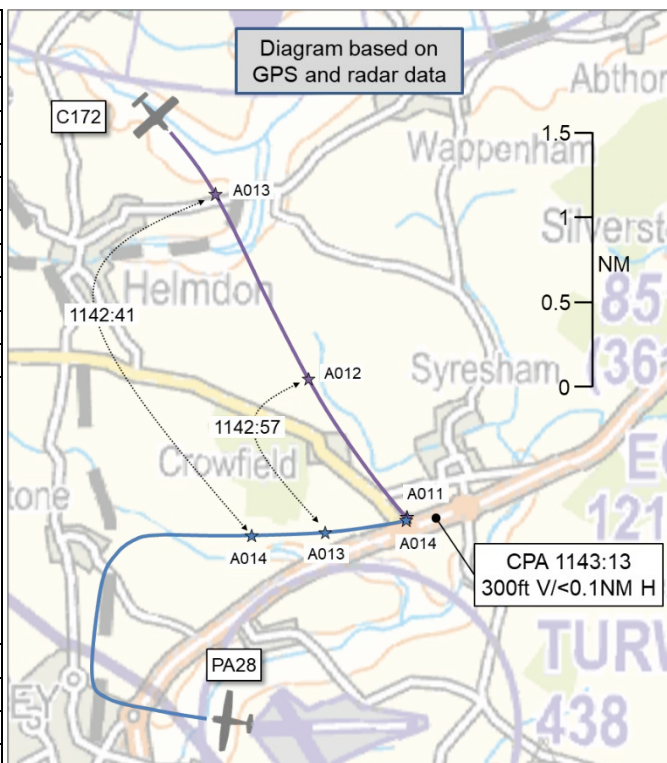


AIRPROX REPORT No 2025233

Date: 08 Nov 2025 Time: 1143Z Position: 5204N 00105W Location: IVO Turweston

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	
Aircraft	PA28	C172	
Operator	Civ FW	Civ FW	
Airspace	London FIR	London FIR	
Class	G	G	
Rules	VFR	NK	
Service	AGCS	AGCS	
Provider	Turweston Radio	Turweston Radio	
Altitude/FL	1400ft	1100ft	
Transponder	A, C, S	A, C, S	
Reported			
Colours	Black, white	NR	
Lighting	Landing, strobes		
Conditions	VMC		
Visibility	>10km		
Altitude/FL	1000ft		
Altimeter	QFE (999hPa)		
Heading	090°		
Speed	85kt		
ACAS/TAS	SkyEcho ¹		SkyEcho
Alert	TA		None
	Separation at CPA		
Reported	200ft V/0m H	NR	
Recorded	300ft V/<0.1NM H		



THE PA28 PILOT reports that they hold a PPL fixed-wing licence with circa 70hr of flight time. They were flying solo, conducting practice circuits at Turweston and in contact with Turweston Radio. The weather was a scattered cloudbase of 1200ft with good visibility. They remained clear of clouds at all times. The PA28 is fitted with a Mode S transponder and they were squawking 'Alt'. They were also operating [an EC device] (in receive mode only) with traffic being displayed on SkyDemon on a yoke-mounted tablet.

On their second circuit, after turning crosswind-to-downwind for RW27RH at 950-1000ft height (QFE 999hPa) at 85kt, they spotted on SkyDemon traffic at their level, approaching from their left (from the north) at, approximately, an 80° constant bearing. As they looked for the traffic, they made their downwind position call. They could not see the traffic for some time, but they elected to remain on the heading. Their reasoning was that they had priority in the circuit already, they could not see [the aircraft] and did not know [the other pilot's] intentions and they did not want to lose any situational awareness of [the other pilot's] predicted position by changing their own position and orientation. After a period, they spotted a high-wing Cessna, later confirmed as [the C172] by the Turweston AGO, less than 200ft below their level, to their left (travelling from left-to-right) on a constant bearing. They could see that [the other pilot] was lower and in a slight descent, so they started a climb (circa 100ft) to get additional separation. [The C172] passed directly below them with around 200ft vertical separation. Their position was mid-downwind at that point.

Due to [the C172] being lower, it was camouflaged against the ground resulting in a delay in acquiring it. There was less than 10sec from spotting it to [the C172] passing directly below them. After it had passed, they regained visual [contact with] it to the right and could see it start a slight climb and a right turn overhead the runway. They determined it was then not a factor and continued their downwind leg

¹ The pilot of the PA28 reported that their EC device had been operated in a 'receive-only' mode.

for another touch-and-go. They cannot recall hearing position calls from [the pilot of the C172] if any were made.

[The pilot of the PA28 commented that] their club CFI had a polite chat with the pilot of the [C172]. There was [,reportedly,] mention of losing GPS and not knowing their position. [The PA28 pilot opined that] that would [explain] flying through the downwind leg and doing a right-hand orbit inside the circuit on the live-side of the runway. However, it was not clear what kind of join [the C172 pilot] had intended to do.

[The pilot of the PA28] is intrigued as to their intentions as they seemed unconcerned. The cloudbase could have been a contributing factor since it did not allow for a standard overhead join. However, they believe the [pilot of the C172] could have held off outside the circuit on hearing traffic already on the downwind leg (if a mid-downwind join had been their intention).

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

THE C172 PILOT believed that an Airprox had not occurred and declined to submit a report.

THE TURWESTON AGO reports that [the pilot of the PA28] was established in the circuit. [The pilot of the C172] joined from the north and, on first contact, they had advised them of the traffic in the circuit. There were two aircraft in the circuit at the time, one aircraft being [the PA28].

At 1143, they observed [the pilot of the PA28] climbing to avoid the C172 and, at the same time, they observed [the pilot of the C172] descending to avoid the PA28. After the event, [the pilot of the C172] executed a 180° [UKAB Secretariat note: 270°] turn to join downwind behind the PA28. At the time of the incident, no radio calls were made.

The AGO perceived the severity of the incident as 'High'.

Factual Background

The website for Turweston Aerodrome provides the following procedures:

Joining Procedures

Pilots should make themselves familiar with procedures [for] operating at Turweston before departure or arrival.

- a) Inbound aircraft should establish radio contact at 10NM or 5 minutes away.
- b) Standard overhead join. Circuit height 1000ft QFE

The entry for Turweston Aerodrome in a popular VFR flight guide provides the following procedure:

Preferred Join: Standard overhead at 2000ft. Circuit height 1000ft QFE.

The weather at Oxford Airport was recorded as follows:

METAR EGTK 081150Z 21007KT 9999 FEW017 SCT023 13/10 Q1013

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data. The pilot of the PA28 kindly supplied GPS track data for their flight. The C172, but not the PA28, was observed by reference to ADS-B data sources. The diagram was constructed and the separation at CPA determined by combining the data sources.

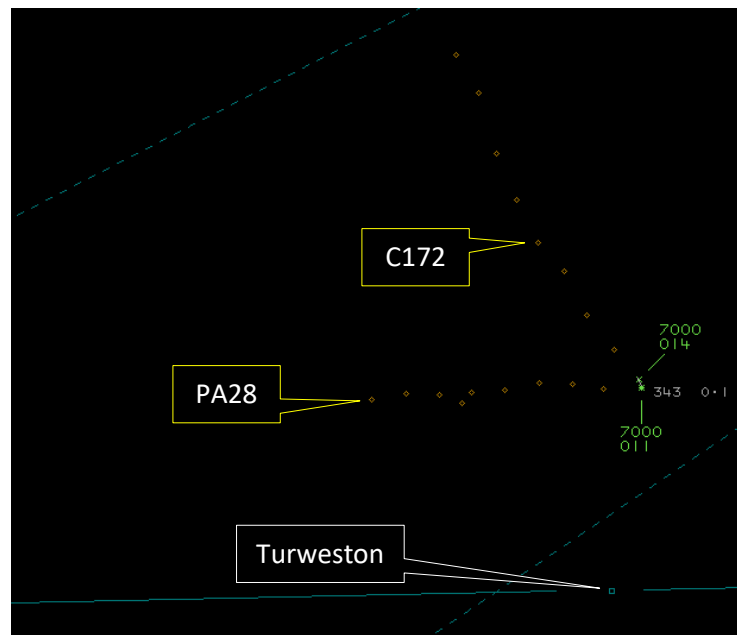


Figure 1 – CPA at 1143:14 (1sec after CPA)

The PA28 and C172 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 An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation.³

Summary

An Airprox was reported when a PA28 and a C172 flew into proximity in the vicinity of Turweston aerodrome at 1143Z on Saturday 8th November 2025. The PA28 pilot was operating under VFR in VMC. The flight rules and meteorological conditions under which the C172 pilot had been operating could not be verified. Both pilots had been in receipt of an AGCS from Turweston Radio.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the pilot of the PA28, radar photographs/video recordings, GPS track data for the flight of the PA28 and a report from the AGO 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 PA28, and members noted that, when they had been on the downwind leg of the circuit, they had been aware of traffic approaching at their level from their left. It was agreed that an alert from their EC device (**CF8**) had subsequently prompted a visual scan of the area. One member pointed out that their EC device had been in 'receive-only' mode and, if that had been a deliberate selection, wondered why that had been deemed to have been preferable to the 'receive and transmit' mode which may have assisted other pilots with their situational awareness. Notwithstanding, members commended the PA28 pilot for the adaptation of their dynamic plan, particularly so because it was appreciated that they had had limited flight experience. Members noted that they had maintained their position in the circuit whilst increasing their vigilance to visually acquire the traffic in question. It was agreed that, upon sighting the C172, the PA28 pilot had been concerned by its proximity (**CF10**) and had considered that the safest course of action had been to have climbed to increase the separation.

² (UK) SERA.3205 Proximity.

³ (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Turning to the actions of the pilot of the C172, members were disappointed that they had chosen not to engage with the Airprox process. The Board wished to emphasise that, even if they had believed that safety margins had not been eroded from their perspective, analysis of a reported Airprox event is for the benefit of flight safety in general and may cover details, experiences and lessons from which many others may find value. Notwithstanding, the pilot of the PA28 had reported that they had been concerned by the proximity of the C172 which, in itself, categorised this event as an Airprox without requiring consensus between the parties involved. Nevertheless, it was understood that the C172 had been fitted with an additional EC device which, on this occasion, had not provided the pilot with an alert to the presence of the PA28. Members agreed that, given that the device fitted to the PA28 had been in 'receive-only' mode, the EC device fitted to the C172 had been rendered incompatible (**CF7**). It was noted that, when the C172 pilot had made first contact with the Turweston AGO, they had been passed Traffic Information that had pertained to two aircraft that had been in the circuit at that time. Although it was not clear to members that that information had been assimilated by the C172 pilot, members agreed that it had been likely that they had gleaned generic situational awareness of the active circuit (**CF6**). Members next considered the C172 pilot's subsequent actions. Turning to the website for Turweston Aerodrome, members noted that the joining procedure states that pilots are expected to execute a standard overhead join. As a deviation from that procedure had not been mentioned by the Turweston AGO in their report of the event, and that the PA28 pilot had expressed that they had not been aware of the C172 pilot's intentions, members agreed that it had been likely that the non-standard join had not been mentioned, or requested, on frequency. Consequently, members agreed that the pilot of the C172 had not complied with the published joining procedure (**CF1**) and had not communicated their intention to join the circuit in an unexpected manner (**CF2**) (whether or not a low cloudbase had been a factor that might have affected an overhead join).

Members noted that the PA28 pilot had commented that the C172 pilot had, reportedly, mentioned '*losing GPS and not knowing their position*'. Whilst that suggestion could not be corroborated, if it had been true, members were clear that a resolution to their predicament had required decisive action. Members were keen to advocate the guidance provided in CAP1535 The Skyway Code in the section for Emergencies.⁴ Notwithstanding the possible loss of positional awareness, it was agreed by members that the pilot of the C172 had not formulated an appropriate plan for their approach to Turweston (**CF4**) and, apparently, had continued their flight, at circuit altitude, until the airfield had appeared beneath them. Consequently, and from the perspective of the execution of their join to the circuit, members agreed that they had not conformed with, nor had they avoided, the pattern of traffic in operation (**CF3**). Additionally, members agreed that they had not integrated with the PA28 despite having had situational awareness that there had been traffic in the circuit (**CF5**).

Members next considered the actions of the Turweston AGO. It was noted that, upon first contact with the pilot of the C172, they had passed information on the two aircraft that had been in the circuit. Members agreed that there had been little else that the AGO could have done to have assisted further.

Concluding their discussion, members summarised their thoughts. It was agreed that, without a suitable plan for their join to the circuit, the pilot of the C172 had flown close enough to the PA28 to have caused its pilot concern (**CF9**). Although it was agreed that safety standards had been reduced, members noted that the pilot of the PA28 had taken appropriate avoiding action to have improved the situation. Consequently, members were satisfied that there had not been a risk of collision and assigned Risk Category C to this event.

⁴ CAP 1535 (Issue 4), Section 8, page 135.

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

2025233				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Flight Elements				
• Regulations, Processes, Procedures and Compliance				
1	Human Factors	• Use of policy/Procedures	Events involving the use of the relevant policy or procedures by flight crew	Regulations and/or procedures not complied with
• Tactical Planning and Execution				
2	Human Factors	• Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions
3	Human Factors	• Monitoring of Environment	Events involving flight crew not to appropriately monitoring the environment	Did not avoid/conform with the pattern of traffic already formed
4	Human Factors	• No Decision/Plan	Events involving flight crew not making any decision at all	
• Situational Awareness of the Conflicting Aircraft and Action				
5	Human Factors	• Incomplete Action	Events involving flight crew performing a task but then not fully completing that task or action that they were intending to carry out	Pilot did not sufficiently integrate with the other aircraft despite Situational Awareness
6	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				
7	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
8	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
• See and Avoid				
9	Human Factors	• Incorrect Action Selection	Events involving flight crew performing or choosing the wrong course of action	Pilot flew close enough to cause concern
10	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

Degree of Risk: C.

Safety Barrier Assessment⁵

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

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because the pilot of the C172 had not complied with the regulation to conform with, or avoid, the pattern of traffic in operation.

Tactical Planning and Execution was assessed as **ineffective** because the pilot of the C172 had not formulated a plan to have integrated correctly into the pattern of traffic.

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

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of the C172 did not integrate with the PA28 despite having generic situational awareness of its presence.

Airprox Barrier Assessment: 2025233		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 Conflication & 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								