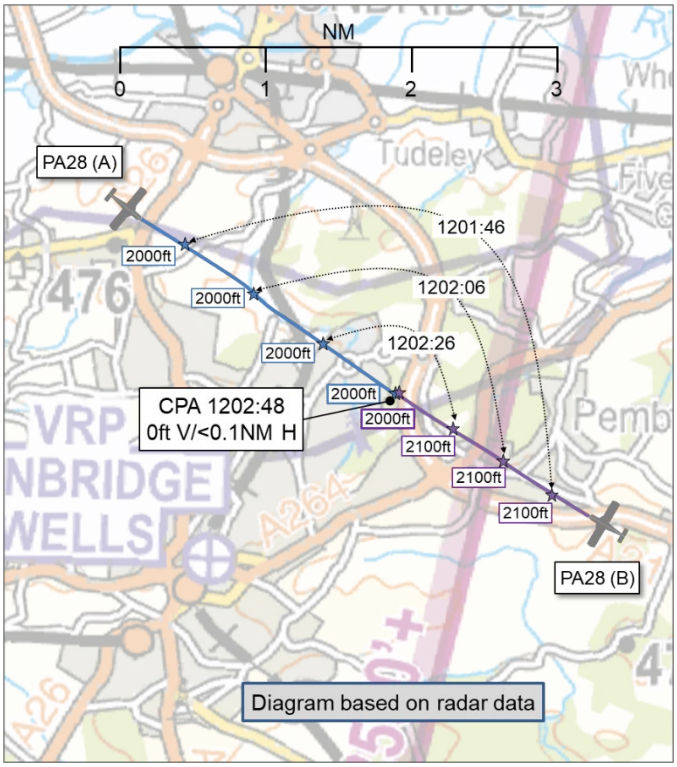
AIRPROX REPORT No 2025100

Date: 25 May 2025 Time: 1203Z Position: 5109N 00017E Location: NE Tunbridge Wells

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	Basic	Basic
Provider	Farnborough Rdr	Farnborough Rdr
Altitude/FL	2000ft	2000ft
Transponder	A, C[1]	A, C, S
Reported		
Colours	Red and white	White and green
Lighting	Strobes, beacon	Strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2000ft	NK
Altimeter	QNH (1010hPa)	QNH
Heading	120°	300°
Speed	90kt	99kt
ACAS/TAS	Not fitted	Not fitted
Separation at CPA		
Reported	300ft V/100m H	Not seen
Recorded	0ft V/<0.1NM H	



THE PA28(A) PILOT reports that this was a checkout flight for them by the instructor (who was PIC). They were flying at 2000ft, QNH 1010hPa, receiving a Basic Service from Farnborough (they believed the other aircraft was as well). They had just finished their cruise climb to 2000ft 2min prior, with heading 120°. No alert from ATC regarding the traffic was given to either them or the [pilot of the] other aircraft. No avoiding action was taken, however, on spotting the traffic they asked Farnborough for an upgrade to a Traffic Service and mentioned a *"near Airprox"* (Farnborough ATC did not require/ask for more details). The [pilot of the] other aircraft was heard shortly after asking to change to [their enroute frequency] on their way back, and being handed off by Farnborough to do so. [Navigation software] was running for the duration of the flight on both of their phones (no traffic enhancement was used) and they had photos from [their navigation software] of where the Airprox occurred. At the time of the Airprox, they were looking down at the fuel selector (being in the front left seat) and looked up when the aircraft was just short of passing vertically above them. They did not hear anything from the [pilot of the] other aircraft on the radio, including after they requested a Traffic Service upgrade, and they suspected that, due to their low wing, [the other pilot] might not have spotted them. Neither aircraft took avoiding action nor altered course, and [the aircraft] passed each other on parallel and reciprocal headings. They were not on a converging course when they passed each other – if they continued on present headings and altitude, they believed there would not have been a collision, however, it was too close for comfort and if they had seen the aircraft earlier they would have likely changed heading to the right. The instructor advised that they turned the landing light on for better visibility. The instructor had also added that they were writing on their kneeboard at the time, for the next fuel tank change, calculating and writing it down, taking less than 10sec. They then looked up and they both spotted the aircraft at the same time. After the flight, they landed with no issue, and they called Farnborough Radar a couple of hours later to provide their callsign, time of Airprox and approximate location for their record.

[1] The pilot of PA28(A) had reported Mode S as 'on' but only Modes A and C were identifiable at the time of the Airprox. The aircraft was later verified by R/T and position reports with Farnborough LARS.

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

THE PA28(B) PILOT reports that they had finished an instrument lesson. The student was not under the hood anymore. They were descending and stable at 500fpm over Bough Beech Reservoir [which was being used as] an unofficial joining point for [destination]. [They opined that] Gatwick controlled airspace was nearby making everyone fly in the same low altitude band.

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

THE FARNBOROUGH LARS CONTROLLER reports they were working as LARS North and East in low traffic. The Approach controller on their right-hand side was very busy and requested their help with some phone calls to Terminal Control as there was nobody else available to do this. They believed during this time the Airprox occurred. The pilot reported they *"nearly had an Airprox"* on frequency, but this was after the event so they did not see it happen. They had given [PA28(A)] a LARS East squawk but they believed they did not have it identified (ticked and crossed on the strip) until after the pilot spoke to them about the possible Airprox due to being on the phone for their colleague. They had given the pilot a Basic Service on first contact. They thought the [pilot of the] other aircraft involved was also working them under a Basic Service but did not report anything.

Factual Background

The weather at Gatwick Airport was recorded as follows:

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METAR EGKK 251150Z 26017KT CAVOK 19/07 Q1010
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Analysis and Investigation

NATS Safety Investigations

The UK Airprox Board notified NATS Safety Investigations of a pilot-reported Airprox between PA28(A) and PA28(B). Both aircraft were in receipt of a Basic Service from Farnborough LARS with only [PA28(B)] identified. The pilot of [PA28(A)] subsequently reported on the LARS frequency they *"very nearly had an Airprox".* The LARS controller reported they did not observe the event and the pilot of [PA28(B)] did not report a confliction on frequency.

The pilot of [PA28(B)], outbound from [departure point], contacted the Farnborough LARS East (LF-LARS) at 1131:08 (all times UTC) and requested a Basic Service which was agreed. The pilot of [PA28(A)] contacted the LF-LARS frequency at 1158:15 and requested a Basic Service. The pilot reported they were overhead Bough Beech Reservoir at altitude 1300ft, on QNH 1010hPa. SSR code 1730 was issued with a Basic Service agreed. The SSR code 1730 was input to the aircraft Mode-A at 1158:56 with [PA28(A)], tracking beneath the lateral boundary of the Gatwick CTA, 11.3NM from [PA28(B)], on an opposite direction track (Figure 1).

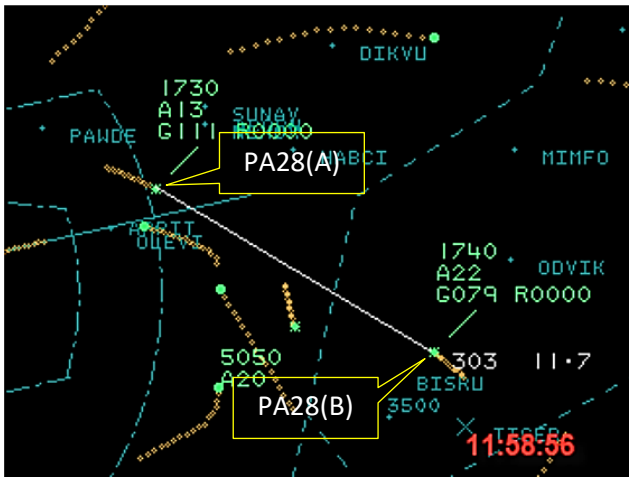


Figure 1

The LF-LARS controller report stated they were assisting the Approach controller, seated adjacent, with telephone calls. The report stated the LF-LARS controller believed they *'did not have it identified (tick and cross on the strip) until after the pilot spoke to me about the possible Airprox due to being on the phone for my colleague.'*

[PA28(A)] then commenced an unreported climb to maintain altitude of 2200ft. This was potentially in confliction with [PA28(B)] that was maintaining 2200ft on an opposite direction track, inbound to [destination]. The two aircraft crossed at 1202:45 (Figure 2).

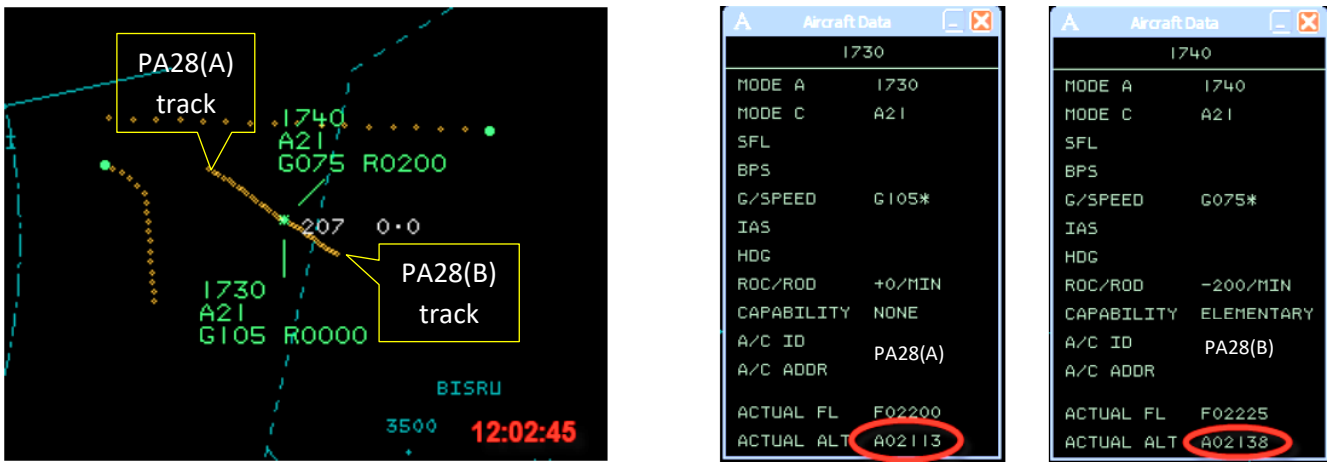


Figure 2: CPA Time 1202:45 and altitude read-outs.

The closest point of approach between [PA28(A)] and [PA28(B)] occurred at 1202:45 and was displayed on NODE multi-track radar as 0.0NM and 0ft. NODE Radar aircraft data displayed the 'actual altitude' of [PA28(A) as 2113ft, with the 'actual altitude' of [PA28(B)] displayed as 2138ft, which indicated the vertical separation was approximately 25ft. Although the Mode C of both aircraft changed from A21 (2100ft) to A20 (2000ft), neither aircraft displayed any form of lateral or vertical avoidance manoeuvre on radar (Figure 3).

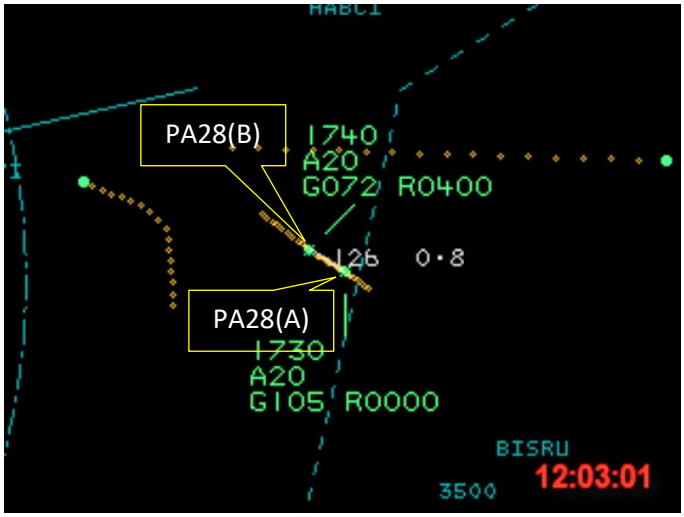


Figure 3 – after CPA.

The pilot of [PA28(A)] subsequently reported to the LF-LARS controller at 1205:13: *"*[C/S*], can I request a Traffic Service please, we just very nearly had an Airprox where we are."* The controller responded, *"*[C/S] *roger, identified, Traffic Service."* Immediately after this, at 1205:31, the pilot of [PA28(B)] reported *"three miles south of Bough Beech Reservoir, changing frequency to* [enroute]*"*. The pilot of [PA28(B)] did not report a confliction on the frequency.

Information available to the investigation included:

- CA4114 from the Farnborough LARS North & East controller (LF-LARS)
- NATS4118 Initial Watch Management Investigation Report
- [Redacted] Airprox report from the pilot of [PA28(A)]
- [Redacted] Airprox report from the pilot of [PA28(B)]

The Farnborough LARS function was operating as LARS North and East combined. The LF-LARS controller report stated they were working *'in low traffic'*. The Gatwick METAR for the time of the confliction suggested visibility in the area was 10km or greater, with cloud FEW at 4700ft.

[PA28(B)] was operating out of, and back into [an airfield], receiving a Basic Service from Farnborough LARS East. [PA28(A)] was also operating out of, and back into [the same airfield]. The Airprox report from the pilot of [PA28(A)] stated: *'This was a PA28 checkout flight for me by the instructor (who was PIC) .. We had just finished our cruise climb to 2000ft, 2min prior, with heading 120 degrees.'*

CAP774 Chapter 2, 2.1 stipulated

> '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.'

Both aircraft were receiving a Basic Service from the LF-LARS controller, with [PA28(A)] not identified prior to the subsequent confliction due to other operational workload assisting the Approach controller seated adjacent. The CA4114 from the LF-LARS controller stated: *'The Approach controller on my right hand side was very busy and requested my help with some phone calls to TC … I believe during this time the Airprox occurred. The pilot reported they "nearly had an Airprox" on frequency, but this was after the event so I did not see it happen.'*

[PA28(B)] was identified and verified according to the electronic Flight Progress Strip (eFPS) when previously established on the LF-LARS frequency at approximately 1131. The LF-LARS controller report stated [PA28(A)] was not identified at the time of issuing a Basic Service due to other operational workload.

CAP774 Chapter 2, 2.4 'Identification' stated:

> 'A controller may identify an aircraft to facilitate co-ordination or to assist in the provision of generic navigational assistance, but is not required to inform the pilot that identification has taken place. Identification of an aircraft in receipt of a Basic Service does not imply that an increased level of ATS is being provided or that any subsequent monitoring will take place. Controllers may allocate SSR codes to aircraft in receipt of a Basic Service. The issuance of such a code does not constitute the provision of a surveillance ATS.'

The pilot of [PA28(A)] Airprox report further stated there was '*no alert from ATC regarding the traffic was given to either us, or the other aircraft*'.

CAP774 Chapter 2, 2.5 stated:

> '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. A pilot who considers that he requires a regular flow of specific Traffic Information shall request a Traffic Service … (2.9) Whether Traffic Information has been provided or not, the pilot remains responsible for collision avoidance without assistance from the controller.'

[The NATS investigation report then replicated both pilots' reports as above.]

Conclusions: The LF-LARS controller was operating as LARS North and East combined. LARS West, Zone and Approach was operating as a combined function with this controller sat adjacent to the LF-LARS controller.

The pilot of [PA28(B)] was receiving a Basic Service from the LF-LARS controller, with the aircraft identified and verified. The pilot of [PA28(A)] was also subsequently receiving a Basic Service, with the aircraft not identified or verified on the radar display due to the LF-LARS controller providing assistance to the adjacent Approach controller.

The [PA28(A)] climbed to their unreported cruising altitude of 2200ft, which placed the aircraft on an opposite direction track at the same altitude as [PA28(B)], inbound to [destination].

[The PA28(A) flight] was a checkout flight with an Instructor. Both pilots stated they were momentarily engaged with flight tasks regarding fuel tank change, and were not scanning for traffic, and were unaware of [PA28(B)] prior to observing the aircraft pass vertically above, therefore no avoidance manoeuvre was possible. The pilot of [PA28(B)] Airprox report stated the opposite direction aircraft was not seen.

Recommendations and Actions: There were no actions recorded as a result of this Investigation.

CAA ATSI

After review, ATSI had nothing to add to the Farnborough investigation report.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and only PA28(B) was identified using Mode S data. PA28(B) was visible on radar and verified by Farnborough LARS.

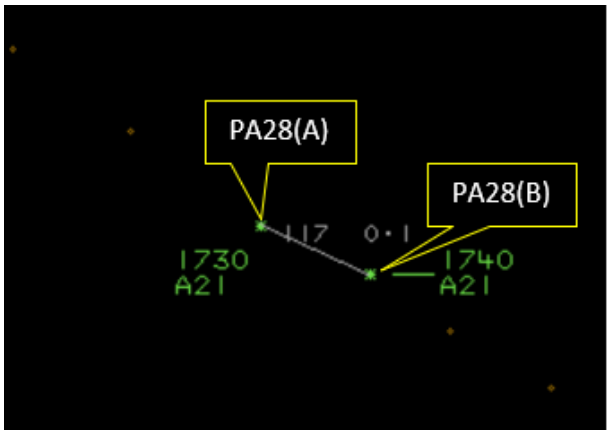


Figure 4 – Time 1202:46 co-altitude at 0.1NM

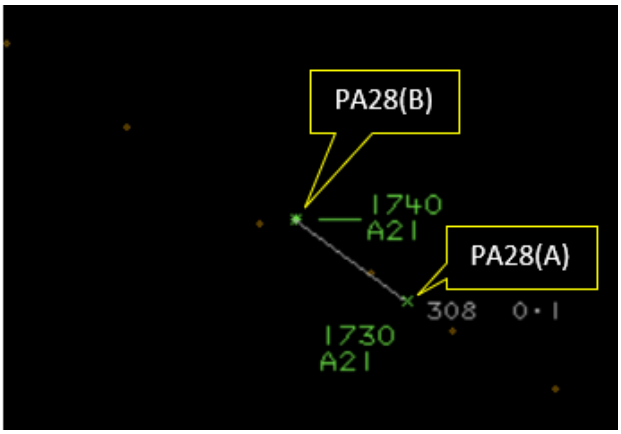


Figure 5 – Time 1202:50 co-altitude at 0.1NM

Figures 4 and 5, above depict that the aircraft were separated laterally by 0.1NM immediately before and after CPA. Therefore, CPA was assessed by interpolation to have been at 1202:48, co-altitude and less than 0.1NM lateral separation.

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

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

Summary

An Airprox was reported when a PA28(A) and a PA28(B) flew into proximity northeast of Tunbridge Wells at 1203Z on Sunday 25th May 2025. Both pilots were operating under VFR in VMC and both were in receipt of a Basic Service from Farnborough Radar.

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 looked at the actions of the PA28(A) pilot and noted that they had been on a Basic Service with Farnborough LARS and had requested a Traffic Service only after they had had an Airprox event with PA28(B). Members agreed, therefore, that it might have been more appropriate for them to have requested a Traffic Service on first communicating with the LARS provider (**CF3**). On considering the PA28(A)'s climb from its original reported altitude, members felt it would have been prudent for the pilot to have informed ATC of their altitude change so as to increase the controller's situational awareness of the relative positions of known aircraft. Members acknowledged, nonetheless, that it is not a requirement to do so. While on the subject of altitude, some members also discussed the use of the former quadrantal rule (an IFR procedure phased out from UK Regulations in April 2015 to align with international standards[4]) and wondered if pilots may be best served to follow the basic principles of it in order to maintain dissimilar altitudes against opposite direction traffic at lower levels in Class G airspace. Members further discussed the responsibilities of pilots to break tasks down into single or smaller parts so that lookout would not be disadvantaged and, while the Board agreed, they also noted that the pilot would be required to briefly look into the cockpit to change fuel tanks as part of their normal tasks. However, in this case, members felt that the pilot and instructor could have managed the flight cooperatively such that the instructor looked out while the pilot flying (PF) changed tanks. The Board noted that, on looking up from the fuel tank selection, the pilot had not seen PA28(B) until it had flown above them and members agreed that this had been an effective non-sighting (**CF5**). The Board was disappointed to note the lack of additional electronic conspicuity (EC) devices being carried in training aircraft and members agreed that carrying compatible EC could significantly enhance a pilot's situational awareness in much the same way that a Traffic Service could. Members agreed that, under the circumstances, the pilot had had no situational awareness of the presence of PA28(B) (**CF4**).

Turning their attention to the actions of the pilot of PA28(B), the Board noted that the pilot in command (PIC) had been on an instrument training exercise and had been in receipt of a Basic Service from Farnborough LARS. Members felt that the instructor had possibly missed a training opportunity by not requesting a Traffic Service and demonstrating its use to the student, and the Board agreed that the pilot could have selected a more appropriate Traffic Service for the flight (**CF3**). However, members acknowledged that it can sometimes be difficult to agree a Traffic Service with Farnborough LARS and wished to remind all pilots that, should such a service be refused when requested, then a 'Refusal of ATS' report FCS1522 should be submitted.[5] Members reiterated that the intention of a Traffic Service is to be provided with pertinent Traffic Information, thereby increasing situational awareness, and noted that although the PA28(B) pilot had not benefitted from Traffic Information on PA28(A), as they had been established on the LARS frequency when the PA28(A) pilot called at Bough Beech Reservoir, they would have had generic situational awareness of the position of it (**CF4**). The Board noted that, although the pilot had had generic awareness of the other aircraft's position, they had not seen it as they had been approaching Bough Beech Reservoir on their return to base and members agreed that this had been a non-sighting of PA28(A) by the pilot of PA28(B) (**CF5**).

The Board then moved their discussion to the actions of the Farnborough LARS controller providing both PA28 aircraft with a Basic Service, and noted that they had been assisting another controller when

[4] Phased out: The Rules of the Air Regulations 2007 Section 6 Instrument Flight Rules, p34 Quadrantal rule and semi-circular rule.
[5] FCS 1522 - UK Airspace Access or Refusal of ATS Report

the Airprox had occurred. Members discussed the nature of the distraction and wondered why the other controller had not had an assistant in place, noting that there had been nobody else available, although ATC members explained that the nature of the phone calls most likely had required a qualified radar controller to make them, therefore the option of an assistant may not have been relevant. The Board was mindful that Farnborough LARS has 5 positions, 2 of which would normally have been worked combined but, on this occasion, had been band-boxed with a third position (Farnborough West, Approach and Zone) and it was that controller who had required assistance from the LARS controller overseeing the PA28s who had also been band-boxed (Farnborough North and East) but with a reportedly low workload. Some controller members questioned how, at the point of making telephone calls to Terminal Control on behalf of the other controller, that controller (Farnborough LARS North and East) had been performing their duties as a radar controller, although it was noted by other controller members that, according to the Farnborough procedures, it had also been their responsibility to assist the other controller. The Board was concerned about the level of ATC resourcing at the time, and wondered if Farnborough's management may consider reviewing their procedures in this regard. Nonetheless, the Board agreed that, as the PA28s had both been under a Basic Service, the controller had not been required to monitor either of their flights (**CF1**), but that they were engaged in other tasks at the time of the Airprox (**CF2**) and had missed the opportunity to pass Traffic Information.

When considering the risk, members noted that the PA28(A) pilot had had no situational awareness of PA28(B) and had initiated a climb to approximately 2000ft and that the pilot of PA28(B) had had generic situational awareness of PA28(A) but had started a descent in the direction of PA28(A) having reached approximately 2000ft when the two aircraft passed one above the other. The PA28(B) pilot had not seen PA28(A) beneath them and the PA28(A) pilot had not seen PA28(B) until at or around the point of CPA and had been unable to take avoiding action. In concluding their discussion, some members had felt that safety margins had been much reduced below the norm and that safety had not been assured, whilst others thought that neither of the pilots had seen the other aircraft in time to materially improve matters and that a serious risk of collision had existed (**CF6**). The Chair put it to a vote and the latter vies prevailed by a small majority. As such, Risk Category A was assigned to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025100			
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
2	Human Factors	• Task Monitoring	~~Events involving an individual or a crew/ team not appropriately monitoring their performance of a task~~	Controller engaged in other tasks
	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
	• See and Avoid			
5	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			
6	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: A.

Safety Barrier Assessment[6]

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

Ground Elements:

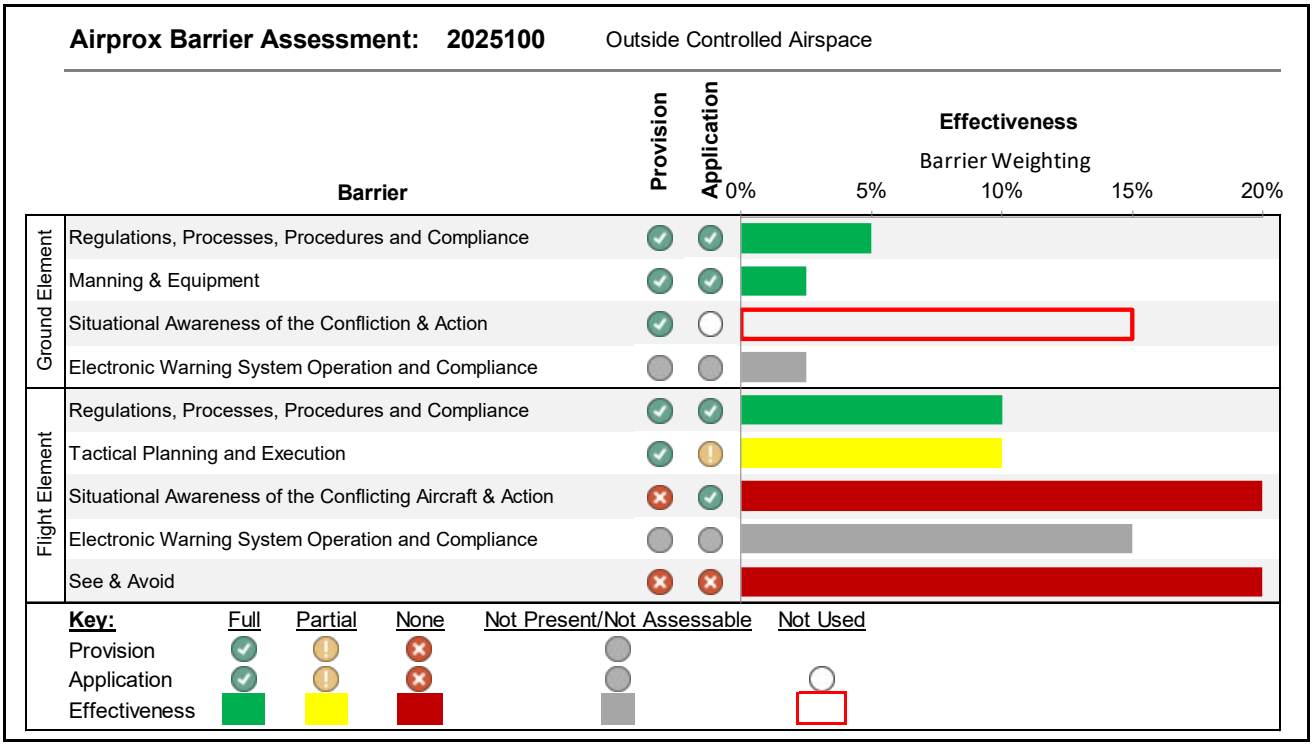
Situational Awareness of the Confliction and Action were assessed as **not used** because the Farnborough LARS controller was not required to monitor either PA28(A) or PA28(B) on a Basic Service.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the pilots of PA28(A) and PA28(B) could both have requested a Traffic Service from Farnborough LARS.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of PA28(A) had no situational awareness of the presence of PA28(B) and the pilot of PA28(B) had only generic situational awareness of the presence of and position of PA28(A) from the pilot's initial communication with Farnborough LARS.

See and Avoid were assessed as **ineffective** because the pilot of PA28(A) had not seen PA28(B) until the point of CPA and the pilot of PA28(B) had not seen PA28(A).



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