

AIRPROX REPORT No 2014163

Date/Time: 7 Sep 2014 1156Z (Sunday)

Position: 5118N 00049W
(2nm NW of Farnborough)

Airspace: Blackbushe/Farnborough ATZ
(Class: G)

Aircraft 1 Aircraft 2

Type: Tecnam P2002 PA28

Operator: Civ Club Civ Club

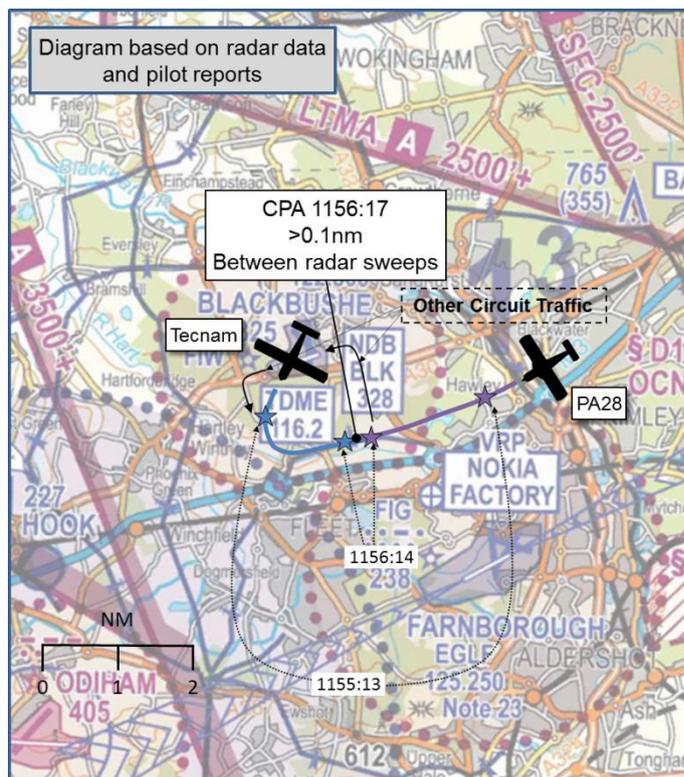
Alt/FL: 800ft 1600ft
 (1004hPa) QNH (1016hPa)

Conditions: VMC VMC

Visibility: 8km 7km

Reported Separation:
 200ft V/80m H 400ft V/200m H

Recorded Separation:
 NK V/0.1nm H

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

THE TECNAM PILOT reports flying VFR in a white aircraft with strobes, landing lights and navigation lights illuminated; the transponder was on with Modes 3/A and C selected. He was in contact with Blackbushe Information, heading 070° at 90kt, and level at 800ft (1004hPa) downwind in the Blackbushe visual circuit. He saw the PA28 appear from behind his 'canopy frame, slightly above and left', 0.5nm away, flying in the opposite direction. Due to the late sighting there was not time to take any action, and he assessed that the PA28 passed him 200ft above and 80m to his left.

He assessed the risk of collision as 'Medium'.

THE PA28 PILOT reports flying VFR, heading 250° at 90kt, level at 1600ft (QNH 1016hPa), in a white and blue aircraft, with strobe lights and navigation lights illuminated and squawking transponder modes 3/A and C. He was in receipt of a Basic Service from Farnborough Radar and had been cleared to fly the 'British Rail West' route by ATC. The pilot had not flown this route before, and had difficulty identifying the railway line, so he set course along the M3 whilst continuing to try and identify the railway line to the south. He saw the Tecnam ahead and assessed that no avoiding action was required because his PA28 was 'well above' it and they pass clear of each other 'port-to-port' at 'a safe distance' of around 200m horizontally and with around 475ft separation between the PA28 and the Blackbushe circuit height of 1125ft. In his frank and open report, the pilot acknowledged the importance of establishing visual contact with the railway-line earlier, and that he had likely strayed into Blackbushe ATZ in error.

He assessed the risk of collision as 'None'.

THE FARNBOROUGH LARS WEST CONTROLLER reports agreeing a Basic Service with the PA28 pilot who requested to route 'British Rail westbound'. The controller issued a Mode 3/A squawk to the pilot, which he verified on the radar display, and observed that no Mode C was displayed. The controller checked that the Farnborough Approach controller did not have any traffic to affect the PA28 pilot's routing, approved the route, and advised the pilot that there was no level restriction and that he was to remain outside controlled airspace. The controller continued to control the aircraft on his frequency and then became aware that the Approach controller was talking to Blackbushe about

an Airprox between the PA28 and an aircraft in the Blackbushe visual circuit. The LARS West controller looked back to his display and saw that the PA28 was south of Blackbushe, routing along the right-hand side of the M3, and that there was a visual circuit aircraft displayed just to the south of the PA28.

Factual Background

The Farnborough weather at 1150 was recorded as:

METAR EGLF 071150Z VRB02KT 9999 SCT021 BKN036 18/12 Q1016

Analysis and Investigation

CAA ATSI

The Tecnam pilot was in receipt of a Basic Service from Farnborough LARS (W) and at 1150:40 was transferred to Blackbushe Information before joining a left hand traffic pattern for RW25 at Blackbushe.

At 1150:50 the PA28 pilot contacted Farnborough and reported en-route at 1000ft, requesting a Basic Service, and a routing westbound following the British Railway Line. The Farnborough controller allocated squawk 0436, QNH 1016, agreed a Basic Service and the routing via the British Rail Line westbound. This was acknowledged by the PA28 pilot.

The PA28 pilot's written report indicated that he had routed on the north side of the M3 whilst trying to identify the railway line as he had not flown the route before. At 1155:41 radar showed the PA28 2nm southeast of Blackbushe entering the Blackbushe ATZ. The Tecnam was turning downwind and was on a reciprocal track at a range of 2nm. Neither of the two aircraft was indicating Mode C level reporting – Figure 1.

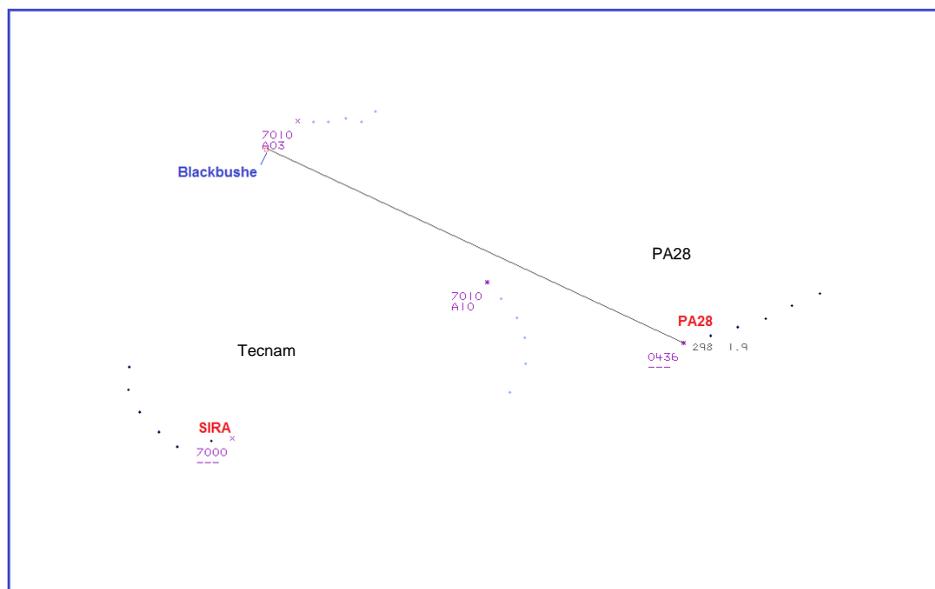


Figure 1 – Swanwick MRT at 1155:41

At 1156:08 the two aircraft were at a distance of 0.6nm (Figure 2) and at 1156:18 they are shown passing abeam at a distance of 0.1nm - Figure 3.

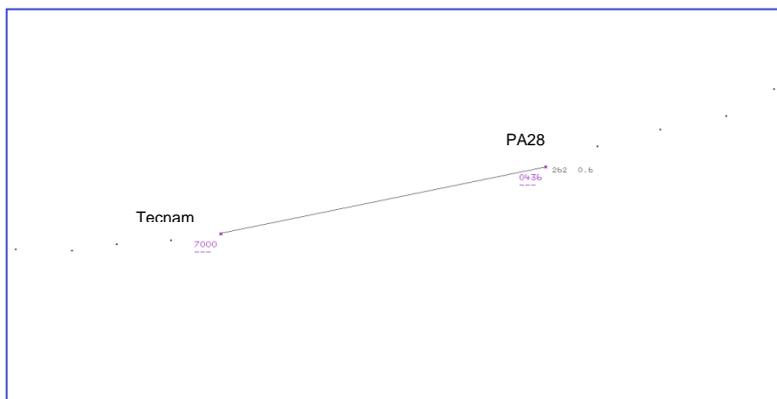


Figure 2 – Swanwick MRT at 1156:08

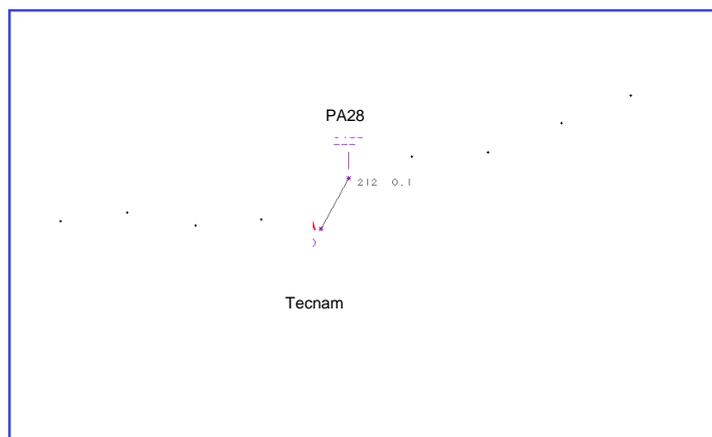


Figure 3 – Swanwick MRT at 1156:18

The PA28 pilot's written report indicated that he sighted the Tecnam on his left hand side and 475ft below. The Tecnam pilot's written report indicated that he was downwind left-hand RW25 at 800ft (QFE) when the PA28 appeared on his left and slightly above. The Tecnam pilot advised Blackbushe information about an aircraft passing overhead going in the opposite direction to the downwind leg. Blackbushe responded that the aircraft was unknown to them.

The PA28 was in receipt of a Basic Service from Farnborough LARS (W), under which the pilot remains responsible for his own collision avoidance. The controller was not required to monitor the flight and the controller's written report indicated that he was working other traffic on the frequency and only became aware of the Airprox after it had occurred.

The PA28 pilot recognised that he had incorrectly entered the Blackbushe ATZ due to being unable to correctly identify the railway line feature.

UKAB Secretariat

The PA28 pilot was flying in the vicinity of Blackbushe aerodrome and was required to conform to the pattern of traffic formed by other aircraft intending to land there or keep clear of the airspace in which the pattern was formed.¹ The aircraft were approaching head-on, so both pilots were required to alter course to the right.² Both pilots had equal responsibility for avoiding collisions and for ensuring that they do not fly in such proximity to other aircraft as to create a danger of collision.³

¹ Rules of the Air 2007, Rule 12, Flight in the vicinity of an aerodrome, and Regulatory Article 2307(1) Para 16

² Rules of the Air 2007, Rule 10, Approaching Head-on

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

Summary

An Airprox was reported in the Blackbushe ATZ, between a Tecnam, which was being flown VFR downwind left-hand in the visual circuit for RW25, and a PA28 whose pilot had entered the ATZ in error whilst having difficulty identifying the railway line that he was trying to follow.

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 commended the PA28 pilot for his honesty about his navigation error and noted that he could also have requested navigational help from the Farnborough controller; even if the controller could not help quickly enough, he would have had the opportunity to inform Blackbushe about potential conflicts. Whilst members were clear that the PA28 pilot had inadvertently entered the Blackbushe ATZ without permission, and they understood the Tecnam pilot's entirely justified concern, it was also noted that he had seen the PA28 half a mile away and that the PA28 pilot had seen the Tecnam in time to take action, but had decided none was necessary. The Board decided that the cause was that the PA28 pilot had flown close enough to cause the Tecnam pilot concern, and that his flight into the ATZ without permission had been a contributory factor. Members also agreed that, although the PA28 pilot should not have been in the ATZ flying the wrong way along the down-wind leg, both pilots had seen the other aircraft in time to take further effective action if necessary, and so they assessed that the Degree of Risk was Category C.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u>	The PA28 pilot flew close enough to cause the Tecnam pilot concern.
<u>Contributory Factor(s):</u>	The PA28 pilot inadvertently entered the Blackbushe ATZ without permission.
<u>Degree of Risk:</u>	C.
<u>ERC Score⁴:</u>	2.

⁴ 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.