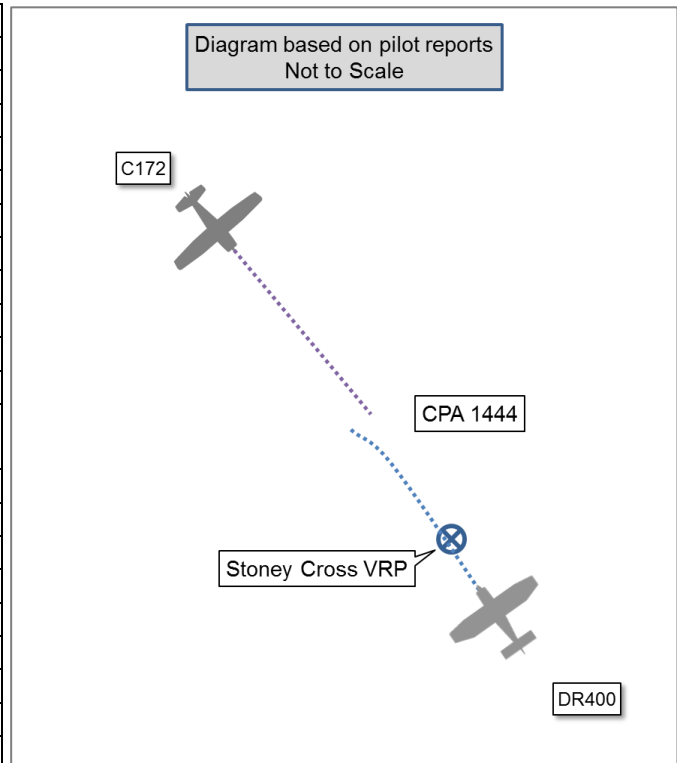


## AIRPROX REPORT No 2015012

Date: 17 Feb 2015 Time: 1444Z Position: 5056N 00140W Location: Stoney Cross

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Robin DR400	C172
Operator	Civ Club	Civ Trg
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	None
Provider	(Boscombe)	(Solent Radar)
Altitude/FL	NK	NK
Transponder	A, C	A, C, S
Reported		
Colours	White/yellow	White
Lighting	White anti-collision strobe	Strobe and beacon
Conditions	VMC	VMC
Visibility	40km	'Cavok'
Altitude/FL	1500ft	1800ft
Altimeter	QNH (1039hPa)	QNH (1035hPa)
Heading	320°	145°
Speed	115kt	95kt
ACAS/TAS	Not fitted	Other TAS
Alert	N/A	Nil
Separation		
Reported	0ft V/200m H	NK
Recorded	NK	



**THE DR400 PILOT** reports en-route via Beaulieu and Stoney Cross VRPs. The pilot had been in receipt of a Basic Service from Solent Radar and Bournemouth Radar and, on passing Stoney Cross VRP, was instructed to call Boscombe Zone. During the initial call, he observed a C172, slightly right of the canopy windscreen centre strut compass housing on top of the instrument panel. It was on a reciprocal heading at the same level, so the DR400 pilot made an immediate avoiding action left turn, remaining level. He then banked right, and observed the C172 pass down his right-hand side, remaining level. The C172 pilot did not appear to have seen him and took no avoiding action. The DR400 pilot filed the incident and, on enquiry, was told by the Boscombe Zone controller that the Cessna pilot was not in radio contact and that no squawk had been observed by either Boscombe or Bournemouth Radar controllers.

He assessed the risk of collision as 'High'.

**THE C172 PILOT** reports en-route via the Stoney Cross and Beaulieu VRPs. Once south of the Alderbury VRP, he requested a Basic Service with Solent Radar and was issued a squawk and to report at the Beaulieu VRP, where he continued his onward flight. The pilot reported that he was not aware of an incident at any time during the flight. He did recall that Solent Radar advised of another aircraft in the area but, with good lookout, no traffic was seen. The pilot noted that the C172 was fitted with a Traffic Awareness System, from which he did not recall receiving an alert.



## Factual Background

The weather at Bournemouth was recorded as follows:

METAR EGHH 171450Z 32007KT 9999 FEW037 09/00 Q1039

## Analysis and Investigation

### CAA ATSI

The DR400 pilot's route was over the New Forest which lies beneath the Solent Control Area and between the CTRs of Bournemouth and Southampton. At 1434:00, the DR400 pilot called Solent Radar and was issued a squawk of 3670 but asked to standby by the controller. At 1437:00, the controller returned to the DR400 pilot and asked him to pass his message. A Basic Service was agreed as the DR400 pilot reported passing Beaulieu VRP and confirmed tracking towards Stoney Cross. The controller then confirmed whether that was the routing 'now', as it took the DR400 close to the Bournemouth CTR. The controller instructed the DR400 pilot to free-call Bournemouth Radar. (Bournemouth use Stoney Cross VRP as an entry and exit point for their CTR and they are also a LARS unit). After a brief period working Bournemouth radar, the DR400 pilot was transferred to Boscombe Radar. It was during the initial call that the pilot observed a C172 tracking in the opposite direction at the same height. The DR400 pilot reported an Airprox at 1444:00, the same time the C172 pilot called Solent Radar requesting a Basic Service, which was agreed at 1445:00. Under the terms of a Basic Service, the controller is not required to monitor the flight but may supply Traffic Information on first contact. Traffic information was passed, but on an unrelated Helicopter. A review of the radar data did not provide a picture of the Airprox geometry; the low-level nature of the flights meant they were on the base of coverage. Both the aircraft were flying in Class G airspace, where the pilots were ultimately responsible for their own collision avoidance.

### UKAB Secretariat

The DR400 and C172 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 head-on, or nearly so, then both pilots were required to turn to the right<sup>2</sup>, notwithstanding their obligation to avoid collision.

## Summary

An Airprox was reported when a Robin DR400 and a Cessna 172 flew into proximity at about 1444 on Tuesday 17<sup>th</sup> February 2015. Both pilots were operating under VFR in VMC, the DR400 pilot in the process of agreeing a Basic Service with Boscombe Zone, and the C172 pilot in the process of agreeing a Basic Service with Solent Radar.

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

Information available consisted of reports from the pilots of both aircraft, radar photographs/video recordings (which did not show the incident geometry) and a report from the appropriate ATC authority.

Board members quickly agreed that although the VFR principle of 'see-and-avoid' was key in resolving this incident, other factors had a bearing. Both pilots were in the process of establishing an Air Traffic Service, but had not yet done so, and members observed that this would necessarily entail a reduction in lookout as each pilot selected radio frequencies and transponder codes. Fortunately, the DR400 pilot saw the C172, albeit late by his own assessment, but with sufficient time to take

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

<sup>2</sup> SERA.3210 Right-of-way (c)(1) Approaching head-on.

avoiding action in the most appropriate direction. The C172 pilot did not recall seeing another aircraft in close proximity and, of further concern, did not recall receiving a warning from his TAS. The Board were not able to establish why this was so, other than to hypothesize equipment unserviceability or that the DR400 transponder had been selected to standby during the initial call to Boscombe, which had occurred close to CPA. The Board reiterated the limitations of a Basic Service, and that pilots either had to request Traffic Information or a 'higher level' of service, such as a Traffic Service, in order to gain situational awareness on other traffic. Members also remarked that the pilots were routing in opposite directions, using the same VRPs, and that this was an example of the need to avoid directly over-flying a VRP and keep the feature on the left, thereby maintaining visual contact in the majority of 2-seat light-aircraft and building in a level of deconfliction between aircraft approaching a VRP from opposite directions.

Members agreed that the late-sighting by the DR400 pilot, and the non-sighting by the C172 pilot had meant that the DR400 pilot had only been able to avoid collision at near to the last opportunity to do so; hence they concluded that safety margins had been much reduced below normal.

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

Cause: A late sighting by the DR400 pilot and a non-sighting by the C172 pilot.

Degree of Risk: B.