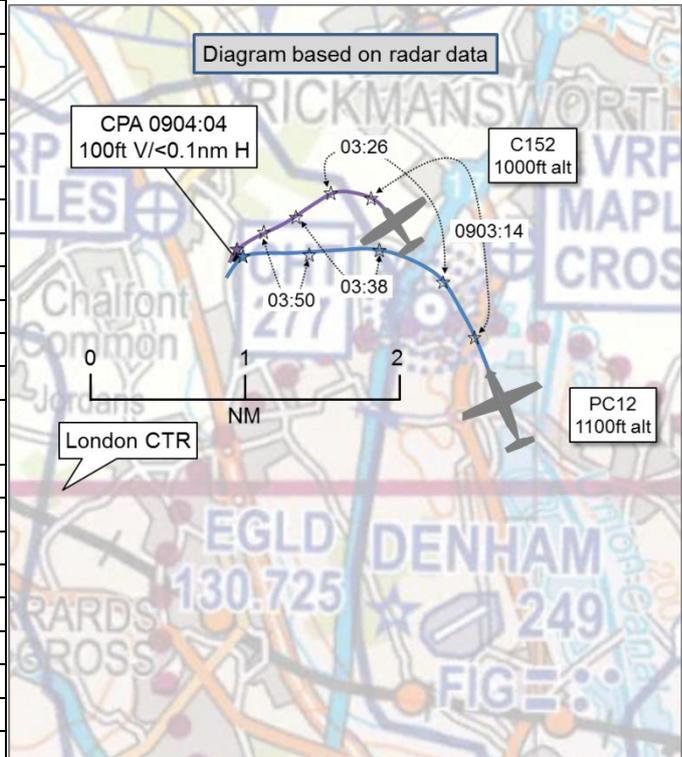


AIRPROX REPORT No 2015079

Date: 23 May 2015 Time: 0904Z Position: 5138N 00033W Location: Denham Airfield (Saturday)

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PC12	C152
Operator	Civ Comm	Civ Club
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	A/G Service	A/G Service
Provider	Denham Radio	Denham Radio
Altitude/FL	1100ft	1000ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Gold	Red, white, blue
Lighting	Nav, beacon landing	NK
Conditions	VMC	VMC
Visibility	10km	>10km
Altitude/FL	1000ft	1200ft
Altimeter	QNH (NK hPa)	QNH (1024hPa)
Heading	280°	220°
Speed	120kt	75kt
ACAS/TAS	TCAS I	Not fitted
Alert	TA	Nil
Separation		
Reported	0ft V/20m H	0ft V/150m H
Recorded	100ft V/<0.1nm H	



THE PC12 PILOT reports performing a ‘full-circuit pattern’ due to 3 aircraft ahead, routing St Giles VRP, Denham, Maple Cross VRP, St Giles VRP. When approaching St Giles VRP for the second time the co-pilot saw another aircraft, very close on the right side and in a left turn. The pilot took avoiding action and, simultaneously, the crew received a TCAS Traffic Alert. The pilot noted that neither Denham Radio nor they were aware of ‘this new aircraft’ in the circuit pattern.

He did not make an assessment of the risk of collision.

THE C152 PILOT reports instructing a circuit training exercise. The circuit was congested so they departed via Maple Cross VRP. Whilst tracking towards St Giles VRP, a practice go-around was conducted at height, and the student (PF) started to turn left. The instructor asked him to level the wings so that they could continue to track towards St Giles VRP, at which point he saw the underside of a gold turbo-prop aircraft, co-altitude about 200-150m away, overtaking them in a level hard left turn; he did not have time to take avoiding action. The instructor reported the Airprox to Denham Radio, who did not acknowledge the call.

He assessed the risk of collision as ‘High’.

THE DENHAM A/G OPERATOR did not submit a report.

Factual Background

The weather at Heathrow was recorded as follows:

METAR EGLL 230850Z 35006KT 310V050 9999 FEW024 16/10 Q1025 NOSIG
 METAR EGLL 230920Z 36006KT 330V060 9999 FEW021 17/11 Q1025 NOSIG

Analysis and Investigation

UKAB Secretariat

The PC12 and C152 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. The incident geometry was overtaking; the C152 pilot had right of way and the PC12 pilot was required to keep out of the way of the other aircraft by altering course to the right², notwithstanding the requirement to avoid collision.

The version of CAP 413 (Radiotelephony Manual) in force at the time stated:

'An AGCS radio station operator is not necessarily able to view any part of the aerodrome or surrounding airspace. Traffic information provided by an AGCS radio station operator is therefore based primarily on reports made by other pilots. Information provided by an AGCS radio station operator may be used to assist a pilot in making decisions, however, the safe conduct of the flight remains the pilot's responsibility.'³

Summary

An Airprox was reported when a PC12 and a C152 flew into proximity at 0904 on Saturday 23rd May 2015. Both pilots were operating under VFR in VMC, both in receipt of an A/G Service from Denham Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft and radar photographs/video recordings.

Members noted that the Denham visual circuit was severely constrained by airspace and noise abatement limitations, and that the airspace to the north of Denham could be very congested. The C152 pilot had elected to leave the visual circuit due to congestion and was effectively transiting between VRPs in Class G airspace. Some members felt that he would have been better served in not conducting instruction in the busy airspace between VRPs, but rather concentrate on effective lookout. That being said, other members noted that it was Class G airspace, that he was entitled to operate within it, and that he was probably just taking advantage of the short transit to consolidate points made during the circuit training work. The Board noted that the PC12 pilot had also left the visual circuit due to congestion, but they were informed that there was no 'full-circuit pattern' as such, as reported by the PC12 pilot. That being said, they recognised that the nature of the departure and joining procedures effectively created a fixed route between Denham and the Maple Cross and St Giles VRPs. It was clear to the Board that the PC12 pilot did not have SA on the C152, as evidenced by his recollection that it was 'a new aircraft in the circuit pattern'. Members noted that pilots were required to report their position and height to the A/G Operator on entering and immediately prior to leaving the ATZ⁴, but they were hampered by the lack of RT recording to determine what had actually been said in this instance. Nevertheless, they agreed that each pilot would be expected to state their

¹ SERA.3205 Proximity.

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

³ Chapter 4 (Aerodrome Phraseology), page 50 (Aerodrome Air/Ground Communication Service Phraseology), paragraph

4.138 (Type of Service), dated 13 Nov 2014.

⁴ Rules of the Air 2015, Rule 11 (Flight within aerodrome traffic zones).

intentions on leaving the visual circuit, and therefore that both pilots should have had the opportunity to have been aware of the other's position and intentions.

After some discussion, it was agreed that the C152 and PC12 were not actually in the visual circuit at the time of the Airprox, that the PC12 was overtaking the C152 in Class G airspace, and therefore that the C152 pilot had right of way. It was unfortunate that the PC12 pilot had not seen the C152 earlier, and consequently his flight path had taken him into conflict. When considering the risk, members agreed that it was fortunate that the PC12 co-pilot had seen the C152, albeit at close range; however, with a combination of a late sighting, relatively high overtake speed, and reported hard turn away, it was also agreed that separation had been reduced to the minimum, and that chance had played a major part in events.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The PC12 pilot flew into conflict with the C152.

Degree of Risk: A.