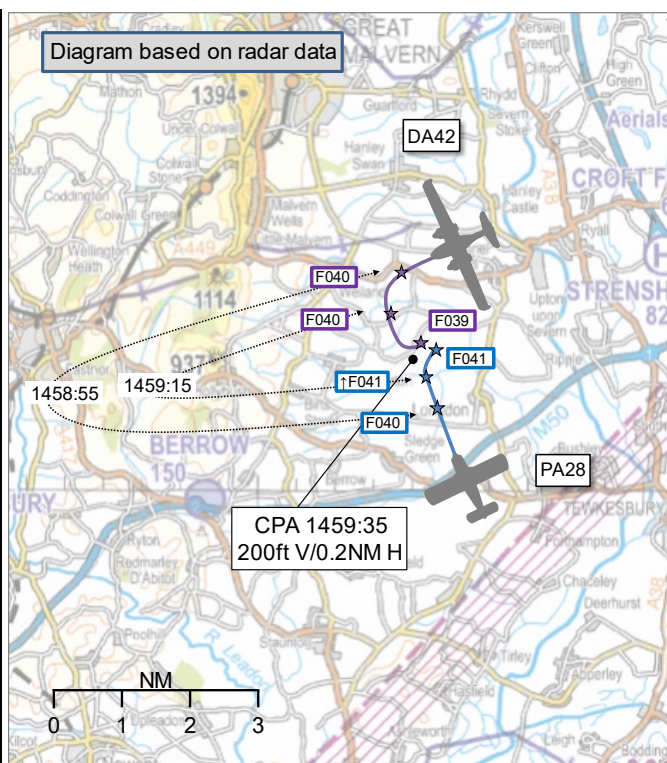


AIRPROX REPORT No 2025071

Date: 01 May 2025 Time: 1500Z Position: 5202N 00215W Location: 2NM SW Upton-upon-Severn

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA28	DA42
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic
Provider	London Info	Gloucester
Altitude/FL	FL041	FL039
Transponder	A, C, S	A, C, S+
Reported		
Colours	Blue/White	White
Lighting	'Full'	Strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	4000ft	4000ft
Altimeter	QNH (1014hPa)	QNH
Heading	330°	300°
Speed	100kt	120kt
ACAS/TAS	Not fitted	Other
Alert	N/A	Information
Separation at CPA		
Reported	100ft V/7-800m H	100ft V/0.25NM H
Recorded	200ft V/0.2NM H	



THE PA28 PILOT reports that they were tracking north, working London Information in Class G [airspace] when they identified an aircraft ahead, similar level, moving right-to-left at a good distance, before turning respectively left on to an intersecting track to their own. To avoid conflict, they turned in a right bank (as the aircraft was at their 11 o'clock), however, it seemed to be that the other aircraft maintained a left turn and followed them around, essentially ending up in their 7 o'clock, meaning that the risk was not avoided. [The PA28 pilot] then turned back left, to try to maintain visual contact, as it did not seem that the other pilot was visual with their aircraft – the aircraft was also a faster moving twin. Later, on inspection of FlightRadar24, it appeared to have been an IR exam flight, probably 'under the hood' in Class G [airspace] on a VFR day. They estimated that the minimum separation was 700m+ and 100/200ft vertically. Conditions were good at the time, 10km plus and CAVOK. As they were visual and action was taken, they would suggest that the risk was very low.

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

THE DA42 PILOT reports that they were conducting an initial Instrument Rating Test and were in the general handling phase. The candidate was flying on limited panel on a nominated heading of 300° at 4000ft. They received a verbal warning of 'traffic 10 o'clock', same level. They sighted a PA28 passing about 1/4 mile down the left side of the aircraft, slightly below. They did not take any avoiding action. They suspect the aircraft was initially hidden from view behind the windscreen pillar. They did not know if the PA28 pilot had taken any avoiding action.

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

THE LONDON INFORMATION FISO reports that they were on watch as a trainee FISO on London Information. Traffic levels were medium, occasionally high, with the weather in the UK generally fair. The PA28 pilot called on frequency at 1458Z conducting a flight from [departure aerodrome] routing

to [arrival aerodrome] and called approximately 5 miles from Great Malvern town at altitude 4000ft. The pilot called leaving the frequency at 1514Z to Shawbury for a service across their area. No mention was made at the time of an Airprox on the R/T.

THE GLOSTER CONTROLLER reports that they were made aware of the Airprox sometime after the event between [PA28 C/S] and [DA42 C/S]. On reviewing the FPS, [DA42 C/S] was general handling to the north of the field, and [PA28 C/S] had previously transited south-to-north, receiving a Basic Service, however the PA28 was not on the Gloucester Approach frequency at the time of the Airprox. They did not recall any details of the event.

Factual Background

The weather at Gloucester was recorded as follows:

METAR EGBJ 011450Z 17003KT 9999 FEW047 27/11 Q1014=

Analysis and Investigation

NATS Investigation

Information available to the investigation included:

- CA4114 from the London Information FISO under training
- Airprox report from the pilot of [PA28]
- Airprox report from the Instructor pilot of [DA42]
- Radar and R/T recordings.

[C/S] was a Piper PA28, outbound from [...], inbound to [...], tracking north-northwest, maintaining altitude 4000ft and had previously displayed Mode-A 4531, the Gloucestershire Airport Listening Squawk.

[Registration] was a Diamond DA42 flight school aircraft based at [redacted]. The Mode-S Aircraft ID displayed callsign [C/S], with the pilot Airprox report stating the flight was a CAA Flight Examination with the 'candidate wearing goggles'. The DA42 was operating to the east of Great Malvern (Figure 1), at a maximum altitude of 4000ft. The pilot report stated: '*I was conducting an initial Instrument Rating test and was in the General handling phase.*' Mode-A displayed 4530, the Gloucestershire Airport Instrument Approach Training SSR, with the pilot report stating the flight was receiving a Basic Service from Gloucester ATC.



Figure 1 - Approximate aircraft tracks and position of conflict.

The pilot of [PA28 C/S] contacted the London Flight Information Service (LFIS) frequency at 1457:55 (all times UTC) and was initially instructed to standby whilst the FISO under training (LFISO) prioritised other tasks. When the LFISO returned to the PA28 pilot, the pilot stated, “*currently five miles to overhead Great Malvern, requesting Basic Service, three on board.*” The LFIS squawk was issued with a Basic Service confirmed, with the aircraft altitude confirmed as 4000ft on QNH 1014hPa. Mode-A 1177 appeared on radar at 1458:56.

As [the PA28] tracked towards Great Malvern, radar displayed [that the DA42] turned sharp left at 1459:08 onto an opposite direction track to [the PA28] at the same altitude. As both aircraft approached each other, at 1459:22 both aircraft appeared to initially turn right, however [the DA42] then appeared to turn left on the next radar update, reducing the lateral distance, resulting in the closest point of approach (CPA) being 0.3NM and 100ft occurring at 1459:36 (Figure 2).



Figure 2

[The PA28] then continued on a northerly track, whilst [the DA42] tracked further east. Figure 3 displays the radar trails of manoeuvres prior to and after the closest point of approach based on NODE radar.



Figure 3 – Blue = DA42 Orange = PA28 Red = CPA as in Figure 2

CAP774 Chapter 2, 2.1 stipulates:

A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights ... The avoidance of other traffic is solely the pilot's responsibility. Basic Service relies on the pilot avoiding other traffic, unaided by controllers/ FISOs. It is essential that a pilot

receiving this ATS remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight.

Conclusion

London Flight Information Service was being operated by a FISO under training with an Instructor. The Airprox occurred when the pilot of [DA42], operating on a CAA Flight Examination with the 'candidate wearing goggles', turned onto an opposite direction track, at the same altitude, towards [PA28 C/S] tracking northwest, resulting in a confliction outside controlled airspace. The Closest Point of Approach occurred at 1459:36 and was recorded on Multi-Track Radar as 0.3NM and 100ft. The incident was resolved by the pilot of [the PA28] initiating avoidance manoeuvres to deconflict.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be identified using Mode S data. CPA was assessed to be at 1459:35 when the two aircraft were 200ft vertically and 0.2NM laterally separated.

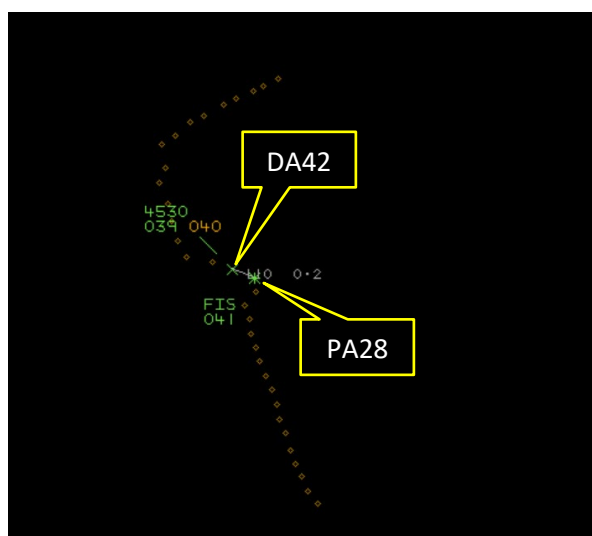


Figure 4 – CPA 1459:35

The PA28 and DA42 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 head-on or nearly so then both pilots were required to turn to the right.²

Summary

An Airprox was reported when a PA28 and a DA42 flew into proximity at 2NM southwest of Upton upon Severn at 1500Z on Thursday 1st May 2025. The PA28 pilot was operating under VFR in VMC in receipt of a Basic Service from London Information, and the DA42 pilot was operating under VFR in VMC in receipt of a Basic Service from Gloucestershire.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, reports from the air traffic controller and the FISO 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.

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

The Board first looked at the actions of the PA28 pilot. They had been transiting northbound and in receipt of a Basic Service from London Information. Prior to receiving a service from London Information, they had been receiving a Basic Service from Gloucester ATC. Members lamented the lack of LARS coverage in this area, with no obvious choice for a better service, nevertheless, they noted that neither of these units could have provided a radar-based surveillance service and thought that a better option may have been to have called Brize Radar; the position of the Airprox had been 34NM from Brize and, although at the edge of their AOR, at 4000ft, both aircraft should have been within radar coverage (**CF2**). Additionally, the PA28 had not been fitted with any form of CWS and so the PA28 pilot had not received any prior situational awareness about the DA42 until they became visual (**CF3**). Once visual, they had taken avoiding action, however, the pilot had become concerned when the DA42 had subsequently turned back towards them (**CF6**).

Turning to the DA42 pilot, they had been conducting an IRT, had been general handling, and had been in receipt of a Basic Service from Gloucester. Again, members thought that a better option for a service might have been to have called Brize Radar and, if traffic levels had permitted, they may have been able to provide a Traffic Service (**CF2**). Members noted that when a student was operating under 'foggles', the responsibility for lookout lay with the examiner, but that the view from the DA42 cockpit could be somewhat restricted due to the pillars. Members thought that the pilot's description of the position of the PA28 when their TAS had alerted, in their left 10 o'clock, meant that it had been likely that the TAS had alerted after the event (**CF4**) and too late to have provided the pilot with any prior situational awareness (**CF3**). Members therefore agreed that this had been effectively a non-sighting by the DA42 pilot (**CF5**).

When discussing the role of ATC, members agreed that neither of the ATSUs had been required, or had the equipment, to monitor the aircraft under a Basic Service (**CF1**). Some controlling members wondered whether the Gloucester controller could have provided some generic information to the PA28 pilot prior to them leaving the frequency, as the controller had been aware that the DA42 had been conducting general handling in the area. However, without a radar to refer to, it may have been that the controller had not been aware exactly how adjacent the two aircraft had been likely to become.

When determining the risk, members considered the radar screenshots together with the reports from the pilots, the London Information FISO and the Gloucester controller. They noted that although it had been likely that the DA42 pilot had not seen the PA28 until after the closest point of approach, the PA28 pilot had been visual throughout the event and had taken avoiding action to increase the separation. Members unanimously agreed that there had not been any risk of collision, but thought that the geometry of the encounter, with the DA42 turning back towards the PA28, meant that safety had been degraded; Risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025071			
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	• 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
6	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 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:

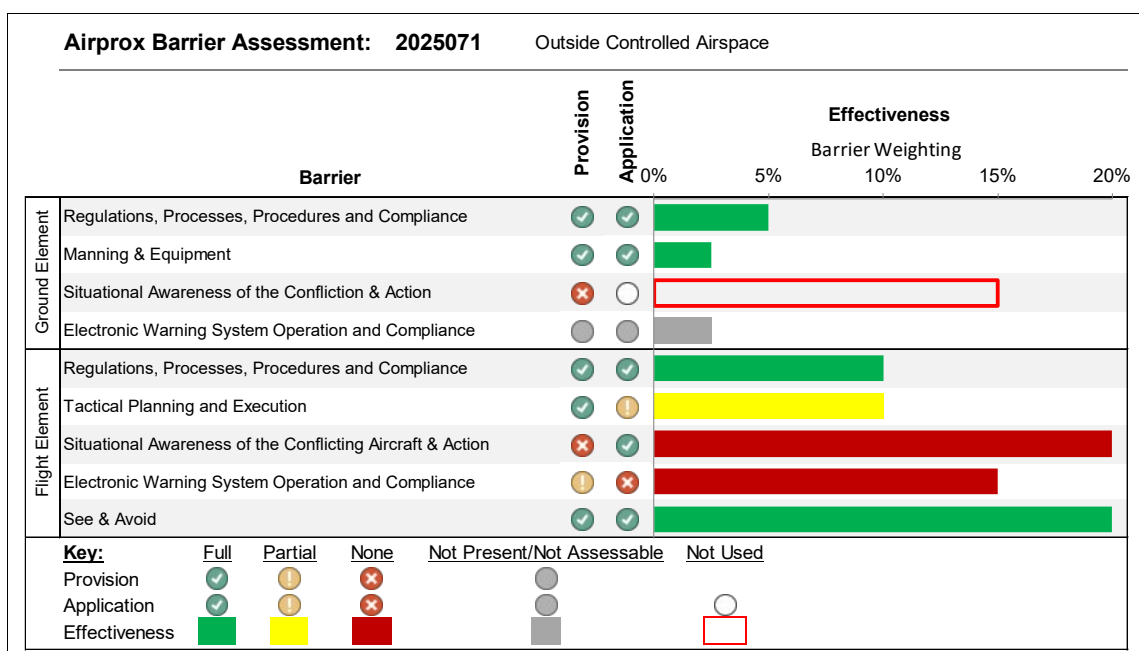
Regulations, Processes, Procedures and Compliance were assessed as **not used** because neither the London Information FISO nor the Gloster controller were required to monitor the aircraft under a Basic Service.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because either pilot could have called Brize Radar for a surveillance-based ATS.

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

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the information received from the TAS on the DA42 was not received in time for the pilot to take action.



³ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](https://www.ukab.co.uk/).