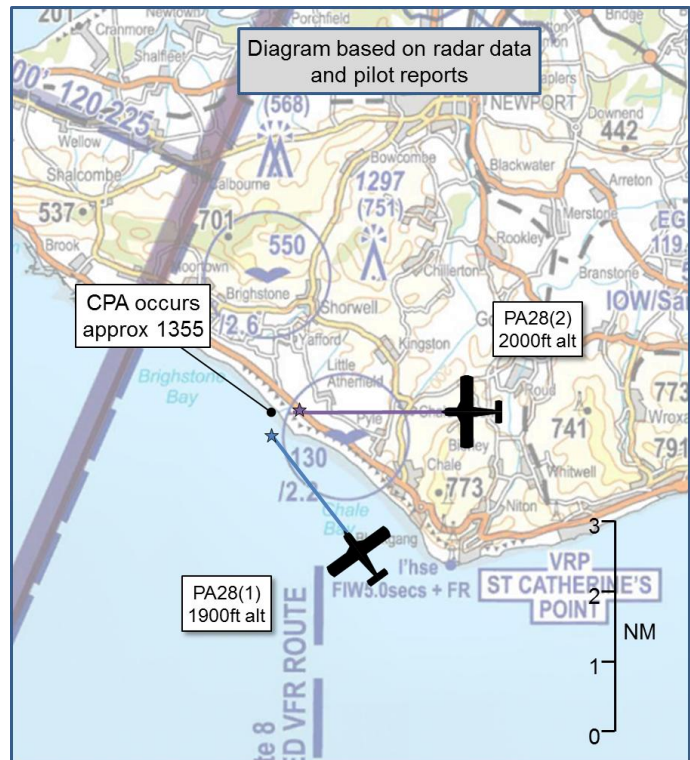


AIRPROX REPORT No 2015011

Date: 24 Mar 2015 Time: 1355Z Position: 5036N 00121W Location: Isle of Wight

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|-------------|---------------|---------------------|
| Aircraft | PA28 | PA28 |
| Operator | Civ Club | Civ Club |
| Airspace | Lon FIR | Lon FIR |
| Class | G | G |
| Rules | VFR | VFR |
| Service | Basic | Basic |
| Provider | Solent Radar | Solent Radar |
| Altitude/FL | 1900ft | 2000ft |
| ACAS/TAS | Not fitted | Not fitted |
| Alert | N/A | N/A |
| Transponder | On/ A,C | On/A,C |
| Reported | | |
| Colours | Red and White | Blue and White |
| Lighting | Strobes | Strobes/ Nav lights |
| Conditions | VMC | VMC |
| Visibility | >10km | 30km |
| Altitude/FL | 1500ft | 2000ft |
| Altimeter | NK | QNH |
| Heading | 260° | 298° |
| Speed | 95kt | 120kt |
| Separation | | |
| Reported | 50ftV/0ft H | 500ftV/ 1nm H |
| Recorded | NK | |



THE PA28 (1) PILOT reports flying along the south coast receiving a Basic Service from Solent radar. The weather was sunny and hazy which made looking into the sun difficult. The passenger reported an aircraft on the starboard side at a similar altitude. The pilot reported being wary of the other aircraft as it appeared closer than she would usually expect and, in her opinion, had clearly positioned there. It was at a similar speed and, after a while, she ruled out that he was intending to overtake; she kept watching it and, as she did, he dipped his left wing and turned towards her aircraft. It was slightly higher, but the margin for error seemed very slim so she lowered her nose and he turned above and behind and came along side her port wing, again at a similar altitude and speed. Because she didn't trust that he wasn't going to turn towards her again, she reduced speed so he could get ahead of her and she could watch him. She lost sight of him as he headed towards the Needles, which was also her next turning point. She increased back to normal cruising speed and carried on as intended to the Needles. As she turned onto a northerly heading she saw the same aircraft coming in the opposite direction on her starboard side, again at a similar altitude, although she noted that with controlled airspace at 2000ft in this area, aircraft around the Needles were often at the same altitude. She levelled off the turn so they didn't converge, but again she saw him turn towards her in a starboard bank. She decreased her height and watched as he turned behind her tail and then reappeared on the port wing. He stayed there until she pulled away in a starboard turn. She requested the registration from ATC, but they didn't seem to have any information on him. She described his actions as "as though he was trying to fly in formation with me".

She assessed the risk of collision as 'High'.

THE PA28(2) PILOT reports flying at 2000ft, south of St Catherine's Point when he saw traffic on his port side approximately 1nm from his wing and 500ft above, he moved behind the aircraft maintaining good separation and visual contact throughout. He then turned away from the other aircraft and out to sea to allow the other aircraft to turn at the Needles VRP; the other pilot then turned at this point and was on a SE heading. He had now turned his own aircraft at the Needles VRP and was orbiting to allow his passenger to take photos and allow the other aircraft to gain more distance. After this the other aircraft was out of sight and he didn't see it again. At no time did he consider that either aircraft were in any danger, or he didn't believe there had been an Airprox because he had maintained good separation and visual contact at all times.

He assessed the risk of collision as 'None'.

Factual Background

The weather at Southampton was reported as:

EGHI 2413500Z 32011KT 280V350 9999 FEW030 07/M01 Q1028=

Analysis and Investigation

CAA ATSI

The two aircraft involved were operating VFR in Class G Airspace where it is ultimately the pilots' responsibility for collision avoidance. Both pilots were being provided with a Basic Service by Solent Radar at Southampton, and both aircraft were flying more or less clockwise around the Isle of Wight. The R/T recordings provided were of only 120.225 although one pilot reported on 128.855. These two frequencies were 'cross-coupled' at Southampton so they effectively operate as one frequency. Although both aircraft were under a Basic Service mutual Traffic Information was provided by the Solent Radar controller which they are required to do if they notice that a definite risk of collision exists. However, a controller providing a Basic Service is not required to monitor a flight. The pilot of PA28(1) confirmed they were visual with the traffic. The Radar screenshot below (Figure 1) showed the two aircraft concerned (at the bottom of the picture) with the range set to a similar range to that which the controller would have seen. The PA28(1) squawking 3670 filed the initial report, PA28(2) squawking 3666, converged from the north east and then turned left behind PA28(1) before routing parallel towards The Needles are at the western point of the Isle of Wight.

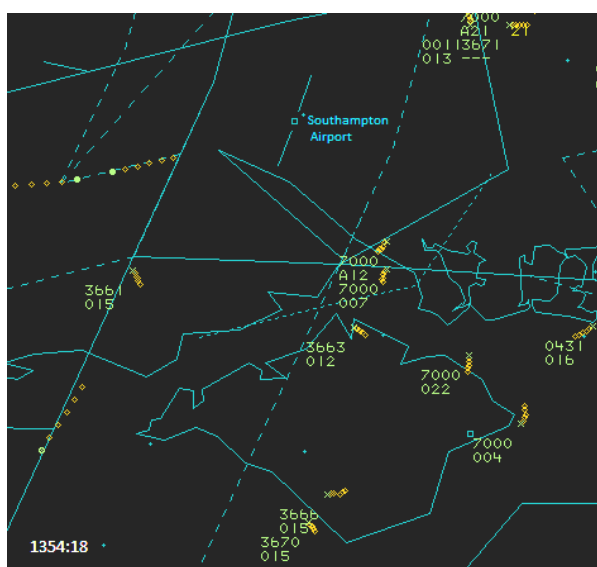


Figure 1

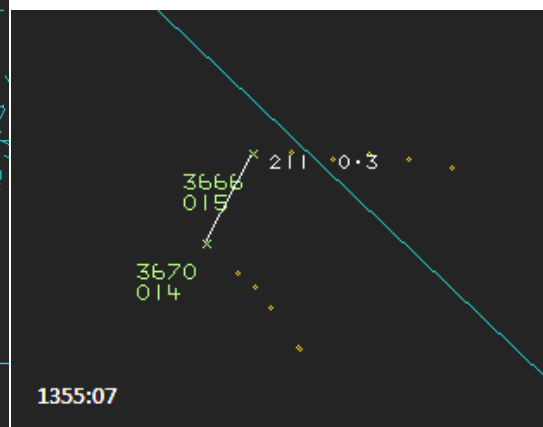


Figure 2

Figure 2 showed the relative positions just prior to when the controller gave the traffic information. The radar returns show Flight Level information which indicated approximately 450ft lower than the aircraft height – due to the high QNH. Having gradually converged with PA28(1), PA28(2) made a left turn and appeared to pass behind the other aircraft. However, low-level radar coverage caused the contacts to become intermittent so the horizontal distance in Figure 2 is the minimum radar indicated. Beyond these images radar contact with both aircraft was sporadic.

UKAB Secretariat

PA28(2) fades from the NATS radars just before CPA, when the aircraft are 100ft and 0.5nm apart, therefore the exact CPA is not known. Both 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 to be converging then PA28(1) pilot was required to give-way.²

Summary

An Airprox was report on 24th March at 1355 between two PA28s, both VMC and VFR at approximately 2000ft. Both aircraft were receiving a Basic Service from Solent Radar, and received Traffic Information about the other aircraft.

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 opined that this Airprox essentially revolved around differing perceptions of relative proximity; one pilot thought that there had been an Airprox whilst the other didn't. Both pilots were undertaking a similar sortie, and were probably using the same turning points; furthermore, it was agreed that, given their similar routing and performance, it would have been difficult to out-pace or slow down by very much to effect any form of separation. In looking at the actions of PA28 (1) pilot, the Board noted that she was clearly concerned by the positioning of the other aircraft to her right-hand side. They also noted that, under SERA regulations, the pilot of PA28 (1) was required to give way to PA28 (2). In the event, the pilot of PA28 (2) was also visual with PA28 (1), and had himself chosen to avoid it to give himself more room to manoeuvre for his own task requirements. In all of this, the Board wondered why the two pilots had simply not spoken to each other on the radio to mutually arrange deconfliction. In this respect, although not directly pertinent to this incident, the Board also noted that, in Scotland, there is an ongoing trial of 135.475 as a general VHF low-level common frequency; they opined that, had this been available in this area it may have allowed the two pilots to communicate directly.

The Board noted the vastly differing estimates of the separation from the two pilots, and also noted that the pilot of PA28 (1) had had to ask Solent for the registration of PA28 (2). They thought that, had the aircraft really only been 50ft apart, the PA28 (2)'s registration could have been fairly easily read by PA28 (1)'s pilot. In the end, they came to the conclusion that the separation was probably much more than 50ft, and likely somewhere between the two estimates; however, they urged pilots to take all measures to avoid other aircraft by a good margin since they could not know the other pilot's intentions, or whether they had been seen themselves.

In determining the cause, the Board agreed that the root of the incident was that the pilot of PA28 (1) had been concerned by the proximity of PA28 (2). Because both pilots had both been visual with each other, the Board opined that the two aircraft were never going to collide, and assessed the degree of risk as C; effective and timely actions had been taken by the PA28 (2) pilot.

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-Way (c) (2) Converging.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The PA28 (1) pilot was concerned by the proximity of PA28 (2).

Degree of Risk: C.