



Accident to the ROBIN - DR400 - 100
registered **F-GKQE**
on Friday 29 July 2022
on Biarritz - Pays Basque airport

Time	Around 13:55 ¹
Operator	Aéroclub Basque
Type of flight	Instruction
Persons on board	Instructor and student pilot
Consequences and damage	Aeroplane 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.	

Bird strike on final, in instruction

Note: the following information is principally based on the instructor's statement.

1 HISTORY OF THE FLIGHT

The instructor and the student pilot were carrying out their third LH runway circuit on Biarritz - Pays Basque airport with the intention of carrying out a touch-and-go on runway 27. On final, at a height of around 450 ft², they identified a flight of birds, possibly four to five large birds of prey close to the flight path. One of the birds changed course and struck the propeller and then the LH wing.

After observing that the aeroplane was still controllable, the instructor reported the bird strike to the controller and his intention to carry out a full-stop landing. The student pilot, still at the controls, landed without further incident.

2 ADDITIONAL INFORMATION

2.1 Aircraft information

The aeroplane, a Robin DR 400-100, was put into service in April 1991. Made of a canvas-covered wood structure with low wings, it was equipped with a Rotax 912 iSc2 Sport engine providing 100 hp and a three-blade composite propeller.

2.2 Damage to aircraft

A propeller blade, the fairing of the LH main landing gear and the elevator showed marks from a bird strike but without any visible damage.

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

² The glossary of abbreviations and acronyms frequently used by the BEA can be found on its [web site](#).

The leading edge of the LH wing was damaged at around 40 cm from the root. It was dented and torn over an approximate width of 10 cm and depth of 20 cm. The plywood of the leading edge and a rib were destroyed. The spar was not damaged.

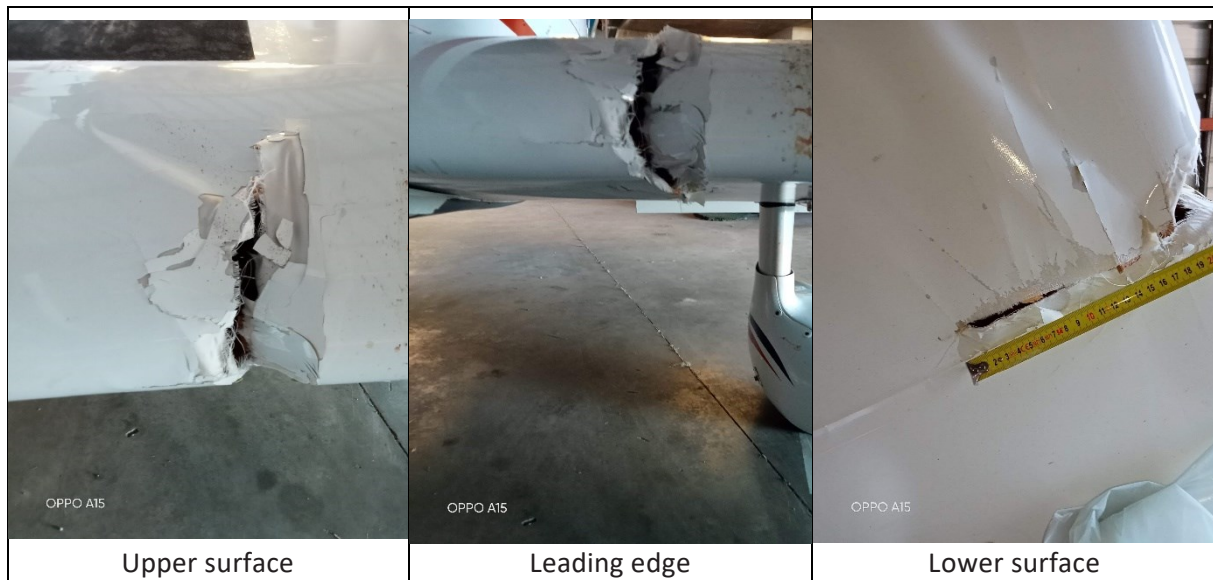


Figure 1: photo of damage to LH wing (Source: BEA)

2.3 Biarritz - Pays Basque airport information

Biarritz - Pays Basque airport is equipped with a paved runway 09-27, measuring 2,250 m long and 45 m wide.

There were 21 bird strikes in 2022 and 16 in 2023 on this airport.

According to the analysis of the airport's fauna carried out by the airport manager, the airport has a large single area of grassland which is very attractive to open-habitat birds. During the migration period (March-May and August-November), large numbers of birds of all species fly over the airport, which can pose a danger to aircraft. The airport manager has put in place measures to manage this risk, such as mowing at night, neutralising watering holes and perches, and scaring birds away. However, there are no means of combating migration and the associated bird flight over the airport.

2.4 Instructor and student pilot information

The 41-year-old instructor held an aeroplane Commercial Pilot Licence (CPL(A)) obtained in January 2021. He also held an aeroplane Flight Instructor rating (FI(A)) obtained in December 2021. He had logged around 400 flight hours.

The instructor indicated that the bird which struck them could have been a vulture.

The 31-year-old student pilot had logged around 20 flight hours.

2.5 Meteorological information

According to the French met office, Météo-France, the weather conditions at Biarritz - Pays Basque airport at 14:00 were the following:

- wind from 310° of 8 kt;
- visibility greater than 10 km;
- scattered clouds based at 4,900 ft;
- a temperature of 24°C;
- QNH 1010 hPa.

3 CONCLUSION

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

Scenario

The aeroplane was on final when a bird struck the propeller and then the leading edge of the LH wing. The aeroplane remained controllable and the student pilot was able to land without further incident.

The low speed of the aeroplane on final and the short remaining flight time may have contributed to limiting the damage caused by the collision. These elements and there being no consequence on the controllability of the aeroplane might have led the instructor not to take the controls for the landing.

In other circumstances, the damage caused by a birdstrike can make the aeroplane difficult to control. This was the case on 18 April 2021 when a cormorant struck the LH wing of the DR400 registered [F-GNNE](#) while in cruise. The high kinetic energy of the collision along with the limited strength of the wing composed of wood and canvas contributed to the extensive damage.

In the case of a bird strike, as for any occurrence or failure in instruction which could compromise the safety of the flight, the DSAC recommends that the instructor take the controls.

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