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# Serious incident between the ROBIN DR400 - 160

registered **F-BUSE** and the Piper PA28 registered **F-GCQE** on 11 December 2021 at Lyon-Bron

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Time	Around 16:30 <sup>1</sup>
Operator	F-BUSE: Aéroclub du Grand Lyon <sup>2</sup>
	F-GCQE: AVNIR Aviation <sup>3</sup>
Type of flight	F-BUSE: local flight
	F-GCQE: local instruction flight
Persons on board	F-BUSE: Pilot and passenger
	F-GCQE: Student pilot and instructor
Consequences and damage	None
This is a courtesy translation by the BEA of the Final Report on the Safety Investigation. As	

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# Near-collision between an aeroplane on final and an aeroplane in final right turn to position on final

#### 1 HISTORY OF THE FLIGHT

Note: the following information is principally based on statements and radio communication recordings.

The F-BUSE pilot, returning from a local flight with a passenger, joined the airport circuit in coordination with the controller at Lyon-Bron airport. At 15:29:19, he reported that he was at the end of the downwind leg. The controller told him that he was No 2 behind a PA28 and asked him to call back on final. Aeroplane No 1 on final for runway 34 (the PA28 registered F-GCQE) was at the end of the airport circuit.

Visibility was 10 km, with scattered clouds at 2,700 ft and broken clouds at 3,500 ft. The wind was blowing at 12 kt from 360°.

At 15:29:26, the pilot of F-BUSE reported that he was turning onto the base leg. At 15:30:04, the controller asked him if he had sight of the aeroplane on final and indicated that he had turned a little short in relation to the latter. The pilot of F-BUSE replied that he did not have sight of it.

<sup>&</sup>lt;sup>3</sup> Company, pilot training school based at Lyon-Bron airport.



November 2022

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

<sup>&</sup>lt;sup>2</sup> Flying club based at Lyon-Bron airport.



At 15:30:11, the controller asked F-BUSE to go around. The pilot read back the instruction and started to go around four seconds later.

At 15:30:17, the instructor on board F-GCQE reported to the controller that F-BUSE had narrowly missed him by 10 m.

The student pilot of F-GCQE continued the final approach and carried out a touch-and-go, followed by an airport circuit. The pilot of F-BUSE flew an airport circuit and landed at 15:37.

#### ADDITIONAL INFORMATION

#### 2.1 Aerodrome information

Lyon-Bron airport<sup>4</sup> is a controlled airport open to public air traffic. It has a paved runway 16/34 measuring 1,820 m long and 45 m wide, with a threshold displaced by 300 m at each end. The airport circuit is flown to the east of the runway at a published altitude of 1,500 ft QNH<sup>5</sup>.

The airport is in a class "D" control zone (CTR) which can only be entered by aeroplanes equipped with a radio.

The control tower is located to the west of the runways and offers controllers a clear view of the entire airport circuit from their workstation.

### Regulations in force at an airport

In class "D" airspace, air traffic control does not provide separation between VFR flights. Indeed, Implementing Regulation (EU) No 923/2012 known as "SERA" (Standardised European Rules of the Air)<sup>6</sup> indicates, in paragraphs SERA.6001 and 5025 b, that air traffic control provides IFR/VFR and VFR/VFR traffic information as well as traffic avoidance advice on request.

VFR aircraft are provided with flight information services based on the information available to controllers.

In an airport circuit, VFR pilots must ensure separation from other aircraft by maintaining visual flight conditions and by applying the "see-and-avoid" rule.

#### 2.3 F-BUSE pilot information and statement

The 58-year-old pilot, who was a member of the Aéroclub du Grand Lyon, held a Private Pilot Licence - Aeroplanes (PPL(A)) and had logged 385 flight hours, including 280 h as pilot-in-command and 5 h in the last three months, all on the DR400.

The pilot explained that on returning from his local flight from the south, he followed the controller's instructions and joined the middle of the downwind leg for runway 34 after flying overhead the control tower. He added that in the downwind leg, he configured the aeroplane for landing. He specified that when he reported that he was at the end of the downwind leg, the controller told him that he was No 2 behind a PA28 on final and asked him to call back on final. He

<sup>&</sup>lt;sup>4</sup> Altitude: 659 ft.

<sup>&</sup>lt;sup>5</sup> Height of the airport circuit: 800 ft.

<sup>&</sup>lt;sup>6</sup> Version in force on the day of the accident.



said that he turned right for the base leg with a 20-30° bank angle and that he started the descent.

He continued the turn to align on the final approach. He explained that he did not have sight of the aeroplane on final and that he followed the controller's instructions when the latter asked him to go around. He added that at no time had he seen the aeroplane on final, and that he had not been worried about the situation, even during the go-around.

The pilot explained that, according to him, the controller ensured the separation between VFR aeroplanes, including in the airport circuit, and would take action in the event of conflicting paths.

He specified that he thought that the controller asked him to go around because the previous aeroplane would not have vacated the runway before he landed.

#### 2.4 F-GCQE instructor information and statement

The instructor, who held a Commercial Pilot Licence - Aeroplanes (CPL(A)), had logged approximately 550 flight hours, 200 hours of which in instruction.

He explained that he was carrying out airport circuits in instruction flight with a student. He added that he knew of the presence of an aeroplane, No 2 in the circuit, which was supposed to call back on final. He did not have sight of this aeroplane and did not try to see it, as the aeroplane was supposed to fly behind him, ensuring separation. He explained that he saw F-BUSE on his right, ending its turn and becoming parallel to F-GCQE, slightly ahead of him and a little higher, at the very time the controller asked the pilot of that aeroplane to go around. He estimated that the minimum distance between the two aeroplanes was approximately 10 m. He specified that he took over the controls and that he saw F-BUSE gain altitude and distance from them.

#### 2.5 Controller statement

The controller on duty stated that he was visually scanning the area, when he saw F-BUSE (aeroplane No 2 for landing) turning onto the base leg, on a converging path approaching the PA28 registered F-GCQE (No 1 for landing), which was on final to runway 34. He specified that he immediately contacted the pilot of F-BUSE to ask if he had sight of the aeroplane. The pilot replied in the negative, so he asked him to go around.

Note: the playback of the ATC recordings revealed that the controller asked the pilot to go around using the appropriate phraseology, with a calm, firm and composed tone.

#### 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

The pilot of F-BUSE (No 2 for landing) turned onto the base leg and then continued the turn onto final without having sight of the aeroplane which was already on final. This put him on a converging path approaching this aeroplane. The controller, who visually detected the abnormal proximity, asked the pilot of F-BUSE to go around, which resolved the conflictual situation.



## **Contributing factors**

The following factors may have contributed to the abnormal proximity between the two aeroplanes:

- the pilot of F-BUSE not visually searching for aeroplane No 1 on final before starting the turn to align for final approach;
- the lack of knowledge of the pilot of F-BUSE with respect to the services provided by controllers to VFR aircraft in class "D" airspace.

The following factors contributed to the avoidance of a mid-air collision:

 visual monitoring of traffic changes in the airport circuit, analysis of the situation by the controller, and request to go around using the appropriate phraseology with a calm and composed, yet firm tone, which avoided the creation of a stressful and anxiety-provoking situation for the pilot of F-BUSE.

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