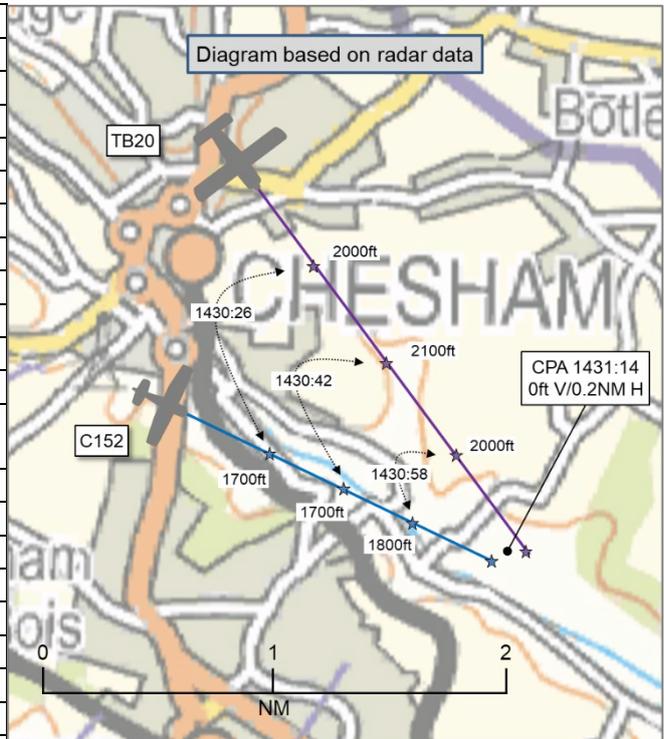


AIRPROX REPORT No 2025186

Date: 14 Aug 2025 Time: 1431Z Position: 5141N 00034W Location: Chesham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C152	TB20
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Listening Out
Provider	Farnboro' North	Luton
Altitude/FL	1800ft	1800ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Yellow, black	White, blue
Lighting	Beacon, nav	Nav, strobe, taxi, Idg
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2000ft	1600ft
Altimeter	QNH	QNH (1018hPa)
Heading	110°	~150°
Speed	90kt	140kt
ACAS/TAS	Not fitted	TAS
Alert	N/A	None
Separation at CPA		
Reported	0ft V/100m H	NK
Recorded	0ft V/0.2NM H	



THE C152 PILOT reports that their flight was returning to [destination aerodrome] after carrying out a lesson to the west of Aylesbury (the reporter had been the FI). On the return, they were tracking directly to [...] from Princess Risborough. They were practicing straight-and-level flight at the time, with an emphasis on maintenance of scan. At the time, the FI had been encouraging the student to work on their scan and had been carrying out a 'Lookout, Attitude, Instruments' exercise with them, so both of the pilots' lookout was enhanced. Workload was low as the lesson was complete and they were returning to [destination aerodrome]. An aircraft appeared to the left side of the screen from the blind spot above the wing passing in front of their aircraft, from left-to-right and appeared to be tracking towards [...] in a descent. The FI did not take any avoiding action as the speed at which it all happened did not afford enough time for a proper assessment of their track, altitude or any action they may have been taking. The other aircraft appeared to maintain track. It is possible the other aircraft pilot had not seen them as it may have been possible to pass behind. The other aircraft also appeared to be travelling faster than them. Whilst the event had been unintentional, it adds as a reminder for all of us that this portion of airspace along the east-west corridor can be an exceptionally busy sector of airspace.

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

THE TB20 PILOT reports that they had been flying back to their home airfield of [...] from [...]. They had routed through the Tring corridor between RAF Halton and the Luton CTR at between 2100ft and 2200ft. They were not talking to any ATS at that point but had tuned to Luton Radar 129.550MHz and set a listening squawk of 0013. Somewhere near Chesham they had seen another aircraft about 0.5NM south and a few hundred feet below. It was not showing on their traffic system. Initially, they had thought it was also routing to [...], but it became clear that it was headed more due east. Although it was slightly ahead initially, it was clear that [the TB20] was faster and would soon pass it. The TB20 pilot lost sight of it as it went behind and below them. A short while later the TB20 pilot judged that it had been well

clear but could not see it as it was behind them so they started their descent towards the Maple Cross VRP for [...]. The TB20 pilot did not see the aircraft again and was not aware of any close approach. At some point they cancelled their listening squawk and contacted Denham Radio. They are not sure if this had been before or after they had initially seen the aircraft, but it would have been before they had started their descent.

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

THE FARNBOROUGH NORTH CONTROLLER reports that they had been operating LARS North and East banded at the time of the event, with traffic levels being of a medium complexity, including the Red Arrows receiving a Basic Service at the extremity of LARS East's sector associated with the Eastbourne airshow. The C152 pilot had previously called requesting a Basic Service, which had been given along with the QNH and SSR code of 5020. Immediately prior to the C152 pilot having called in connection with this event, the controller detected some garbling of data involving their data label and believes that they had rotated the label to see a 7000 SSR code aircraft showing 1600ft descending having obviously passed the C152 (who had been at 1800ft). The C152 pilot asked the controller if they had the identity of the aircraft concerned. Although the controller was able to obtain this from Mode S data, they stipulated on the RT that they were not able to provide this information as it would be a matter for any reporting action the C152 pilot may have wished to take. The C152 pilot indicated that they would be filing a report when they had landed.

THE DENHAM AIR/GROUND OPERATOR reports that, as the Duty Officer (AGCS) at Denham during this period, they confirm that neither aircraft reported experiencing an Airprox. The incident appeared to have occurred overhead Chesham, so it is quite possible that the aircraft involved were not monitoring Denham's frequency at the time. If they were, no transmissions were made regarding this event, and the AGO was not made aware of it via the frequency or otherwise.

Factual Background

The weather at London Heathrow Airport was recorded as follows:

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METAR COR EGLL 141420Z AUTO 25008KT 9999 BKN046 27/15 Q1018 NOSIG=
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Analysis and Investigation

NATS Safety Investigation

The C152 had been operating under a Basic Service with Farnborough LARS North and East at 1800ft outside controlled airspace. The TB20, squawking 7000, descended through the altitude of the C152 while the LARS controller had been communicating with an unrelated aircraft, at a range of 0.2NM and 100ft. The C152 pilot subsequently reported the event as an Airprox.

The C152 pilot had been on a local flight to and from [...] and had called onto the Farnborough LARS North frequency and requested a Basic Service, which was agreed by the LARS controller, who assigned the pilot squawk 5020.

At 1430:54 the pilot of an unrelated aircraft reported onto the Farnborough LARS frequency requesting a Basic Service. The pilot of the unrelated aircraft passed their flight details with the interaction ending at 1431:28. The TB20 had been inbound to [...], displaying Mode-A conspicuity code 7000, had initially been operating north of, and above, the C152. During the communication with the unrelated aircraft, the TB20 descended through the altitude of the C152. The closest point of approach between the two aircraft was measured on the LTC Multi Track Radar as 0.2NM and 100ft. As both aircraft were operating outside controlled airspace, there were no separation requirements relating to the two aircraft. At the conclusion of the communication with the unrelated aircraft at 1431:28, the LARS controller interrogated the Track Data Block for the C152 and identified a crossing track which was below the C152 and descending. The pilot of the C152 called onto the LARS North frequency at 1431:48 and requested if the controller had been aware of the traffic. The

pilot stated they would file a report relating to the interaction as the crossing aircraft was, “*in their blind spot.*”

The C152 pilot had requested and was operating under a Basic Service.

CAP774, Section 2, 2.4 states:

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.

Traffic Information – Given that the provider of a BS 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 they require a regular flow of specific Traffic Information shall request a Traffic Service.

Whether Traffic Information has been provided or not, the pilot remains responsible for collision avoidance without assistance from the controller.

At the time of the transmission from the unrelated aircraft, 1430:54, the TB20 had been 0.5NM north of the C152, 400ft above, with both aircraft displaying in level flight. As the transmission with the unrelated aircraft concluded, the confliction between the two aircraft had passed, with no further opportunity for the LARS controller to issue pertinent Traffic Information to the pilot of the C152, with CAP774 detailing there was no requirement for the controller to have monitored the flights.

CAA ATSI

ATSI has nothing to add to the investigation report from NATS on this event.

UKAB Secretariat

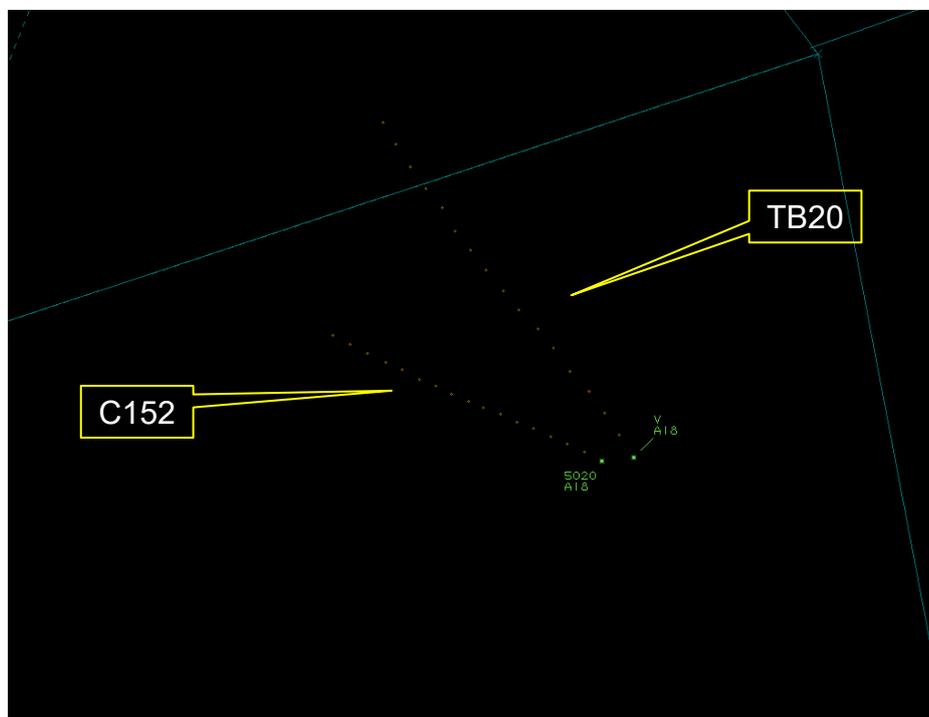


Figure 1: At CPA – 1431:14

Both aircraft were tracked via radar and identified through Mode S data. The C152 and TB20 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 overtaking then the C152 pilot had right of way and the TB20 pilot was required to keep out of the way of the other aircraft by altering course to the right.²

Summary

An Airprox was reported when a C152 and a TB20 flew into proximity at Chesham at 1431Z on Thursday 14th August 2025. The C152 pilot was operating under VFR in VMC in receipt of a Basic Service from Farnborough North, and the TB20 pilot was operating under VFR in VMC and had not been 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, 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.

Members firstly considered the actions of the C152 pilot. They noted that they had been completing a flying lesson and had been returning to their home airfield. The pilot had sought a Basic Service with Farnborough North which had been agreed but, as the NATS safety investigation clarifies, the controller had been operating with an uninvolved aircraft at the time of CPA and, although they had seen the TB20 approaching the C152, it had been higher and had been passing to the left-hand side. Members wished once again to stress that, where available, a higher level of air traffic service should be considered, particularly in areas of greater traffic density (**CF2**). Additionally, as the C152 had not carried any electronic conspicuity equipment, the C152 pilot had had no situational awareness of the proximity of the TB20 (**CF3**). The C152 pilot reported that they had visually acquired the TB20 as it had appeared descending from their rear left quarter, having been obscured by the C152's high-wing configuration (**CF8**). Members felt that the C152 pilot's sighting of the TB20 had been at a very late stage (**CF6**) and had caused some concern as to its proximity (**CF7**).

Members moved on to consider the actions of the TB20 pilot, noting that they had been transiting under the Luton CTA whilst selecting a Listening squawk and monitoring the appropriate frequency. At the reported time of CPA, the TB20 pilot reported that they had cleared the Luton area and had switched to the Denham Air/Ground frequency. Members recognised that, in this highly congested airspace and with little distance between Luton and Denham, it had not been unreasonable to have managed their radios in this way but did wish to highlight that a more active service from those able, such as Luton, may produce a greater contribution to a pilot's situational awareness of surrounding traffic. The Board noted that the TB20 had carried a TAS unit which had unfortunately not registered any emissions from the C152 (**CF4**) and this, combined with the use of a passive air traffic service, had led to the TB20 pilot having had no situational awareness of the presence of the C152 (**CF3**). Members noted that the TB20 pilot reports having visually acquired the C152 as they had approached from its rear port side and had passed at a distance that had caused the C152 pilot some concern over its proximity (**CF5**).

In reviewing the role played by the Air Traffic Service providers, members noted that Farnborough had been providing a Basic Service to the C152 pilot and that there had been some disruption to the frequency around the time of the Airprox event. No Traffic Information had been provided to the pilot regarding the confliction with the TB20. In accordance with regulations relating to the provision of services, there is no requirement for the Air Traffic Control officer to monitor the flight under a Basic Service (**CF1**). Although the TB20 had made reference to having switched to the Denham Air/Ground radio frequency, there had been no contact with that unit before the reported CPA.

In considering risk, members noted that neither pilot had any situational awareness of the presence of the other aircraft but the overtaking TB20 pilot had gained visual with the C152 and had judged there to have been no risk of collision. Members assessed that safety had been degraded; Risk Category C.

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(3) Overtaking.

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

	2025186			
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				
• Tactical Planning and Execution				
2	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				
3	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				
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	• Lack of Individual Risk Perception	Events involving flight crew not fully appreciating the risk of a particular course of action	Pilot flew close enough to cause concern
6	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
7	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft
8	Contextual	• Visual Impairment	Events involving impairment due to an inability to see properly	One or both aircraft were obscured from the other

Degree of Risk: C.

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 **not used** because the Farnborough controller was not required to monitor the flight under a Basic Service.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the C152 pilot could have requested a 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.

³ 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 TAS unit carried by the TB20 should have been able to receive electronic emissions from the C152 but no alert was reported.

Airprox Barrier Assessment: 2025186		Outside Controlled Airspace						
Barrier		Provision	Application	Effectiveness Barrier Weighting				
				0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓					
	Manning & Equipment	✓	✓					
	Situational Awareness of the Confliction & Action	✓	○					
	Electronic Warning System Operation and Compliance	●	●					
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✓					
	Tactical Planning and Execution	✓	⚠					
	Situational Awareness of the Conflicting Aircraft & Action	✗	✓					
	Electronic Warning System Operation and Compliance	✗	✓					
	See & Avoid	✓	✓					
Key:		<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>		
Provision	✓	⚠	✗	●				
Application	✓	⚠	✗	●	○			
Effectiveness								