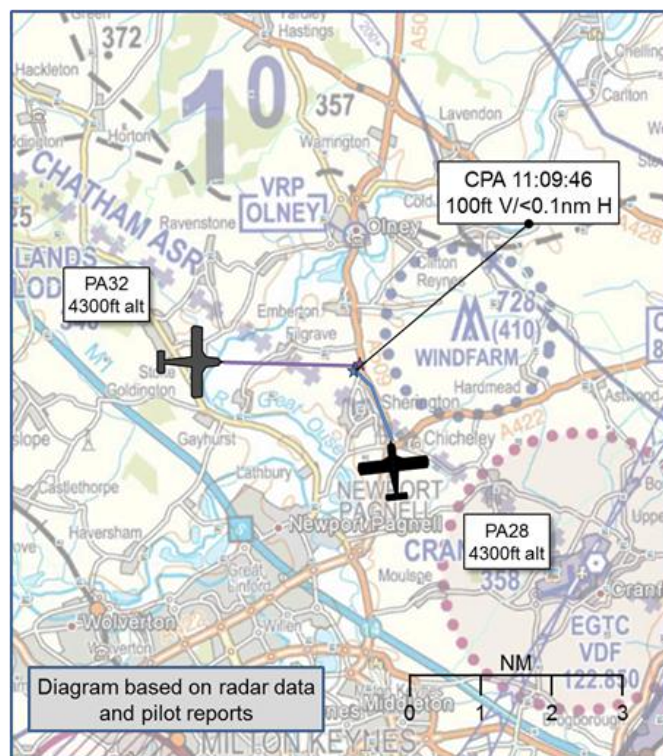


AIRPROX REPORT No 2015007

Date: 24 Jan 2015 Time: 1110Z Position: 5207N 00043W Location: 5nm NW Cranfield (Saturday)

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA28	PA32
Operator	Civ Pte	Civ Trg
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic
Altitude/FL	4000ft	4300ft
ACAS/TAS	Not fitted	NK
Alert	N/A	Unknown
Transponder	A , C	A, C, S
Reported		
Colour scheme	White, green and gold	Not known
Lighting	Navigation, strobes and landing lights	Not known
Conditions	VMC	NK
Visibility	10km	NK
Altitude/FL	4000ft	NK
Altimeter	QNH (1025hPa)	NK
Speed	110kt	NK
Separation		
Reported	75ft V/15m H	NK
Recorded	100ft V/0.1nm H	



THE PA28 PILOT reports that after departing RW21 at Cranfield he was cleared for a right turn-out and climb to 4000ft under a Basic Service from Cranfield Approach. Whilst carrying out a top-of-climb FREDA¹ check, he noticed the PA32 aircraft about 50-100ft above, 10-20m away approximately 10° to port. He immediately pushed the nose down to increase vertical separation. He commented that he only saw the other aircraft whilst leaning forward to physically touch the fuel selector as part of his FREDA check; the PA32 had been obscured behind the window pillar/aircraft roof of his aircraft before this. He did not report the Airprox at the time to the Cranfield controller because the controller was busy providing a number of aircraft in the hold/approach with a Procedural Service and he did not want to distract him. He changed over to Coventry Approach shortly afterwards for a Traffic Service.

He assessed the risk of collision as 'High'.

THE PA32 INSTRUCTOR PILOT declined to participate in the Airprox process.

Factual Background

The weather at Cranfield was recorded as follows:

EGTC 241050Z 29010KT CAVOK 05/01 Q1025

¹ Fuel, Radio, Engine, DI, Altimeter.

Analysis and Investigation

CAA ATSI

CAA ATSI had access to the PA28 pilot's report. No report was available from the PA32 pilot and neither aircraft reported the Airprox on RTF or subsequently to Cranfield. As a result, no reporting action was taken by Cranfield. The PA28 was in receipt of a Basic Service from Cranfield Approach. The controller was providing a combined Aerodrome and Approach Control Service without the aid of surveillance equipment. The controllers' workload was assessed as medium.

At 1103:00 the PA28 departed VFR from Cranfield's RW21 with a right turn out. On departure, the PA28 had been in receipt of an Aerodrome Control Service and, although the service was not changed, the PA28 pilot reported being in receipt of a Basic Service. At 1106:00 the PA28 pilot reported passing 3000ft climbing to 4000ft on QFE. The controller passed the QNH 1025 which was acknowledged by the PA28 pilot.

At 1108:17 the PA32 contacted Cranfield Approach and reported VFR, 8nm northwest of Cranfield at 4300ft requesting a Basic Service and permission to join the hold. The controller advised the PA32 pilot he had previously booked a ten thirty training slot and that, due to other aircraft which had also booked training, Cranfield was unable to accommodate the PA32's request for training in the hold. After an RTF exchange which ended at 1109:30, a Basic Service was agreed, and the PA32 indicated his intention to return to Oxford.

At this point the two aircraft were 4.4nm northwest of Cranfield Airport. The horizontal distance between the two aircraft was 0.8nm and the PA28 was shown 100ft above the PA32 – Figure 1.

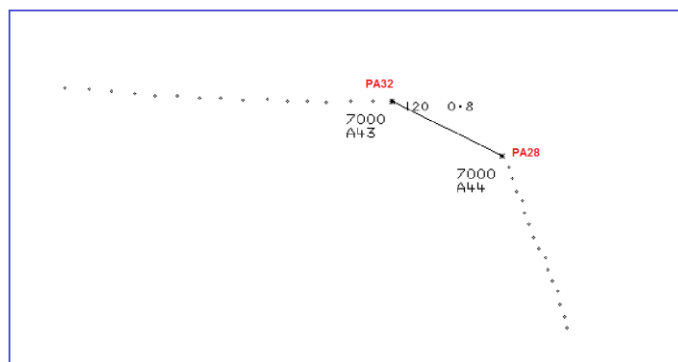


Figure 1 – Swanwick MRT at 1109:30

At 1109:39 the PA28 was indicating 4300ft and had made a slight left turn. The PA32 was indicating 4400ft. At 1109:47 (CPA) the PA28 passed 0.1nm southwest of the PA32 and was indicating 100ft below – Figure 2.

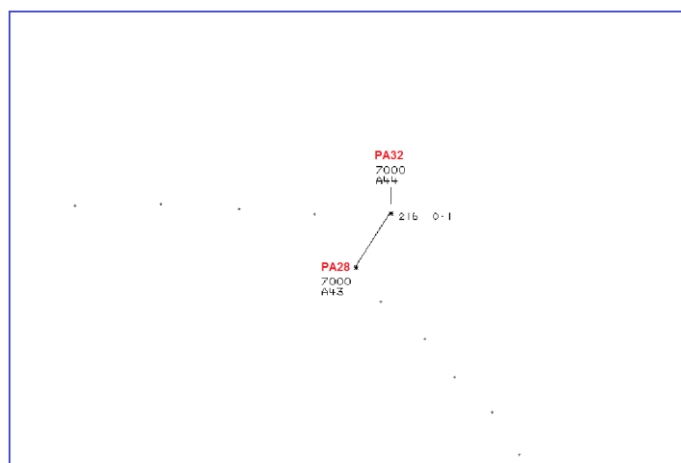


Figure 2

No report was made on the RTF regarding the Airprox or the proximity of another aircraft. The two aircraft continued without further incident.

Both aircraft had been in receipt of a Basic Service where the avoidance of other traffic is solely the pilot's responsibility and the controller was not required to monitor the flight².

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.

UKAB Secretariat

The PA28 and PA32 pilots shared an equal responsibility for collision avoidance and not to fly into such proximity as to create a danger of collision³. The incident geometry is considered as converging, and therefore the PA32 pilot was required to give way to the PA28⁴.

Summary

An Airprox was reported when a PA28 and a PA32 flew into proximity at 1110 on Saturday 24th January 2015. Both pilots were receiving a Basic Service from Cranfield Approach.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the pilot of the PA28, 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.

Members of the Board were unanimous in expressing their dismay at the PA32 Instructors' attitude to flight safety by refusing to partake in the Airprox reporting process. They commented that it was only by the open and honest reporting of Airprox that vital flight safety lessons could be learnt; a process which the Instructor himself had no doubt benefited from in the past. Furthermore, it was considered that, as an instructor, he had even more of a responsibility to set a good example to his students and the wider GA aviation community by contributing fully. In this respect, the Board were at pains to remind all those who had been involved in an Airprox event that confidentiality was a key part of the process, which was intended only to understand the causes and risks of an incident without apportioning blame or culpability. Names and identities were only submitted during reporting in order to allow the UKAB Secretariat to enable incident tracking, investigation and follow-up responses; they were not released outside this small team and, moreover, all report material was destroyed after the reporting process was complete.

Turning to the event itself, the Board agreed that this was a relatively straightforward encounter between two aircraft whose pilots were carrying out normal activity in Class G airspace under the principles of see-and-avoid. Both pilots were in receipt of a Basic Service from Cranfield, which had no surveillance capability and therefore could not assist in providing Traffic Information other than procedurally. The PA28 pilot's report highlighted the need to pro-actively counter the problems of cockpit obscuration by moving one's head to ensure an effective lookout. The Board considered that it had been fortunate indeed that he had done so by happenstance whilst conducting his FREDAs checks. The Board also noted that the PA32 pilot had contacted Cranfield Approach 1min 30sec prior to CPA and, although they were not aware of the exact contents of the discussion, surmised that there would have been numerous references to the potential for the PA32 to enter the hold from the West (albeit this was ultimately refused). The Board highlighted that this also potentially provided a separate source of situational awareness to the PA28 pilot if he had been able to correlate these

² CAP774, Chapter 2, Paragraph 2.1

³ SERA 3205 (Proximity).

⁴ SERA 3210 (Right of way).

radio calls with his own intentions. Unfortunately, the same opportunity was not available to the PA32 pilot who, it appeared, had not been on Cranfield's frequency when the PA28 pilot had stated his intentions. That being said, the Board wondered whether the Cranfield controller, who was aware of the PA28 pilot's intentions, could have passed that information to the PA32 pilot; they surmised that, because of the extended conversation and negotiation about holding slots, the Cranfield controller had overlooked the relevance of this information once the PA32 pilot had said he would be returning to Oxford rather than enter the hold.

Although they had no information from the pilot of the PA32 with which to base an understanding of his perception of risk and cause, it was clear to the Board that, once visual with the PA32 at a very late stage, the pilot of the PA28 had had to take urgent avoiding action. In contrast, it seemed that the pilot of the PA32 had not reacted and had therefore not materially affected the geometry of the encounter. Taking all of these factors into account, the Board agreed that the cause was a late sighting by the pilot of the PA28 and a probable late or non-sighting by the PA32 instructor. Because safety margins had been much reduced and the pilot of the PA28 had had to take emergency avoiding action, the Board agreed that the degree of risk was Category B.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by the PA28 pilot and a probable late or non-sighting by the PA32 instructor.

Degree of Risk: B.