### AIRPROX REPORT No 2015138

Date: 15 Aug 2015 Time: 1656Z Position: 5117N 00009W Location: M25 N abeam Redhill

Recorded	Aircraft 1	Aircraft 2		a Serie	H
Aircraft	C172	PA28	Diagran	n based on radar dat	ta
Operator	Civ Club	Civ Pte	ID DID		ΕŅ
Airspace	London FIR	London FIR	RICH / LOO		SA(
Class	G	G	BANSTEAD	NM	7
Rules	VFR	VFR	ation	TWW I	6
ervice	Basic	Basic	Burgh	1 2 4	-1
Provider	Biggin Hill	Farnborough	LHeath		
		LARS East		y Chi	C
Altitude/FL	1900ft	1800ft	Th PA 1800		200
ransponder	A/C	A/C/S	1000		200
Reported			6 Angen	1000 75 21	1
Colours	Mainly white	Mainly white	Malta	1 1 1	A19
ighting	None	Nav, beacon	wallon app		
Conditions	VMC	VMC	on the Hilles		-
/isibility	>10km	10km		55:22 55:34	55:46
ltitude/FL	2100ft	1900ft	2000ft alt	MAS )	
Altimeter	NK (1014hPa)	NK	Tho 8	5.0 M	
leading	075°	090°	PHermitage 7.7	Rx24-11	hU
Speed	105kt	105kt	riennitage 217	HO HO	SK
ACAS/TAS	Not fitted	Not fitted	2 VRP	XS 2°E	
Separation		BUCKLAN		-91	
Reported	50ft V/0m H	Not seen	POULTIN	14.19-20	Carrow Contraction
Recorded 100ft V/<0.1nm H					

# PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE CESSNA 172 PILOT** reports being inbound to Biggin Hill. He first saw the other aircraft between 100-150ft away. It was approaching slightly behind, to his left and approximately 50ft below. It passed directly underneath, heading about 090°-100°. He reported 'pulling up' as avoiding action.

He assessed the risk of collision as 'High'.

**THE PIPER PA-28 CHEROKEE PILOT** reports that he was not aware of the Airprox having no recollection of seeing another aircraft in close proximity at the time.

## Factual Background

The weather at Biggin Hill was recorded as follows:

METAR EGKB 151650Z 30007KT 250V350 9999 FEW045 18/08 Q1014=

### Analysis and Investigation

## CAA ATSI

The C172 pilot called Biggin Hill approach and was asked to report at 5nm from Biggin Hill, a Basic Service was agreed. The PA28 pilot reported working Farborough Radar on a Basic Service, but the pilot report did not refer to any Traffic Information having been passed and no recording of the Farnborough frequency was made.

A review of the Radar data was used to identify the aircraft: the C172 was squawking 7047 and the PA28 was squawking 0430 (Figure 1 – Redhill Airfield bottom right, annotated 'KR').



Figures 2 and Figure 3 show two consecutive Radar sweeps made at 1655:50 and 1655:56 respectively. The CPA occured at Figure 3, when the aircraft were less than 0.1nm horizontally and 100ft vertically apart. There was no mention of the event on the radio and Biggin Hill were not aware that an Airprox had occurred.

Under a Basic Service pilots are ultimately responsible for the provision of collision avoidance and controllers are not expected to monitor individual flights<sup>1</sup>.



Figure 2.

Figure 3.

### **UKAB Secretariat**

The C172 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<sup>2</sup>. If the incident geometry is considered as converging then the PA28 pilot was required to give way to the C172<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> CAP774, Section 2.1

<sup>&</sup>lt;sup>2</sup> SERA.3205 Proximity.

<sup>&</sup>lt;sup>3</sup> SERA.3210 Right-of-way (c) (2) Converging.

#### Summary

An Airprox was reported when a C172 and a PA28 flew into proximity abeam Redhill on Saturday 15<sup>th</sup> August 2015. Both pilots were operating under VFR in VMC, the C172 pilot in receipt of a Basic Service from Biggin Hill and the PA28 pilot in receipt of a Basic Service from Farnborough LARS East. The C172 pilot saw the PA28 between 100-150ft away, approaching from his left, slightly behind, and approximately 50ft below; it passed directly underneath. The PA28 pilot did not see the C172. The minimum separation was recorded as 100ft vertical and less than 0.1nm horizontal.

### PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

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

The Board noted that the Airprox had occurred in Class G airspace with both pilots operating under VFR in VMC. The C172 pilot, who had been inbound to Biggin Hill, had contacted Biggin Approach and a Basic Service had been agreed. (Biggin Hill is not equipped with surveillance radar.) For his part, the PA28 pilot, who was transiting the area, had been in receipt of a Basic Service from Farnborough LARS E but, under a Basic Service with a Radar Unit, there was no requirement for the controller to identify or monitor the PA28's progress. Unfortunately the RTF recording of the frequency was no longer available to see whether or not Traffic Information had been issued to the PA28 pilot, nor did the PA28 pilot comment that he had received any Traffic Information from Farnborough in his report.

Because neither pilot had presumably been in receipt of Traffic Information, and they had been on different frequencies, the only way for them to avoid confliction in this busy aviation area was by 'seeand-avoid'. The Board noted that the two aircraft had effectively been abeam each other on slowly conflicting flight paths for some time, with the PA28 to the left of the C172 and travelling slightly faster. Notionally, as the overtaking aircraft, it had been for the PA28 pilot to give way to the C172, but he had not seen the aircraft. Equally unfortunate, the C172 pilot had not seen the PA28 which had been approaching and converging from slightly behind. Members commented that, for both pilots, this highlighted again the need to maintain an all-round lookout, guarding especially against becoming fixated on looking ahead or in one particular area for navigation reasons. The Board noted that the C172 pilot had seen the PA28 only when it had been in close proximity to his aircraft, and that the PA28 pilot had not seen the C172 at all; consequently, the Board quickly decided that the cause of the Airprox was a non-sighting by the PA28 pilot and a late sighting by the C172 pilot.

Turning to the risk, it was apparent from the C172 pilot's report and the radar recordings that the two aircraft had been very close at the time of the Airprox. The radar recordings show that they passed 0.1nm apart horizontally and 100ft vertically. Because the C172 pilot had taken some form of avoiding action by 'pulling up', it was considered that this had prevented the possibility of a collision although the safety margins had been much reduced below the norm. Consequently, the Board agreed that the Airprox should be categorised as risk Category B.

The Board opined that if the PA28 pilot had requested, and had been able to receive, a Traffic Service from Farnborough he could have expected to have been informed about the presence of the C172 which was displaying on radar. However, it was recognised that, due to controller workload, it was not always possible for controllers to provide the service. Although on this occasion neither pilot had reported that they had been expecting more information about other traffic when in receipt of a Basic Service, a lengthy discussion took place concerning pilots' expectations when being provided with a Basic or a Traffic Service. A number of GA members believed that there were still many pilots who were not sufficiently informed about what to expect under various ATC Services, especially a Basic Service' seemed to them to be the confusing part for some pilots in that they equated this with some sort of monitoring by ATC. A CAA advisor commented that there was no reason why a pilot should not be aware of the limitations of a Basic Service, because the information is promulgated sufficiently; it was up to the pilot to ensure that he was aware what a Basic Service entailed. The

Board were not as sanguine as the CAA representative, and wondered whether it was time to look again at the naming rationale within UK FIS.

### PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u> A late sighting by the C172 pilot and a non-sighting by the PA28 pilot.

Degree of Risk: B.