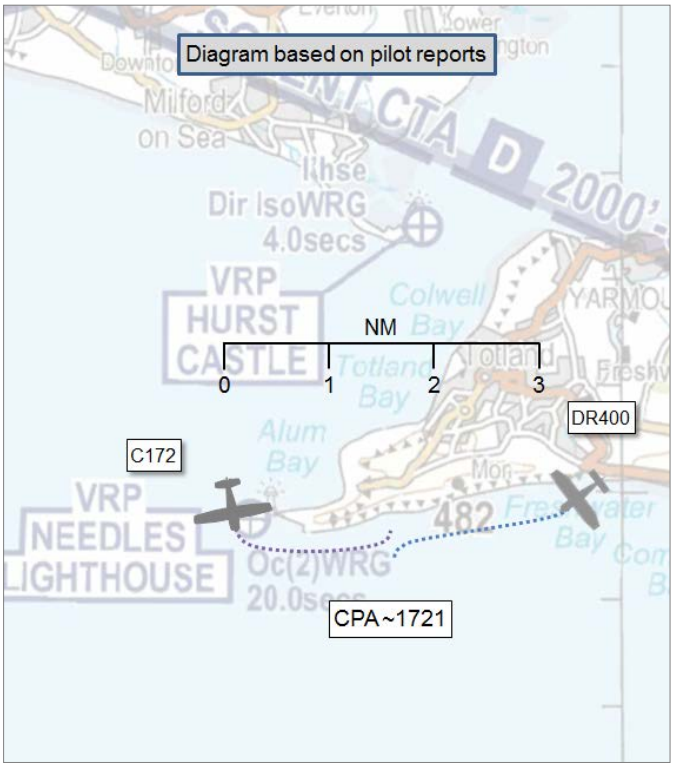
AIRPROX REPORT No 2017130

Date: 21 Jun 2017 Time: 1721Z Position: 5040N 00133W Location: Freshwater Bay, IoW

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	DR400	C172
Operator	Civ Club	Civ Club
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Listening Out
Provider	Solent	(Solent)
Altitude/FL	NK	NK
Transponder	A, C	A, C, S
Reported		
Colours	White, yellow	White
Lighting	Beacon, landing	Beacon, strobes
Conditions	VMC	VMC
Visibility	6km	>10km
Altitude/FL	500ft	700ft
Altimeter	RPS (1012hPa)	QNH (1012hPa)
Heading	275°	085°
Speed	115kt	93kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	0ft V/50m H	50ft V/200m H
Recorded	NK	



THE DR400 PILOT reports that he had descended to 500ft overhead Freshwater Bay after notifying Solent Approach of his intentions. He turned west, following the coastline approximately 200m offshore. He wasn't advised by ATC of any aircraft in the area (Basic Service only), nor did he request that information. He had been advised of traffic by the controller prior to the event and later by subsequent controllers despite being on a Basic Service. Approaching the Needles, he saw a white-and-blue Cessna 152 or 172 type aircraft at ½nm in the 12 o'clock position on a reciprocal heading on a collision course. He verbally notified the passenger and initiated a 30° AOB left-hand turn without losing sight of the other aircraft. The Cessna simultaneously conducted a left-hand turn towards the coastline at the same time. About 5secs later, the aircraft passed approximately 50m from each other with the Cessna very slightly higher and off the right wing. The DR400 pilot decided not to report an Airprox on the radio as the controllers were busy and he wanted to focus on flying in the area on a hazy day. The pilot was also new to UK airspace. He did not hear R/T from the Cessna pilot or ATC with respect to the Airprox.

He assessed the risk of collision as 'Medium'.

THE C172 PILOT reports having rounded the needles heading eastbound when his passengers pointed out that there was an opposing aircraft slightly below and about 10° to the starboard side. He saw a white Robin-type aircraft at a range of ¾nm and turned to port to increase the distance between them. Once the aircraft had cleared each other he turned back on course. The C172 pilot did not report an Airprox.

He assessed the risk of collision as 'Low'.

THE SOLENT CONTROLLER did not submit a report to the Airprox Board.

Factual Background

The weather at Bournemouth and Southampton was recorded as follows:

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METAR EGHH 211720Z 15007KT CAVOK 23/17 Q1012=
METAR EGHI 211720Z 18007KT 150V210 CAVOK 27/17 Q1012=
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Analysis and Investigation

CAA ATSI

The DR400 pilot contacted Solent Radar at 1708:58, reported his altitude as 1700ft and his intention to route via Stoney Cross, Beaulieu and the Needles at 3000ft, before being transferred to Bournemouth Radar. The Solent controller allocated a transponder code of 3670 and a Basic Service was agreed. The C172 pilot, who was flying at 700ft in the vicinity of the Needles, reported listening out on the Solent Radar frequency, was transponding code 0011[1] and did not contact Solent Radar during this period.

At 1719:40, the DR400 pilot reported his intention to descend to 500ft in the vicinity of The Needles, which was acknowledged by the controller. Figure 1 shows the situation at 1719:55.

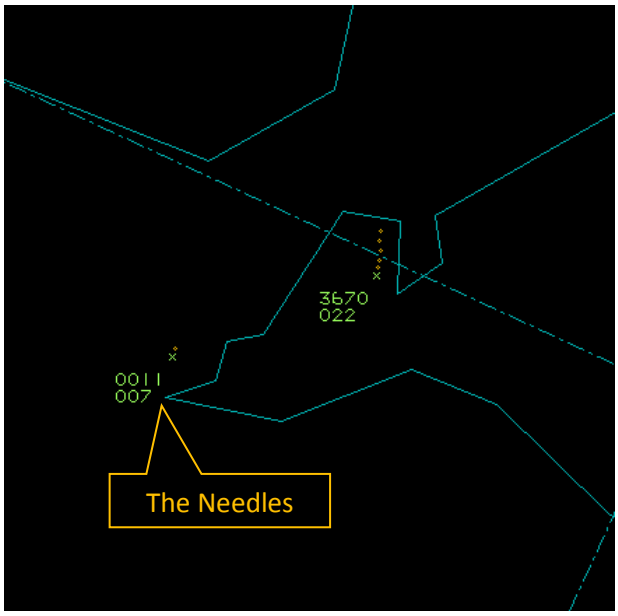

Figure 1 – 1719:55

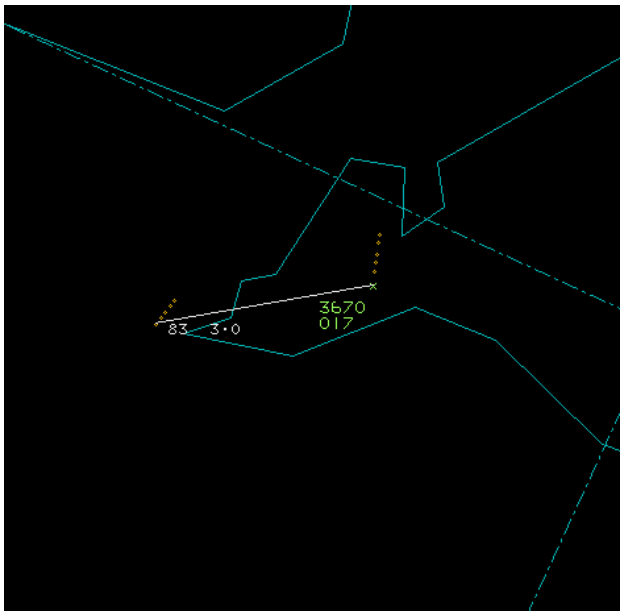

Figure 2 - 1720:25

The C172 faded from radar cover at 1720:25 in the vicinity of the Needles, still indicating 700ft and 3nm west of the DR400 (Figure 2).

The DR400 then faded from the radar recording at 1720:40, whilst still tracking south, passing 1600ft in the descent, 2.9nm from the last observed position of the C172.

CPA could not be determined and it should be noted that there is no radar coverage available to Southampton ATC below these levels in this area. The controller was also sequencing inbound aircraft, including one which was deviating from a standard approach, as well as other traffic.

The DR400 pilot did not notify an Airprox on frequency and requested to transfer to Bournemouth Radar at 1723:30. Both aircraft were being operated in Class G airspace and the pilots were responsible for their own collision avoidance.

[1] The Southampton listening-out squawk at the time of the Airprox, now used as the Bournemouth listening-out squawk with Southampton now using 7011.

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[2]. If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right[3], notwithstanding their responsibility to avoid collision.

Summary

An Airprox was reported when a DR400 and a C172 flew into proximity at about 1721 on Wednesday 21st June 2017. Both pilots were operating under VFR in VMC, the DR400 pilot in receipt of a Basic Service from Solent Radar and the C172 pilot listening out on the Solent Radar frequency.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings and a report from the appropriate ATC authority.

Members noted that without surveillance or TAS, both pilots were reliant on see-and-avoid for deconfliction. This barrier worked, in that each pilot saw the other aircraft and turned to avoid collision, but their sightings were at a closer range than was desirable and resulted in the aircraft flying into proximity with an increased potential for collision. In light of previous Airprox around the Isle of Wight, members wondered whether a means of deconfliction or coordination could be employed. It was pointed out that the 'right-hand rule' would have accomplished such deconfliction but that with the introduction of SERA this rule was no longer a requirement. Notwithstanding, although the rule had been withdrawn, it was still CAA recommended best practice to fly to the right of line features, such as coastlines, which in this instance would have generated lateral separation between the 2 aircraft. Some members also felt that transmitting one's intentions could afford additional situational awareness to other pilots listening out on the same frequency, provided the calls were heard and assimilated.

The Board agreed that the cause of the Airprox had been the late sighting of each other's aircraft by the pilots but were content that, although the proximity was less than desirable, the descriptions and assessments of the incident were such that risk of collision had been averted.

PART C: ASSESSMENT OF CAUSE, RISK AND SAFETY BARRIERS

Cause: A late sighting by both pilots.

Degree of Risk: C.

Safety Barrier Assessment[4]

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

ANSP:

Situational Awareness and Action were assessed as **ineffective** because the aircraft faded from surveillance some minutes before CPA thus denying any possibility of ATC input.

[2] SERA.3205 Proximity.
[3] SERA.3210 Right-of-way (c)(1) Approaching head-on.
[4] The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.

Flight Crew:

Tactical Planning was assessed as **partially effective** because use of the 'right-hand rule', as recommended by the CAA, would have increased lateral separation.

Situational Awareness and Action were assessed as **partially effective** because neither pilot was aware of the other's presence until a late stage.

See and Avoid were assessed as **partially effective** because both pilots saw the other aircraft at a late stage.