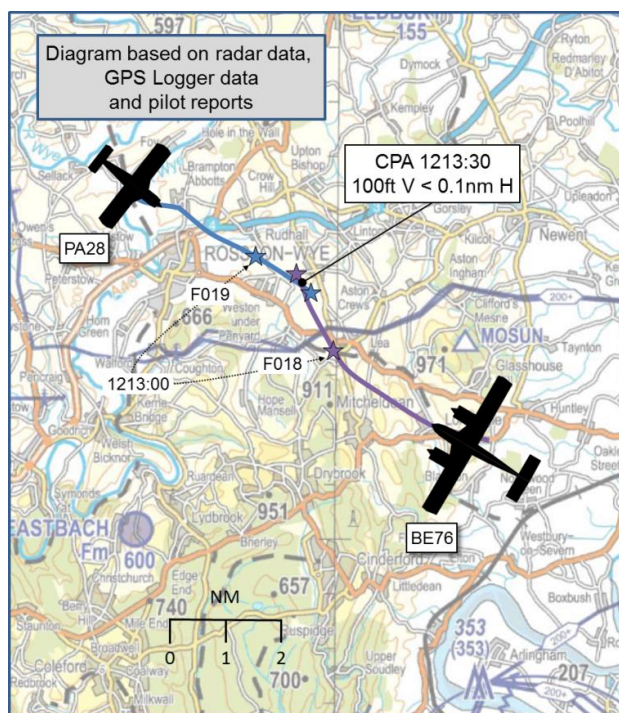


AIRPROX REPORT No 2014196Date/Time: 3 Oct 2014 1213ZPosition: 5155N 00230W
(3nm E of Ross-on-Wye)Airspace: London FIR (Class: G)Aircraft 1 Aircraft 2Type: PA28 Beech 76Operator: Civ Trg Civ CommAlt/FL: 2000ft 2100ft
QNH (1021hPa) QNH (1021hPa)Conditions: VMC VMCVisibility: 30km >10kmReported Separation:

200ft V/<0.5nm H >100ft V/100m H

Recorded Separation: 100ft V/0.1nm H**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

THE PA28 PILOT reports flying under VFR in 'good VMC', with the fin beacon, strobe and navigation lights illuminated, squawking transponder Modes 3/A and C, 300ft below a layer of cloud, towards the end of a navigation exercise with a student. Whilst cruising straight-and-level at 90kt and heading 115°, the pilot saw a low-wing, twin-engine, predominantly white aircraft, which appeared around 500ft in front of them as it descended through 2300ft whilst emerging from the cloud layer. It appeared that the pilot of the other aircraft had seen the PA28 just before the PA28 pilot saw the other aircraft because it appeared to 'break hard to the left' just before the PA28 instructor took control and made a left, descending turn. Although they were switching from Gloster¹ ATC's frequency to Kemble Information's frequency at the time, the pilot thought that they may still have been under a Basic Service. The student was quite shocked by the occurrence, so the instructor decided to wait until after landing to report the Airprox rather than doing it on the radio.

He assessed the risk of collision as 'High'.

THE BEECH 76 (BE76) PILOT reports flying a red, white and blue aircraft, under VFR in VMC, 150ft below cloud, with strobe lights illuminated, squawking Modes 3/A, C and S, under a Basic Service from Gloster; the aircraft was not fitted with ACAS or TAS. The purpose of the flight was cockpit familiarisation for the instructor, who was occupying the left-hand seat and was looking into the cockpit to operate the auto-pilot whilst the second pilot was maintaining look-out. The second pilot saw the conflicting aircraft 0.5nm away and 'called for an avoiding action left turn'; the instructor looked out and, seeing the other aircraft, assessed that the collision risk was 'nil' but decided to continue the left turn so that the pilot of the other aircraft would know that they had been seen; the other aircraft appeared to maintain a steady track throughout.

He assessed the risk of collision as 'Low'.

Factual Background

The weather at Gloucestershire Airport at 1150 was recorded as:

METAR EGBJ 031150Z 21005KT 9999 FEW013 BKN018 19/15 Q1021

¹ Gloucestershire Airport ATC uses the callsign Gloster

Analysis and Investigation

CAA ATSI

The CAA ATSI had access to Gloster RTF and area radar recording together with written reports from both pilots. Both pilots were operating under VFR and both were in receipt of a Basic Service from Gloster Approach. Gloster ATSU were operating split Aerodrome and Approach control without the aid of surveillance equipment.

At 1156:22, the PA28 contacted Gloster Approach, reporting overhead Stroud on a navigational exercise and requesting a Basic Service. The controller agreed a Basic Service, and passed the QNH (1021hPa) to the pilot, who reported at an altitude of 2100ft.

The BE76 departed from Gloucester, contacting Gloster Approach at 1207:30 and a Basic Service was agreed.

At 1209:22, the PA28 pilot reported overhead Ross-on-Wye before being transferred to Shobdon's frequency. At 1210:20, the PA28 pilot contacted Gloster Approach and reported that, due to lowering cloud base, they were turning to head towards Kemble. This was acknowledged by the controller and the PA28 pilot was instructed to report west-abeam Gloucester.

At 1212:40 radar showed the two aircraft at the same level FL018, which converts to an altitude of 2000ft (2016ft on the Gloucester QNH 1021hPa with 1hPa equal to 27ft). The horizontal distance between the two aircraft was 3.5nm – Figure 1.

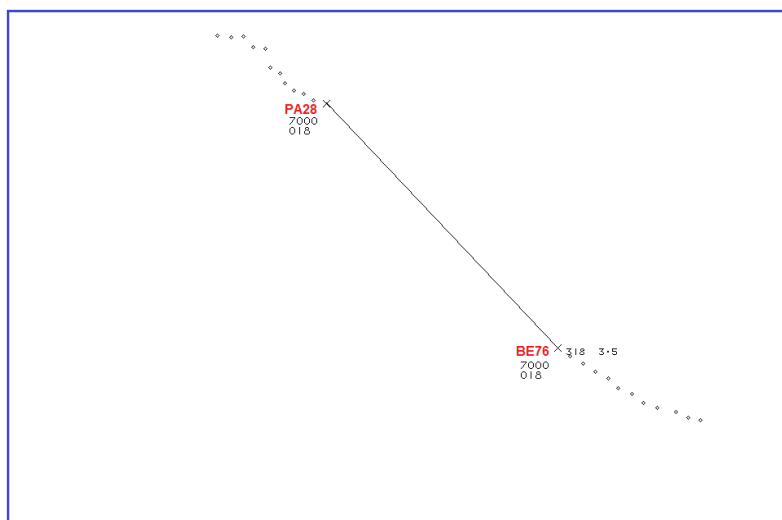


Figure 1 – Swanwick MRT at 1212:40

At 1213:23 the distance between the two aircraft was 0.6nm, with both aircraft indicating FL019 (2100ft) – Figure 2.

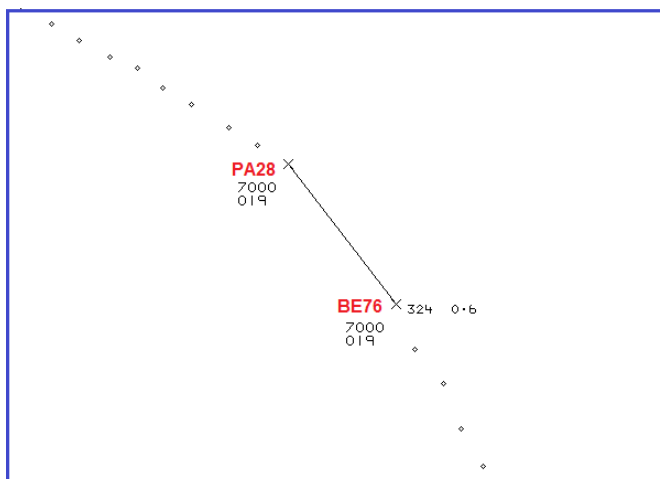


Figure 2 – Swanwick MRT at 1213:23

At 1213:31 the BE76 was indicating 100ft below the PA28 at a range of 0.1nm – Figure 3.

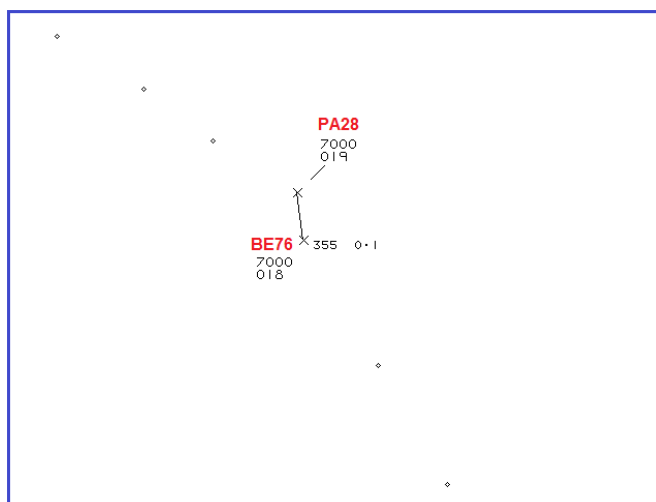


Figure 3 – Swanwick MRT at 1213:31

The CPA was estimated to have occurred at 1213:28 at a horizontal distance of less than 0.1nm and vertical distance of 100ft. The next radar update at 1213:35 showed the two aircraft had passed and were diverging – Figure 4.

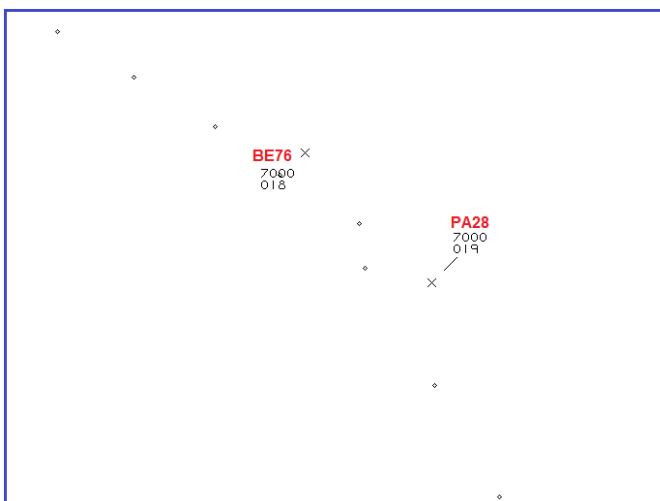


Figure 4 – Swanwick MRT at 1213:35

At 1216:32 the PA28 pilot reported passing 'the bends in the river' (3nm west-abeam Gloucester) and the PA28 was instructed to freecall Kemble.

At 1221:25 the BE76 pilot reported 11nm west of Gloucester and requested rejoin.

The Airprox was not reported on the radio and the Gloster ATC had no knowledge of the event.

Both aircraft were in receipt of a Basic Service where²

'ATS is provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot's responsibility.

Basic Service relies on the pilot avoiding other traffic, unaided by controllers. It is essential that a pilot receiving this ATS remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight.'

Given that the provider of a Basic Service is not required to monitor the flight, pilots should not expect any form of traffic information from a controller. A pilot who considers that he requires a regular flow of specific traffic information shall request a Traffic Service. However, where a controller has information that indicates that there is aerial activity in a particular location that may affect a flight, they should provide traffic information in general terms to assist with the pilot's situational awareness. This will not normally be updated by the controller unless the situation has changed markedly, or the pilot requests an update.'

The BE76 pilot departed Gloucester under VFR, but did not specify a direction or routeing, and the controller was likely not aware of the potential conflict between the two aircraft. The Airprox occurred when the BE76 and the PA28 came into proximity whilst operating under VFR in Class G airspace, where the avoidance of traffic is solely the pilot's responsibility.

UKAB Secretariat

Both pilots had equal responsibility for avoiding collisions and for ensuring that they did not fly in to such proximity to other aircraft as to create a danger of collision.³ The aircraft were approaching head-on, or approximately so, and so both pilots were required to alter course to the right.⁴

Summary

An Airprox was reported 12.6nm west-northwest of Gloucester Airport, within Class G airspace, between a Piper PA28 and a Beech 76. Both pilots were flying under VFR, in VMC and in receipt of Basic Service from Gloster Approach

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

The Board noted that even though the PA28 pilot had thought that the BE76 had descended out of the cloud, both aircraft had been more-or-less level throughout their approach towards each other. They commented that it was likely that the effect of a light-coloured aircraft against a light-coloured sky with an uneven cloud layer could have created this impression. Given that both aircraft were on

² CAP774, Chapter 2, Paragraph 2.1, 2.5 & 2.6

³ Rules of the Air 2007, Rule 8, Avoiding Aerial Collisions

⁴ Rules of the Air 2007, Rule 10, Approaching Head-on

the same frequency and talking to Gloster Approach, members wondered whether the Gloster Controller could have done more by passing Traffic Information. However, they noted that both aircraft were under a Basic Service (where pilots should not expect specific Traffic Information) and that, in addition, the position information available to the Controller was not specific enough to suggest any immediate threat to flight safety. As a result, the Board agreed that the controller could not have been expected to have done more, and that the cause was a straightforward late sighting by both pilots. The Board commented that this was a salutary reminder as to the benefits of requesting a Traffic Service despite the fact that to do so can come with attendant additional RT calls which might not always be welcome during instructional sorties.

Turning to the Degree of Risk, members noted that the separation was much less than would be considered reasonable in Class G airspace. Despite the BE76 instructor's assessment that the risk of collision was low, the Board noted that both pilots had taken late but effective avoiding action with a recorded separation, head-on, of 100ft and <0.1nm; the Board therefore agreed that the Degree of Risk was Category B.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u>	A late sighting by both pilots.
<u>Degree of Risk:</u>	B.
<u>ERC Score</u> ⁵ :	20.

⁵ Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.