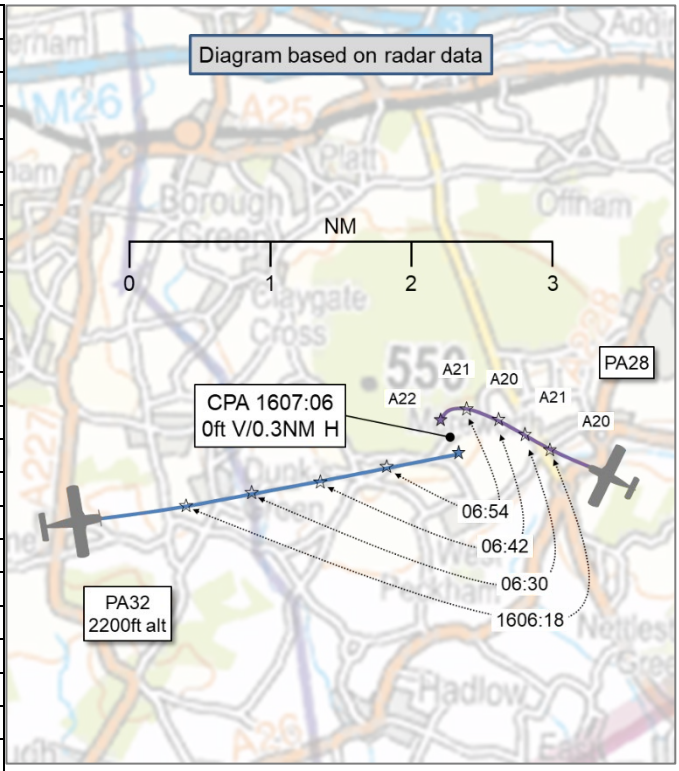
AIRPROX REPORT No 2025155

Date: 26 Jul 2025 Time: 1607Z Position: 5115N 00021E Location: 6.5NM E Sevenoaks

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA32	PA28
Operator	Civ Comm	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Listening Out
Provider	(Biggin Approach)	(Biggin Approach)
Altitude/FL	2200ft	2200ft
Transponder	A, C	A, C, S
Reported		
Colours	Blue/white	NR
Lighting	Strobes	NR
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2200ft	1600ft
Altimeter	QNH (1017hPa)	QNH (1017hPa)
Heading	~080°	300°
Speed	~135kt	100kt
ACAS/TAS	SkyEcho	Not fitted
Alert	None	N/A
Separation at CPA		
Reported	0ft V/0.5-1NM H	200ft V/500m H
Recorded	0ft V/0.3NM/555m H	



THE PA32 PILOT reports flying in formation with [a Spitfire] in the Maidstone area, having cleared them to pass on the right, when a co-altitude PA28 was seen at a range of 5-6NM on a bearing of 050° on a [reciprocal] non-conflicting track. After the Spitfire passed on the right and broke to the south, The PA28 turned onto a southerly track approximately 1NM away, pointing directly at them. In response they put [the aircraft] into a descent until clear of the traffic. After safely passing the aircraft on the right they continued en-route back to [destination airfield]. The PA28 did not appear to have any ADS-B [Out] as they did not appear on [their TAS].

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

THE PA28 INSTRUCTOR reports in the right-hand seat on a trial flight with a student and the reported 'incident' occurred toward the end of the 1hr sortie, during their recovery back to [departure airfield]. Whilst heading west they saw a formation of 2 aircraft in the 11 o'clock at a range of about 2.5-3NM, heading east at a similar altitude of 1600ft, and pointed them out to the student. Weather was not a factor with >10km visibility and scattered cloud at around 3000ft amsl. At around 2NM range it was clear the contact was [a] Spitfire in loose echelon starboard formation with [a] PA34 [sic] photo-ship in [the] lead, after having heard them reporting position at the Sevenoaks local reporting point. It was evident, given the headings and speeds, that the less manoeuvrable formation would continue to pass well to the left and behind and posed no conflict. Nevertheless, they gave a friendly wing-waggle and turned on the landing light for conspicuity. At around 1NM range the Spitfire engaged in a dynamic climbing break out of formation to the right, giving [the left-seat] passenger a fabulous view of its elliptical silhouette, presumably for a photo-op from the photo-ship. As it did this, they transitioned [the PA28] into a 30° banked sideslip to the left to maintain visual and to give [the] passenger a better view. Once the lead PA34 [sic] had passed the 9 o'clock, at a range they estimated at 0.5km-0.5NM, they turned left (with a tremendous amount of lag on the PA34 [sic]) to maintain visual with the dynamically manoeuvring Spitfire and watched it in trail as it headed away. At no point were any of the aeroplanes'

velocity vectors converging. With reasonable formation [experience] themself and as a former 4-ship formation unlimited aerobatic display authorisation holder, they were aware not to cross the lead plane's six o'clock position in case the Spitfire were to complete an orbit and rejoin its lead in echelon starboard. Therefore, they promptly turned right, back onto their original track toward [destination airfield], congratulated the student on their good fortune and thought nothing more of the sighting. They would visually estimate the minimum lateral separation from the PA34 [sic] lead plane as it passed to their left and behind in the region of half a nautical mile. Both aircraft were continuously in sight for a period of minutes before and after the 'incident', and they watched the Spitfire subsequently roll out from its 270° break manoeuvre heading north, passing below and in front of their aircraft at a range of about 1NM. In their cockpit, workload was low and situational awareness was high. They were continuously listening out on Biggin Approach and, despite themself and the reporting aircraft recovering to [destination airfield] at the same time, heard nothing of the Airprox on the radio. A suggestion for Biggin formations engaging in short-term high energy manoeuvres squashed under the London TMA would be to report their direction of operation after the Sevenoaks reporting point that funnels inbound and outbound VFR aircraft, although that would have made no difference in this case.

The pilot assessed the risk of collision as 'None'.

THE BIGGIN CONTROLLER confirmed that none of the pilots had been in receipt of a FIS from Biggin Hill at the time of the Airprox.

Factual Background

The weather at Biggin Hill was recorded as follows:

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METAR EGKB 261620Z 29005KT 250V360 9999 SCT028 21/14 Q1017=
METAR EGKB 261550Z 27008KT 9999 SCT026 21/14 Q1017=
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Analysis and Investigation

UKAB Secretariat

The PA32 and PA28 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].

Summary

An Airprox was reported when a PA32 and a PA28 flew into proximity 6.5NM east of Sevenoaks at 1607Z on Saturday 26th July 2025. Both pilots were operating under VFR in VMC and listening out on the Biggin Hill Approach frequency, neither 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, GPS track data and a report from the air traffic controller. 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 members agreed that, although the PA32 pilot had been concerned by the proximity and manoeuvre of the PA28, the PA28 instructor had been fully aware of the PA32 and associated Spitfire and had remained sufficiently clear such that there had been no risk of collision. Some members noted that the pilots had been listening out on Biggin Approach and wondered whether a Traffic Service could have assisted them in gaining early situational awareness of their impending proximity, but others pointed out that the PA32 pilot had first seen the PA28 at a reported range of 5-6NM and wondered to what degree a Traffic Service would have mitigated risk of MAC any more than the risk had already been mitigated by the relatively long-range visual sighting. Notwithstanding, the Board did note that the

[1] (UK) SERA.3205 Proximity.

electronic conspicuity equipment carried by the PA32 had not be able to register any emissions from the PA28 and, therefore, that neither pilot had had prior situational awareness of the presence of the other aircraft until sighted.

CF1: None of the pilots had had situational awareness of the other aircraft before visual sighting.

CF2: The EC equipment had been incompatible.

CF3: The PA32 pilot had been concerned by the proximity of the PA28.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025155			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Situational Awareness of the Conflicting Aircraft and Action			
1	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			
2	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
	• See and Avoid			
3	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: E.

Safety Barrier Assessment[2]

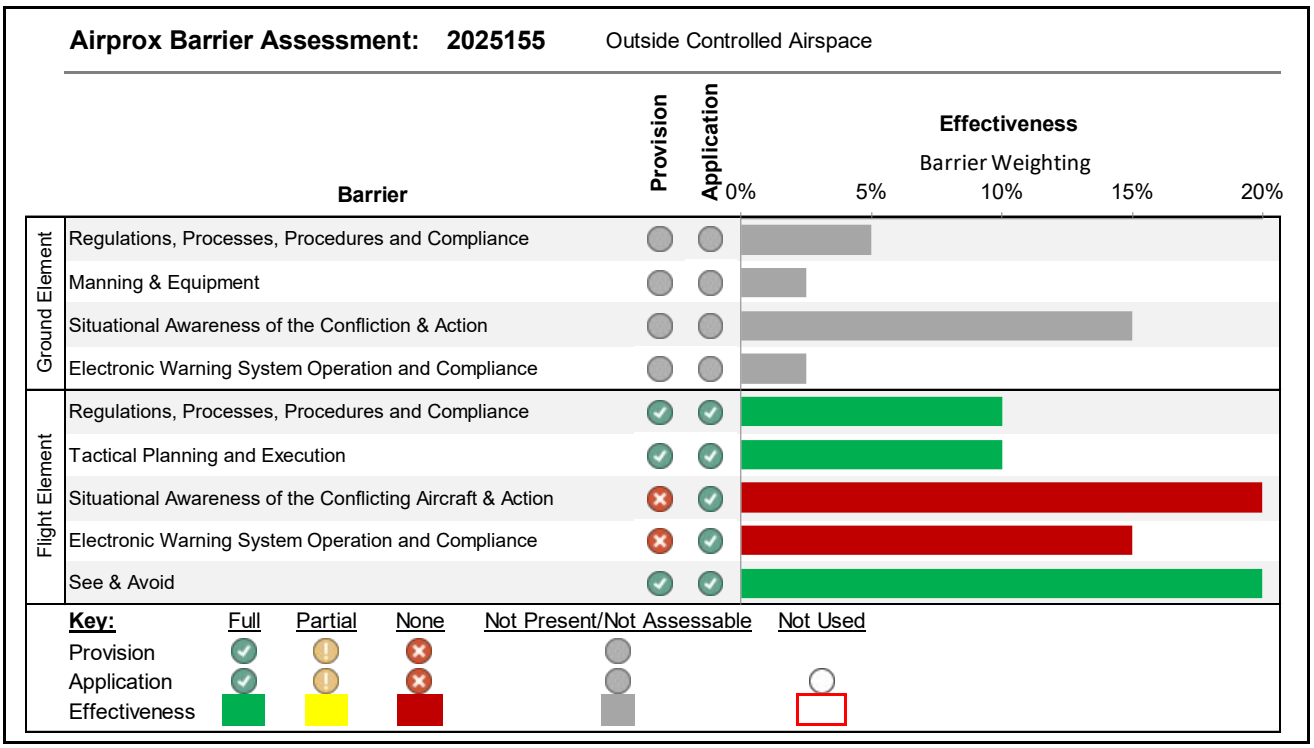
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had situational awareness of the other's position before visual sighting.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the PA28 was not fitted with EC equipment and the PA32 TAS was not compatible with the PA28 EC transmissions.

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


Airprox Barrier Assessment: 2025155
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:
Full
Partial
None
Not Present/Not Assessable
Not Used
Provision
Application
Effectiveness