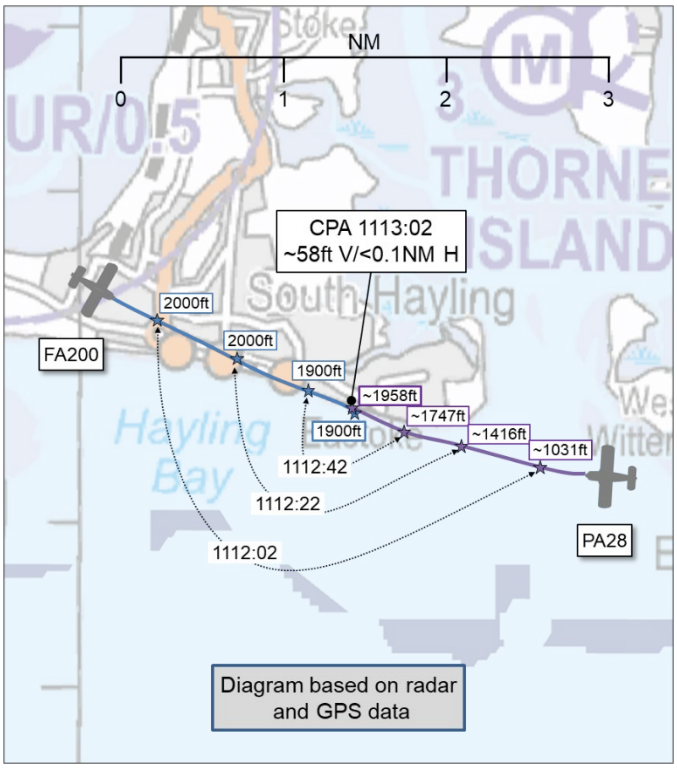
AIRPROX REPORT No 2025114

Date: 17 Jun 2025 Time: 1113Z Position: 5047N 00057W Location: S Hayling Island

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	FA200	PA28
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Listening Out
Provider	Lee Information	Solent Radar
Altitude[1]	1900ft	~1958ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White	White, blue trim
Lighting	NK	Strobes
Conditions	VMC	VMC
Visibility	>10km	5-10km
Altitude/FL	1400ft	2000ft climbing
Altimeter	NK	QNH (1026hPa)
Heading	140°	290°
Speed	95kt	80kt
ACAS/TAS	Not fitted	Not fitted
Separation at CPA		
Reported	0ft V/400m H	300ft V/50m H
Recorded	~58ft V/<0.1NM H	



THE FA200 STUDENT PILOT reports that this was their first lesson from [airfield]. They are a PPL student. It was their first lesson in an FA200. They had flown 15 times previously. [The instructor/PIC] piloted the take-off along the south-west sense of the runway at [airfield]. Post take-off they took control. On [the PIC's] instruction, they performed a climbing turn to the left onto south-east. [The PIC] emphasised the need for checking pre-turns. Levelling off at 1400ft to 1500ft they did a turn to the left then straight and level then right and straight and level. Upon finishing the right-hand turn and returning to straight and level, they believed they were back on a heading of approximately 140° over the Solent and southeast of Lee-On-Solent airfield. While on this heading and at 1400ft, a light-aircraft appeared slightly left of the nose on a direct collision course, nose-to-nose. On spotting it a few hundred metres from the nose of their FA200 they diverted their course to the right. They did not have time to warn [their instructor]. [The PIC] was less well sighted due to the oncoming aircraft being slightly left of the nose. The other aircraft took no evasive action. They believed it was a DA42 or at least a [Diamond] aircraft. In the opinion of [the instructor, the pilot of the other aircraft] never saw them. The [pilot of the other] other aircraft gave no indication of having seen them. Post their diversion to the right they safely continued flying.

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

THE PA28 PILOT reports that, after flying at 500ft, they were climbing to 2500ft before crossing the Solent. Every 500ft they lowered the aircraft's nose to check ahead. They did not see any aircraft. At around 2000ft (estimated) they saw a grey plane pass beneath and behind their left wing, flying in the opposite direction. Although they did, at the time, assume [that the other pilot] had seen [their aircraft], they had been thinking about this a lot. In the climb stage they were completely blind ahead. [They thought that] their lowering the nose every 500ft technique was obviously not good enough, and that they must think differently about climbing. More of a staircase with longer treads i.e. longer time visually

[1] The FA200 altitude is based on radar data and the PA28 altitude has been interpolated from GPS data at approximately 1958ft which equates to an altitude readout of 2000ft on radar.

checking in straight and level flight and more often than 500ft. They also did not need to climb at 80kt (optimal climb rate) with a high nose attitude. A flatter trajectory might help. Also, there was the weaving technique for checking ahead. Some of these techniques might mean slower climb rates but that is easily planned for.

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

THE LEE-ON-SOLENT AFISO reports that [the pilot of] an [FA200] was on frequency with their agency and in receipt of a Basic Service from Lee Information at 1113. The PA28 [pilot] was not on frequency with their agency and, therefore, not known to them. Furthermore, no other [pilots] had reported on frequency with their agency (Lee Information) in the vicinity of Hayling Island at 1113.

The first time that the AFISO became aware of this Airprox incident was upon receipt of an email from the UK Airprox Board.

Factual Background

The weather at Southampton Airport was recorded as follows:

```
METAR EGHI 171120Z 27004KT 210V360 9999 FEW040 23/13 Q1026
METAR EGHI 171050Z 25004KT 190V310 9999 FEW032 22/12 Q1026
```

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft were positively identified using Mode S data. The aircraft were seen to cross at 1113:02 (Figure 1), at approximately the point where the FA200 had descended approximately 100ft with a slight right turn. One sweep beforehand, at 1112:58, the aircraft had been indicating co-altitude at a range of 0.1NM.

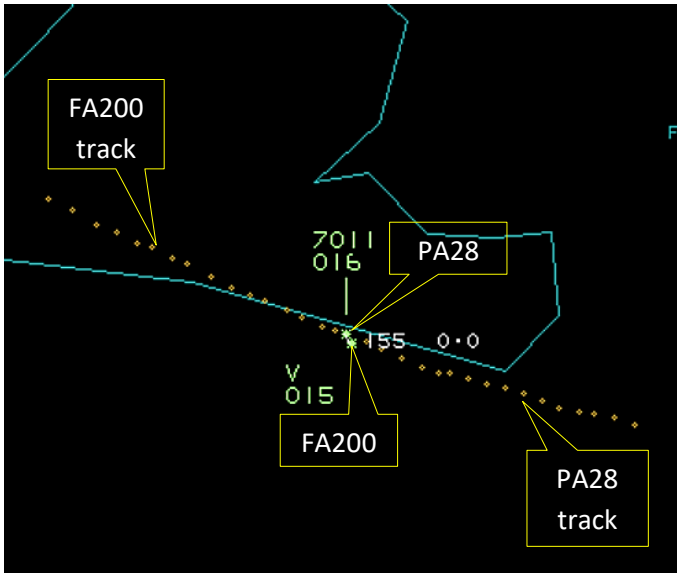


Figure 1 – CPA at 1113:02

Similar results were seen on other aircraft tracking software sources utilising MLAT. No ADS-B source was available from either aircraft, suggesting that neither aircraft was fitted with ADS-B-Out capable electronic conspicuity equipment. The PA28 pilot provided a navigation database file which confirmed the track displayed on the NATS radar replay and provided an altitude readout, once interpolated, of approximately 1958ft (1558ft on 1013hPa) at 1113:02.

CPA was assessed to have occurred at 1113:02 with approximately 58ft vertical and less than 0.1NM lateral separation.

The FA200 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.[2] If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.[3]

Summary

An Airprox was reported when an FA200 and a PA28 flew into proximity south of Hayling Island at 1113Z on Tuesday 17th June 2025. The FA200 pilot was operating under VFR in VMC in receipt of a Basic Service from Lee Information, and the PA28 pilot was operating under VFR in VMC listening out on the Solent Radar frequency and not in receipt of a FIS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS track data from the PA28 and a report from the AFISO involved. 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 first considered the actions of the FA200 student pilot and was pleased to note that they had seen the PA28 on their left-hand side and had taken avoiding action, albeit that members agreed that the sighting was at or around CPA and was, therefore, an effective non-sighting (**CF3**). The Board felt that it was unfortunate that neither aircraft had had additional electronic conspicuity (EC) equipment fitted to improve the pilots' situational awareness, and members wondered if it may have been prudent to have asked for a surveillance-based service from either Farnborough or Bournemouth LARS, although it was acknowledged that the area may have been on the extent of the range of both those LARS providers. With no information from off-board or on-board systems, members agreed that the pilot had had no situational awareness of the presence of the PA28 (**CF2**).

Turning their attention to the actions of the PA28 pilot, the Board noted that they had been listening to the Solent Radar frequency with no Flight Information Service (FIS). Members discussed whether this had been the most practical use of the services available in the vicinity, and whether it may have served the PA28 pilot better to have had a Basic Service with Lee Information because they had been tracking in that direction at the time. However, some members noted that the pilot had initially been at low level where they would have been unlikely to practically receive a suitable service and, having planned to cross the Solent, would have been best served to have received a Traffic Service from Solent Radar when at a suitable altitude and distance, albeit Solent Radar is not a LARS provider so a FIS from that unit cannot be assumed. The Board noted that there was generally poor radar coverage in the area, which was at the extent of Farnborough and Bournemouth LARS areas, and that using Solent Radar on reaching an appropriate altitude and distance would likely have served the pilot best. Given the lack of FIS, members agreed, therefore, that the PA28 pilot had had no situational awareness of the presence of the FA200 (**CF2**) and that this may have been improved had they had additional electronic conspicuity (EC) equipment fitted. Members further agreed that the PA28 pilot had been unsighted on the FA200 until after CPA (**CF3**). The Board was encouraged by the PA28 pilot's analysis of their climb profile and how this may have affected the efficiency of their lookout scan.

The Board then looked at the actions of the Lee Information AFISO and noted that they had been unable to provide the FA200 pilot with Traffic Information on the PA28 that had been unknown to them. Members further agreed that the AFISO had not been required to monitor the flight of the FA200 under a Basic Service in any case (**CF1**).

In reviewing the circumstances of the Airprox, members discussed that neither pilot had had situational awareness of the presence of the other aircraft, which had led to a subsequent non-sighting of the FA200 by the PA28 pilot and effective non-sighting of the PA28 by the FA200 pilot, who had not seen the PA28 until CPA and had made a belated turn away from it. Members agreed that the separation

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

between the FA200 and PA28 had been such that the safety of the aircraft had not been assured and that there had been a risk of collision (**CF4**). The Board assigned Risk category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025114			
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
	Flight Elements			
	• Situational Awareness of the Conflicting Aircraft and Action			
2	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
	• See and Avoid			
3	Human Factors	• Monitoring of Other Aircraft	Events involving flight crew not fully monitoring another aircraft	Non-sighting or effectively a non-sighting by one or both pilots
	• Outcome Events			
4	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[4]

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 the Lee AFISO was not required to monitor the FA200 under the terms of a Basic Service.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither the FA200 nor the PA28 pilots had situational awareness of the presence of the other aircraft.

See and Avoid were assessed as **ineffective** because the FA200 pilot had not seen the PA28 until the point of CPA, effectively a non-sighting, and the PA28 pilot had not seen the FA200 until after CPA.

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

Airprox Barrier Assessment: 2025114 Outside Controlled Airspace