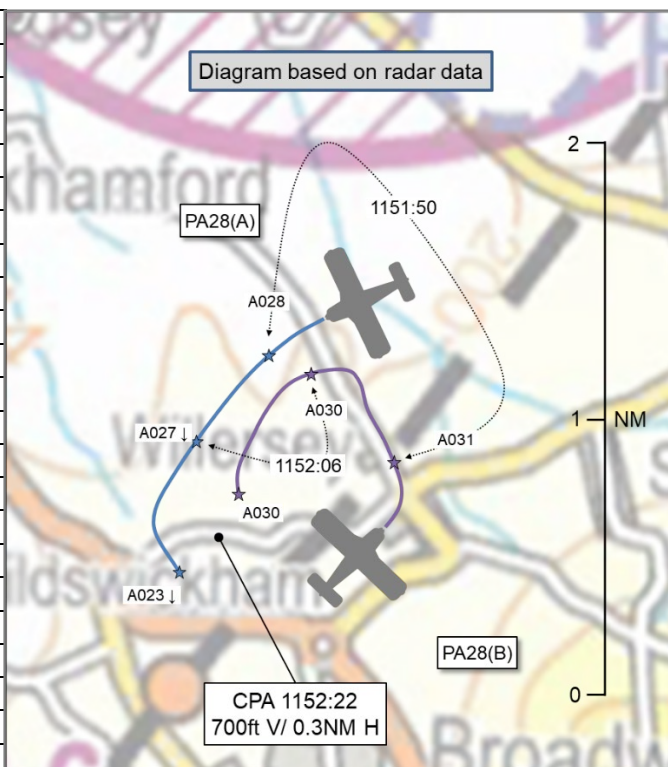


## AIRPROX REPORT No 2022189

Date: 19 Aug 2022 Time: 1152Z Position: 5203N 00152W Location: 4NM W Chipping Campden

### PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA28(A)	PA28(B)
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic
Provider	Wellesbourne Info	Gloster Approach
Altitude/FL	2300ft	3000ft
Transponder	A, C, S	A, C, S
<b>Reported</b>		
Colours	Cream, green	Red, white
Lighting	Beacon, strobe	Anti-col
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	NK	2500ft
Altimeter	QNH (1014hPa)	QNH (NK hPa)
Heading	NK	'Turning'
Speed	NK	90kt
ACAS/TAS	Not fitted	Not fitted
<b>Separation at CPA</b>		
Reported	NK V/0.5NM H	0ft V/500m H
Recorded	700ft V/ 0.3NM H	



**THE PA28(A) PILOT** reports that they were manoeuvring in level flight when they became aware of another aircraft which was initially passing right-to-left and then appeared to be passing down their port side with no conflict. However, it then commenced a turn to its left so was now turning towards them. The pilot had by then ceased manoeuvring and had been flying straight-and-level in order to understand the other pilot's intentions. At the point in its turn when the other aircraft had been facing towards them, the PA28(A) pilot 'wing-waggled' for conspicuity. The other aircraft would have been in the 9 o'clock position at that time. The other aircraft continued their turn, reducing separation, and seemed to be tucking-in behind them. It was last seen at an estimated 0.5NM in their 7 o'clock position before disappearing into their 6 o'clock position. At this point [after CPA], the handling pilot took avoiding action by turning right in a steeply descending turn and flew away from the area to continue the sortie. Meanwhile, the non-handling pilot radioed the Wellesbourne AFISO and asked for them to view FlightRadar24 to confirm that there was indeed another aircraft in close proximity, and to note down the registration of that aircraft. Upon landing, the pilot visited the AFISO at Wellesbourne to view the flight and subsequently phoned the operator of [the other aircraft] and asked to speak to the pilot in command.

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

**THE PA28(B) PILOT** reports that they were conducting a training flight with a student and the exercise was 'Medium level turns'. They had positioned over Broadway and started a 360° turn from a southerly heading and at a height of 2500ft [they recall]. As the turn passed through 090°, [the pilot and student] spotted another PA28 about 1.5NM away to the northeast on a heading of approximately 240°. They saw that the other aircraft would pass ahead of them and their turning circle would be separated from the path of the other aircraft, and so it transpired. As their turn passed through NNW, the other aircraft passed ahead of them. They were assured that the other aircraft had seen them as the [other] pilot had rocked their wings to make themselves more conspicuous. [The PA28(B) pilot] then continued to concentrate on their student's performance. They estimate that the minimum separation was in excess of 500m. While passing through a heading parallel to the other aircraft, and with increasing separation,

they noticed it well to their right and saw it turn right and descend. It occurred to them at that point that the other pilot must have felt threatened by the situation and was taking belated evasive action. The other aircraft passed ahead of them, and their turning circle was separated to the south of the path of the other aircraft at all times. Both pilots had sight of, and were aware of, each other throughout.

[The PA28(B) pilot] subsequently considered whether the course of action they had elected to take was the best. The obvious answer to them is that it was not. It would have been better to have rolled out of the turn once the other aircraft was sighted, waited for it to have left the vicinity, and then continued the turning lesson. It would also have been better for their student to have experienced that decision-making process. They sincerely apologised to the other pilot for their understandable anxiety and commend them for making themselves more conspicuous by rocking their wings in the manner that they did.

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

**THE WELLESBOURNE AFISO** reports that they were on duty in the tower when an aircraft in the local flying area reported that another aircraft had come into close proximity in the Broadway area, 12NM southwest of Wellesbourne aerodrome. The pilot of the aircraft involved, [the PA28(A)], was on a Basic Service and had departed from [departure airfield] at 1139 for a training flight. At 1152, the instructor of the aircraft involved asked them to check online-virtual-radar to try to identify the other, unknown aircraft. They could see on a radar app that another PA28, [the PA28(B)], unknown to [the AFISO], was very close to the aircraft that was on their frequency so they made a note of the registration and checked the route and point of departure. After landing, [the AFISO] passed the information from virtual-radar to the crew of the PA28(A) who then contacted the operator by telephone to discuss the incident. At no point was an Airprox reported on frequency or mentioned in conversation afterwards.

**THE GLOSTER APPROACH SUPERVISOR** reports that they had spoken with the Approach controller on duty on the day and no specific detail that was out-of-the-ordinary was remembered given the delay from the event to the reporting date. The controller confirmed that the alleged location was further out on the ATM and no definite risk of collision would of been seen on the ATM with only one aircraft being on frequency. Chipping Camden is a location 15NM NE of Gloucester.

## Factual Background

The weather at Gloucestershire Airport was recorded as follows:

METAR EGBJ 191150Z 23008KT 200V270 9999 SCT048 21/09 Q1015

## Analysis and Investigation

### Gloucestershire Airport investigation

Recordings were audited from 1130 with RW22 and RW27 in use, wind was 230/7. The frequencies were split (TWR and APP) and the QNH was 1015hPa. There was a controller handover at 1157.

Timeline of events:

- 1143 [The pilot of the PA28(B)] called but the radio call was distorted.  
(The controller was busy and didn't respond initially).
- 1144 [The pilot of the PA28(B)] requested a Basic Service and was told to standby and was then given a standard overhead join which was corrected by the controller to a Basic Service.

No other aircraft to the northeast called in the period 1151 to 1154. The radar recordings were reviewed and the radar picture is shown in Figure 1. [Referring to the radar screen as recorded] at 1151, [it is] difficult to ascertain if the controller could have seen more than one return in close proximity due to the location being 10NM to the northwest.

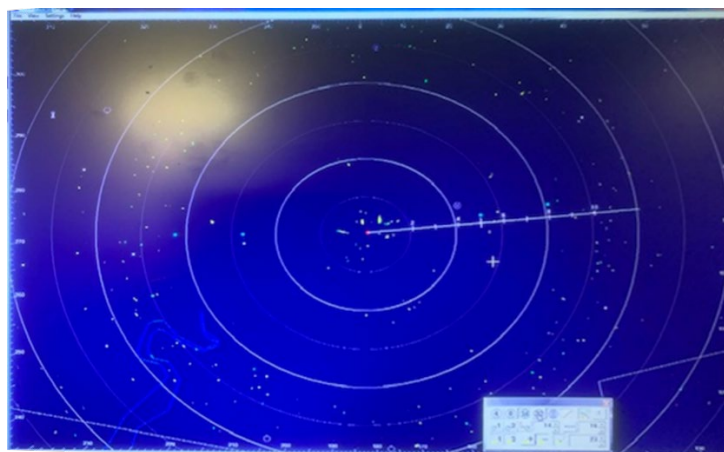


Figure 1 – Radar picture at 1151

#### Findings and observations:

- The TWR and APP frequencies were split.
- [The pilot of the PA28(B)] was initially given a Standard Overhead Join in error but wanted a Basic Service.
- [The pilot of the PA28(B)] did not disclose the level they were climbing to or were at.
- There was no mention of an Airprox or incident until 06/09/22.
- The pilot of the [PA28(A)] did not speak to or receive a service from Gloucester on that day.

Two aircraft became in alleged close proximity to each other northeast of Gloucester. Only one aircraft of the two had been on the Gloucester Approach frequency at the time (PA28(B)) and was under a Basic Service. The other did not communicate with Gloucester. The radar was serviceable at the time of the incident but would not pick up two aircraft in close proximity in that location due to its limitations.

#### UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data. It was observed on radar that after the pilot of the PA28(B) had turned towards the PA28(A), the pilot of the PA28(A) had initiated a descent and turn to their left (see Figure 2). The CPA, as a slant range, was assessed to have occurred during this descent and turn. After CPA, the pilot of the PA28(A) continued to descend and turned sharply to their right.

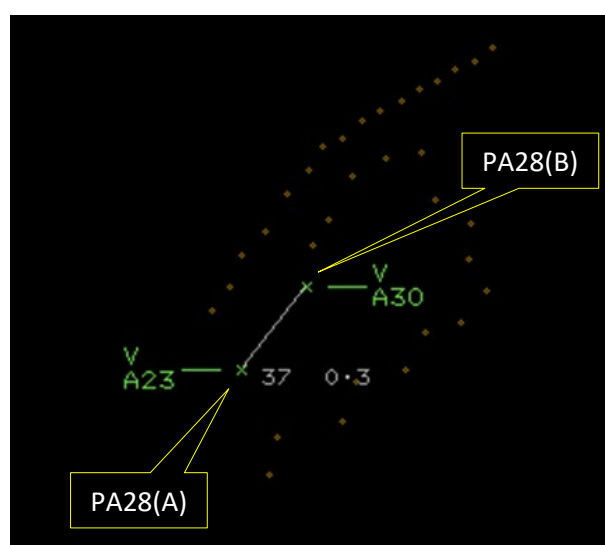


Figure 2 – CPA at 1152:22

The PA28(A) and PA28(B) pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.<sup>1</sup> If the incident geometry is considered as converging then the PA28(B) pilot was required to give way to the PA28(A).<sup>2</sup> If the incident geometry is considered as overtaking then the PA28(A) pilot had right of way and the PA28(B) pilot was required to keep out of the way of the other aircraft by altering course to the right.<sup>3</sup>

## Summary

An Airprox was reported when PA28(A) and PA28(B) flew into proximity 4NM west of Chipping Campden at 1152Z on Friday 19<sup>th</sup> August 2022. Both pilots were operating under VFR in VMC, the PA28(A) pilot in receipt of a Basic Service from Wellesbourne Information and the PA28(B) pilot in receipt of a Basic Service from Gloster Approach.

## **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 controllers involved and reports from the appropriate operating authorities. 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(A) and were heartened that their lookout had been effective in that they had acquired the PA28(B) in plenty of time to assess the situation as it unfolded. The action taken to highlight the presence of their aircraft by 'wing-wagging' was considered prudent given that the PA28(B) had turned towards them. Members next pondered the subsequent descent and turn to the right when the PA28(B) had disappeared from view behind the PA28(A). Members concluded that the pilot of the PA28(A) had been quite concerned by the proximity of the PA28(B). However, it was considered that a less abrupt manoeuvre, given that the other aircraft was known to be nearby but presently unsighted, may have achieved the desired separation without potentially turning into further conflict. Nevertheless, the Board commended the positive action to remedy the situation.

Turning their attention to the actions of the pilot of the PA28(B), members were pleased that, again, an effective lookout had provided the pilot plenty of time to consider the situation and their subsequent course of action. It was noted that the pilot of the PA28(B) had calculated that there had been no risk of collision. Members commended the pilot's retrospective analysis of the incident and concluded that although the pilot of the PA28(B) had been mindful of their proximity to the PA28(A), it had been such that it had caused concern to the pilot of the PA28(A).

Members were satisfied that normal safety standards and parameters had pertained and, as such, the Board assigned Risk Category E. Members agreed that the following factors (detailed in Part C) had contributed to this Airprox:

- CF1.** Neither the Wellesbourne AFISO nor Gloster Approach controller had been required to monitor the flights under the terms of a Basic Service.
- CF2.** Neither pilot had Situational Awareness of the other prior to visual acquisition.
- CF3.** The pilot of the PA28(A) had been concerned by the proximity of the PA28(B).

## **PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK**

### Contributory Factors:

<sup>1</sup> (UK) SERA.3205 Proximity.

<sup>2</sup> (UK) SERA.3210 Right-of-way (c)(2) Converging.

<sup>3</sup> (UK) SERA.3210 Right-of-way (c)(3) Overtaking.

2022189				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
<b>Ground Elements</b>				
<b>• Situational Awareness and Action</b>				
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
<b>Flight Elements</b>				
<b>• Situational Awareness of the Conflicting Aircraft and Action</b>				
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
<b>• See and Avoid</b>				
3	Human Factors	• Perception of Visual Information		Pilot was concerned by the proximity of the other aircraft

Degree of Risk: E

### Safety Barrier Assessment<sup>4</sup>

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

#### **Ground Elements:**

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **not used** because neither the Wellesbourne AFISO nor Gloster Approach controller had been required to monitor the flight under the terms of a Basic Service.

#### **Flight Elements:**

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because neither pilot had Situational Awareness of the other prior to visual acquisition.

<sup>4</sup> 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: 2022189** 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	✓	✓					
<b>Key:</b>		Full	Partial	None	Not Present/Not Assessable	Not Used		
Provision	✓	!	✗	○				
Application	✓	!	✗	○	○			
Effectiveness	■	■	■	■	□			