2.4 Statements

### 2.4.1 Tug pilot

The tug<sup>3</sup> pilot explained that he had already completed three tows before. When he arrived to tow F-CALI, its pilot being not ready, he stopped the engine. After a few minutes, as the glider pilot was ready, he started up the engine and had to wait with the engine running for about 10 minutes due to numerous movements at the aerodrome. He explained that at that point, the right tank was selected<sup>4</sup>, that he estimated he had 30 minutes of fuel endurance<sup>5</sup>, i.e. about 20 l, and that this would probably be the last take-off on this tank before switching to the left tank, which, he thought, contained around 40 l.

He explained that he did not detect any anomaly during engine power-up and the take-off run. He added that during the climb towards 100 ft, he experienced engine spluttering, and that he applied the procedure, which consists in adopting a nose-down attitude to maintain speed and in switching tanks. He considered that these actions lasted between two and four seconds, before the engine regained rated speed. He realised that in the meantime, the glider pilot had released the cable. He cleared the axis and decided to come back to land<sup>6</sup> at the aerodrome on the opposite QFU. He added that he did not see the glider's manoeuvres.

### 2.4.2 Glider pilot

The glider pilot stated that his glider<sup>7</sup> was based at Serres - La Bâtie-Montsaléon aerodrome until 2020, and that in March 2024, he then changed base to Aspres-sur-Buëch aerodrome.

He reported that once he was lined up with the cable taut, he gave the towing signal over the radio. During the take-off, the speed was correct and he maintained correct position behind the tug. He specified that during the climb, he saw the cable slacken and the tug initiating the descent before going out of his sight. He adopted a slightly nose-down attitude to regain sight of the tug and found that the cable was still slack. He specified that he remembered an accident occurred at Bagnères-de-Luchon in 2020<sup>8</sup>, during which the glider, too high during the take-off, destabilised the tug, which collided with the ground. He decided to release the cable. He announced this verbally to his passenger, but could not remember whether he also pressed the push-to-talk switch to inform the tug pilot. He decided to try to land on the opposite QFU. He specified that, being seated in the right seat, he turned right to have sight of the ground. He reported that he did not check his altitude or speed before starting the turn. He added that during the turn, he thought that he had passed the photovoltaic array field, which was no longer visible to him, and that he could land abeam the runway.

He reported that when he based his glider at Aspres-sur-Buëch, he did not receive a safety briefing on the aerodrome. A few days before the accident, he considered going round the aerodrome to identify the various fields for an off-field landing in the vicinity, but did not do so.

He added that he had knowledge of the "cable break" procedure, which consists in continuing on the axis towards an accessible field. However, that day, he thought that he was high enough to land on the opposite QFU.

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<sup>3</sup> Rallye 180 T registered F-BLIT.

<sup>4</sup> Three-position fuel selector (closed, left, right).

<sup>5</sup> The average fuel consumption en route is 40 l/h.

<sup>6</sup> The tug pilot landed a few minutes after the glider's accident.

<sup>7</sup> Two-seat side-by-side glider.

<sup>8</sup> [Accident to F-HKZZ and F-CDRM on 2 September 2020 at Bagnères-de-Luchon.](#)

### 2.4.3 President of the gliding centre

The president of the gliding centre stated that he was responsible for ground operations as regards gliding activity. He confirmed that due to heavy traffic at the aerodrome, there was a hold of approximately 10 min after starting up the tug aeroplane. He watched the take-off and, on hearing the engine spluttering, gave the order to reject take-off over the radio. He observed that the glider pilot was initiating a right turn with a steep bank angle to come back to the runway. He saw the glider's right wing snag the perimeter fence of the photovoltaic array field and collide with the photovoltaic panels.

He added that in the days leading up to the accident, he spoke to the glider pilot and mentioned the case of a towing problem (untimely release, cable break, etc.) during the initial climb. Since the aerodrome is on a plateau, they identified several accessible fields, although not listed, located below the aerodrome and more or less on the take-off axis.

## 3 CONCLUSIONS

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

### Scenario

The tug pilot thought he had enough fuel in the selected tank to make the last flight of the series of tows. He did not switch fuel tanks despite a lengthy hold on the ground. During the initial climb, when the tug approached the end of the runway and the edge of the plateau, the pilot observed an irregular operation of the engine. He adopted a nose-down attitude to maintain speed and switched fuel tanks. Observing that the cable was slackening and that the aeroplane was descending, the glider pilot released the cable. As the engine had regained rated power and resumed the climb, the tug pilot realised that the glider pilot had released the cable. After releasing the cable, the glider pilot estimated, without checking his altimeter, that he was high enough to attempt a U-turn and come back to land at the aerodrome on the opposite QFU. During the right turn, the glider's wing struck the perimeter fence of a photovoltaic array field bordering the aerodrome. The glider's path ended in this field.

### Contributing factors

The following factor may have contributed to the reduction in engine power which occurred to the tug during the initial climb:

- overestimation by the pilot of the amount of fuel available in the selected tank.

The following factors may have contributed to the glider pilot's decision to try to land on the opposite QFU:

- an incorrect estimation of the height in relation to the aerodrome.  
The towing incident, which led the glider pilot to decide to release the cable, occurred while the glider was at the edge of the plateau where the aerodrome is located. As a consequence, the pilot had sight of the valley below, which may have biased his estimation of the height at which he actually was above the aerodrome.
- lack of knowledge of alternative solutions.  
The pilot had knowledge of the presence of fields for an off-field landing in the immediate vicinity of the aerodrome. In the absence of reference to visual landmarks or a safety briefing supplemented by an aerial view of the surrounding area with the exact

position of these fields, the pilot was unable to identify them immediately on releasing the cable and to take them into account in his decision-making process during this emergency situation.

## Safety lessons

### Incident during take-off

A cable break or untimely release shortly after take-off were identified by the FFVP<sup>9</sup> as critical situations and are the subject of a dedicated procedure described in the glider pilot's manual and repeated in information and safety bulletins.

Depending on the height at which the incident occurs, pilots will have to adapt their flight to reach an area suitable for landing (land straight ahead, select a field for an off-field landing located more or less on the axis in the vicinity, or consider a U-turn and land on the opposite QFU, if the glider is high enough).

However, depending on the height, this choice is constrained by the flight time available, which is generally comprised between a few seconds and a few tens of seconds. The reference height values, the options available and the possible retrieval areas must not only be known by the pilot before undertaking the flight, but also recalled during the pre-take-off briefing in order to optimise reaction and decision-making time in an emergency situation.

Moreover, direct observation of these areas during take-offs also enables pilots to update the information they have on them and to detect any changes that could make some of these areas temporarily unsuitable (e.g. harvested wheat field with bales of straw not collected, height of crops in a field, flooded field, etc.), therefore improving the pilots' analysis and decision-making capacities in the event of a precautionary landing.

### Distribution of safety instructions and special instructions

The methods used to distribute safety instructions - in particular, instructions identifying the fields for an off-field landing in the vicinity of an aerodrome - vary depending on the structures managing the gliding activity.

The method used may be simply verbal during a briefing, based on individual documents such as an information booklet, included in a safety briefing, or be the subject of a ground reconnaissance by the pilot as part of a personal initiative.

A visual resource (aerial view, map, etc.), displayed and accessible - indicating in particular the position of suitable fields for an off-field landing in the vicinity of an aerodrome - in addition to a safety (or introductory) briefing for new pilots arriving at an aerodrome, could contribute to effectively improving flight safety. In addition, any pilot at the aerodrome could refer to it if they have any doubts or questions, in particular after a period without flying. This type of resource (provided that it is kept up to date) offers two advantages: it keeps all pilots at the same level of information, and allows local managers to have control over its content.

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

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<sup>9</sup> Fédération Française de Vol en Planeur (French Gliding Federation).