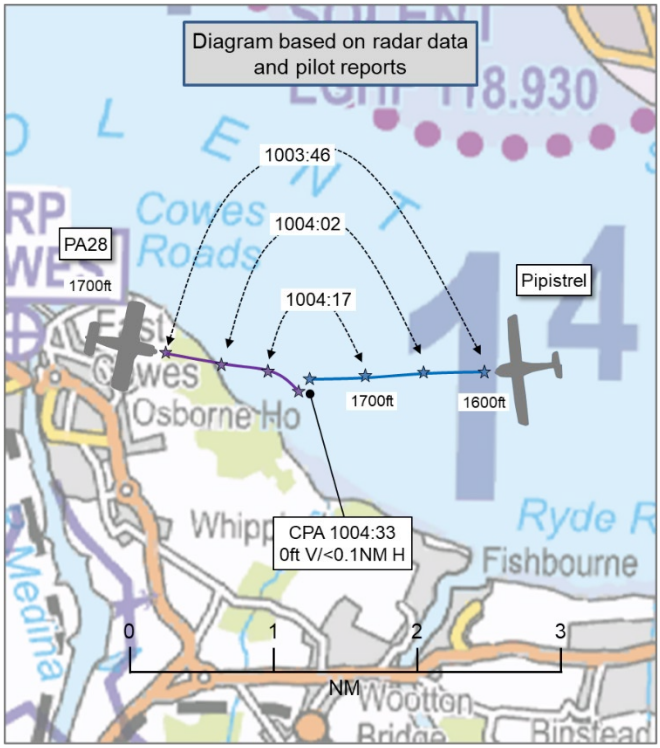
AIRPROX REPORT No 2025079

Date: 07 May 2025 Time: 1005Z Position: 5045N 00114W Location: 2NM E of Cowes VRP

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Pipistrel Alpha	PA28
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Listening Out
Provider	Solent Radar	Solent Radar
Altitude/FL	1700ft	1700ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White	White, blue, red
Lighting	Nav, strobes	Nav, beacon, strobes, taxi, ldg
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1750ft	1500ft
Altimeter	QNH (1024hPa)	QNH
Heading	257°	~100°
Speed	90kt	~100kt
ACAS/TAS	TAS	SkyEcho
Alert	None	None
Separation at CPA		
Reported	20ft V/0.1NM H	0ft V/0.3NM H
Recorded	0ft V/<0.1NM H	



THE PIPISTREL PILOT reports that they had been operating under a Traffic Service [they recall] with Solent Radar. When they had asked Solent how the other aircraft had got quite so close [to them], they had been told that the other aircraft had no active transponder and had not been in contact with them and had also not shown on their radar. [The Pipistrel pilot] had wondered why the other pilot would fly that way? It had been the VE day of celebration so [all knew that] the airspace [would be] busy.

The pilot assessed the risk of collision as 'High'.

THE PA28 PILOT reports that they had been pilot-in-command of the flight. They had a student with them who had been in control at the time [and they] had both spotted the traffic at the same time. The PIC took control, paused for about 2sec to see what the other traffic would do and [then] initiated a turn to the right, coordinated with approximately 30°-40° bank angle for 3-4sec. Once clear of the traffic the PIC had turned back towards their original track. Nothing had appeared on their EC unit to alert them as they carry one as an aid to complement the practice of always keeping a good lookout.

The pilot assessed the risk of collision as 'Low'.

THE SOLENT CONTROLLER reports that they had been on shift as Watch Manager on the 7th May, and at 1000 had handed the Solent Radar position to another ATCO. On frequency at the time had been [the Pipistrel pilot], who had been under a Basic Service in Class G [airspace], and was being passed generic Traffic Information (by themself and the subsequent controller) on observed activity of various other aircraft in the Solent. Shortly afterwards they were pre-noted and transferred to Bournemouth Radar. No Airprox was reported at the time on the Solent Radar frequency, however, they had since been notified that an Airprox had been filed involving that aircraft.

Factual Background

The weather at Southampton Airport was recorded as follows:

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METAR EGHI 071020Z 01010KT 340V060 9999 SCT036 13/05 Q1024=
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Analysis and Investigation

NATS Safety Investigation

The UK Airprox Board notified Safety Investigations of a pilot reported Airprox in the vicinity of Wootton, Isle of Wight, with another aircraft. The Pipistrel pilot had been receiving a Basic Service from Solent Radar, whilst the PA28, squawking 7011 had not been in receipt of any FIS (Flight Information Service). Traffic Information was passed to the Pipistrel pilot by the Solent Radar controller. However, the pilot did not respond.

Description of the event. All times UTC:

0956:58 The Pipistrel pilot contacted Solent Radar, 3NM south of Thorney Island.

0957:35 The Pipistrel pilot requested a *'Basic Service, or Traffic Service if it's possible'.*

0957:40 The Solent Radar ATCO (ATCO1) provided the Pipistrel pilot with a 'Basic Service initially' and issued a squawk of 3672.

0958:05 The Pipistrel pilot squawked 3672.

0959:35 ATCO1 informed the Pipistrel pilot that they were identified and confirmed that it would 'remain a Basic Service for now'.

0959:47 The Pipistrel pilot reported descending to 1900ft and reported their routeing as south of Portsmouth, then towards Bournemouth.

1000:53 ATCO1 commenced handover of Solent Radar position to ATCO2.

1001:23 ATCO1 mentioned during the handover that the Pipistrel pilot had requested a Traffic Service. The Pipistrel had been 1NM south of the Spinnaker Tower, tracking west indicating 1800ft. There had been an [uninvolved] aircraft passing west of the Spinnaker Tower, squawking 7000 and tracking south towards the Pipistrel also indicating 1800ft. The subject of the Airprox report [the PA28] had been 2NM west of Cowes, squawking 7011 and tracking northeast indicating 1600ft.

1001:25 ATCO1 transmitted: '[Pipistrel C/S] *it does remain a Basic Service but just be advised I've got a...I can see a contact about 1 mile er north of you now, it's just on your right hand side then, similar altitude southbound so just keep a good lookout'.*

1001:34 [Pipistrel C/S]: *'er* [C/S] *we...we don't have a contact er...we keep looking, thank you very much'.*

1001:43 ATCO1: *'Affirm. Just half a mile on your right-hand side now, similar level'.*

1001:48 ATCO1 resumed the handover, stating that the Pipistrel pilot had asked for a Traffic Service, but has a Basic Service only.

1001:53 [Pipistrel C/S]: *'er negative visual* [Pipistrel C/S]*'.*

1001:54 ATCO1 transmitted: *'er roger and er should be just in your...just to the north of you now on your right hand side possibly your 2 or 3 o clock now'...[to self] oh my god...[transmits] 'looks like it may pass just behind you.'*

1002:13 Pipistrel C/S: *'Yeah we have a visual on my at...er...3 o clock now well below us* [Pipistrel C/S]*'.*

1002:15 ATCO1: *'Roger, thank you'.*

1004:11 Handover of position completed and ATCO2 took over.

The Pipistrel had been 2.5NM east of Cowes, tracking west at 1800ft. The PA28 had been 1.2NM west of the Pipistrel, opposite direction and Mode C indicated 1700ft and climbing. The [uninvolved aircraft] had then been 0.8NM south of the Pipistrel on a similar track, indicating 1300ft.

1004:33 ATCO2: '[Pipistrel C/S] *traffic just passing down your left-hand side now indicating similar level do you have him in sight?*'

[No response from Pipistrel C/S]

The Pipistrel then indicated 1700ft, the PA28 indicated 1800ft, and the minimum distance of 169.5m was noted.

1004:40 The PA28 had made a right turn to the south, indicating 1700ft and the lateral distance between them and the Pipistrel, at 1800ft, had increased to 619.3m. The uninvolved aircraft had then been directly below the PA28, indicating 1200ft.

[Further exchange with the Pipistrel pilot unrelated to the Airprox event].

Investigation

Southampton Airport MATS Part 2 procedures preclude the provision of radar services below 2000ft. The Pipistrel had been operating at 1900ft and below within the FIR and therefore a radar-derived service could not be offered. Southampton Airport MATS PART 2 states in Section 4, Chapter 5, UK Flight Information Services (UK FIS) 5.1 General:

> 'The provision of approach radar control services is to take priority over any request for a radar service outside controlled airspace. Southampton ATCU is not a Lower Airspace Radar Service (LARS) unit. However, UK FIS may be provided upon request, subject to workload:
>
> Radar Services are only to be provided between: 25NM - 40NM radius of Southampton at 3000 FT or above;
>
> or within 25NM radius of Southampton at 2300 FT or above;
>
> or within the ATC Surveillance Minimum Altitude Area, at or above 2000 FT ALT;
>
> or ATC Surveillance Minimum Altitude Area.
>
> If workload prevents provision of a radar service to an aircraft outside controlled airspace, a Basic Service may be offered'

In accordance with the detailed MATS and service restrictions, it was made clear to the Pipistrel pilot throughout that they were only being provided with a Basic Service.

CAP 774 Chapter 2 Traffic information 2.5 states:

> 'Given that the provider of a Basic Service is not required to monitor the flight, pilots should not expect any form of traffic information from a controller/FISO'

CAP774 Chapter 2 Basic Service Definition 2.1 states that:

> 'A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. The avoidance of other traffic is solely the pilot's responsibility. Basic Service relies on the pilot avoiding other traffic, unaided by controllers/ FISOs. It is essential that a pilot receiving this ATS remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight'

Despite being on a Basic Service, specific Traffic Information was passed to the Pipistrel pilot on two separate aircraft, although the Traffic Information relating to the reported Airprox was not acknowledged by the pilot.

CAP774 Chapter 1 ATS Principles Duty of care 1.3 states that:

> 'Nothing in this CAP prevents controllers from using their own discretion, initiative and professional judgement in response to unusual circumstances, which may not be covered by the procedures herein. The nature of the ATS task in providing the UK Flight Information Services means that it is not possible to be totally prescriptive about all actions to be taken, particularly with regard to unknown traffic and the passing of advice and warnings on high risk conflictions to pilots who have requested Basic Service and Traffic Service. Consequently, there is a need for controllers/ FISOs to remain free to use their professional judgement to determine the best course of action for them to take for any specific situation'.

Despite being on a Basic Service, the ATCO exercised a Duty of Care in passing Traffic Information when recognising the potential for aircraft to be operating within close proximity.

CAP774 Chapter 2, 2.7 states:

> 'A controller with access to surveillance-derived information shall avoid the routine provision of traffic information on specific aircraft but may use that information to provide a more detailed warning to the pilot. If a controller/ FISO considers that a definite risk of collision exists, a warning shall be issued to the pilot ((UK) SERA.9005(b)(2) and GM1 (UK) SERA.9005(b)(2)). Whether traffic information has been provided or not, the pilot remains responsible for collision avoidance without assistance from the controller.'

Pilot Report

The pilot states that the conflicting aircraft was the PA28. That aircraft was not receiving any service from Solent radar.

The pilot states that the Pipistrel 'moved to the right abruptly' to avoid the PA28.

The Pipistrel pilot stated that the distance on first sighting the other aircraft was 0.1NM with a minimum horizontal separation of 0.1NM.

In the report, under the 'type of service', the pilot states they were under a 'Radar Control' Service at the time of the incident. The investigation showed that at no time was the aircraft under a Radar Control Service, but a Basic Service from Solent Radar.

Under the 'Narrative' section of the pilot's report, the pilot states they were under a 'Traffic Service'. At no time was a Traffic Service provided to the Pipistrel pilot.

Conclusions

The Pipistrel pilot contacted the Solent Radar frequency 3NM south of Thorney Island requesting a Traffic Service. The Solent Radar ATCO (ATCO 1) informed the pilot that a Basic Service would be issued initially. Following a controller handover, the Solent Radar controller (ATCO 2) subsequently observed an opposite direction track conflicting with the Pipistrel and issued Traffic Information. The Pipistrel pilot did not respond.

CAA ATSI

This is a comprehensive investigation report from Southampton to which ATSI has nothing to add.

UKAB Secretariat

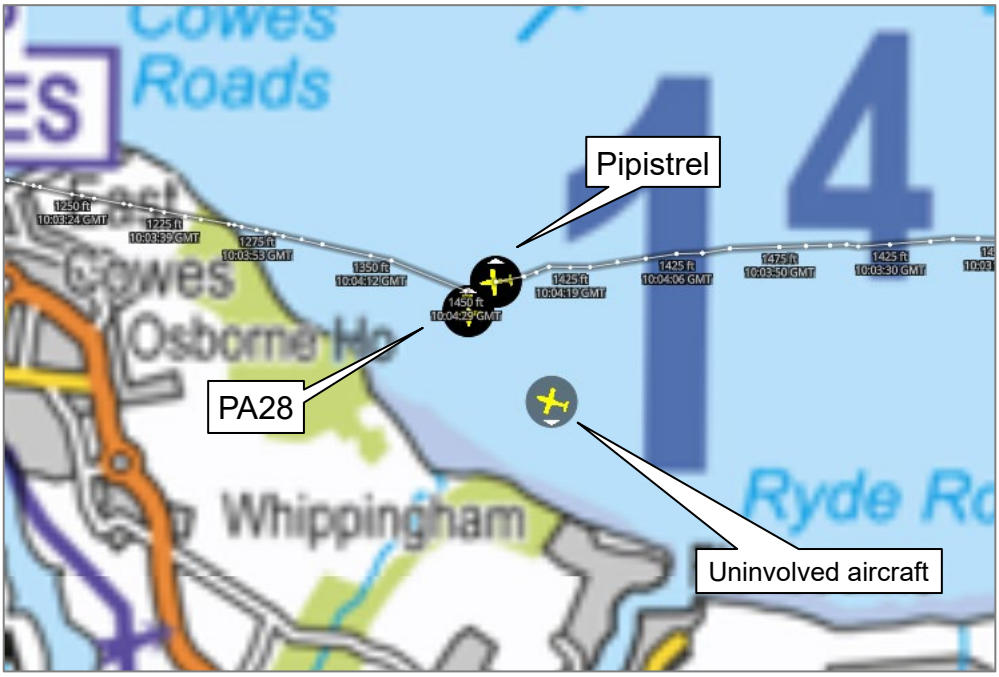

Figure 1: from the Airspace Analyser Tool at 1004:35 (CPA + 2sec)

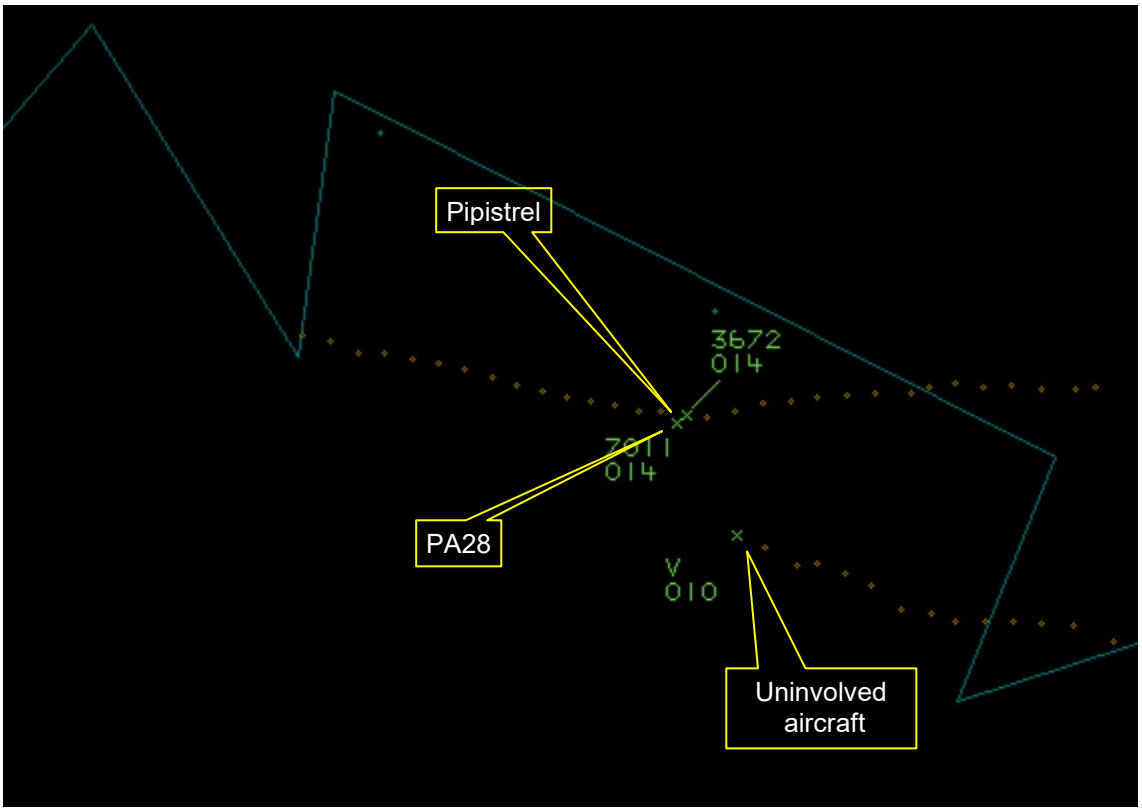

Figure 2: at CPA – 0ft V/<0.1NM H

The Pipistrel 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.[1] If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.[2]

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

Summary

An Airprox was reported when a Pipistrel and a PA28 flew into proximity 2NM east of the Cowes VRP at 1005Z on Wednesday 7th May 2025. The Pipistrel pilot was operating under VFR in VMC in receipt of a Basic Service from Solent Radar and the PA28 pilot was operating under VFR in VMC and not in receipt of a Flight Information Service.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data, a report from the air traffic controller involved and reports from the appropriate operating authorities. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

The Board firstly considered the actions of the Pipistrel pilot, noting that their report of the event had reflected their surprise at the proximity of the PA28 at the point they had seen it. The Pipistrel pilot had been subject to a Basic Service at the time of the event as their initial request for a Traffic Service had not been possible to deliver due to radar coverage at their range and altitude. Although Traffic Information (TI) had previously been passed regarding other (not involved) aircraft, the Board agreed that the TI passed regarding the Airprox PA28 had been far too late for the Pipistrel pilot to action and therefore had not had an influence on the outcome. Furthermore, as the Traffic Alerting System carried by the Pipistrel had unfortunately not registered or reported the presence of the PA28 (**CF6**), the Board agreed that the Pipistrel pilot had had no situational awareness of the proximity of the PA28 (**CF4**). Members recognised that the Pipistrel pilot had seen the PA28, but that had been at too late a stage to have initiated any avoiding action (**CF7**).

Members then considered the actions of the PA28 pilot, noting that they had been listening out on the Solent Radar frequency which had enabled them to passively add to their general situational awareness, but the Board opined that it is usually better to request a more active service from a provider if it is available. In this case, a Traffic Service may have alerted them in advance to the oncoming Pipistrel (**CF3**). This lack of an active service, in conjunction with the lack of compatible electronic conspicuity equipment carried by the PA28 (**CF5**), had led to a lack of situational awareness of the proximity of the Pipistrel (**CF4**) and it had been fortunate that the PA28 pilot had achieved a late sighting of that aircraft (**CF7**) and had been able to take avoiding action, albeit late.

In reviewing the role played by the Solent Radar controller, members acknowledged that in delivering a Basic Service, there is no requirement for the controller to monitor the flight (**CF1**) but that in this case they had done so and offered Traffic Information to the pilot of the Pipistrel on a number of other local contacts within the operating area. The Board noted that the controller had passed Traffic Information to the Pipistrel pilot regarding the Airprox PA28 coincidental with the CPA and members felt that this had been too late to have afforded the pilot any opportunity to react to it. The PA28 pilot had been listening out on that same frequency but had not requested a service. It had been unfortunate that the Short Term Conflict Alert system in place for Solent Radar had not been used in this case as both aircraft had been utilising squawks that lie outside the select frame for that tool (**CF2**). Members agreed that, when considering the level of service in place for both pilots, the range and altitude of the event and the volume of traffic operating in that area, there had been little more that the controller could have done in this case.

The discussion concluded and members considered the risk of collision. Members agreed that the safety of the aircraft had not been assured and that safety margins had been reduced much below the norm but, as the PA28 pilot had made an avoidance turn, the separation between the aircraft had not reduced to the bare minimum (**CF8**). The Board assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025079			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Ground Elements			
	• Situational Awareness and Action			
1	Contextual	• ANS Flight Information Provision	Provision of ANS flight information	The ATCO/FISO was not required to monitor the flight under a Basic Service
	• Electronic Warning System Operation and Compliance			
2	Technical	• Conflict Alert System Failure	Conflict Alert System did not function as expected	The Conflict Alert system did not function or was not utilised in this situation
	Flight Elements			
	• Tactical Planning and Execution			
3	Human Factors	• Communications by Flight Crew with ANS	An event related to the communications between the flight crew and the air navigation service.	Pilot did not request appropriate ATS service or communicate with appropriate provider
	• Situational Awareness of the Conflicting Aircraft and Action			
4	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness
	• Electronic Warning System Operation and Compliance			
5	Technical	• ACAS/TCAS System Failure	An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations	Incompatible CWS equipment
6	Human Factors	• Response to Warning System	An event involving the incorrect response of flight crew following the operation of an aircraft warning system	CWS misinterpreted, not optimally actioned or CWS alert expected but none reported
	• See and Avoid			
7	Human Factors	• Identification/ Recognition	Events involving flight crew not fully identifying or recognising the reality of a situation	Late sighting by one or both pilots
	• Outcome Events			
8	Contextual	• Near Airborne Collision with Aircraft	An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles	

Degree of Risk: B.

Safety Barrier Assessment[3]

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

Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because although Traffic Information was passed to the Pipistrel pilot, it had been as the Pipistrel had passed the PA28 and therefore offered no situational awareness to the pilot.

Electronic Warning System Operation and Compliance were assessed as **not used** because the squawks utilised were outside the select frame of the STCA tool.

[3] The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the PA28 pilot could have sought an active Air Traffic Service.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had any situational awareness of the presence of the other aircraft.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the electronic conspicuity equipment carried by the Pipistrel had not received any electronic emissions from the PA28 and the equipment carried by the PA28 had been unable to receive electronic emissions from the Pipistrel.

See and Avoid were assessed as **partially effective** because both pilots had achieved only a late-sighting of the other aircraft.