BEA
Bureau d'Enquêtes et d'Analyses
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SAFETY INVESTIGATION REPORT

Accident to the Centrair ASW 20 F registered F-CFFF on Saturday 3 June 2023 at Bailleau-Armenonville

Time	Around 13:05[1]
Operator	Private
Type of flight	Competition
Persons on board	Pilot
Consequences and damage	Pilot seriously injured, glider substantially damaged
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.	

Loss of pitch control during take-off, collision with ground, during a competition flight

1 HISTORY OF THE FLIGHT

Note: the following information is principally based on statements and recordings from the avionics systems.

The pilot was participating in the French gilder championships held on Bailleau-Armenonville aerodrome from 27 May to 3 June 2023. He carried out an off-field landing on 2 June and de-rigged the glider. He re-rigged it in the morning of 3 June in the presence of another person.

At around 13:05, the pilot carried out a towed take-off from runway 36[2]. During the take-off, the glider bounced several times, making hard contact with the ground. At the end of the runway, the glider suddenly nosed up at an angle of more than 30°. The glider rose to a height of around 35 m (see **Figure 1**, point 1), approximately 20 m higher than the tug plane (see point 1). The glider pilot released the cable connecting the glider to the tug plane.

Onlookers then saw the glider descend and observed the deployment of the flaps. The glider collided with the ground and came to a stop around 70 m from threshold 18 (point 2). The tug pilot landed without incident.

[1] Except where otherwise indicated, times in this report are local.
[2] Grass runway measuring 780 m x 20 m.

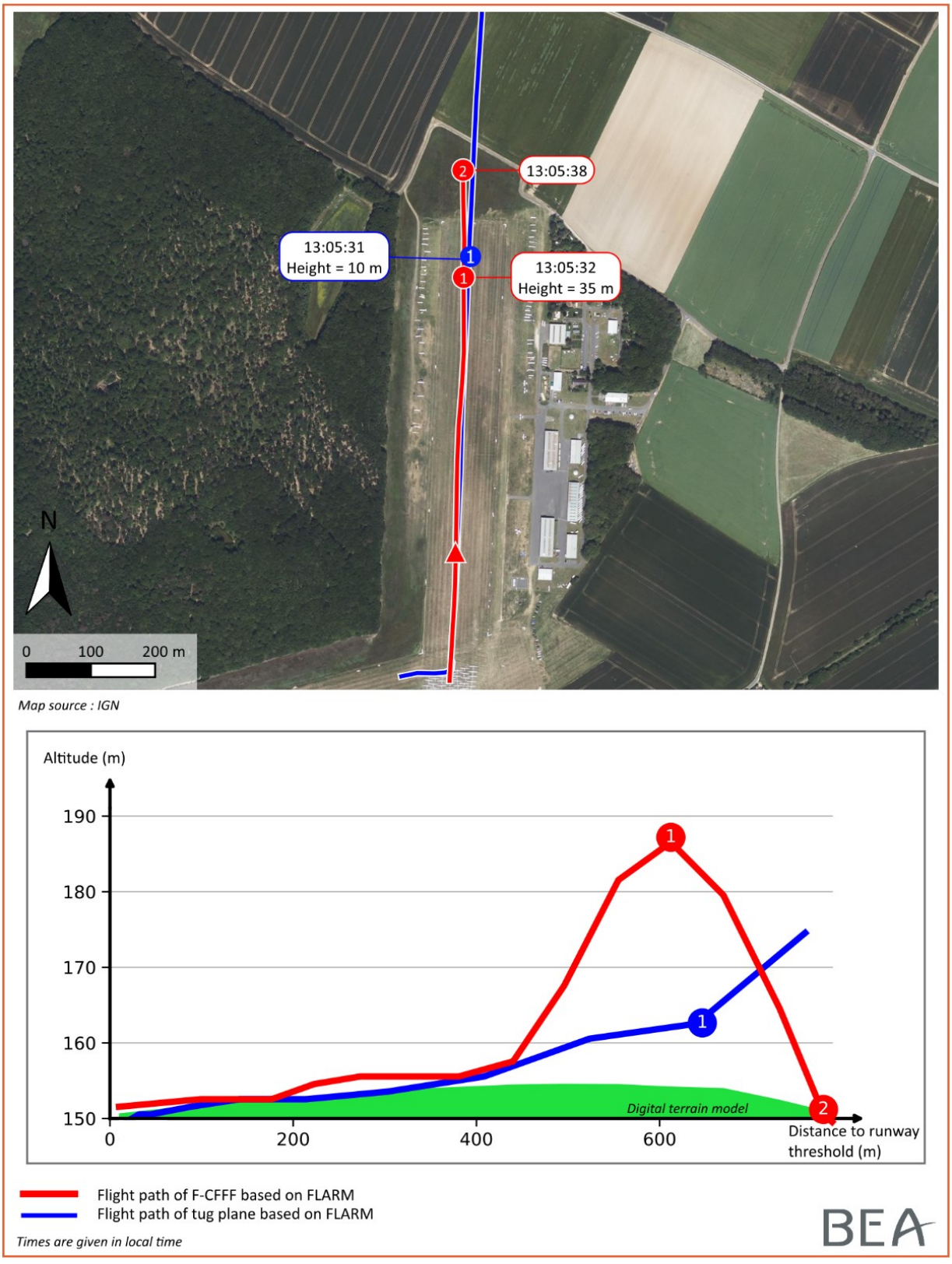

Figure 1: flight paths of both aircraft

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2 ADDITIONAL INFORMATION

2.1 Site and wreckage information

The following observations were made by the GTA[3].

The ruptures observed were the result of the collision with the ground. The roll and yaw controls were continuous and functional at the time of the accident as were the flaps and air brakes. The flaps were in a positive extended position, their exact setting could not be determined.

The elevator control was continuous and functional from the stick up to the socket of the elevator ball and socket connector. This ball and socket connector was found disconnected between the vertical control rod situated in the fin and the elevator (see **Figure 2**).

Figure 2: ball and socket connector found disconnected (source: GTA)

2.2 Glider information

F-CFFF is an ASW 20 F built in 1979. According to the log book, the glider had totalled around 2,300 flight hours.

The German manufacturer, Alexander Schleicher designed the ASW 20 and holds the type certificate of this glider. The ASW 20 F gliders, although of a similar initial design to the ASW 20, were built under licence in France by Centrair. The latter holds the type certificate of these gliders and is responsible for the continued airworthiness.

The two co-owners of the glider had carried out the annual inspection and paint work between the winter of 2022 and the spring of 2023. They stated that they had complied with the specific maintenance instructions for the ball and socket connector between the control and the elevator. In particular, they specified that they checked the sphericity criterion of the ball with a micrometre.

The previous owner who had acquired the glider in 1990 stated that he had never replaced the elevator ball or socket. It is probable that the assembly installed at the time of the accident was the original one. The investigation was not, however, able to confirm this.

[3] The glossary of abbreviations and acronyms frequently used by the BEA can be found on its web site.

The elevator ball and socket connector is manufactured by L'Hotellier. It is composed of a ball fixed to the elevator and a socket quick connector fixed to the end of the control rod. This connection also includes a manual locking system (spring-loaded tab) as shown below.

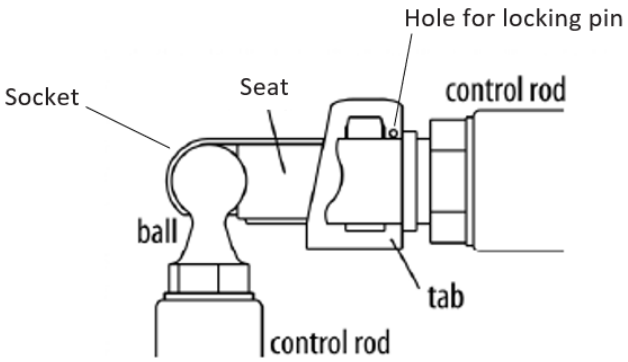

Figure 3: schematic diagram of ball and socket connector
(source: BEA, based on EASA SIB 2019-07)

To disconnect the elevator, the pilot must press the spring-loaded tab (downwards on **Figure 3**) and then remove the ball from the socket (by moving the socket upwards on **Figure 3**). The unlocking and disconnecting are therefore carried out in opposite directions. When the ball is in place, a locking pin can be positioned in the hole provided in the tab, preventing any untimely disconnection. The use of this pin is not required by the glider manufacturer. However, the civil aviation authorities in several countries have made it compulsory (see paragraph 2.5).

2.3 Examination of elevator ball and socket connector

2.3.1 Examinations on glider

The BEA carried out the following examinations on F-CFFF.

The ball and socket connector was not equipped with a locking pin, the pilot did not use one (see paragraph 2.7.2). The functionality of the system was checked by connecting the elevator and then checking that actioning the control moved the elevator. After assembling the ball in the socket, a manual load was applied to try to separate the connector, which remained connected. The environment of this ball and socket connector was neither damaged nor deformed.

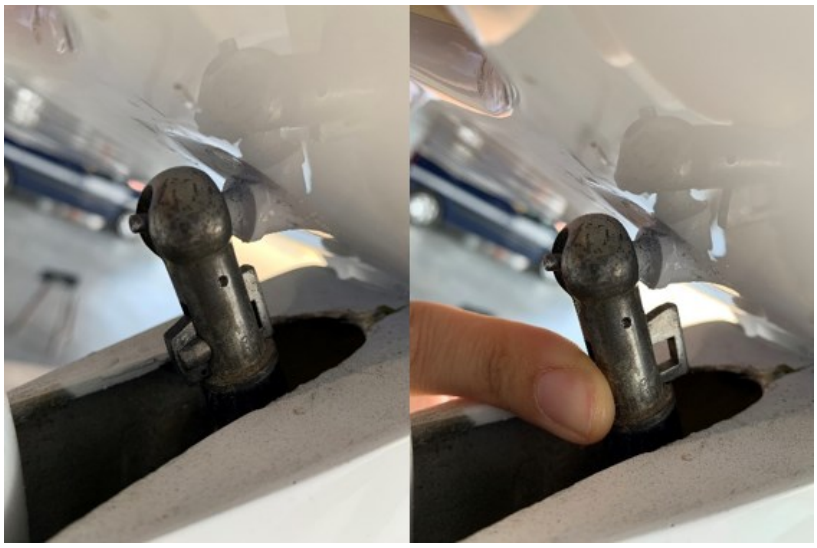

Figure 4: locked and unlocked positions of ball and socket connector (source: BEA)

The ball and socket were removed and examined in the BEA laboratory.

The BEA had access to a glider identical to that of the accident to examine the connection and locking of the elevator ball and socket connector. The BEA observed that it was possible to partially insert the ball in the socket without the system locking. During the before flight check of the controls, the pilot is thus able to observe that the elevator moves when actioning the stick. However, when resistance is applied at the same time to the elevator, as stipulated in the positive control check[4], either the system completely disconnects or it locks.

2.3.2 Examination of removed ball and socket connector

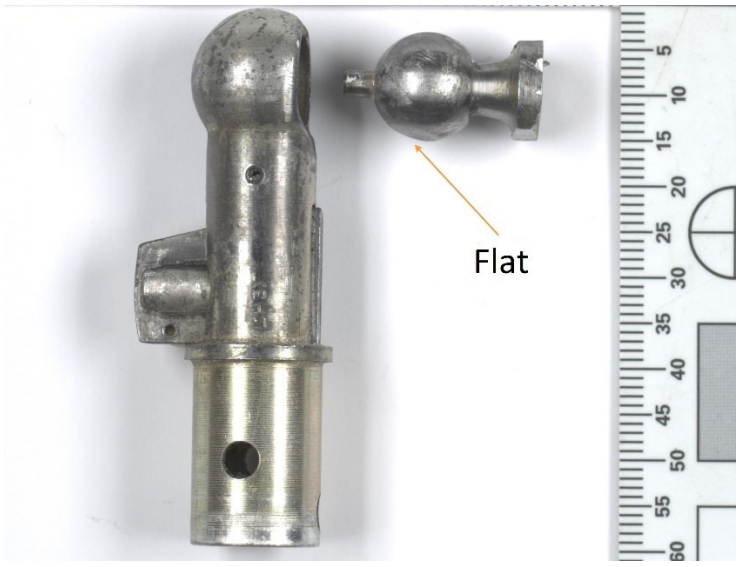

Figure 5: socket on LH side and ball on RH side (source: BEA)

[4] Test to ensure that the elevator functions correctly and responds to the controls, see Safety Lessons paragraph.

The ball had a flattened area here its surface came into contact with the socket seat (see **Figure 5**). In this flattened area, the maximum difference between the various measurements taken of the diameter of the sphere was around 0.3 mm. According to L'Hotellier's maintenance instructions, available in the glider's maintenance manual, this difference must not exceed 0.1 mm, after this limit it is considered to be abnormal wear. The sphericity criterion mentioned in the maintenance instructions was therefore not complied with. An update to the maintenance instructions which was not included in the glider's maintenance manual, required at least four diameter measurements to be carried out.

The socket was not marked with its date of manufacture. According to L'Hotellier, its sockets were systematically marked from 1997 onwards. The socket had therefore been manufactured before this date.

The socket was assembled with a new ball and underwent the load test carried out on newly manufactured sockets. The socket complied with the expected requirements for new sockets. However, the manufacturer does not have a test bench to carry out a load test on the ball. Furthermore, the loads borne by the ball and socket connector during the gilder's take-off bounces are not known. It was therefore not possible to assess the consequences of the ball's wear on the strength of the connection for the accident flight.

2.3.3 Conclusion of examinations

The ball and socket connector of the elevator control was found disconnected. The examinations carried out did not reveal a failure of the socket. The immediate environment of the connection was not deformed. No locking pin was present on the system. These elements seem to indicate that the elevator control was incorrectly or not connected during the accident.

However, the ball showed abnormal wear according to the criterion defined in the maintenance instructions. The in-flight disconnection of the elevator ball cannot therefore be totally excluded.

2.4 Maintenance of ball and socket connectors

2.4.1 History of maintenance instructions

In 1985, L'Hotellier set out the maintenance instructions for the balls and sockets in a document referenced IMA 10.01.

The Centrair ASW 20 F gliders were the subject of a Centrair Service Bulletin referenced BS 20-19 containing instructions for checking the L'Hotellier balls and sockets. The DGAC then issued an Airworthiness Directive applicable in March 1997 making compliance with the L'Hotellier instructions (revision C of IMA 10.01 dated 1989) and BS 20-19 for the inspection of ball and socket connectors during each annual inspection and major inspection mandatory. The Directive specified that it had been issued to prevent possible seizure of the L'Hotellier balls in their socket or an incorrect connection.

At the end of 1997, Centrair then issued revised BS 20-19 which became Mandatory Service Bulletin 20-19 iss. 1, inspection of L'Hotellier balls and sockets. This Bulletin included the instructions in issue E of IMA 10.01 dated 1994. It was appended along with the Airworthiness Directive to the maintenance program for the accident glider.

Since issue C, IMA 10.01 had been revised several times. Issue F of 2009 introduced the following sentence concerning the ball and socket assembly: "*it is mandatory to replace this assembly every 10 years or every 3000 flight hours, whichever comes first*." Prior to this, the replacement was recommended for the fatigue strength of the part. L'Hotellier indicated that this modification had been made following an audit in the scope of the certification for the aeronautical standard EN9100.

The most recent issue of IMA 10.01 at the date of the accident was issue H dated 2021. This version included a paragraph concerning the locking pin. It is indicated: "*The safety pin in place, try to unlock the ball joint by pressing firmly the lock until the maximum possible […] and by making a light pull of the ball joint to try to extract it, it must not leave its housing*."

From 1997, the updated ball maintenance instructions were not included in the glider's maintenance program.

2.4.2 Distribution of maintenance instructions

2.4.2.1 From suppliers to type certificate holder

Consolidated European regulation (EU) No 748/2012, paragraph 21.A.7, indicates the obligations of the type certificate holder regarding the dissemination of the instructions required to ensure continued airworthiness of the aircraft and of "*any associated part*". In addition to providing these instructions at the time of delivery, the holder must "*make available changes to those instructions to all known operators of the product affected by the change*." Communication between the aircraft type certificate holder and its suppliers can be formalised by a contract based on AMC3 21.A.7 (a).

At the time of the certification of the ASW 20 F, this requirement did not exist and contracts between equipment suppliers and light aircraft manufacturers were unusual.

L'Hotellier and Centrair did not have a contract or arrangement concerning the distribution of maintenance instructions for the balls and sockets.

L'Hotellier's internal procedures set out that type certificate holders would be informed of updates to the maintenance manual (CMM) but not of updates to IMA 10.01. If a type certificate holder makes no request, it is not informed of the updates to IMA 10.01. Since 2009, L'Hotellier indicated that it had received four requests, including one in 2014 from Centrair (see paragraph 2.4.2.2).

Numerous aeronautical companies use L'Hotellier balls and sockets, particularly glider, aeroplane and helicopter manufacturers. The manufacturers contacted in the scope of the investigation indicated that they had not been informed of an update to IMA 10.01 nor of the periodic replacement criterion of these balls and sockets. Some manufacturers indicated that any possible non-conformity of the balls and sockets would have negligible consequences for the safety of their product. However, other glider manufacturers use these balls and sockets for the flight controls. The investigation was not able to draw up an exhaustive list of aircraft on which these parts were installed nor their function.

L'Hotellier informed the BEA that its internal procedures could be modified to ensure that IMA 10.01 is distributed to all its customers and to EASA each time there is an update. However, L'Hotellier expressed reservations about its ability to draw up an exhaustive list of all historical customers for these parts. EASA proposed to support this approach by distributing IMA 10.01 to all known type certificate holders.

2.4.2.2 From type certificate holder to operators

In 2014, Centrair requested the latest maintenance data from L'Hotellier. Revision F of IMA 10.01, making the periodic replacement of the balls and sockets mandatory, was sent to them. The EASA Project Certification Manager (PCM)[5] responsible for Centrair gliders told the BEA that Centrair had then launched a consultation with various operators to assess the condition of the L'Hotellier balls and sockets equipping their gliders. Centrair had concluded that the condition of these balls was satisfactory. This assessment were shared with the DGAC and the Centrair PCM in a meeting. During this meeting, the proposal made by Centrair, the type-certificate holder, not to make the regular replacement of the balls and sockets mandatory, was accepted.

Centrair then added in the Pégase (C101, 101A, 101P, 101AP) maintenance manual, in paragraph *5.2 Equipment and parts with particular maintenance*, that *"All L'Hotellier balls and sockets have to be inspected following the manufacturer maintenance instructions. Nevertheless, the mandatory replacement asked by the L'Hotellier company every 10 years or at 3000Hrs of flight time whichever occurs first can be replaced by an inspection on absence of cracks or the initiation of cracks on the 2 components (ball and socket) at every annual inspection performed after this 10Yrs period*."

For a reason that Centrair did not explain to the BEA, this periodic replacement criterion was not referenced in the ASW 20 F maintenance manual. As a consequence, the operators of the ASW 20 F did not have the same level of information about the L'Hotellier balls and sockets as the owners of the Pégase.

2.5 Securing ball and socket connectors

The connecting system can be secured by inserting a locking pin (see paragraph 2.2). L'Hotellier does not deliver locking pins with the ball and socket connectors and the pin part number indicated by L'Hotellier in IMA 10.01 must be specifically ordered.

Following the accident to ASW 20L registered HB-2212 in 1992 at Samedan in Switzerland, it was observed on the wreckage that the ball and socket of the elevator were disconnected and that the glider operator did not use a locking pin. The report's appendix mentions a study carried out by the German civil aviation authority (LBA) concerning various assemblies of the L'Hotellier balls and sockets. The study showed that the untimely disconnection of the ball and socket connector was possible, even when correctly connected. Consequently, in 1993, the LBA issued an Airworthiness Directive making the use of a locking pin mandatory. This Airworthiness Directive was addressed to German operators.

As the DGAC did not take similar measures, the use of a locking pin was not mandatory in France. However, the use of such a pin was made mandatory in several countries, whose authorities issued Airworthiness Directives to the operators. In particular, the FAA Directive lists the glider models concerned, and these include Centrair gliders. Other countries, such as Norway, the Netherlands and even Australia, used the LBA Directive.

In 2012, EASA published a Safety Information Bulletin (SIB) referenced 2012-04 regarding the L'Hotellier ball and socket connectors recommending a positive control check. This SIB also

[5] A PCM is responsible not only for managing certification projects but also for the continued airworthiness of products already certified.

indicated that the LBA Airworthiness Directive of 1993 was not applicable as it stood as it had been issued by the German authorities whereas the State of design for the L'Hotellier connectors[6] is France. The actions recommended in the SIB were not made mandatory as EASA had considered that "*this airworthiness concern is not an unsafe condition*"[7].

In 2019, EASA published SIB 2019-07 regarding the rigging of gliders in which the securing of the various connection systems including the L'Hotellier balls and sockets, is covered. In this document, EASA reminds pilots of the recommendation to use a locking pin, and also stresses the importance of complying with L'Hotellier's maintenance instructions. This document specifies, however, that the use of the locking pin does not guarantee that the ball is correctly engaged in the socket and a positive control check is strongly recommended.

2.6 Installation of an elevator with automatic-connection system

In 1986, the German manufacturer, Alexander Schleicher, issued a technical note which gave instructions for installing an automatic elevator connection system on the ASW 20 and 20 L. The ASW 20 F produced by Centrair, is considered to be technologically identical to the ASW 20 produced by Alexander Schleicher[8]. To date, however, this technical note can still not be applied to the ASW 20 F by operators wishing to install an automatic-connection system, as the type certificate is different.

2.7 Pilot information

2.7.1 Experience

The 25-year-old pilot held a sailplane pilot licence (SPL) obtained in 2017 along with towed and winch ratings. He had logged around 1,000 flight hours.

2.7.2 Statement

The pilot explained that as he had owned the glider since 2021, he had already rigged and de-rigged it. He indicated that he was aware of the rigging specificities of the elevator and that he knew of numerous accidents linked to rigging errors. He explained that he had rigged the glider in the morning of the accident, in the presence of a person who was not acquainted with this type of glider. He had thus explained and shown in detail to this person, how to rig it.

He stated that he had started by rigging the ball and socket connector and checked that he could clearly see the hole in the tab. He then finished rigging the elevator control surface. He specified that he proceeded in this order because otherwise the elevator when installed, could conceal the tab hole. He indicated that he did not fit a locking pin.

He explained that the competition organisers had reminded the pilots three times to be careful when rigging the flight controls: during the briefing, by Whatsapp message and on the runway before taking off. The pilot indicated that he felt particularly concerned by these announcements because, to his knowledge, he was the only pilot with an "old generation" glider, not equipped with an automatic-connection system.

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[6] The document mentions Commission Regulation (EC) No 1702/2003 of 24 September 2003 which specifies that "*the applicable airworthiness directives are those of the State of design*."

[7] As defined by this regulation.

[8] In particular, see airworthiness sheet No 160.

He stated that he had also put a sign with “elevator” written on it, on the instrument panel in order to check this elevator during the pre-flight inspection. He indicated that he raised the elevator and carried out a final walk around check before taking off. The pilot indicated that he could no longer remember the check method that he had used.

On taking off, he had felt some turbulence and the glider touched down so hard on the ground that he thought that the landing gear had collapsed. The glider then took off again. He stated that at the end of the runway, when the glider suddenly took a high nose-up attitude, he tried to nose down. He then observed that the elevator control was no longer reacting and then the glider entered a sharp stall dive. He stated that he extended the flaps to a negative position in order to give a nose-up moment and soften the impact with the ground, and then set them to a positive position just before impact.

2.8 Meteorological information

Météo-France's analysis indicated a light to moderate north-easterly flow and a clear sky with temporarily, a few cumulus clouds in the afternoon.

The 11:00 TU METAR for Toussus-le-Noble aerodrome situated at around 40 km north-east of the accident site mentioned:

- mean wind from 60° at 9 kt;
- temperature 22°C;
- QNH 1018 hPa;
- CAVOK;
- no significant phenomenon.

3 CONCLUSIONS

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

Scenario

The elevator ball of the glider showed abnormal wear requiring it to be replaced according to the criterion defined in the maintenance instructions included in the maintenance manual. This wear had not been detected during the last annual inspection. Furthermore, the ball and socket had been installed for more than 30 years, exceeding the replacement time limit indicated by the manufacturer, by more than 20 years.

The manufacturer, L’Hotellier, had introduced this periodic replacement criterion in an update of the maintenance instructions. The glider manufacturer, Centrair, had had knowledge of this. It had considered that it was not necessary to systematically carry out this replacement and had not transmitted this information to the operators of the ASW 20 F.

Centrair had not had knowledge of the following updates and as a consequence, neither had the users of its gliders.

The morning of the accident, the pilot had rigged the glider. As usual, he did not use a locking pin for the elevator ball and socket connector. He visually checked the connection. In the afternoon, during the take-off, the pilot lost pitch control of the glider which collided with the ground.

The observations made of the elevator ball and socket connector (see paragraph 2.3.3) seem to show that it was incorrectly or not connected following the rigging of the glider the day of the accident.

However, abnormal wear of the ball, associated with the take-off bounces may have created excessive loads on the connector. The disconnection of the elevator ball and socket connector cannot therefore be totally excluded.

Contributing factors

ASW 20 F operators did not have the latest version of the specific maintenance instructions for the L'Hotellier balls and sockets in the glider maintenance manual. Updates of these maintenance instructions had not been distributed by the glider manufacturer since 1997. These maintenance instructions contained in particular, additional information regarding the verification of the sphericity of the ball.

The absence of an obligation to use a locking system on the ball and socket connector, such as a locking pin, may have contributed to the pilot not securing the elevator ball and socket connector.

Safety lessons

Glider rigging check: Positive control check

The EASA SIB No 2019-07, published in English, explains the positive control check method. This method was relayed by the FFVP in a bulletin *"Actions Vitales No 10"* and more recently in a *"Flash Info Sécurité"*.

At least two people are needed to check the rigging of the elevator: one person must block the control surface, while the other person moves the stick in both directions. Without someone blocking the control surface, the incomplete rigging might not be detected by simply moving the stick (see paragraph 2.3.1). This method can also be used to detect if the socket and the ball are not connected whereas a simple visual check can be misleading, as the hole on the tab is visible in both the locked and unlocked positions.

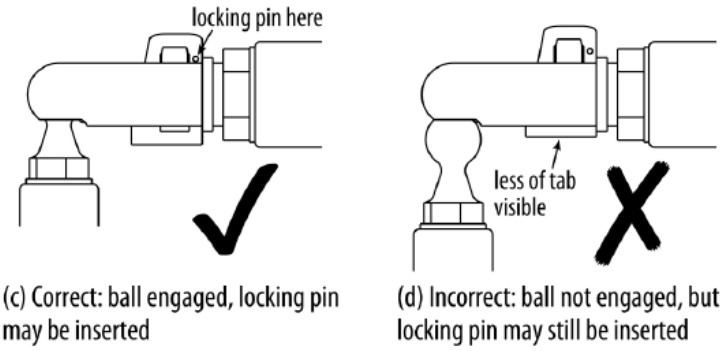

Figure 6: possible positions of tab (locked position on LH side, unlocked position on RH side) (source: EASA SIB 2019-07)

It should also be checked that the direction of movement of the control surface actually corresponds to the movement of the stick and that the full deflection of the surface is reached.

It is recommended that the check is carried out by a qualified person. Ideally, this person will not have taken part in the rigging or will have taken a break between the rigging and the check. The BEA investigation report into the accident to the glider registered F-CIEA specifies that in the event that the second person has little experience, it is the latter who should move the controls in the cockpit. Indeed, only a qualified pilot, familiar with the type of glider, can effectively check the movements and deflection of the elevator.

Measures taken

Following this accident, FFVP issued a *Flash Info Sécurité* concerning gliders with manually-connected controls. In this document, FFVP asks clubs and owners to install locking pins on the L'Hotellier type connectors of the elevator and of the other control surfaces when this is possible.

On 25 February 2025, EASA published SIB 2019-07R1 which is a revision of the 2019 SIB regarding the rigging of gliders. This revision was issued following several accident reports published since 2019. One of the major modifications to the SIB is the insistence on the method of the positive control check by describing this procedure in detail. It is also recommended that operators establish a procedure to "sign-off" the after rigging inspection. This procedure could have a positive human factors effect by giving a sense of responsibility to the person signing the after rigging inspection. The different gliding communities are encouraged to implement awareness and training actions addressed at glider operators and pilots.

Centrair has modified the ASW 20 F flight manual by adding in part 4, Normal procedures, section 1, Preflight inspections: Check for the **MANDATORY** presence of the locking pin on the L'Hotellier connection.

4 SAFETY RECOMMENDATIONS

Note: in accordance with the provisions of Article 17.3 of Regulation No 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation, a safety recommendation in no case creates a presumption of fault or liability in an accident, serious incident or incident. The recipients of safety recommendations shall report to the safety investigation authority which issued them, on the measures taken or being studied for their implementation, as provided for in Article 18 of the aforementioned regulation.

4.1 Securing L'Hotellier ball and socket connectors

The elevator ball and socket connector of the accident glider had not been secured by means of a locking pin. The ball and socket were found disconnected, very probably explaining the pilot's loss of pitch control and the collision with the ground. A fatal accident involving an ASW 20 L occurred in 1992: the ball and socket of the elevator were found disconnected, there was no locking pin. The studies carried out by the German civil aviation authority (LBA) following this accident and other incidents involving L'Hotellier connectors concluded that there might have been untimely disconnections of the balls and sockets. Consequently, in 1993, the LBA issued an Airworthiness Directive making the use of a locking pin mandatory. EASA did not adopt this Airworthiness Directive when it subsequently became responsible for the type certificate and continued airworthiness of Centrair and Alexander Schleicher gliders.

The authorities of several countries have also issued Airworthiness Directives to impose the locking pin, including the FAA. SIB 2019-07 published by EASA in 2019 regarding the rigging of gliders mentions the importance of using a locking pin. This document is not mandatory. The L'Hotellier maintenance instructions have mentioned the use of a locking pin since 2016.

After the accident, the FFVP issued a *"Flash-info sécurité"* asking all its members to install a locking pin on the L'Hotellier connectors.

Consequently, the BEA recommends that:

- ***whereas the use of a locking pin is indicated by L'Hotellier in the ball and socket maintenance instructions;***
- ***whereas Airworthiness Directives were issued by several civil aviation authorities including the German (before the creation of EASA) and American authorities to make the securing of the L'Hotellier connectors mandatory;***
- ***whereas these Directives were not adopted by EASA and are not applicable in France;***

EASA impose the locking of L'Hotellier connectors, notably by means of a locking pin, on aircraft using these connectors for critical parts such as the flight controls. [Recommendation FRAN-2025-002].

4.2 Distribution of maintenance instructions

Type certificate holders are responsible for assessing the conformity of the parts installed on aircraft and for producing instructions concerning the continued airworthiness of these parts. While holders are not obliged to fully comply with the recommendations of the equipment manufacturer, this decision must be taken by assessing the consequences for safety.

L'Hotellier regularly updated the maintenance instructions for the balls and sockets, contained in the document referenced IMA 10.01. These changes are important for safety, notably the introduction, in 2009, of a periodic replacement criterion, and thus a service life limit.

Without making it compulsory, the manufacturer Centrair, distributed the periodic replacement criterion for the L'Hotellier balls and sockets to operators of certain glider types by incorporating the information in the maintenance manual of these gliders. For an undetermined reason, Centrair did not distribute this information to operators of the ASW 20 F which has maintenance instructions dated 1997.

Furthermore, other manufacturers have indicated that they are not aware of this periodic replacement criterion and the L'Hotellier procedures do not provide for the communication of updates to IMA 10.01 to type certificate holders.

Consequently, the BEA recommends that:

- ***whereas the L'Hotellier procedures do not provide for the distribution of updates to IMA 10.01 to type certificate holders;***
- ***whereas L'Hotellier and Centrair have not formalized by contract or arrangement, the distribution of these maintenance instructions;***
- ***whereas at the time of the certification of the ASW 20 F, the drawing up of a contract between light aircraft manufacturers and their part suppliers was unusual;***
- ***whereas the updates to IMA 10.01 have a safety benefit, in particular with the addition of a periodic replacement criterion for balls and sockets implying a service life limit for these parts;***
- ***whereas there are many type certificate holders using L'Hotellier balls and sockets;***
- ***whereas for certain aircraft, these parts are installed on flight controls;***
- ***whereas the several manufacturers contacted during the investigation did not have knowledge of the updated maintenance instructions introducing a periodic replacement criterion;***

EASA, in coordination with L'Hotellier, ensure that the maintenance instructions contained in IMA 10.01 are effectively distributed to all type certificate holders using L'Hotellier connectors on their aircraft; [Recommendation FRAN-2025-003]

EASA raise awareness among type certificate holders of light aircraft about the need to monitor updates to maintenance information published by critical component suppliers. [Recommendation FRAN 2025-004]

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