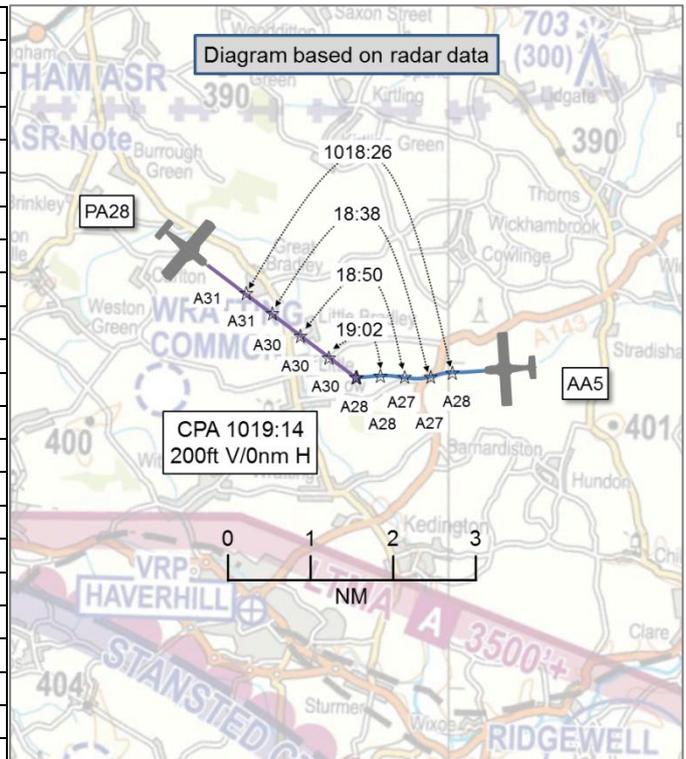


AIRPROX REPORT No 2015091

Date: 21 Jun 2015 Time: 1019Z Position: 5207N 00028E Location: 2nm W Stradishall

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	AA5	PA28
Operator	Civ Pte	Civ Pte
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	NK
Provider	Cambridge App	N/A
Altitude/FL	2800ft	3000ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White/blue	White/blue
Lighting	Strobe, beacon	NK
Conditions	VMC	VMC
Visibility	>20km	>10km
Altitude/FL	2700ft	3000ft
Altimeter	QNH (1015hPa)	QNH (1015hPa)
Heading	270°	130°
Speed	110kt	110kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	200ft V/75m H	NK
Recorded	200ft V/0nm H	



THE AA5 PILOT reports that shortly after making contact with Cambridge Approach and turning west, he scanned outside and noticed a white and blue PA28 at a range of ¼nm approaching on a closing course from the north, heading south. He assessed that there was a chance of collision so took avoiding action by diving. The other pilot appeared not to have seen him, since there was no indication of any deviation in the other aircraft’s course or level.

He assessed the risk of collision as ‘Medium’.

THE PA28 PILOT reports that he could not recall the exact circumstances of this event and assumed that the information given regarding the date, time and position was correct. He stated that he may have been receiving a Basic Service from Cambridge, or may have just left their frequency. However, he did remember a very late sighting of another aircraft ahead and slightly below that seemed to be already taking avoiding action. The PA28 pilot thought he turned slightly but he didn't consider there was any risk of collision.

He assessed the risk of collision as ‘None’.

THE CAMBRIDGE CONTROLLER was not informed of the Airprox and did not file a report.

Factual Background

The weather at Cambridge was recorded as follows:

METAR EGSC 211020Z 27011KT 240V320 9999 SCT035 17/11 Q1015

Analysis and Investigation

CAA ATSI

ATSI had access to both pilot reports, the Swanwick Radar recording and recordings of the relevant radio frequencies.

- At 1006:05 the PA28 pilot had established communication with Cambridge Approach and a Basic Service was agreed. Surveillance services were not available as Cambridge were operating procedurally.
- At 1015:40 the PA28 pilot reported east abeam Cambridge, as previously requested by Cambridge Approach.
- At 1017:50 the AA5 pilot made contact with Cambridge and a Basic Service was agreed.
- At 1018:55 the PA28 pilot advised leaving the frequency but did not state the next agency.
- At 1019:14 CPA occurred. It was not possible to measure the horizontal distance between the aircraft – for reference the picture shows a 0.1nm line. The vertical distance was 200ft (see Figure 1).

Neither pilot advised Cambridge of the Airprox, and the Controller would not have been aware. 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 Section 2.1 refers).



Figure 1: CPA. Swanwick MRT at 1019:14

UKAB Secretariat

The AA5 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 hazard¹. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right². If the incident geometry is considered as converging then the AA5 pilot was required to give way to the PA28³.

Summary

An Airprox was reported when an AA5 and a PA28 flew into proximity at 1019 on Sunday 21st June 2015. Both pilots were operating under VFR in VMC, the AA5 pilot in receipt of a Basic Service from Cambridge Approach, operating without radar, and the PA28 pilot having just left the Cambridge frequency and probably not in receipt of a service.

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c) (1) Approaching head-on.

³ SERA.3210 Right-of-way (c) (2) Converging.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, radar photographs/video recordings and a report from the appropriate ATC authority.

Members discussed the pilots' actions and first considered the AA5 pilot's narrative. It was apparent that he had seen the PA28 at fairly close range and that he had perceived a possibility of collision. Consequently he had dived below the other aircraft. Members agreed that, from the radar picture, it appeared the AA5 pilot had commenced the dive close to CPA, and that he had probably not significantly further increased separation. Turning to the PA28 pilot, it was clear that he had, by his own account, seen the AA5 also at a late stage. Neither pilot should have expected to obtain Traffic Information from Cambridge due to the Air Traffic Service they had requested, and, in any case, the PA28 pilot had left the frequency some 20sec before CPA. Therefore, it was agreed that the cause of the Airprox was a late sighting by both pilots.

Turning to risk, the PA28 pilot reported 'a very late sighting of another aircraft ahead and slightly below that seemed to be already taking avoiding action'; he consequently felt there was no risk of collision. Members discussed his perception of collision risk; on the one hand he had quite rightly assessed that the AA5 would miss him, on the other, members felt that the close proximity of the two aircraft denoted an inherent increased risk. It was suggested that the PA28 pilot's view of risk of collision was based on his perception of the instantaneous trajectories of each aircraft at or close to CPA, whereas the Board felt this picture was too limiting and dealt purely with the outcome rather than a complete assessment of events surrounding the Airprox. Some members felt that timely action had been taken to prevent a collision, not least because the aircraft were separated by some 200ft vertically in the first place; however, by a close majority, it was felt that although avoiding action had been taken, it appeared to have been too late to have materially affected separation and that safety margins had been reduced below the normal.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by both pilots.

Degree of Risk: B.