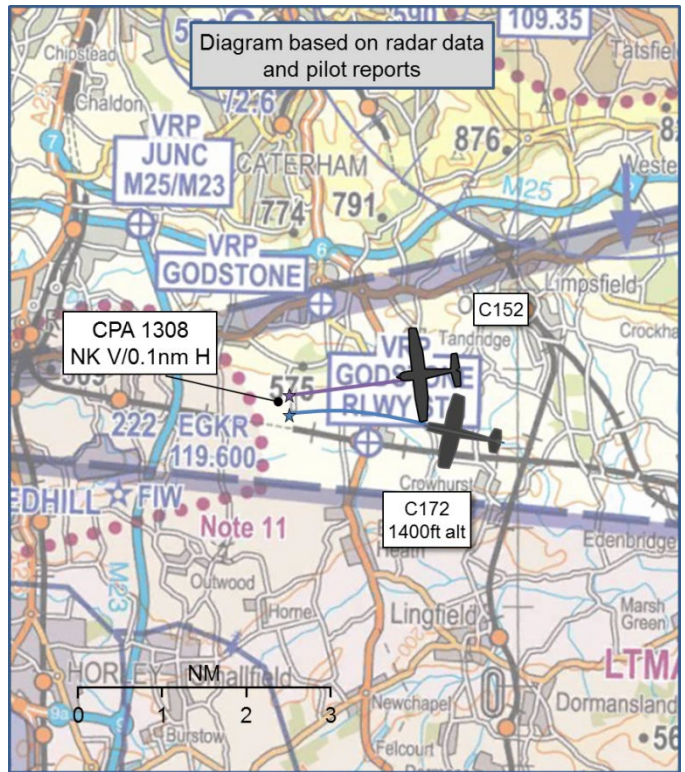


## AIRPROX REPORT No 2015149

Date: 29 Aug 2015 Time: 1308Z Position: 5113N 00005W Location: Godstone Station VRP

### PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C172	C152
Operator	Civ Pte	Civ Trg
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Aerodrome	Aerodrome
Provider	Redhill Tower	Redhill Tower
Altitude/FL	1400ft	NK
Transponder	A,C,S	A.C
<b>Reported</b>		
Colours	White, Orange, Green.	White, red, blue.
Lighting	Nav, landing.	NK
Conditions	VMC	VMC
Visibility	10km	>10km
Altitude/FL	1200ft	1350ft
Altimeter	QNH (1019hPa)	QNH
Heading	270°	270°
Speed	95kt	90kt
ACAS/TAS	Not fitted	Not fitted
<b>Separation</b>		
Reported	50ft V/50ft H	2-300ft V 0.5nm H
Recorded	NK V/0.1nm H	



**THE C172 PILOT** reports that he was joining Redhill airfield from the east and had called for join as usual at Bough Beech reservoir. Although not a mandatory reporting point, this gives ATC and other pilots' positional awareness. He was told to report at South Godstone railway station. Just west of the reservoir he overtook a slower moving aircraft (not involved in the Airprox) following the rules of the Air, so he maintained airspeed to ensure good separation. When he was within 1nm of the railway station, he heard a C152 pilot report that he was at South Godstone station. The RT was busy at this time and the C152 pilot was given permission for a straight in approach. The C172 pilot immediately called on the RT to report that he was directly above the station and could not see the other aircraft. He recalled being worried by this and considered conducting an orbit whilst trying to work out where the other aircraft might be and what his options were. He could not orbit left because that would infringe Gatwick airspace, and a right orbit may have taken him towards the other aircraft. Luckily, ATC asked him to conduct an overhead join at no higher than 1500ft. He immediately applied power to climb to 1400ft. At that point he saw the C152 coming directly towards him from the north, approximately 50ft below. He believed that the pilot had reported being at the VRP when actually 3 miles north which was, in his opinion, poor airmanship.

He assessed the risk of collision as 'High'.

**THE C152 PILOT** reports routing the VRP of Godstone Station, used for joining RW26 at Redhill; he was in communication with Redhill ATC. He had requested joining instructions from ATC when in the vicinity of Oxted, and recalled the other pilot requesting a join from Bough Beech Reservoir at a similar time. He was looking out for the other aircraft, and another following it. He reported at Godstone Station before the C172, in fact he was about ½ mile north at the time and was visual with the C172 who was above, behind and to the left. He was initially given an overhead join, but this was changed to a straight in approach whilst the C172 was given the overhead join. He considered that

there was no risk of collision, he had the aircraft in sight at all times and, given that he was on the other aircraft's right, he believed he had 'right of way' in accordance with Rules of the Air; notwithstanding, he maintained visual separation.

He assessed the risk of collision as 'None'.

## Factual Background

The weather at Gatwick was recorded as follows:

METAR EGKK 291250Z 15006KT 110V190 9999 SCT035 20/14 Q1020=

## Analysis and Investigation

### CAA ATSI

The C172 pilot called Redhill Tower for joining instructions from the east at 1301:20 and was instructed to report the Godstone Railway Station VRP.

At 1304:20 the C152 pilot called for joining instructions from the east, north-east and was also told to report at the Godstone Railway Station VRP. The controller then passed Traffic Information to the C152 on the C172 and on a PA28 also inbound from the east.

At 1307:01 the C152 pilot reported at the Godstone Railway Station VRP, adding that they were ahead and to the north of the C172. The controller cleared the C152 to the overhead (Figure 1).

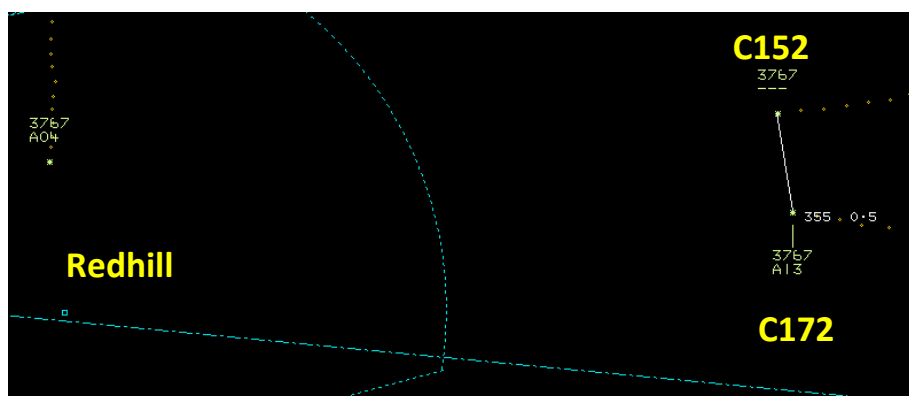


Figure 1 – 1307:01

At 1307:12 the C172 pilot reported directly overhead the VRP and so the controller changed the sequence, instructing the C152 to continue for a straight-in approach for RW26, and the C172 to route to the airfield overhead. The pilot of the C152 also then reported to Redhill ATC that the C172 was above and behind their aircraft. (Figure 2).

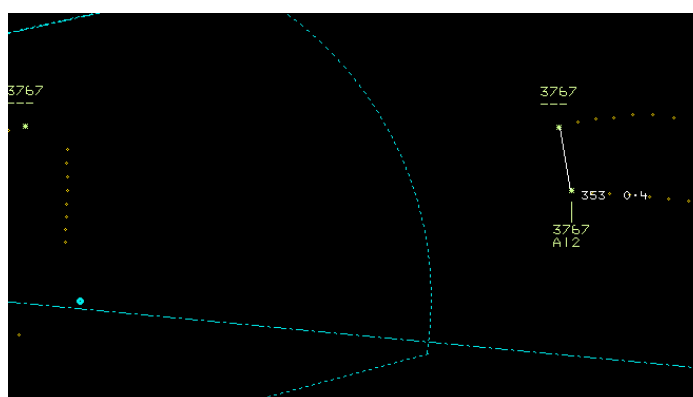


Figure 2 – 1307:37

The Airprox report from the pilot of the C172 suggested that CPA took place following this sequence of instructions from ATC, estimated to be 1307:40. On radar, CPA took place at 1308:34, with only the C172 transponding Mode C altitude. (Figure 3).

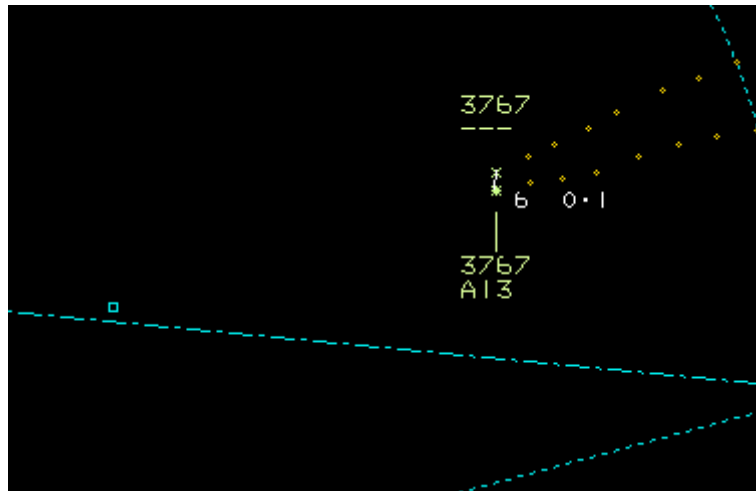


Figure 3 – 1308:34

The secondary radar return of the C152 in Figure 3 had been lost, and was now primary-only, and the aircraft disappeared fully from radar shortly afterwards, suggesting a descent by the C152.

### UKAB Secretariat

The C172 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 hazard<sup>1</sup>. If the incident geometry is considered as converging then the C172 pilot was required to give way to the C152<sup>2</sup>. An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation.

### Summary

An Airprox was reported when a C172 and a C152 flew into proximity at 1308 on Saturday 29<sup>th</sup> August 2015. Both pilots were operating under VFR in VMC, and both were joining Redhill via Godstone Station VRP and receiving an Aerodrome Service from Redhill ATC.

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

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, and reports from the appropriate ATC and operating authorities.

The Board first noted that this Airprox had happened in the vicinity of a Visual Reference Point (VRP) which were known to be potential points of conflict because they invited pilots to funnel towards a single area. Members stressed that VRPs were Reference points and not Reporting points. In this respect, they also highlighted previously issued guidance from the CAA about not routing directly overhead VRPs in order to avoid the risk of meeting other aircraft also flying overhead. Instead, pilots were better advised to fly offset to VRPs and to give accurate position reports based on that VRP, e.g. to report 3nm north–abeam or similar as appropriate.

<sup>1</sup> SERA.3205 Proximity.

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

The Board then looked at the actions of the C172 pilot. He had heard the other pilot call on frequency and knew that they were both routing towards the same VRP. Concerned when he could not see the other aircraft, the Board wondered why he didn't communicate with the other pilot. The ATSI advisor (who had listened to the RTF transcript), had noted that there were 12 aircraft on the frequency at the time, that the frequency was therefore extremely busy, and opined that this may have prevented more dialogue between the two pilots involved in the Airprox. In his concern about navigating to the VRP, members wondered whether the C172 pilot had been focusing his lookout into that area to the detriment of an all-round lookout; they noted that the 2 aircraft had essentially been abeam each other for some time on a gradually closing vector, and they reiterated the need to maintain a good all-round lookout rather than just focusing ahead during airfield joins

For his part, the C152 pilot was visual with the C172 and therefore probably didn't perceive there to be a problem; notwithstanding, subject to the busy frequency, the Board also thought that he could have told the C172 pilot that he was visual and would avoid him, thus clearing up any doubt. The Board agreed that the C152 pilot had probably been to the north of the VRP when he had called overhead, and they re-iterated the need for accurate position reporting. Some members wondered whether, having seen the C172 abeam, he was rushing to get his call in to ATC first, hoping that he would then be given clearance ahead of the other aircraft.

Although the radar recordings show the two aircraft in close proximity horizontally, the Board thought that at CPA the C152 pilot had probably commenced his descent. Therefore, it was likely that there was reasonable vertical separation, and probably more than the 50ft suggested by the C172 pilot. It is common in Airprox reporting for those startled by the unexpected presence of an aircraft to misjudge separation, and the Board thought that the C172 pilot was probably alarmed by the presence of the C152 thereby causing him to assess it as being closer than it was. Notwithstanding the fact that he was visual with the C172, GA members thought that the C152 pilot could have done more to prevent the Airprox from happening. Had he made a small adjustment to his heading, height or speed earlier, or told the C172 that he was visual with him, then the C172 pilot would not have been so startled by his proximity. Furthermore, because the C152 pilot didn't know the intentions of the C172 pilot, by flying so close he risked being surprised himself by the other pilot's actions: had the C172 pilot orbited right as he had considered doing, the proximity could have been much closer.

The Board commended Redhill ATC who, despite being busy, had identified the problem of the two aircraft approaching from the same direction at the same time and had pro-actively amended the clearance of the C152, thereby allowing one aircraft to climb and the other to descend and thus reduce the conflict.

Some members thought that, because he had been visual at all times, the C152 pilot had effectively knowingly flown into conflict with the C172; however, the majority felt that he had been constrained by the joining procedures and had simply not allowed enough room, or communicated his intentions in a timely and accurate manner, to avoid concerning the other pilot. In assessing the cause, the Board finally agreed that by not allowing more separation (whether he had right of way or not), the cause of the Airprox was that the C152 pilot had flown close enough to the C172 to cause its pilot concern. In assessing the risk, the fact that the C152 pilot was visual with the C172 at all times caused the Board to conclude that there was no risk of collision; they assessed the risk as Category C.

### **PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: The C152 pilot flew close enough to the C172 to cause its pilot concern.

Degree of Risk: C.