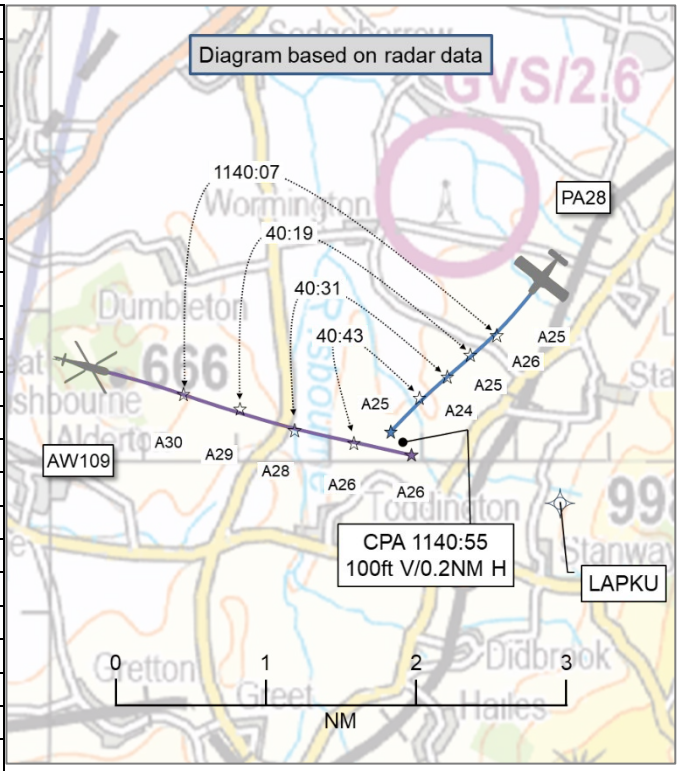
AIRPROX REPORT No 2025245

Date: 02 Dec 2025 Time: 1141Z Position: 5200N 00156W Location: ivo Toddington

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA28	AW109
Operator	Civ FW	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	IFR
Service	Basic	Procedural
Provider	Gloster	Gloster
Altitude/FL	FL028	FL029
Transponder	A, C, S	A, C, S+
Reported		
Colours	White/blue	Blue/white
Lighting	Nav, strobes	Nav, anti-col, land
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2500ft	2700ft
Altimeter	QNH (1001hPa)	QNH (NK hPa)
Heading	230°	080°
Speed	90kt	100kt
ACAS/TAS	Not fitted	TAS
Alert	N/A	None
	Separation at CPA	
Reported	~100ft V/~¼NM H	0ft V/100m H
Recorded	100ft V/0.2NM (370m) H	



THE PA28 PILOT reports on a VFR navigation exercise to overhead Gloucester in good VMC when a helicopter was noted in the top right corner of the windscreen. It travelled right-to-left across the windscreen and the handing pilot made a gentle descent. The helicopter passed above and away to the left. They felt no downwash from the rotor blades and were in visual contact at all times. The area was in the vicinity of LAPKU, the start of the RNP approach to Gloucester, in Class G airspace. There was never a risk of collision but it reinforced the need for a good lookout, especially near unprotected instrument approaches.

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

THE AW109 PILOT reports [seated] in the left seat, instructing on a student IR training flight. They were receiving a Procedural Service from Gloster Approach and had been cleared to LAPKU as the initial approach fix for an RNP approach to RW27. They were in the descent from 3000ft to 2500ft, about a mile from LAPKU, when the instructor saw a Piper Cherokee aircraft converging from the left. They had no opportunity to take avoiding action as it was a very late sighting as the aircraft appeared from behind the cockpit window strut. The Cherokee passed behind and they estimated the separation was around 100m with both aircraft at the same level. They told Gloster Approach that they would be filing an Airprox on the incident. Approach immediately called [a pilot] [PA28 C/S] and asked [their] position. They replied that they were routeing southwest from Winchcombe gliding site which put it in much the same position as the AW109. The instructor noted that it was unfortunate that two aircraft came within such close proximity in the open, Class G, FIR, even more [so] when they were working the same air traffic unit on the same frequency. In this incident, no one was to blame, it was a clear weather day and both [pilots] were operating in open airspace. The instructor stated that they were slightly concerned that immediately they announced [the Airprox], [the Gloster controller] had a very good idea which was the other aircraft and called it immediately. Perhaps if the instructor had been told that there was a Cherokee close to their position at a similar altitude they might have seen it earlier. That said, the

Cherokee [pilot] was receiving a Basic Service and [the Gloster controller was] under no obligation to separate the aircraft. The instructor assessed that there was a real risk of collision which was avoided on this occasion by pure luck as neither [pilot] took any avoiding action, possibly because their sighting was too late and possibly because the Cherokee [pilot] never actually saw them.

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

THE GLOSTER APPROACH CONTROLLER reports [AW109 C/S], an Agusta A109 helicopter, was routeing to LAPKU for their second instrument training approach, after carrying out a missed approach on RW27. They had been cleared for the RNP27 via LAPKU, the Initial Approach Fix, northeast of Gloucestershire aerodrome. They were in receipt of a Procedural Service.

At 1141, [AW109 C/S] advised that they wished to report an Airprox and was asked whether they wished to pass the details on the [radio] or on the ground. They advised that a white and maroon aircraft had passed them.

An aircraft, [PA28 C/S] a Piper PA28, was carrying out a flight from [departure aerodrome] to [destination aerodrome] [and the pilot] made contact with Gloster Approach at Chipping Campden (northeast of Gloucester aerodrome) at 1138 requesting a Basic Service and to route via the overhead. [The pilot] advised that they were at 2500ft and was given a Basic Service and instructed to report 5NM from the overhead.

[The controller] asked [PA28 C/S] to report their position or range and they replied that they were in the vicinity of Winchcombe. The [AW109 C/S] pilot made a comment that this was the aircraft that had flown through the instrument approach.

As per ATC Incident Investigation procedures, a colleague then took over the Approach position so that the Manager ATS could carry out the preliminary investigation.

Factual Background

The weather at Gloucestershire aerodrome was recorded as follows:

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METAR EGBJ 021150Z 19007KT CAVOK 10/05 Q1001=
METAR EGBJ 021120Z 21007KT 9999 FEW040 10/05 Q1001=
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Analysis and Investigation

UKAB Secretariat

The PA28 and AW109 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 converging then the PA28 pilot was required to give way to the AW109.[2]

Gloucestershire Occurrence Investigation

At interview, the Instructor of [AW109 C/S] reported that they believed at their closest points the two aircraft were 50m apart and at the same height. [AW109 C/S] Instructor assessed the risk of collision as high. At interview and during the transcribed event, the Instructor of [AW109 C/S] stated that [PA28 C/S] was white and maroon. The Instructor of [PA28 C/S] stated that [PA28 C/S] is white and blue at interview. The Instructor of [AW109 C/S] stated [PA28 C/S] had travelled from their 9 o'clock to their 4 o'clock, routeing behind them. They said that no avoiding action could be taken by [AW109 C/S] as they saw [PA28 C/S] too late. They stated that both aircraft were at 2500ft. They stated that

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3210 Right-of-way (c)(2) Converging.

they were in “good VMC”. They believed that they may not have been able to see [PA28 C/S] as its relative position to [AW109 C/S] meant it was initially behind their door pillar.

At interview the Instructor of [PA28 C/S] reported that they were visual with [AW109 C/S] and said to the student pilot “helicopter there”. At that time, the student pilot pulled back the throttle and they descended a little. The Instructor estimated that their closest point was more than 400m away and that [PA28 C/S] was about 100ft below [AW109 C/S]. They reported that they did not receive Traffic Information on [AW109 C/S] but that they wouldn't expect it. The Instructor of [PA28 C/S] assessed the risk of collision as low.

Shortly after this the [Approach controller] was relieved from position and their replacement gave Traffic Information to [AW109 C/S] on [PA28 C/S] again and [AW109 C/S] responded “is that the same one that nearly hit us?”. This was included in the report as it may be appropriate for Manager ATS to contact this operator to discuss the appropriateness of broadcasting certain statements.

It should be noted that, in the transcript above, [AW109 C/S] reported that [PA28 C/S] flew through the Instrument Approach. This, demonstrably, did not occur as [AW109 C/S] reported the Airprox as having occurred more than a minute before reporting at LAPKU which is the Initial Approach Point for the RNP27.

Whilst the exact timings of transmissions were difficult to ascertain due to a voice recorder error, the investigator calculated that there were only approximately 100sec between the [Approach controller] assimilating all of the information passed by [PA28 C/S], issuing [them] with a squawk of 4531 and [AW109 C/S] reporting the Airprox. In this 100sec the [Approach controller] made several other transmissions to other [pilots] including [C/S] under a Procedural Service and [C/S] under a Basic Service as well as interactions with [AW109 C/S]. It was reasonable to say that in that 100sec there was little opportunity to pass all required Traffic Information although the [Approach controller] did pass mutual Traffic Information to [the other callsigns]. It may well be that, given more time, the [Approach controller] would have passed Traffic Information to both [AW109 C/S] and [PA28 C/S] on each other, but at that particular moment workload was relatively high.

It should be noted that during the above transmissions [the Approach controller] did pass mutual Traffic Information on [AW109 C/S] to/from other aircraft under a Basic Service which also indicated that the lack of Traffic Information to [AW109 C/S] on [PA28 C/S] may have been related to workload.

[AW109 C/S] was under a Procedural Service and so, according to CAP774, ‘The controller shall provide traffic information, if it is considered that a confliction may exist, on aircraft being provided with a Basic Service’. Without surveillance equipment the [Approach controller] may not have considered that a confliction existed but it may also be that other tasks had meant that Traffic Information had not yet been passed at the time of the Airprox rather than there never having been an intention to pass it.

[PA28 C/S] was under a Basic Service and so, according to CAP774, ‘the pilot should not expect any form of traffic information from the controller’.

According to CAP774, in Class G airspace ‘Regardless of the ATS being provided, pilots are ultimately responsible for collision avoidance and terrain clearance’.

[AW109 C/S] had a training slot for instrument approaches from 1030 to 1130. This Airprox event took place at least ten minutes outside the training booking slot. This may have meant that the workload of [the Approach controller] was higher than otherwise would have been the case.

Ultimately this Airprox event is most likely the result of two aircraft flying in Class G Airspace. The [AW109 pilot] under the Procedural Service did not receive Traffic Information on the other aircraft (although, using instances of other Traffic Information being passed to other aircraft on frequency around the same time of the Airprox event, it may well have been the intention of the [Approach controller] to pass Traffic Information). It is unlikely that their closest point was as reported by

[AW109 C/S] i.e. 50m at [the] same level [because] 3rd party ADS-B software suggests several 100m separation and different levels, and the report of [PA28 C/S] differs greatly from [that] of [AW109 C/S] and it was [PA28 C/S] that was visual with [AW109 C/S] throughout. Also, [AW109 C/S] got the colour of [PA28 C/S] wrong which may indicate that they were not as close as they had initially thought.

It should be noted that Gloucestershire's Primary Surveillance Radar (which was previously used for situational awareness by Gloster [Approach controllers]) has been out of service since August 2024. It cannot be guaranteed that if it had been serviceable that the [Approach controller] would have been able to see [AW109 C/S] and [PA28 C/S] as primary returns due their range and levels, but it may have helped.

Reference to 3rd party electronic conspicuity software (FlightRadar24 and ADS-B Exchange) indicates that there were several hundreds of metres between the two aircraft at their closest points and 100ft of vertical separation. It is acknowledged that this data cannot be relied upon as accurate but it does corroborate the report of the event that the pilot of [PA28 C/S] gave and they seemed to have been visual with [AW109 C/S] throughout.

Summary

An Airprox was reported when a PA28 and an AW109 flew into proximity near Toddington at 1141Z on Tuesday 2nd December 2025. Both pilots were operating in VMC, the PA28 pilot under VFR in receipt of a Basic Service from Gloster Approach, and the AW109 pilot under IFR in receipt of a Procedural Service, also from Gloster Approach.

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.

The Board members first discussed the Airprox from the perspective of the Gloster Approach controller. A GA member noted that the Gloster controller had been aware that the PA28 had been inbound to the overhead from the northeast at 2500ft and that the AW109 had been descending from 4000ft to 2500ft for the RNP27 via LAPKU, the northeasterly of the IAFs for RNP27. Controller members pointed out that the Gloster controller had been engaged in providing Traffic Information to other pilots (**CF2**) and that in their opinion the workload had been sufficiently high that the controller had not been able to assess potential conflict between the PA28 and the AW109 (**CF3**), so the conflict had not been detected (**CF1**). Members agreed that this may have been due in part to the potential for increased workload due to the AW109 crew conducting an approach outside their booked timings but also agreed that the Gloster controller could have declined a service if their workload had been too high. Nevertheless, the Board noted that such inability to pass Traffic Information had been entirely in conformance with the provision of the AW109 pilot's Procedural Service.

Members noted that the PA28 instructor had been aware that they had been in the vicinity of LAPKU and wondered whether they could have used their situational awareness to remain clear of the RNP27 IAF altitude of 2500ft, where traffic on an RNP27 approach would also have been likely to have been. In the event, neither the PA28 nor the AW109 crews had had situational awareness of the other aircraft (**CF4**). Without a surveillance-based FIS, the pilots had had to rely even more on the see-and-avoid barrier. The AW109 instructor had no doubt been monitoring the student's instrument flying and the Board agreed that they would have unavoidably been occupied with that task to some degree (**CF6**). Members felt from the tone of the PA28 instructor's report that the PA28 crew had seen the AW109 in sufficient time to have taken action to increase separation at CPA, but that the AW109 instructor had seen the PA28 at about CPA, effectively a non-sighting (**CF7**), partly due to obscuration behind the cockpit window strut (**CF9**), and had been startled to some degree by its proximity (**CF8**). Members felt that startle had been demonstrated in part by the AW109 instructor's much smaller assessment of

separation at CPA (0ft V/100m H) when compared with the separation from the radar replay (100ft V/370m H) which had been closer to the PA28 instructor's assessment of separation (100ft V/460m H) with less of a 'startle factor'. In the absence of a surveillance-based FIS or the aircraft being separated procedurally, only EC and lookout remained to mitigate collision risk. In this case, lookout from the PA28 crew achieved the aim but the Board was unable definitively to ascertain why the AW109 TAS had not alerted (**CF5**).

Members discussed the risk and agreed that sufficient action had been taken by the PA28 pilot and separation at CPA had been such that risk of collision had been effectively avoided, Risk C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025245			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Ground Elements			
	• Situational Awareness and Action			
1	Human Factors	• Conflict Detection - Not Detected	An event involving Air Navigation Services conflict not being detected.	
2	Human Factors	• Task Monitoring	Events involving an individual or a crew/ team not appropriately monitoring their performance of a task	Controller engaged in other tasks
3	Contextual	• Traffic Management Information Action	An event involving traffic management information actions	The ground element had only generic, late, no or inaccurate Situational Awareness
	Flight Elements			
	• Situational Awareness of the Conflicting Aircraft and Action			
4	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			
5	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			
6	Human Factors	• Distraction - Job Related	Events where flight crew are distracted for job related reasons	
7	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
8	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
9	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 Assessment[3]

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

Ground Elements:

[3] 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 Confliction and Action were assessed as **ineffective** because the Gloster Approach controller either did not have situational awareness of the aircrafts' converging tracks or was engaged in other tasks and unable to pass Traffic Information.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had situational awareness of the other aircraft.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the AW109 TAS did not inform or alert when it could have been expected to have done so.