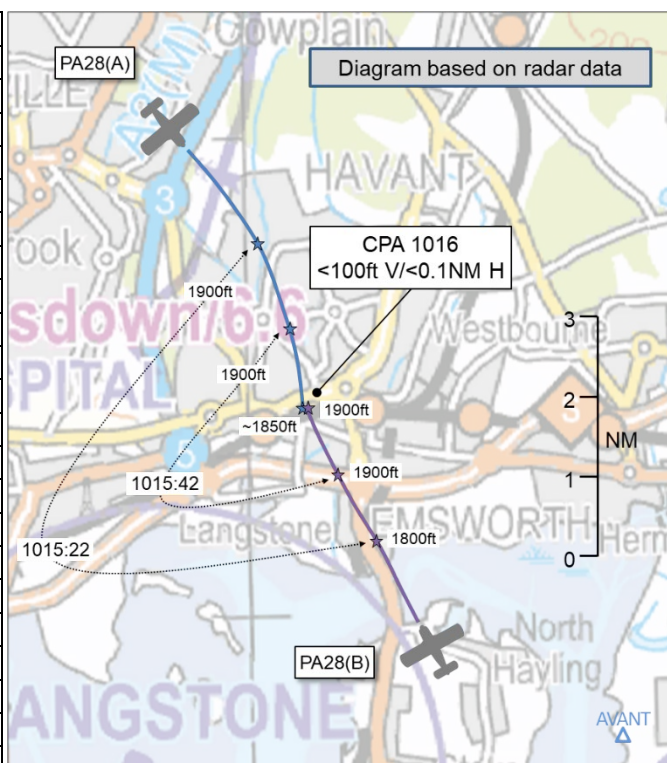


AIRPROX REPORT No 2025052

Date: 13 Apr 2025 Time: 1016Z Position: 5051N 00059W Location: Havant

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA28(A)	PA28(B)
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Basic
Provider	Solent Radar	Farnboro' Radar
Altitude/FL	~1850ft	1900ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White	White, blue
Lighting	Strobes, beacon	Strobes, tail, ldg
Conditions	VMC	VMC
Visibility	>10km	5-10km
Altitude/FL	1800ft	1792ft
Altimeter	QNH (1003hPa)	QNH (1032hPa)
Heading	175°	030°
Speed	100kt	90kt
ACAS/TAS	SkyEcho	Not fitted
Alert	None	N/A
Separation at CPA		
Reported	150ft V/100m H	NK V/1NM H
Recorded	<100ft V/<0.1NM H	



THE PA28(A) PILOT reports that, when approaching the area of the south coast, they have always considered increased traffic in the area. Visibility was good and the other aircraft was simply not seen [until it had been 150m above them]. Nothing within the aircraft had obscured their view and they considered that they had kept a good lookout. No traffic showed on SkyDemon. [The pilot of PA28(A)] described their avoiding action as reducing height and turning to the right. They were on a listening-watch and considered immediate reporting unnecessary.

[The pilot of the PA28 opined that,] on reflection, it must have been that their lookout was not effective. Post-flight inspection of FlightRadar24 shows that, in theory, there had been plenty of time to have spotted the aircraft much earlier.

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

THE PA28(B) PILOT reports that, at 1014, they passed the AVANT waypoint on their way, northwards, to [their destination]. They were talking to Farnborough Radar, receiving a Basic Service and squawking as requested by them. The visibility was good but they cannot remember if it was 10km or more. They were flying clear of, and below, any cloud but cannot remember what the cloudbase had been.

[The pilot of the PA28(B) commented that] they did not consider this flight to be of any special note, and believe that they received a radio report from Farnborough to look out for another aircraft heading south at a similar level to them. They were not aware of any call [from the Farnborough controller] to the other pilot so do not know if they were receiving any service from Farnborough. Shortly after that call, they saw an aircraft heading their way (on their left) but did not consider there was any threat of collision. However, [the pilot of PA28(B)] did bank right so as to make it clear to the other pilot that they had seen them. They do not recall if the other pilot took any action. [The pilot of PA28(B)] radioed Farnborough to say thank you for the notification and continued on their way. They did not consider the two aircraft were close to each other and cannot even recall what type the other aircraft was.

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

THE FARNBOROUGH LARS WEST CONTROLLER reports that they had no memory of the circumstances surrounding this event.

Factual Background

The weather at Southampton was recorded as follows:

METAR EGHJ 131020Z 24006KT 210V270 9999 BKN025 14/08 Q1005

Analysis and Investigation

Farnborough Unit investigation

Description of the event:

The pilot of [PA28(B)] contacted the Farnborough LARS West (LF-LARS) frequency at 1012:37 and requested a Basic Service. The pilot reported overhead Hayling Island, 1800ft, on QNH 1005hPa, and [en-route to their destination]. A Mode-A code of 0450 was issued with a Basic Service agreed, with a QNH of 1004hPa advised.

The LF-LARS controller re-positioned the labels on the radar display and subsequently broadcast at 1015:50: "[PA28(B) C/S], *just caution, there is opposite direction traffic ahead of you by half a mile, indicates the same level*". The pilot responded: "*Affirmative, we've both seen each other*". The two aircraft continued on conflicting tracks (Figure 1).



Figure 1 – Farnborough Radar

At 1016:03, the pilot of [PA28(B)] broadcast "[PA28(B) C/S], *thank you for the call*".

Radar displayed that [the pilot of PA28(B)] appeared to have maintained their track and altitude within 100ft prior to the Closest Point of Approach (CPA) and subsequently turned right, whilst [for PA28(A)], the Mode-C suggested that the pilot also maintained track and altitude at CPA, then subsequently initiated a tight right turn and descent (Figures 2 and 3).

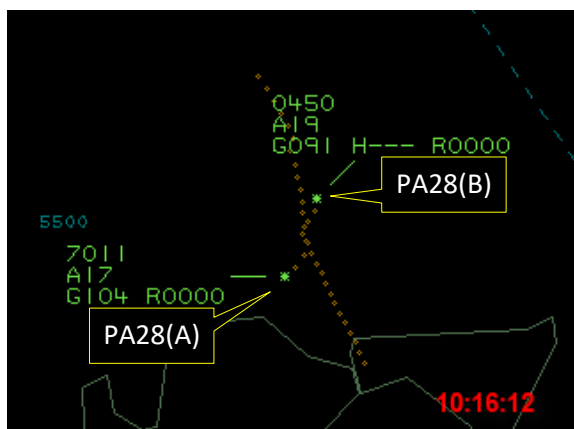


Figure 2 – NODE Radar



Figure 3 – Farnborough Radar

The pilot of [PA28(B)] continued en-route, and did not report a significant confliction on the LF-LARS frequency.

Investigation:

[The pilot of PA28(A)] was outbound from [departure airfield] and operating to the east of the Solent CTA whilst displaying the Solent listening code of 7011 and monitoring the Solent Radar frequency. [The pilot of PA28(B)] was tracking north over the south coast.

The pilot of [PA28(B)] requested, and was in receipt of, a Basic Service from the LF-LARS controller. The position of [PA28(B)] at the initial call was the boundary of the Farnborough LARS West area of responsibility, and at the edge of the controller's radar display (Figure 4).



Figure 4 – 1013:11. The pilot of [PA28(B)] applied the assigned Farnborough Mode-A squawk.

CAP774 Chapter 2, 2.1 stipulates:

'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.'

The LF-LARS controller issued Traffic Information to the pilot of [PA28(B)] on the opposite-direction [PA28(A)].

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.'

Conclusion:

The pilot of [PA28(B)] contacted the Farnborough LARS frequency on the southern boundary of their area of responsibility and was provided with a Basic Service as requested. The Farnborough LARS controller subsequently observed an opposite-direction track conflicting with [PA28(B)] and issued Traffic Information. The pilot responded "*Affirmative, we've both seen each other*".

The aircraft subsequently passed abeam each other, with the pilot of [PA28(B)] stating in their Airprox report that they "*did not consider the two aircraft were close to each other*", suggesting they were visual with the other aircraft. The pilot of [PA28(A)] stated in their Airprox report they did not observe [PA28(B)] until the aircraft passed overhead.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data. PA28(A), but not PA28(B), was observed by reference to ADS-B data sources. The diagram was constructed and the separation at CPA determined from the radar data.

CPA was assessed as having occurred between the radar sweeps at 1015:58 and 1016:02 (Figures 5 and 6).

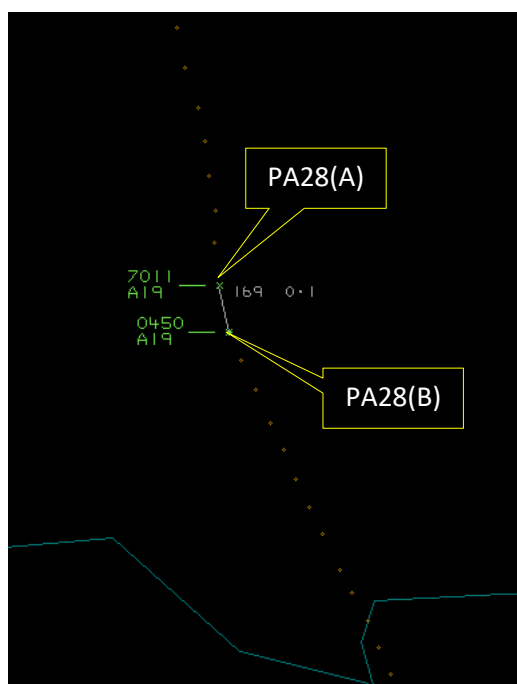


Figure 5 - 1015:58

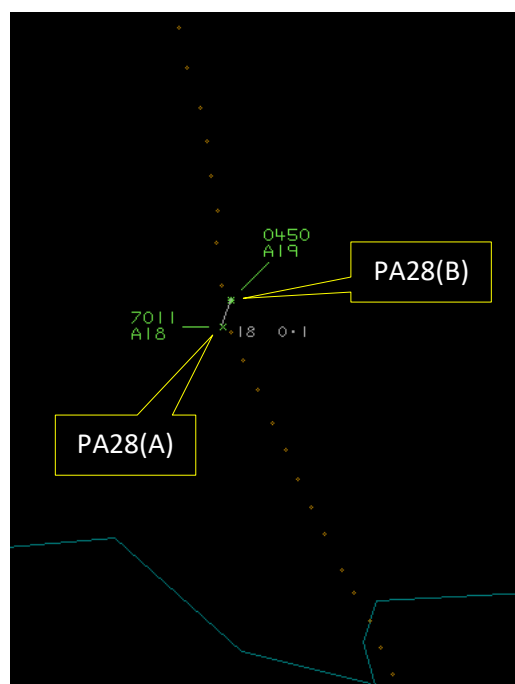


Figure 6 - 1016:02

The PA28(A) and PA28(B) 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

Summary

An Airprox was reported when PA28(A) and PA28(B) flew into proximity at Havant at 1016Z on Sunday 13th April 2025. Both pilots were operating under VFR in VMC, the pilot of PA28(A) listening-out on the

¹ (UK) SERA.3205 Proximity.

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

Solent Radar frequency and the pilot of PA28(B) in receipt of a Basic Service from Farnborough LARS West.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, a report from the air traffic controller involved and a report from the appropriate operating authority. 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 pilot of PA28(A) and it was noted that they had maintained a listening watch on the Solent Radar frequency. Members suggested that it would have been prudent to have been in receipt of a surveillance-based service during their transit of particularly busy airspace (**CF4**). Members agreed that the EC device fitted to PA28(A) would not have been expected to have detected the presence of PA28(B) (**CF6**) and concluded that the pilot of PA28(A) had not had situational awareness of the presence of PA28(B) until it had been sighted (**CF5**). It was agreed that, as PA28(B) had not been visually acquired until the moment of CPA, there had not been time for the pilot of PA28(A) to have taken avoiding action to have materially increased the separation and that that effectively constituted a non-sighting (**CF8**). Members also wished to encourage reporting Airprox occurrences immediately on the frequency in use at the time.

Members turned their attention to the actions of the pilot of PA28(B) and noted that they had been in receipt of a Basic Service from the Farnborough LARS West controller. Again, members wished to emphasise that it would have been prudent to have requested a surveillance-based service whilst in transit through typically congested airspace. Members also noted that PA28(B) had not been fitted with an additional EC device which, on this occasion, may have provided a timely alert to the presence of PA28(A).

Members noted that the pilot of PA28(B) would not have expected to have received any Traffic Information during their flight under the terms of a Basic Service. Notwithstanding, it was noted that, minutes after having contacted the Farnborough controller, they had been passed Traffic Information on PA28(A) which had, at that time, been approximately 0.5NM ahead of them and at their level. Consequently, it was agreed that the pilot of PA28(B) had gathered late situational awareness of PA28(A) (**CF5**). Members pondered the narrative report provided by the pilot of PA28(B) regarding the encounter and noted that it had not portrayed a sense of concern for the proximity nor an urgency for avoiding action. Noting that they had reported the horizontal separation to have been 1NM (in contrast to a recorded separation of less than 0.1NM), some members wondered whether the pilot of PA28(B) had recalled a different occurrence. Notwithstanding, it was clear to members that PA28(A) had been sighted late (**CF7**).

Members next considered the actions of the Farnborough controller. It was agreed that the transponder code selected by the pilot of PA28(B) had fallen outside the select frame of the Farnborough STCA (**CF3**). It was also agreed that the Farnborough controller had not been required to have monitored the flight of PA28(B) under the terms of a Basic Service. Nevertheless, members noted that they had passed Traffic Information on PA28(A), reported as having been ahead of them by 0.5NM. Purely in consideration of the subsequent time available to the pilot of PA28(B) to have assimilated the information and to have taken action (approximately 10sec), members agreed that the Farnborough controller had acquired late situational awareness of PA28(A) (**CF2**) and had therefore passed the Traffic Information late (**CF1**). Nevertheless, members were in full agreement that the information passed had been at the earliest opportunity available to the controller and had assisted matters greatly.

Concluding their discussion, members agreed that several safety barriers had been ineffective or only partially effective in this encounter. It was clear to members that the pilot of PA28(A) had not sighted PA28(B) in time to have taken effective action to have increased the separation between the aircraft. Members agreed that the action taken by the pilot of PA28(B) had increased separation in the seconds before CPA. Members were in agreement that safety margins had been reduced much below the norm and that there had been a risk of collision (**CF9**). The Board assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK**Contributory Factors:**

	2025052			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Ground Elements				
• Situational Awareness and Action				
1	Human Factors	• ANS Traffic Information Provision	Provision of ANS traffic information	TI not provided, inaccurate, inadequate, or late
2	Contextual	• Traffic Management Information Action	An event involving traffic management information actions	The ground element had only generic, late, no or inaccurate Situational Awareness
• Electronic Warning System Operation and Compliance				
3	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				
4	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				
5	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				
6	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
• 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
8	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				
9	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 Assessment³**

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 **partially effective** because the Farnborough LARS controller had passed Traffic Information on PA28(A) to the pilot of PA28(B) late, albeit that had been at the earliest opportunity available to the controller.

Electronic Warning System Operation and Compliance were assessed as **not used** because the transponder code selected by the pilot of PA28(B) had been outside the select frame of the Farnborough West STCA.

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 it would have been prudent for the pilot of PA28(A) to have been in receipt of an ATS.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of PA28(A) had not had situational awareness of the presence of PA28(B).

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the EC device fitted to PA28(A) would not have been expected to have detected the presence of PA28(B).

See and Avoid were assessed as **partially effective** because the pilot of PA28(B) had visually acquired PA28(A) late.

