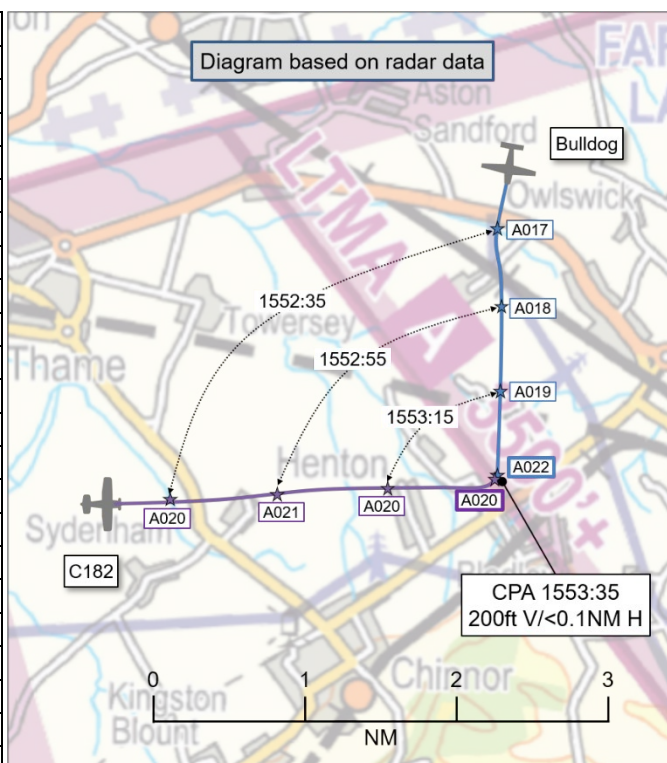


AIRPROX REPORT No 2026070

Date: 01 May 2026 Time: 1554Z Position: 5143N 00053W Location: Bledlow

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Bulldog	C182
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	None
Provider	Farnborough Rdr	None ¹
Altitude/FL	2200ft	2000ft
Transponder	A, C, S	A, C, S
ADS-B Out	Observed	Not observed
Reported		
Colours	Red, white, & grey	White with stripes
Lighting	Nav & anti-colls	Strobes & landing
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	~1800ft	2100ft
Altimeter	QNH	QNH (1018hPa)
Heading	180°	090°
Speed	100kt	125kt
ACAS/TAS	SkyEcho/FLARM	PilotAware
Alert	None	None
	Separation at CPA	
Reported	50ft V/100m H	200ft V/75m H
Recorded	200ft V/<0.1NM H	



THE BULLDOG PILOT reports that they were travelling with a very experienced pilot in the right-hand seat, and they were flying back from [destination] late in the afternoon. [The weather] was CAVOK and conditions for flying were perfect. This naturally meant that airspace was busy, even in the more remote parts of the track. The aircraft was being flown with electronic conspicuity (EC) software being displayed on a large tablet and, in addition to ADS-B traffic, it was displaying [common glider EC] traffic. On the outbound journey, they also used a mix of Basic Service, listening squawks, and London Info. They discussed the merits of a Basic Service compared to listening squawks, their passenger favouring the latter as a Basic Service gives the ATCO no obligation to give any warning of traffic. The pilot preferred taking any service. This was to become a very prophetic discussion. On the return journey, after talking to a succession of ATSUs and trying to talk to many that were closed, they settled on talking to London Information on 124.750MHz. Around ten or so miles north of Stokenchurch mast, they elected to talk to Farnborough West on 125.250MHz and got a Basic Service. Travelling south at somewhere between 1700ft and 1900ft and near Stokenchurch mast, around about 1600, they received an urgent transmission from the ATCO, cautioning them of imminent conflict traffic at about one o'clock, travelling right-to-left. Nothing seen, they leaned forward in the seat to see a white, high wing GA aircraft behind the frame of their canopy, slightly lower and to the right. It was very close. They immediately pulled up and to the right to avoid and, on landing, they saw that their G meter had registered 2.5G in that pull up. Nothing had registered on their EC device. [They believed that] the [pilot of the] other aircraft never saw them.

The pilot further noted that they were flying straight and level [they thought] and that the other aircraft was 100m away on first sighting and below. They reported that the windshield frame had occluded the traffic initially and, for the other aircraft, that the high wing had probably blocked their view of the Bulldog.

¹ The C182 pilot noted that they had been in receipt of a service from Oxford Radar until a minute prior [to the Airprox] and had not yet spoken to the next ATSU.

Also, although they state that nothing registered on their EC device, the navigation display had provided information [they believe], but no alert.

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

THE C182 PILOT reports they had flown the ILS procedure at Oxford and were routeing back [to destination]. They saw the other aircraft late and took control to take avoiding action. They turned behind and pitched up, not feeling very threatened; the inputs were positive but not aggressive. They then returned control to the student. They further mentioned that they had turned left and over-ruled the autopilot, and that the student was wearing a hood, so never saw the other traffic.

They noted that they could have been higher at the position the conflict occurred, but the base of controlled airspace dropped again to 2500ft a few miles ahead and there were few levels to choose from that were well separated from the ground and the base of controlled airspace.

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

THE FARNBOROUGH LARS CONTROLLER reports that they had been informed 19 days after [the Airprox event]. They had no recollection of this event.

Factual Background

The weather at RAF Benson was recorded as follows:

METAR EGUB 011550Z AUTO 23010KT 9999 OVC038/// 22/13 Q1018

Analysis and Investigation

NATS Farnborough

Description of the event.

The pilot of [the Bulldog] called onto the Farnborough LARS West frequency at 1548:12 (all times UTC) and requested a Basic Service. The pilot reported [that they were flying] a Bulldog from [departure to destination], 8NM northwest of Halton, requesting a Basic Service. The pilot was assigned squawk 0440 and a Basic Service was agreed.

The radar range displayed by the LARS controller did not initially show the location of [the Bulldog]. The range was adjusted at 1551:00 which showed it to the north of the display. The controller repositioned the radar back to the usual range at 1551:06, before reverting to the wider range and repositioned the centre of the display, again showing [the Bulldog], at 1551:28. The radar range was again positioned to the default setting at 1552:42.

At 1553:16, the range was again adjusted to see the [the Bulldog]. The LARS controller observed an interaction and at 1553:19 transmitted to the pilot of [the Bulldog], "[C/S], *you've got traffic just converging on your right-hand side similar level.*" The pilot responded, "*Got the traffic, thank you.*"

The closest point of approach between [the Bulldog] (squawk 0440) and the other aircraft (squawk 7000, displayed as V) occurred at 1553:31 measured on the Multi-Track Radar as 0.1NM and 0ft. This interaction was within Class G airspace and there were, therefore, no separation requirements. (Figure 1).

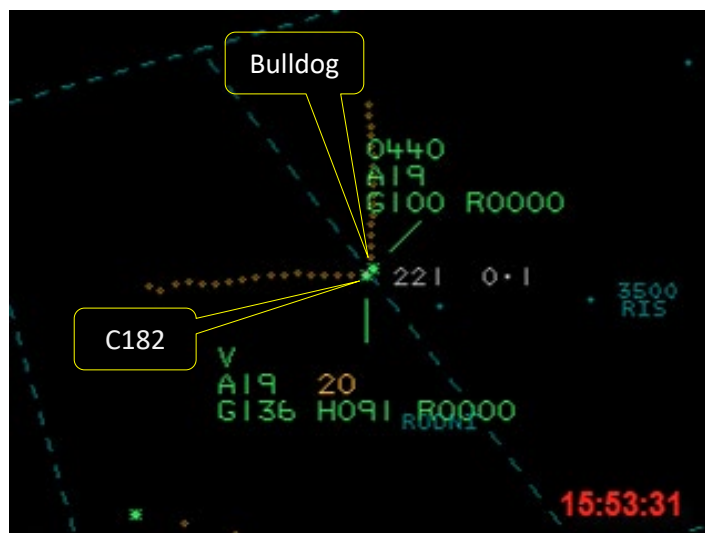


Figure 1

[The pilot of the Bulldog] initiated a climb, such that one radar update later, at 1553:35, there was a 400ft vertical separation between the two aircraft (Figure 2).



Figure 2

At 1553:37, the pilot of [the Bulldog] reported on frequency, *"Farnborough Radar, [C/S], thank you very much for that."*

Investigation

Information available to the investigation included: form CA4114 from the Farnborough LARS West controller, the NATS Initial Watch Management Investigation Report, Radar and R/T recordings, UK Airprox Board notification 2026070, the redacted Airprox report from the pilot of [the Bulldog] and CAP774, UK Flight Information Services.

The pilot of [the Bulldog] called onto the Farnborough LARS West frequency and requested a Basic Service, which was agreed by the controller. The pilot reported 8NM northwest of Halton, which was north of the usual displayed area for the Farnborough West LARS position. The NATS4118 stated, *'At this point [the Bulldog] was not in a location that would have been displayed on the main in use Radar display for the task, but this does not contravene Basic Service requirements.'*

CAP774, 2.1 stated:

'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.'

CAP774 Chapter 2, 2.7 further stated:

'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.'

In this event, the LARS controller changed the display range back to the default range at 1552:42.

At the time of this change, there was 300ft vertical separation between [The Bulldog] (0440) and the VFR aircraft (V). (Figure 3).



Figure 3

Three seconds after repositioning the radar display back to see [the Bulldog], the LARS controller issued Traffic Information to the pilot of [the Bulldog]. The pilot Airprox report from [the Bulldog] stated the first sighting of the conflicting traffic was at '*less than 100yds at one o'clock*' and approximately '*50ft below*'. The pilot stated that the windshield frame occluded the traffic initially, and they noted that for the other aircraft their high wing probably blocked their view.

Mode S information indicated the conflicting aircraft was a C182. No information relating to this event was provided to NATS from the pilot [of the C182].

Conclusions.

Causal Factors [were noted as], [the Bulldog pilot] was in receipt of a Basic Service from the Farnborough LARS controller and came into conflict with [the C182] outside controlled airspace, [and that], Traffic Information was passed by the LARS controller to the pilot of [the Bulldog].

CAA ATSI

When [the pilot of the Bulldog] first called at 1548 they were 6NM outside the Farnborough LARS North area of responsibility, and 10NM north of Farnborough LARS West,² which is the frequency they called on. Under a Basic Service there is no requirement for the controller to continuously

² The LARS coverage chart is available in the NATS AIP, Part 2 ENR 6-11

monitor the aircraft on their surveillance system, but the controller was being proactive by (twice) moving their Radar Data Processor (RDP) picture north to show [the Bulldog].

UKAB Secretariat

An analysis of the NATS radar replay was undertaken, and both aircraft were detected using Mode S data. Further analysis of third-party aircraft tracking software was undertaken, and the Bulldog, but not the C182, was detected using ADS-B data sources. Although NATS radar replay resources were used, the Secretariat could not reproduce the results of the NATS investigation, which is likely due to the various radar settings and radar heads available, and nuances between them.

The C182 was seen to be heading approximately east at an altitude of 2000ft with occasional, minor, changes to their altitude. The Bulldog was initially seen at 1600ft in a gentle 300ft/min climb to 1900ft, 200ft below the level of the C182 which had made a brief 100ft height gain from the 2000ft baseline altitude to 2100ft at 1552:59 (Figure 4).

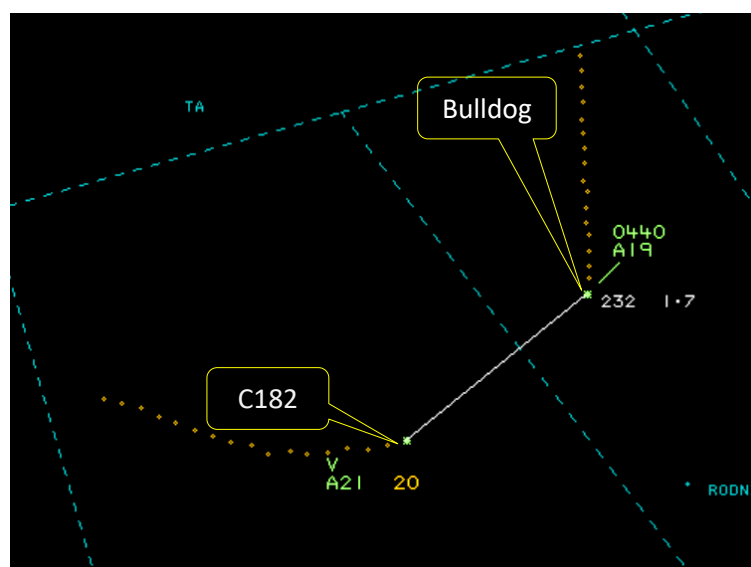


Figure 4 – Time 1552:59 C182 above the Bulldog.

A further 200ft climb was recorded for the Bulldog 4sec before CPA, at 1553:31, as the Bulldog climbed above the level of the C182 which had registered a brief 100ft height loss below its 2000ft baseline to 1900ft, with 0.2NM lateral separation (Figure 5).

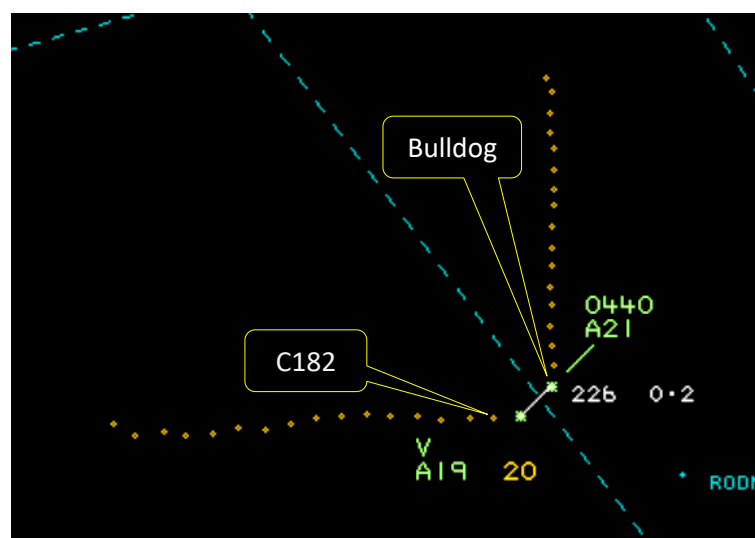


Figure 5 – Time 1553:31 C182 below the Bulldog

Both aircraft increased their altitude by CPA. The C182 returned to its baseline altitude of 2000ft, and the Bulldog had continued its climb to 2200ft. CPA was assessed to have occurred at 1553:35 with 200ft vertical and less than 0.1NM lateral separation (Figure 6).

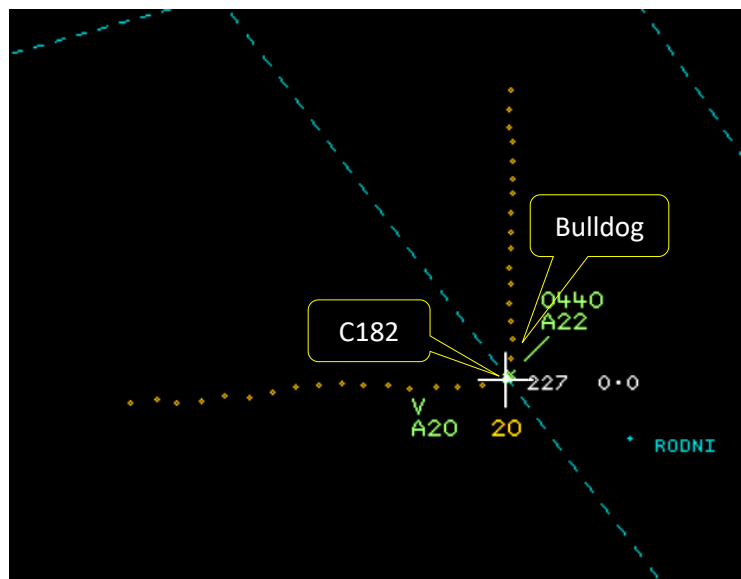


Figure 6 – Time 1553:35 CPA

The C182 was seen to have made a left turn at 1553:39 (4sec after CPA) and a further 200ft climb by 1553:43 (8sec after CPA). Lateral separation continued to increase after CPA.

The Bulldog and C182 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.³ If the incident geometry is considered as converging then the Bulldog pilot was required to give way to the C182.⁴

Summary

An Airprox was reported when a Bulldog and a C182 flew into proximity at Bledlow at 1554Z on Friday 1st May 2026. Both pilots were operating under VFR in VMC, the Bulldog pilot in receipt of a Basic Service from Farnborough Radar and the C182 pilot between frequencies 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, 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 first considered the actions of the Bulldog pilot, noting that the pilot had been in receipt of a Basic Service from Farnborough LARS West. Members were uncertain whether the pilot may have expected to have received Traffic Information under this service, based on the conversation with their passenger that had preceded this Airprox event. A discussion ensued regarding the concerns of the Board that some pilots possibly believed that selecting a frequency monitoring code (listening squawk) and monitoring the frequency, rather than requesting a surveillance-based service, may have led to them to receiving Traffic Information, and that that would not happen under a Basic Service. Members felt it was important to differentiate between the services and reasonable expectations of one over another, noting that the terms of the Basic Service are cited in the Farnborough NATS report (above) and that, although the controller is not required to monitor a flight under those terms, should the controller become aware of a conflict and considers that a definite risk of collision exists, a warning shall be issued to the pilot. Members were keen to point out that applying a frequency monitoring code

³ (UK) SERA.3205 Proximity.

⁴ (UK) SERA.3210 Right-of-way (c)(2) Converging.

does not provide the pilot with any form of ATS, and does not guarantee that the pilot will be warned of any risk of infringement either, and the Board felt that it was important to note that relevant information regarding ATS services is available in the UK AIP.⁵ The Board noted that the pilot of the Bulldog had been provided with Traffic Information from the Farnborough Radar controller, and that this information had alerted the pilot to the presence of the C182, albeit late (**CF2**). Members deemed it unfortunate that the electronic conspicuity (EC) device installed in the Bulldog had been unable to detect the C182 (**CF3**), which had none, as this had not alerted the pilot to the conflict. However, members agreed that the Traffic Information received from the LARS controller had prompted the pilot to lean forward to see beyond the canopy frame that had obscured their view (**CF6**) and visually acquire the C182 at a late stage (**CF5**).

Moving their attention to the actions of the C182 pilot, the Board noted that the pilot had been between frequencies after having completed instrument approaches at Oxford with a student 'under the hood'. In their discussions, members considered that it may have been prudent for the pilot to have requested a Deconfliction Service after completion of the approach training and prior to changing frequency, believing that this may have alerted the pilot to the presence of the approaching Bulldog. The Board members, however, noted that they were unaware of the level of service available to the C182 pilot from Oxford prior to initiating their frequency change, and that Oxford was not a LARS provider in any case. Members agreed that it had been unfortunate that the pilot had neither been in receipt of a surveillance-based service at the time of the Airprox, nor received an alert from their EC device as would have been expected (**CF4**). Members discussed the possibility of missed EC alerts due to pilots generally concentrating on the external environment, which is preferable to being 'eyes in' and monitoring a screen (although a disciplined instrument scan can include an EC device). In their discussion, members agreed that monitoring of EC devices can be distracting and that the noise level in many aircraft may make it difficult to hear an audible alert where one is available. The Board noted that, by investing in a Bluetooth-enabled headset, pilots should expect easier audible detection of alerts. Members agreed, however, that they could not comment on the headset used by the pilot of the C182 as it was unknown. Members agreed that, without the advantages of a FIS, Traffic Information, and EC alerts the pilot of the C182 had had no situational awareness of the presence of the Bulldog (**CF2**) and that these factors had culminated in a late sighting of the Bulldog (**CF5**) and subsequent late avoiding action taken by the C182 pilot.

The Board next considered the actions of the Farnborough Radar controller, noting that they had needed to zoom their monitor out a couple of times so that they had been able to see the Bulldog. The Board appreciated that the controller's efforts in doing that had meant that the controller had been able to detect a conflict between the Bulldog and the C182, despite both aircraft being outside the select frame for a Short-Term Conflict Alert (STCA) with the Bulldog displaying a squawk for Basic Service only and the C182 displaying a VFR conspicuity squawk. Members agreed that the conflict alert system had not been used in this scenario (**CF1**) and that the controller had successfully detected the conflict without the STCA and had passed Traffic Information to the pilot of the Bulldog accordingly. The Board noted that, on passing Traffic Information to the Bulldog pilot, the controller had used the term '*similar level*' to indicate the relative vertical separation from the other aircraft, and one member queried the correctness of this terminology. Air Traffic control members confirmed that the term '*similar level*' did not appear in CAP413, but '*same level*' did. After some discussion the Board recognised that the controller members considered that using the term '*similar level*' where '*same level*' was not true, was acceptable, and that the alternative of calling the full altitude of the other aircraft was potentially cumbersome and more complex for the pilot to achieve a quick mental model of where to look for that traffic. The Board agreed that the phrase '*similar level*' in certain scenarios was a useful tool despite not being specified explicitly within CAP413.

In concluding their discussions and determining a Risk Category for this event, some members felt that, although safety had been degraded, at least one pilot had been able to take timely action to prevent the aircraft from coming into close proximity (Risk Category C), while others considered that both pilots had seen the other aircraft at a late stage and that the avoidance action had, therefore, been taken at the last minute to avert a likely collision (Risk Category B) (**CF7**). The decision was put to a vote and an equal number of members voted Category C (safety degraded, but no risk of collision) and Category

⁵ [UK AIP EN-ROUTE \(ENR\) 1.6 ATS SURVEILLANCE SERVICES & PROCEDURES](#) (2.2.5 Frequency Monitoring Codes).

B (safety not assured). As such, the Chair had the casting vote and assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2026070			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Ground Elements			
	• Electronic Warning System Operation and Compliance			
1	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			
	• 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
	• Electronic Warning System Operation and Compliance			
3	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
4	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			
5	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
6	Contextual	• Visual Impairment	Events involving impairment due to an inability to see properly	One or both aircraft were obscured from the other
	• Outcome Events			
7	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 Assessment⁶

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

Ground Elements:

Electronic Warning System Operation and Compliance were assessed as **not used** because both the C182 and Bulldog squawks were outside the select frame of the STCA at the Farnborough controller's position.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the Bulldog pilot had late situational awareness of the presence of the C182, and the C182 pilot had no situational awareness of the presence of the Bulldog.

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

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the Bulldog's electronic conspicuity (EC) equipment was unable to detect the C182, and the C182 pilot had not reported having received an alert from their EC device when it might have been expected.

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

