

AIRPROX REPORT No 2014205

Date/Time: 17 Oct 2014 1409Z

Position: 5146N 00051W
(3nm SW Aylesbury)

Airspace: London FIR (Class: G)

Aircraft 1 Aircraft 2

Type: Eurostar C152

Operator: Civ Pte Civ Trg

Alt/FL: 1900ft 1800ft
QNH (1011hPa) QNH (NK hPa)

Conditions: VMC VMC

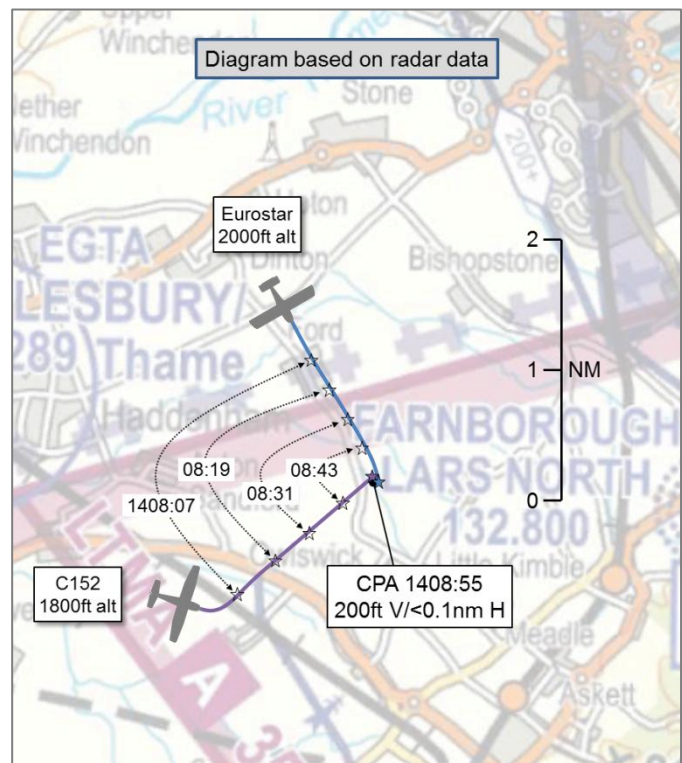
Visibility: >10km >10km

Reported Separation:

30ft V/300m H 250ft V/0.5nm H

Recorded Separation:

200ft V/<0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE EUROSTAR PILOT reports in straight and level cruise. The silver and blue aircraft did not have lights fitted; the SSR transponder was selected on with modes A, C and S; the aircraft was not fitted with a TAS. The pilot was operating under VFR in VMC, in receipt of a Basic Service from Farnborough LARS (North). He thought he saw 'erratic behaviour' from another aircraft about 4nm away in the 10 o'clock. A few minutes later, an aircraft appeared on the left again which, given the previous erratic behaviour, he continuously monitored, although he could not be sure it was the same aircraft. His attention was concentrated to the left when, heading 150° at 90kt, he suddenly saw a predominantly white, high-wing, single-engine aircraft approaching in the 2 o'clock, about 200m away and 100ft below but climbing gently. The Eurostar pilot turned to the right and descended rapidly and the other pilot also turned to his right and descended. The Eurostar pilot noted that both descending was unfortunate but both turning to the right gave adequate separation. He reported the Airprox to the 'Farnborough Radar North' controller and thought, though could not be sure, that the response implied that the other aircraft was squawking with altitude but was not on frequency. The Eurostar pilot stated that he did not wish to lay any blame on the other pilot.

He assessed the risk of collision as 'High'.

THE C152 PILOT reports conducting a local area training flight on the student pilot's fourth lesson. The white aircraft had the red tail-mounted beacon, landing and taxi lights selected on, as was the SSR transponder with Modes A, C and S. The aircraft was not fitted with a TAS. The instructor was operating under VFR in VMC, and in receipt of a Basic Service from Wycombe Tower. The lesson being taught, straight-and-level 2 required that they concentrate on setting aircraft attitude with reference to the horizon and power settings. The student was in control when they became aware of a Eurostar converging from the left 9 o'clock, about ½nm away and slightly higher. The instructor took control and made a descending right turn to avoid. On returning to straight-and-level flight, neither occupant was visual with the Eurostar and they continued the sortie. The instructor noted that he had not seen the Eurostar earlier as it was probably obscured by the door pillar, or possibly the wing.

He assessed the risk of collision as 'Low'.

THE FARNBOROUGH NORTH/EAST LARS CONTROLLER reports working bandboxed as the LARS North and East controller with medium traffic conditions. He had one pilot in receipt of a Traffic

Service whilst all other pilots on frequency were receiving a Basic Service. At approximately 1408, the Eurostar pilot, general handling and on a Basic Service, reported an Airprox with a fixed-wing aircraft just to the south of Aylesbury. The pilot reported that he was at altitude 1800ft, as was the aircraft with which he had the Airprox. The controller could see a secondary return on radar, immediately to the west of the Eurostar and indicating altitude 1700ft. He deduced this was the other Airprox aircraft, which was squawking 7000 and general handling in the Aylesbury area. The controller took the Airprox details from the Eurostar pilot.

Factual Background

The weather at RAF Benson was recorded as follows:

METAR EGUB 171350Z 17012KT 9999 FEW026 BKN250 18/13 Q1010 BLU NOSIG

Analysis and Investigation

CAA ATSI

At 1356, the Eurostar pilot called Farnborough Radar and was given a squawk of 5023. A Basic service was agreed. The Eurostar pilot was carrying out general handling in the Aylesbury area. The C152 pilot was in communication with and in receipt of a Basic service from Wycombe Tower. Prior to the Airprox, the Eurostar pilot reported sighting an aircraft carrying out 'erratic manoeuvres' in his 10 o'clock at approx 4nm (Figure 1). The Eurostar pilot reported that he was keeping a look out to the southeast for the previous aircraft, but at 1408:19 (Figure 2) another aircraft (the subject C152) was approaching from the southwest.

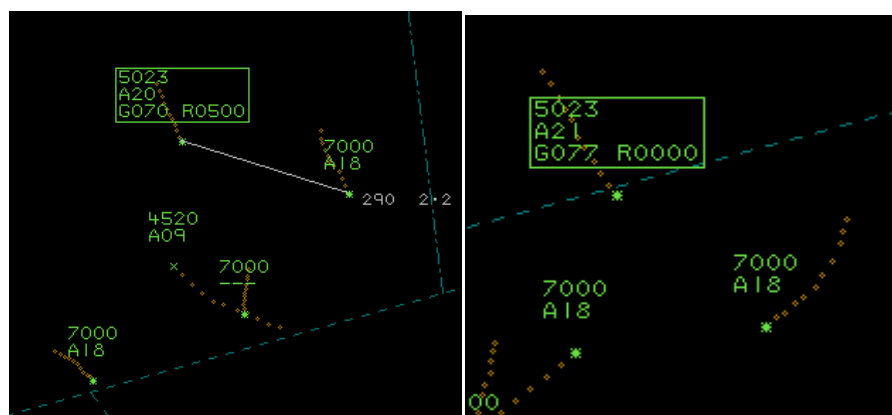


Figure 1

Figure 2

At 1408:37 (Figure 3), the C152 was 0.4nm south-southwest of the Eurostar (the original aircraft having turned to the south). CPA occurred at 1408:55 (Figure 4) with 0.1nm horizontal and 200ft vertical separation.

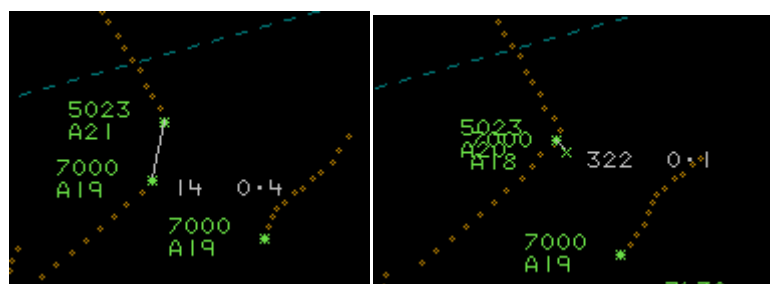


Figure 3

Figure 4

Neither pilot was passed Traffic Information. Under a Basic Service pilots are ultimately responsible for the provision of collision avoidance and controllers are not expected to monitor individual flights. (CAP 774 2.1 refers)

UKAB Secretariat

The Eurostar and C152 pilots shared an equal responsibility for collision avoidance and not to fly into such proximity as to create a danger of collision¹. The incident geometry is considered to be converging, and the Eurostar pilot was therefore required to give way to the C152².

Summary

An Airprox was reported when a Eurostar and a C152 flew into proximity at 1409 on Friday 17th October 2014. Both pilots were operating under VFR in VMC and in receipt of a Basic Service, the Eurostar pilot from Farnborough LARS (North) and the C152 pilot from Wycombe Tower.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, radar photographs/video recordings, and reports from the Farnborough LARS (North) controller and appropriate ATC authority.

The Board first considered the controllers' actions and quickly agreed that both had applied the provisions of a Basic Service; members reiterated that, under a Basic Service, it remained the pilots' responsibility to see other aircraft and avoid collisions without relying on ATC assistance. Notwithstanding, it was unfortunate that, in this instance, the Farnborough LARS controller had been unable to detect the existence of a definite risk of collision and assist by passing a warning.

Turning to the pilots' actions, members discussed the occasionally competing demands of providing airborne instruction and using a surveillance-based Air Traffic Service. Whilst there was no easy solution, members agreed that the priority for any flight was to avoid collision, and that other activities were best planned around that requirement; in this respect, they acknowledged that the Eurostar pilot had unfortunately been distracted by another aircraft, and the C152 instructor felt that his late sighting was compounded by the Eurostar being obscured behind the door pillar and wing. Members agreed that the circumstances highlighted the need to manoeuvre the aircraft and move one's head as part of an effective lookout technique. If this was not achievable, for instance by the need to remain straight and level for training, then a risk analysis should include explicit consideration of mitigations. In this respect, given that the airspace in the vicinity has a large amount of traffic, members considered that a Traffic Service from Farnborough LARS may have been more appropriate for the C152 pilot. If the resultant RT level was considered too high for instructional reasons, then alternative mitigations could be to operate in a less busy area, laterally or vertically, or postpone the lesson.

In the event, the C152 instructor saw the Eurostar at a reported range of ½nm in the left 9 o'clock position, and the Eurostar pilot saw the C152 in the right 2 o'clock at a range of 200m. Members noted that the radar replay was subject to some error, and felt that the pilots' descriptions indicated that the C152 had probably passed in front of the Eurostar. This geometry would also account for both pilots turning to the right. Members agreed that the Airprox was caused by each pilot seeing the other aircraft at a late stage, but that effective and timely action had been taken to avert collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Late sighting by both pilots.

Degree of Risk: C.

ERC Score³: 4.

¹ Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

² *ibid.*, Rule 9 (Converging).

³ Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment.