



Accident to the DG500 ELAN TRAINER registered F-CILE on 7 September 2021 at Saint-Sulpice-des-Landes

Time	Around 15:05 ¹
Operator	Planeurs d'Ille-et-Vilaine
Type of flight	Instruction
Persons on board	Student pilot and pilot supervised by an instructor trainer
Consequences and damage	Glider substantially damaged

This is a courtesy translation by the BEA of the Final Report on the Safety Investigation published in June 2022. As accurate as the translation may be, the original text in French is the work of reference.

Wing tilt during winch take-off run, release of cable, collision with an obstacle on the ground, in instructions

1 HISTORY OF THE FLIGHT

Note: the following information is principally based on statements

The pilot, supervised by an instructor trainer in the scope of a glider flight instructor (FI(S)) training course, and the student-pilot were ready for the winch take-off from grass runway 09. During the take-off run, the supervisor, acting as a wing runner, held the left wing of the glider horizontal by running several metres before releasing it. Approximately 10 m further on, the left wing touched the ground and the glider started to turn left. The glider speed was approximately 60 km/h. The pilot, who was at the controls, immediately released the cable using the release handle that he had already been holding. He also applied inputs on the stick and the pedals to the right, braked and extended the air brakes. The glider's path continued to deviate to the left and the landing gear wheel skidded on the runway. The glider exited the left side of the runway. The pilot was unable to prevent the left wing from striking a post of the aerodrome's perimeter fence. The glider came to a stop alongside the fence around 70 m beyond the place where the cable was released and 110 m from the departure area (see Figure 1).

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



Source: Géoportail

Figure 1: glider departure area for take-off and position of fence post struck

The leading edge of the left wing was damaged (see Figure 2).



Figure 2: damage on the leading edge of the left wing

2 ADDITIONAL INFORMATION

2.1 Pilot information

2.1.1 Pilot supervised by instructor trainer

The 58-year-old pilot held a glider pilot licence (SPL) issued in 2014 along with towed take-off and winch take-off ratings. He had logged approximately 1,000 flight hours, including 845 hours as pilot-in-command and 38 hours flown in the glider flight instructor (FI(S)) training course. Over the previous fortnight, he had flown 5 hours and 45 minutes with F-CILE, which included 31 winch take-offs.

He was seated in the rear seat during the accident flight.

2.1.2 Student pilot

The student pilot had begun his training for his glider pilot licence (SPL) in June 2020 and had logged approximately 20 flight hours, all of which in dual control, which included 47 winch take-offs.

He was seated in the front seat during the accident flight.

2.1.3 Instructor trainer, pilot supervisor

The instructor trainer was qualified by an Approved Training Organisation (ATO), the CNVV (the French Gliding Federation) authorising him to be an instructor trainer. He held a glider pilot licence (SPL), a glider flight instructor rating (FI(S)) and a (FE(S)) glider flight examiner rating (FE(S)).

He stated that he had made two aerodrome circuits in a Twin Astir II glider with the pilot prior to taking out the DG500 registered F-CILE for the pilot and the student pilot. He explained that at the end of the run, he had started to feel that the left wing had had a tendency to drop. Around 10 m after its release, the wing had touched the ground.

2.2 Meteorological information

The meteorological conditions estimated at the time of the accident were as follows:

- Wind from 110° of 12 to 20 km/h, gusts up to 30 km/h, CAVOK.

2.3 Aerodrome information

The aerodrome is reserved for gliders and home-based towing aircraft. It has a grass runway measuring 772 m long and 80 m wide. The take-off distance available (TODA) on runway 09 (QFU 093°) is 722 m. A fence runs along the north section of the aerodrome, 17 m from the left edge of runway 09.

2.4 Flight context

Flights with a pilot in FI(S) training and a student pilot were formerly possible. During these flights, it was expected that the pilot in FI(S) training would be at the glider controls.

With the implementation of the European Regulation pertaining to glider pilot licences², the CNVV no longer undertakes such flights and opts for flights with pilot in FI(S) training/instructor trainer pairs. The CNVV updated its training manual accordingly in January 2021 to take this consideration into account in particular. The instructor trainer supervising the pilot of F-CILE did not have knowledge of this, and it is likely that this could be explained by the CNVV not providing a standardization session in 2021 for instructor trainers due to organisation difficulties associated with the COVID-19 pandemic. However, as the pilot in FI(S) training had immediately acted on the cable release control, this context did not contribute to the accident.

² Regulation (EU) 2020/358 of 4 March 2020 amending Implementing Regulation (EU) 2018/1976 ([Version in force on the day of the accident](#)).

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

During the winch take-off run, the left wing touched the ground, around 10 m after the wing runner released it, probably due to insufficient input on the ailerons to counter the effect of a gust of wind blowing from the right. The pilot in FI(S) training, who already had his hand on the release handle, immediately released the cable. This action prevented the glider from entering a ground loop or cartwheel. The glider's path deviated to the left and the glider veered off the runway. Due to the speed reached during the take-off run, as well as the proximity to a fence, the pilot's actions to counter the path deviation to the left did not allow him to prevent the left wing from striking this fence.

Safety lessons

Wing touching the ground during glider take-off

One of the risks identified during the take-off run, whether it is a towed or winch take-off, is the glider wing tilting until it touches the ground, which will cause a violent ground loop or a risk of turning upside down, commonly known as a cartwheel.

The pilot's grasp on the cable release handle just before the cable becomes taut, whether it be a towed or winch take-off, facilitates the abortion of the take-off as soon as the pilot detects that they cannot hold the wings horizontal in a very dynamic and short flight phase. This recommendation is now indicated at the bottom of the reverse side of the "CRIS" pre-take-off vital actions checklist, which has been standardized at FFVP club level³.

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

³ For more information: [BEA Safety Lessons 2020 - Gliders \(3. Prevention of cartwheels\)](#).