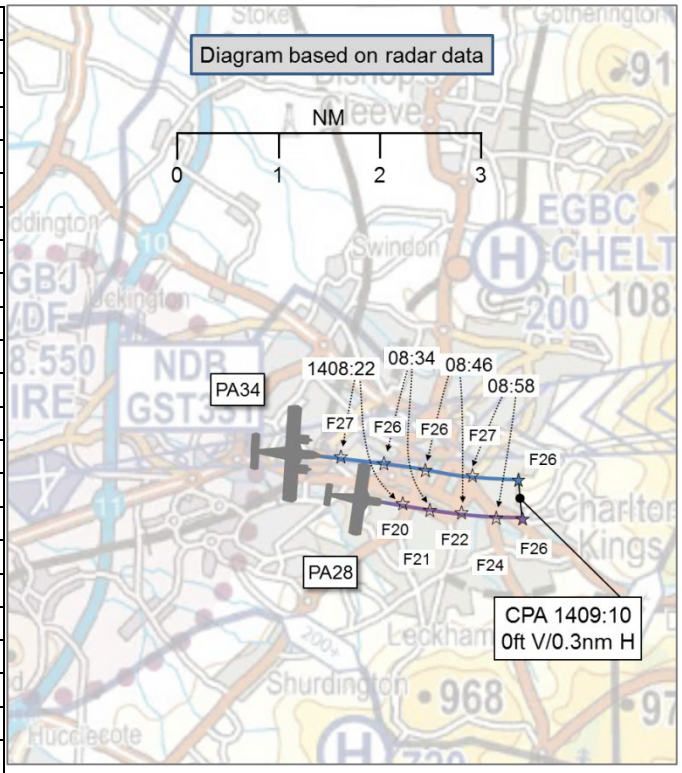
AIRPROX REPORT No 2016059

Date: 20 Apr 2016 Time: 1409Z Position: 5153N 00203W Location: 4nm E Gloucestershire airport

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA34	PA28
Operator	Civ Trg	Civ Club
Airspace	London FIR	London FIR
Class	G	G
Rules	IFR	VFR
Service	Procedural	Basic
Provider	Gloster APP	Gloster APP
Altitude/FL	FL26	FL26
Transponder	A, C, S	A, C, S
Reported		
Colours	White/red	Blue/white/gold
Lighting	NK	Wing strobes
Conditions	VMC	VMC
Visibility	35km	25km
Altitude/FL	3000ft	2700ft
Altimeter	QNH	QNH
Heading	090°	100°
Speed	150kt	95kt
ACAS/TAS	TAS	Not fitted
Alert	TA	N/A
Separation		
Reported	<100ft V/<100m H	150ft V/0.3nm H
Recorded	0ft V/0.3nm H	



THE PIPER PA34 SENECA PILOT reports that traffic was cleared for take-off at Gloucestershire airport as he was initiating a go-around from RW09. He recalled that the Aerodrome controller informed him that the traffic was departing VFR to the south-east. He initially sighted the traffic, but it was lost during the missed approach phase. After being transferred to Gloster Approach, under a Procedural Service, the crew faced a high workload (training flight) and did not recall any further mention of the departing traffic. After levelling off, the crew received a TAS TA indicating a plot in the same position 500ft below at a steady altitude. A few moments later the TA was repeated. The traffic now appeared to be climbing less than 300ft below the PA34. The FI instructed the handling pilot to turn northwards immediately as avoiding action. As the wings came level, the conflicting traffic appeared to be climbing through 3000ft in the location the PA34 had been an instant before.

He assessed the risk of collision as 'High'.

THE PIPER PA28 PILOT reports departing RW09 enroute to his destination via the Oxford overhead. His initial planned altitude was 3000ft. Gloster Approach passed Traffic Information on a Seneca which had flown an approach to RW09 and was eastbound to Oxford, also aiming for 3000ft. Given the routing he did wonder who would get to 3000ft first. He was aware that the Seneca pilot was passed Traffic Information about his aircraft. He became aware that the Seneca was fairly close when its pilot made a comment about being close to him. Upon looking behind he noted the Seneca in his 7 o'clock slightly above and in a shallow left turn. Given the differing rates of climb he suspected that his aircraft may have been in a blind spot for the Seneca crew for a period of time. Having now seen the Seneca and noted it manoeuvring, he did not consider it necessary to change course or stop climbing as he had not quite reached 3000ft. In the end, he climbed to 3500ft and watched the Seneca as their tracks diverged and it gathered speed and moved ahead.

He assessed the risk of collision as 'None'.

THE GLOUCESTERSHIRE APPROACH CONTROLLER reports that the PA28 pilot was transferred from the Aerodrome controller and was placed under a Basic Service. Traffic Information was passed to the PA28 pilot on the PA34 that had gone around behind, climbing to a similar level, which was acknowledged. The PA34 pilot, who had departed behind the PA28, then established contact and was placed under a Procedural Service and instructed to report reaching 3000ft. The pilot read back this instruction and then reported turning left for avoiding action. This was acknowledged, and the Traffic Information on the PA28 ahead was reiterated. There were several further RT exchanges and the filing of an Airprox was confirmed, with details submitted by the pilot after landing.

Factual Background

The weather at Gloucestershire was recorded as follows:

```
METAR EGBJ 201350Z 12008KT 080V140 CAVOK 16/03 Q1029
```

It is not a requirement for controllers to separate aircraft operating under IFR and VFR in Class G airspace. In accordance with CAP774 – UK Flight Information Services, for aircraft in receipt of a Procedural Service:

> *The controller shall provide traffic information, if it is considered that a confliction may exist, on aircraft being provided with a Basic Service*[1]

Analysis and Investigation

CAA ATSI

At 1405:05 the PA28 pilot was cleared for take-off; the PA34, (transponding 2000), had just passed 3nm from touchdown (Figure 1). Levels indicated are Flight Levels.

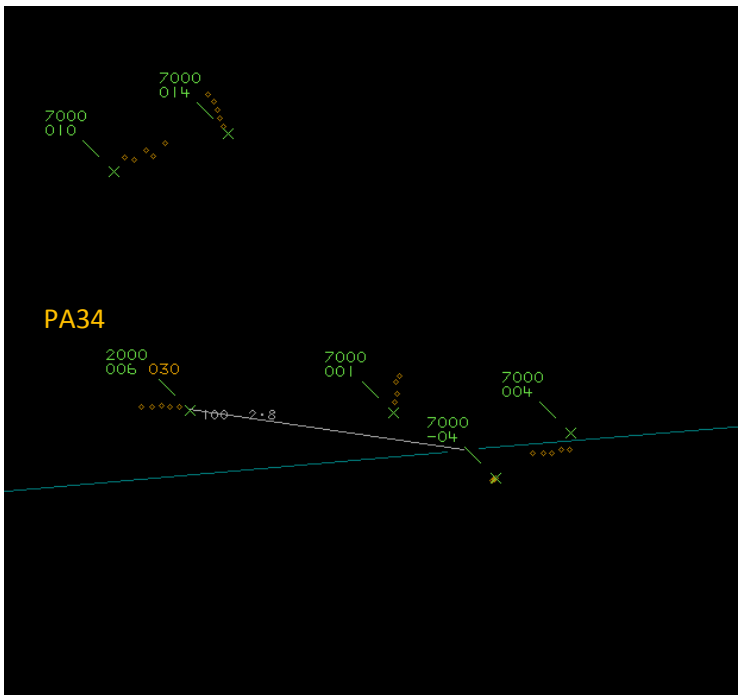


Figure 1 – Swanwick MRT - 1405:05.

At 1406:01 the PA34 pilot was advised that the PA28, airborne from RW09, was departing to the south-east and the pilot of the PA34 reported visual with the aircraft. The PA34 pilot then completed the approach, terminating in a go-around.

[1] CAP774 Chapter 5 Para 5.5

At 1407:10 the PA28 (squawk 7000) became visible on the Swanwick MRT [UKAB Note: Swanwick MRT display is not available to the Gloucester controller], 0.9nm to the east-south-east of the PA34, indicating 900ft below (Figure 2).

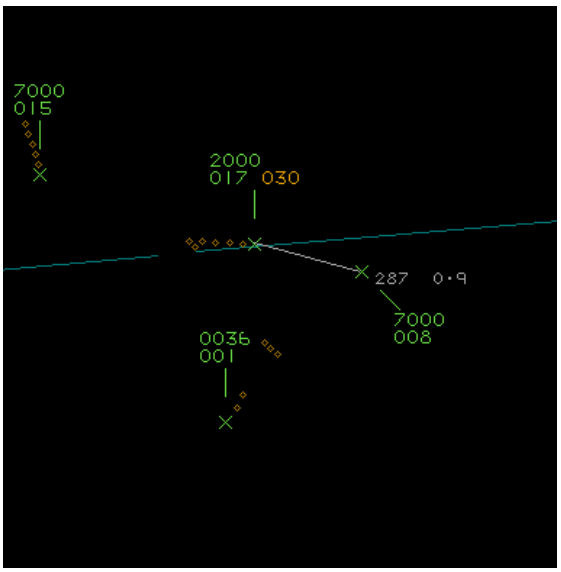


Figure 2 - 1407:10.

At 1407:27 the PA28 pilot was instructed to contact Gloster Approach; the PA34 was transferred at 1407:39.

At 1408:15 the PA28 pilot reported on the Approach frequency and was asked by the controller if he was aware of the PA34 routing to Oxford at 3000ft IFR, which the PA28 pilot confirmed that he was. A Basic Service was agreed. The PA28 pilot did not state, and the approach controller did not ask, what level he was flying/intending to fly at.

At 1408:42 the PA34 pilot reported on the Approach frequency and was advised that it was for a Procedural Service and to report level at 3000ft.

At 1409:00 the PA34 pilot reported making a left turn for avoiding action (Figure 3).

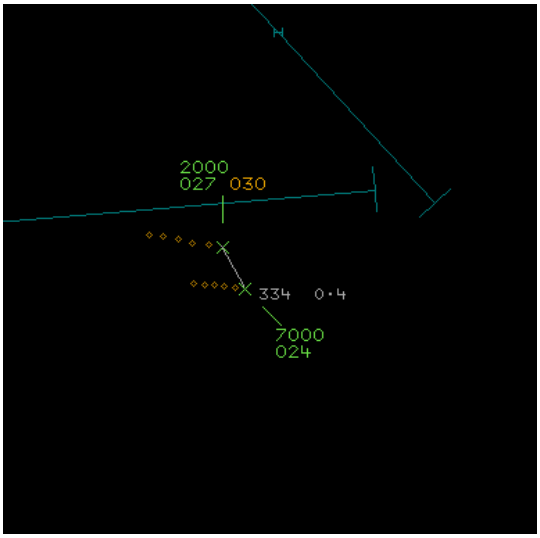


Figure 3 - 1409:00.

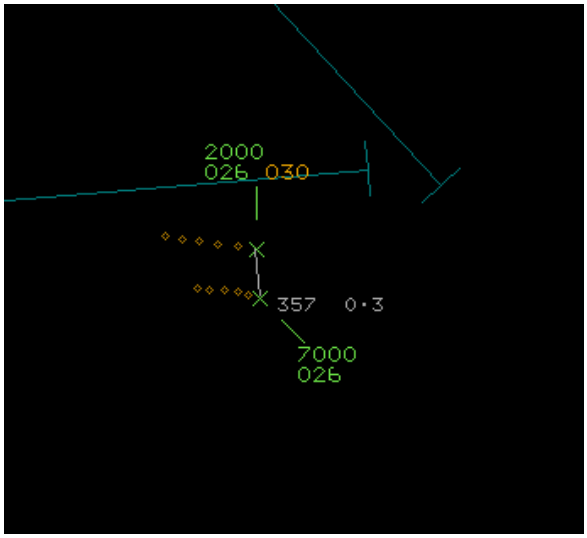


Figure 4 - 1409:17.

The Approach controller then advised the PA34 pilot that there was a PA28 departing to the east climbing to a similar level. CPA took place at 1409:17 with the aircraft separated by <0.3nm laterally and <100ft vertically (Figure 4).

In the subsequent telephone call to complete their reporting action to Gloucestershire ATC, the pilot of the PA34 seemed unsure as to whether or not it was an Airprox, and asked for advice from ATC. The pilot was advised that the decision to report the Airprox was his and it was not for ATC to advice.

UKAB Secretariat

The PA34 and PA28 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[2]. If the incident geometry is considered as overtaking then the PA28 pilot had right of way and the PA34 pilot was required to keep out of the way of the other aircraft by altering course to the right[3].

Summary

An Airprox was reported when a PA34 and a PA28 flew into proximity at 1409 on Wednesday 20th April 2016. The PA34 pilot was operating under IFR in VMC in receipt of a Procedural Service and the PA28 pilot under VFR in VMC in receipt of a Basic Service, both from Gloster ATC. Traffic Information was issued to both pilots. The PA34 pilot reported that he had seen the PA28 initially but had then lost sight of it. Subsequently, he took avoiding action based on a TA. Both pilots only saw each other after the PA34 pilot had commenced his avoiding action turn.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from both pilots, the controller concerned, area radar and RTF recordings and reports from the appropriate ATC and operating authorities.

The Board noted that both pilots intended to route from Gloucestershire airport towards Oxford airport climbing to 3000ft.

The Board first discussed the actions of the PA34 pilot. The Board noted that he had been carrying out an NDB approach and go-around to RW09 under IFR, and had been in contact with Gloster Tower. Whilst on the final approach at about 3nm, the PA28 pilot was cleared for take-off by the Aerodrome controller. Approximately one minute later, members noted that the PA34 pilot had been issued with Traffic Information about the PA28, which was airborne from RW09 and was also departing to the south-east. Having initially reported visual with the PA28, the Board noted that, whilst carrying out his missed approach the PA34 pilot had then lost sight but had not informed the controller. Subsequently, both pilots had been transferred to the Approach controller, with ATC under the belief that the PA34 was still visual with the PA28. Shortly after contact, and having been advised that he was in receipt of a Procedural Service, the PA34 pilot then reported turning left for avoiding action having received a TAS TA about the proximity of the PA28. The Board wondered why the PA34 pilot, having been informed about the PA28 and presumable knowing that he would be flying faster than it, had then continued towards its reported routeing once he had lost visual contact. Moreover, had he informed ATC that he had lost contact, this may have prompted the controller to have taken some action or offer assistance to mitigate the possibility of a close encounter between the two aircraft (although members recognised that, technically, the controller did not have to separate the PA34 and the PA28 under the terms of their Procedural and Basic Services).

The Board then turned to the actions of the PA28 pilot. They noted that he had departed RW09 under VFR ahead of the PA34, climbing to 3000ft. On transfer to the Approach controller he was placed on a Basic Service and had confirmed he was aware of the PA34 routeing to Oxford also at 3000ft. Although he reported that he was aware that the PA34 pilot had been given Traffic Information about his aircraft, and that he understood the performance differential between them as the PA34 would likely overtake, some members were somewhat nonplussed that he had simply

[2] SERA.3205 Proximity.
[3] SERA.3210 Right-of-way (c)(3) Overtaking.

'wondered who would get to 3000ft first' rather than taking pro-active measures to either fly defensively or ensure that the PA34 was indeed visual with him. Some members suggested that he could easily have levelled off below 3000ft to reduce the possibility of a confliction at that height but, that being said, they also recognised that he would not have been aware of the PA34's climb-rate and so he could still have been in conflict with the other aircraft at a lower altitude as it climbed to 3000ft. There was a difficult balance between maintaining a constant path in the belief that the overtaking aircraft was visual with him, and flying defensively in case it was not.

Having discussed the actions of the two pilots, some Board members wondered if the controller could have taken more action to control the situation. Although realising that the controller had not been required to separate the two aircraft, they wondered if it would have been advisable for him to have introduced a height difference to resolve any possibility of a confliction. A Civil Airfield Controller member stated that, in his opinion, once the controller had been informed by the PA34 pilot that he had visual contact with the PA28 (and had not subsequently reported losing sight of the aircraft); it was up to him to separate himself from the PA28 ahead. The Board generally agreed with this opinion.

The Board then considered the cause of the Airprox. Three options were discussed: either the PA34 pilot had flown into conflict with the PA28; it had been a non-sighting by the PA34 pilot and a late sighting by the PA28 pilot; or the PA34 pilot was concerned by the proximity of the PA28. After a short debate during which the actual separation of 0.3nm at CPA was highlighted, it was decided that, having perceived the PA28 to appear close to his aircraft on TAS, the cause of the Airprox was simply that the PA34 pilot was concerned by its proximity.

The Board then turned its attention to the risk. The PA28 pilot reported that he had seen the PA34 in his 7 o'clock, slightly above and turning away and had not needed to take any avoiding action. The PA34 pilot confirmed that he had made an avoiding action turn, but this was based on information from his TAS. The Board again noted that, at CPA, the two aircraft had been 0.3nm apart on virtually parallel tracks. Accordingly, the Board considered that normal procedures and safety standards in Class G airspace had pertained, and they assessed the Airprox as risk Category E.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The PA34 pilot was concerned about the proximity of the PA28.

Degree of Risk: E.