





# **Serious incident** between the CENTRAIR SNC34C Alliance and the Sportine Aviacija LAK19 registered F-CJBH and F-CHNP

on 27 May 2020 at Parentignat (Puy de Dôme)

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

Time	Around 15:20 <sup>(1)</sup>
Operator	Aéroclub Pierre Herbaud
Type of flight	Local
Persons on board	F-CJBH: instructor and trainee F-CHNP: pilot
Consequences and damage	Gliders slightly damaged
This is a courtesy translation by the BEA of the Final Report on the Safety Investigation	

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

# Midair collision between two gliders using uplift

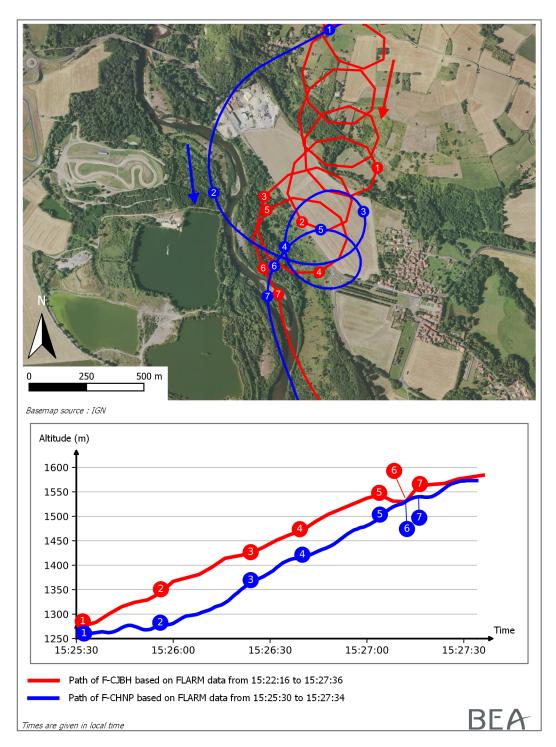
### 1 - HISTORY OF THE FLIGHT

Note: the following information is principally based on statements and FLARM data from both gliders.

The trainee, accompanied by an instructor on board the glider registered F-CJBH, as well as the pilot of the glider registered F-CHNP were using the uplifts near Issoire Le Broc aerodrome (Puy de Dôme). Having found a very favourable uplift, the instructor used the radio to invite the pilot of F-CHNP, who was at a lower altitude, to join them. The latter entered the uplift and made spirals to the left. After the second turn, the instructor saw that the paths were converging and made a sudden manoeuvre to the right to exit the turn. The glider paths crossed and the right wing tip of F-CHNP came into contact with the underside of the F-CJBH fuselage. Both pilots observed that the winglet of the F-CHNP's right wing was missing. The controls of both gliders remained functional and the pilots landed shortly after on runway 36 at Issoire Le Broc aerodrome. On the ground, the instructor on board F-CJBH noticed that the skin of the fuselage level with the cockpit was cut over approximately 10 cm.







Part of the paths based on the FLARMs of both gliders

## 2 - ADDITIONAL INFORMATION

# 2.1 Pilot experience

The instructor on board the glider registered F-CJBH held a SPL glider pilot licence and the glider instructor rating. He had logged 4,550 flight hours, 4,400 of which as pilot-incommand including 3,900 hours as an instructor.

The pilot of the glider registered F-CHNP held a SPL glider pilot licence. He had logged 1,200 flight hours, 1,000 of which as pilot-in-command.



### 2.2 Statements

### 2.2.1 Instructor on board F-CJBH

The instructor stated that he had seen F-CHNP arriving in the uplift and had then continued with the instruction session. He specified that he had not heard the FLARM warning when the two paths started converging. With F-CHNP already having a steep bank, the instructor stated that he had attempted a rapid manoeuvre to the right coming out of the turn. He saw the silhouette of F-CHNP disappear under his glider and heard a loud noise. He then continued in a straight line and noticed that the winglet of the right wing was missing on F-CHNP.

### 2.2.2 F-CHNP pilot

The pilot stated that after entering the uplift, the FLARM had indicated the presence of a glider in the front right sector. When the FLARM warning sounded, he saw F-CHBH very near him to the right. He specified that at this time he had had a rate of climb of 3 to 4 m/s, an indicated airspeed of 110 km/h and a steep bank angle. He stated that he had had no way of increasing his bank angle to remain inside the turn in relation to F-CJBH. On crossing paths, he had heard a loud noise then observed that the winglet of the right wing was missing. Having checked that the controls were still operational, he had landed at Issoire Le Broc aerodrome from where he had taken off.

# 2.3 Action taken by the club following the serious incident

Following this serious incident, the chief pilot reminded all of the club pilots of the need to monitor the path in an uplift. This reminder was also integrated into the briefing before the start of flights.

The following information was specified:

- ☐ In a spiral, if two gliders become too close to each other, pilots must always adapt their path to fly behind the glider ahead and must not attempt to fly inside a turn or take a converging path.
- ☐ To enter an uplift, pilots need to adapt their path to be 180° from the glider already present in the uplift.
- ☐ It is important to be vigilant in terms of FLARM warnings when closing in on another glider.

### 2.4 Glider characteristics

The glider registered F-CHNP is a single-seater Sportine Aviacija LAK 19, with a wingspan of 15 m that can be extended to 18 m with the addition of winglets. The glider equipped with winglets has a maximum lift-to-drag ratio of 50 at a speed of 95 km/h (without ballast) or 115 km/h (with ballast).

The glider registered F-CJBH is a tandem two-seater CENTRAIR SNC34 Alliance with a wingspan of 15.8 m and a maximum lift-to-drag ratio of 35 at a speed of 95 km/h.



### 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**

When using the uplift, despite the FLARM visual indication, the pilot of F-CHNP did not see that he was catching up with the glider registered F-CJBH that was higher up in the same uplift. This catching up both in the horizontal plane and the vertical plane was probably down to the better flight characteristics of the LAK 19 and a faster flying speed. After approximately two turns, the F-CHNP pilot found himself inside a turn on a path converging with that of F-CJBH. The pilot of F-CHNP became aware of the conflictual situation late and was unable to avoid contact between the two gliders.

The instructor on board F-CJBH, given that F-CHNP arrived from the rear, was unable to detect its presence early enough for the emergency manoeuvre that he performed to prevent the collision.

The lack of vigilance and anticipation by the pilot of F-CHNP led to both gliders being on a converging path and to the midair collision.