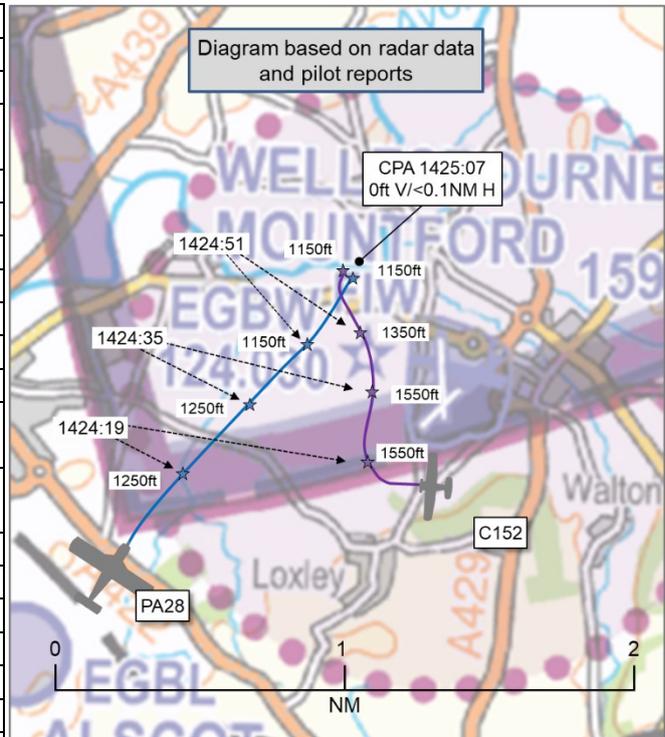


**AIRPROX REPORT No 2024031**

Date: 01 Mar 2024 Time: 1425Z Position: 5212N 00138W Location: Wellesbourne Mountford ATZ

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA28	C152
Operator	Civ FW	Civ FW
Airspace	Wellesbourne Mountford ATZ	Wellesbourne Mountford ATZ
Class	G	G
Rules	VFR	VFR
Service	AFIS	AFIS
Provider	Wellesbourne Info	Wellesbourne Info
Altitude/FL	1150ft	1150ft
Transponder	A, C, S	A, C, S
<b>Reported</b>		
Colours	Red and White	Cream with red stripes
Lighting	"Yes"	Landing, taxi, navigation, beacon
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1200ft	1500ft
Altimeter	QNH (998hPa)	NR
Heading	060°	NR
Speed	100kt	NR
ACAS/TAS	Not fitted	Not fitted
Alert	N/A	N/A
<b>Separation at CPA</b>		
Reported	50ft V/100ft H	Not seen
Recorded	0ft V/<0.1NM H	



**THE PA28 PILOT** reports that they were in the circuit with a student. The RW in use had been 23RH. They were approximately half-way down the downwind leg when a C152 inbound from the east joined directly on downwind for RW18RH. The C152 had turned toward the north and was still descending when it had joined the downwind for RW18 so, to avoid the collision, the PA28 pilot had to turn left towards Stratford and orbit for traffic separation.

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

**THE C152 PILOT** reports [...] returning to Wellesbourne Mountford for a circuit session. PFL attempts in the local area needed work so, to give the candidate a different scenario, they had elected to use RW18 as the wind, although favouring RW23 earlier in the day, had swung round (slacked and backed) to favour RW18 and it had made sense with a longer runway for the candidate to achieve this. The aircraft [the PA28] in question was seen on the climb-out from RW23 as the C152 pilot had been on the climb-out [from] RW18. Comments were made - 'where is he going' - as they believe radar traces show they actually left not only the circuit pattern for RW23 but also the actual ATZ and therefore [the C152 pilot] was not aware that the PA28 pilot had essentially cut them up from the left until [the PA28 pilot] appeared angrily from the flying club. The C152 pilot reports that they had not seen the [the PA28] at all and they did not mention an Airprox in the air. The C152 pilot was on final approach for RW18 when they had said 'I am departing to Stratford for spacing'. The PA28 pilot didn't elect to do what they said either, deciding to orbit. The C152 pilot recalls that they never saw the [other] aircraft.

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

**THE WELLESBOURNE MOUNTFORD AFISO** reports Wellesbourne RW23 in use. The PA28 was engaged in a circuit detail right-hand. The C152 joined from southeast, overhead and requested RW18 and joined the circuit for RW18. The AFISO gave Traffic Information to the C152 pilot that the runway in use was 23 and that there was 1 aircraft in the circuit for RW23. The C152 completed 1 circuit, and reported downwind. The AFISO advised to report final with one aircraft ahead, which had already called right-hand downwind for RW23. The pilot reported visual with that traffic. Another aircraft had elected to join RW18 and the AFISO gave Traffic Information on both aircraft. The C152 pilot then stated that they would be doing a practice engine failure and, aware this might bring it in to conflict with the PA28, started to visually check its progress. Initially both aircraft were hidden from view by a tree, but as soon as they came from behind the tree the AFISO saw the conflict, they gave Traffic Information, and at the same time saw the PA28 turning left to avoid. Although the lateral distance was difficult to estimate, the AFISO believed it was near, and the vertical distance was about 100ft. The PA28 pilot announced that they were going to reposition to Stratford to rejoin but the AFISO suggested that they could continue their left turn into an orbit as the distance was safe and continue their circuit normally. The AFISO had made an unofficial observation of the weather at the time of: 220/12G18 9999 SCT020CB VCSH +7/+3 988/983.

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

## Factual Background

The weather at Birmingham was recorded as follows:

METAR EGBB 011420Z 19006KT 9999 VCSH FEW026CB 07/02 Q0988=

## Analysis and Investigation

### CAA ATSI

Wellesbourne does not record its RTF, and so it has not been possible to complete a full review of this incident.

The AFISO can only issue Traffic Information to pilots, and it is up to the pilots to integrate in the circuit. The PA28 had already been established in the circuit for RW23 which had been the designated runway-in-use when the C152 joined for RW18. Had the incident been during that join, it is clear that the C152 had failed to integrate. However, from the radar replay, the C152 completed a join and a touch-and-go on RW18 and it was their second circuit for RW18 that brought them into conflict with the PA28 downwind for RW23.

In CAP797 FISO Manual, there is the following which would appear to suggest that pilots of aircraft using a runway other than that designated are responsible for the separation against traffic on the main runway.

### Section 2, Chapter 8

*8.15 Whilst generic Traffic Information provided to a pilot may be useful to indicate how busy the aerodrome environment is, as the pilot gets closer to the aerodrome and is required to integrate with other traffic, specific Traffic Information is needed in order to achieve a safe, orderly and expeditious flow of air traffic and to assist pilots in preventing collisions.*

*8.18 Traffic Information to traffic operating in the vicinity of an aerodrome, and specifically within the ATZ and to flights conducting Instrument Approach Procedures (IAP) shall be issued in a timely manner when, in the judgement of the AFISO, such information is necessary in the interests of safety, or when requested by the aircraft. When a pilot report indicates, or an AFISO considers, that there may be a collision risk, specific Traffic Information shall be passed to each pilot concerned.*

8.61 A pilot-in-command can refuse a runway-in-use suggested by an AFISO. In such circumstances, AFISOs shall provide detailed information on other local traffic that is utilising the runway-in-use to assist the pilot in ensuring that safe spacing is maintained when using an alternative runway.

## UKAB Secretariat

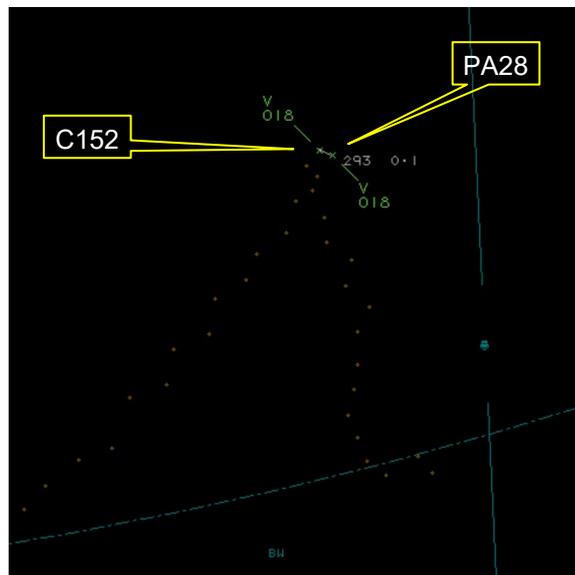


Figure 1: CPA – 1425:07

Altitudes shown on the radar image above are predicated on the London QNH (991) and have, within the diagram on page 1, been corrected for 'local QNH' and QFE to show aircraft heights above airfield level.

The PA28 and C152 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> 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.<sup>2</sup>

## Summary

An Airprox was reported when a PA28 and a C152 flew into proximity at Wellesbourne Mountford at 1425Z on Friday 1<sup>st</sup> March 2024. Both pilots were operating under VFR in VMC and both in receipt of an AFIS from Wellesbourne Information.

## PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings and a report from the AFISO 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 firstly reviewed the actions of the PA28 pilot, noting the instructional nature of their flight and acknowledging that they had been clearly established in a standard pattern for RW23. Members expressed some disappointment that neither the C152 nor the PA28 pilots had equipped with electronic warning systems, thereby denying themselves a significant barrier in Airprox avoidance. The Board agreed that situational awareness in this event had been reliant on clear, accurate and timely RT calls which had unfortunately not prevailed by all involved. The PA28 pilot had achieved only a late sighting of the C152 (**CF3**) as it had descended and closed from their right-hand side.

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

<sup>2</sup> (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

In considering the actions of the C152 pilot, members reviewed the logic behind the pilot's desire for RW18, noting that the wind reported by the AFISO at that time had been favouring the declared runway-in-use, RW23 but acknowledged that it is within the pilot's prerogative to elect to use alternative runways at airfields served by an AFISO. The Board noted that, because the choice for RW18 had been declared, any lack of standard RT calls would make the development of situational awareness markedly more difficult, and in this case had led to the C152 pilot having developed an inaccurate mental model of the relative position of the PA28 (**CF2**) and thereafter not enabling them to conform with, or avoid the pattern the PA28 had been following (**CF1**). The Board also agreed that the PA28 pilot had not visually acquired the C152 until beyond the CPA (**CF4**).

The Board wished to stress that the carriage and use of compatible electronic conspicuity equipment would in this case have likely enabled earlier situational awareness for both pilots and possibly reduced the likelihood of this Airprox.

Members then considered the actions of the Wellesbourne FISO, praising them for proactive actions in monitoring the traffic now occupying 2 separate patterns and offering appropriate Traffic Information at pertinent points. They had continued to maintain good visual contact with both aircraft despite distractions from other aircraft RT calls at the time and had been prepared to intervene as the PA28 pilot had initiated avoiding action. The Board felt that there had been little more the AFISO could have done in this case.

When determining the risk, members considered the reports from both pilots together with the report from the AFISO involved and radar photographs/video recordings. They acknowledged that the PA28 pilot had attained visual contact as the C152 had closed from high on their right-hand side and had initiated an immediate left turn to increase separation. Members agreed, therefore, that safety margins had been much reduced below the norm. As such, the Board assigned a Risk Category B to this Airprox (**CF5**).

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

### Contributory Factors:

	2024031			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
<b>Flight Elements</b>				
<b>• Tactical Planning and Execution</b>				
1	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
<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	• Identification/Recognition	Events involving flight crew not fully identifying or recognising the reality of a situation	Late sighting by one or both pilots
4	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
<b>• Outcome Events</b>				
5	Contextual	• Near Airborne Collision with Aircraft	An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles	

Degree of Risk: B.

### Safety Barrier Assessment<sup>3</sup>

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

#### Flight Elements:

**Tactical Planning and Execution** was assessed as **partially effective** because the C152 pilot did not avoid the pattern of traffic formed by the PA28 to the declared runway-in-use.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **partially effective** because C152 pilot had inaccurate situational awareness of the position of the PA28.

**See and Avoid** were assessed as **partially effective** because the C152 pilot had not seen the PA28 and the PA28 pilot had achieved only a late sighting of the C152.

Airprox Barrier Assessment: 2024031		Outside Controlled Airspace						
Barrier	Provision	Application	Effectiveness					
			Barrier Weighting					
			0%	5%	10%	15%	20%	
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓	[Green bar to 5%]				
	Manning & Equipment	✓	✓	[Green bar to 2.5%]				
	Situational Awareness of the Conflicting & Action	✓	✓	[Green bar to 15%]				
	Electronic Warning System Operation and Compliance	○	○	[Grey bar to 2.5%]				
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✓	[Green bar to 10%]				
	Tactical Planning and Execution	✓	⚠	[Yellow bar to 10%]				
	Situational Awareness of the Conflicting Aircraft & Action	⚠	⚠	[Yellow bar to 18%]				
	Electronic Warning System Operation and Compliance	○	○	[Grey bar to 15%]				
	See & Avoid	✓	⚠	[Yellow bar to 18%]				
<b>Key:</b>		Full	Partial	None	Not Present/Not Assessable	Not Used		
Provision	✓	⚠	✗	○				
Application	✓	⚠	✗	○		○		
Effectiveness	■	■	■	■		□		

<sup>3</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).