AIRPROX REPORT No 2025232

Date: 08 Nov 2025 Time: 1210Z Position: 5159N 00106W Location: 4NM S of Turweston

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C172	C182
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out[1]	Listening Out
Provider	Turweston Radio	Turweston Radio
Altitude	1800ft	1800ft
Transponder	A, C, S+	A, C, S
Reported		
Colours	White and red.	White and blue.
Lighting	Bcn, nav, strobes.	Ldg, taxi, nav, bcn.
Conditions	VMC	VMC
Visibility	5-10km	>10km
Altitude	1800ft	1700ft
Altimeter	QNH (1013hPa)	QNH (1013hPa)
Heading	180°	330°
Speed	95kt	125kt
ACAS/TAS	PilotAware	Safesky
Alert	Information	None
	Separation at CPA	
Reported	0ft V/<0.5NM H	5ft V/70m H
Recorded	0ft V/<0.1NM H	

THE C172 PILOT reports that this was a flight from [departure] to [destination] in their [C172]. There were 2 POB. They had departed [airfield] and, once they had reached 900ft QNH (1013hPa), they turned onto a heading of 180°. Turweston Radio was the active frequency and they made a radio call stating that they were departing to the south. They climbed to 1800ft heading to SOPIT[2], their first turning point. Appearing from around the side of a cloud was a high-wing white and blue Cessna at the same height. It was extremely close and they estimated less than half a mile. They took avoiding action and turned sharply to starboard. The other aircraft did the same. The incident was over in seconds, however, the incident was deeply concerning. They did not hear the [pilot of the] other aircraft on the Turweston frequency, which was surprising considering how close the aircraft was to Turweston airfield.

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

THE C182 PILOT reports that the cloudbase was low and both aircraft were close to the cloudbase. That limited natural "random" vertical separation. Both aircraft turned right on sighting. [They considered] what could have helped: high quality (LED or HID) pulsating lights, lights on the other aircraft to be on (they believed [that the other aircraft] did not have taxi or landing lights on, which would have helped with conspicuity), electronic conspicuity.

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

THE TURWESTON AIR/GROUND OPERATOR reports that nothing was observed and no conflict was reported.

[1] Although the C172 pilot reported being in receipt of an AGCS, the aircraft was operating approximately 4 NM from the aerodrome, where the service conferred no operational relevance beyond enabling the monitoring of traffic on frequency.
[2] SOPIT is an IFR waypoint southeast of Fringford.

Factual Background

The weather at Cranfield Airfield was recorded as follows:

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METAR EGTC 081220Z 24009KT 9999 BKN012 12/10 Q1013
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Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft were identified using Mode S data. The C182 was seen to be squawking a 0010 conspicuity code, which is the frequency monitoring code for Birmingham.

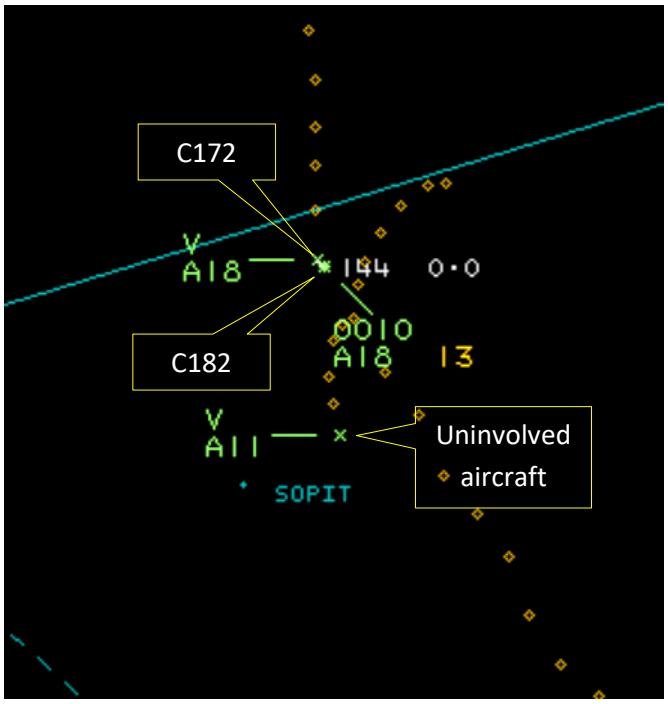


Figure 1 – Time 1210:10 radar tracks

Further analysis of third party tracking software was undertaken; the C172 was identified using ADS-B data sources and the C182 was identified using MLAT-only data sources. The pilot of the C172 supplied their GPS track data, and all tracks were coincident with the radar tracks. CPA was assessed to have occurred at 1210:10 with less than 0.1NM lateral and 0ft vertical separation, and both aircraft were seen to have turned right at or after the point of CPA.

The C172 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 head-on or nearly so then both pilots were required to turn to the right.[4]

Summary

An Airprox was reported when a C172 and a C182 flew into proximity in the vicinity of Finmere at 1210Z on Saturday 8th November 2025. Both pilots were operating under VFR in VMC and listening out on the Turweston Radio frequency.

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

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS track data for the flight of the C172 and a report from the Air Ground Operator 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 pilot of the C172, and it was noted that they had recently departed to the south from an airfield under an AGCS, on which frequency they had heard no evidence of proximate traffic passing the airfield. The Board noted that, although the C172's electronic conspicuity (EC) equipment had displayed information on the approaching C182, the C172 pilot had not received an alert. Members agreed, therefore, that the C172's EC device had not alerted as expected (**CF3**) and that this had led to the C172 pilot having had only generic situational awareness of the presence of the C182 (**CF2**). The Board noted that the pilot, on sighting the C182, had immediately executed an avoiding turn to the right, and members agreed that the C172 pilot had only seen the C182 at the last minute (**CF4**).

The Board then turned their attention to the pilot of the C182, and noted that they had been 'listening out' only on the airfield frequency from which the C172 had departed. The Board was disappointed that the pilot, having selected the frequency, had not made a call to the Air Ground Operator to confirm their routeing past the airfield, thus allowing any other pilots on frequency to have been made aware of their proximity. Members agreed that the C182 pilot had not communicated their intentions to the Air Ground Operator of the airfield frequency to which they were tuned (**CF1**). The Board noted that the C182 pilot had been making use of a 5G mobile device EC application. Members discussed the functionality and limitations of such systems, recognising that although these applications may, in some circumstances, offer supplementary situational awareness information, they are not an approved EC system under existing CAA standards. The Board further observed that, in this instance, the system had not detected the presence of the C172 and members agreed, therefore, that the C182 pilot had had no situational awareness of the presence of the C172 (**CF2**). The Board, while discussing the topic of electronic conspicuity, wished to remind pilots that modern EC devices can provide traffic alerts directly to compatible headsets, thereby offering improved and more easily accessible situational awareness. The Board also reflected that the C182 pilot appeared to have been operating with limited vertical manoeuvring space, and members agreed that, in Threat Error Management (TEM) terms, a greater vertical margin, when conditions and qualifications permit, offers improved options for managing developing threats.The Board further noted that the pilot, on having seen the C172, manoeuvred to the right and away from it, and members agreed that this had been a late sighting of the C172 by the C182 pilot (**CF4**).

On finalising their discussion the Board noted that, while the C172 pilot had had generic situational awareness of the C182's presence, the C182 pilot had had no situational awareness of the presence of the C172, and that both pilots had seen the other aircraft at a late stage. Members agreed that safety margins had been reduced much below the norm, but that the emergency avoiding action taken by both pilots had averted a likely collision. As such, the Board assigned Risk Category B (**CF5**) to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025232			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Tactical Planning and Execution			
1	Human Factors	• Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions
	• 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	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			
4	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
	• Outcome Events			
5	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[5]

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

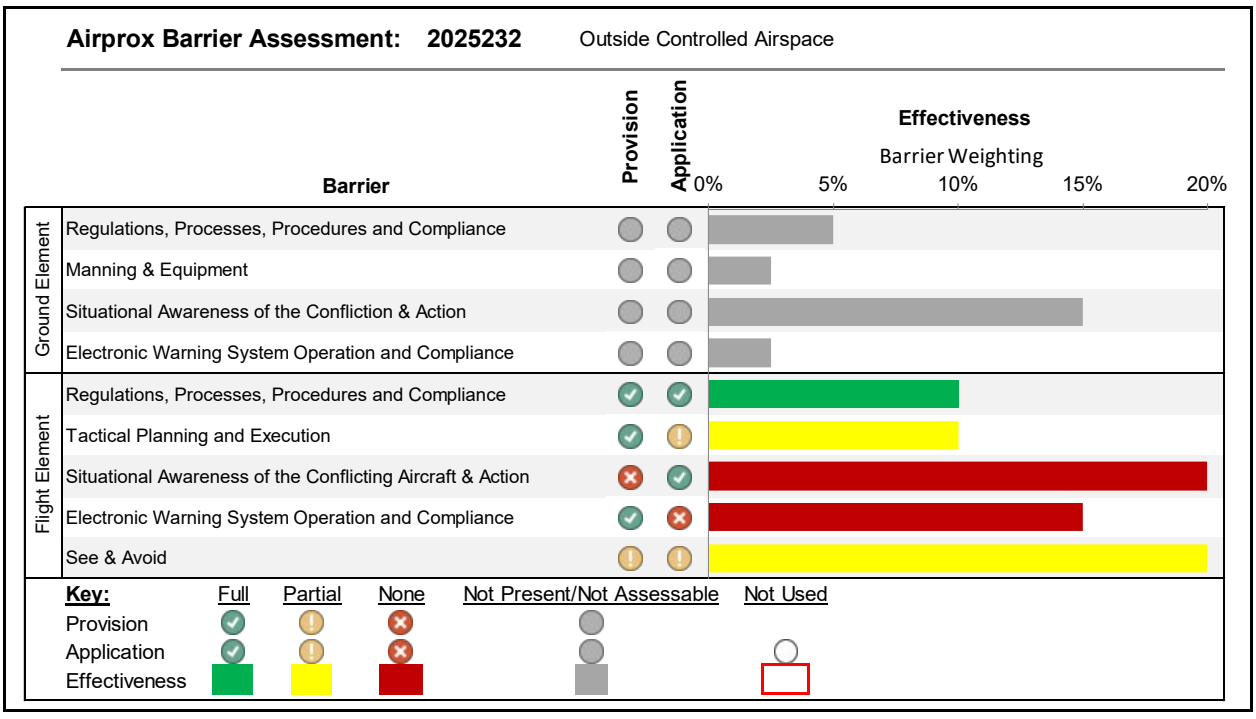
Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because The C182 pilot could have communicated their routeing intentions on the frequency to which they were tuned.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the C182 pilot had no situational awareness of the presence of the C172, and the C172 pilot had only generic situational awareness of the presence of the C182.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the C172's electronic conspicuity equipment had not alerted as would have been expected.

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



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