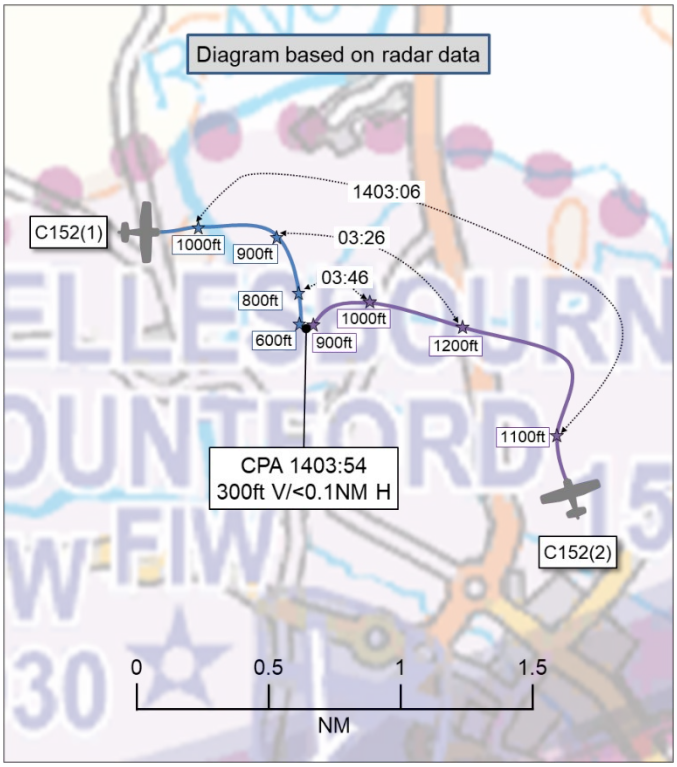
AIRPROX REPORT No 2024254

Date: 05 Oct 2024 Time: 1404Z Position: 5213N 00137W Location: Wellesbourne RW18 Final

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	C152(1)	C152(2)
Operator	Civ FW	Civ FW
Airspace	Wellesbourne ATZ	Wellesbourne ATZ
Class	G	G
Rules	VFR	VFR
Service	AFIS	AFIS
Provider	Wellesbourne Info	Wellesbourne Info
Altitude/FL	600ft	900ft
Transponder	A, C, S	A, C, S+
Reported		
Colours	White/Red	White/Blue
Lighting	Bcn, nav, landing	Nav & strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	650ft	900ft
Altimeter	QFE (1008hPa)	QFE
Heading	180°	270°
Speed	70kt	65kt
ACAS/TAS	PilotAware	Not fitted
Alert	None	N/A
Separation at CPA		
Reported	0ft V/150m H	0ft V/0.25NM H
Recorded	300ft V/<0.1NM H	



THE C152(1) PILOT reports that they were undergoing a circuit training flight at Wellesbourne. The runway in use was 18 with a right-hand circuit. They had been doing touch-and-goes and remaining in the circuit for the past 40min before the occurrence. On mid-downwind, the pilot observed a white and blue aircraft overhead in a descending left turn, but then lost sight of the traffic. They continued on downwind, turned right base and descended as normal. They first identified a possibility of conflict with another aircraft when they had just completed the turn on to final for RW18. The other aircraft could be visually identified by the tail number. [The other C152(2)] was completing a left turn on to final when it was first identified and was seen at the same height, approximately 100-150m left and slowly converging. They discontinued their approach from final and initiated a go-around. [The other C152(2)] continued to land on RW18.

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

THE C152(2) PILOT reports that from first contact with Wellesbourne Information, they thought there was a left-hand circuit and they read back all the information but were never corrected for this misunderstanding. They mentioned they were a student pilot on a qualifying cross country. They joined the circuit and only saw another aircraft, which they followed, once they turned onto final. They kept radio communication and were listening on the radio to figure out where other aircraft were, but the frequency was very busy and they did not hear anyone stating specifically their position. [The other C152(1) pilot] did not state downwind left-hand or downwind right-hand and might have just said downwind therefore they were unsure of [the other aircraft's] position until they turned onto final and realised they had misunderstood and flown the incorrect circuit. They reduced their power as they did not want to catch up with the aircraft in front of them any quicker, and were shocked to see another aircraft close to them on final. During final they were also on a slightly high approach, so they were focused on looking at the runway and trying to lose some height. Once they landed, they spoke with

the controller [sic] at the time, and they severely apologised for flying a left-hand circuit instead of a right-hand circuit and mentioned that it was a genuine mistake.

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

THE WELLESBOURNE AFISO reports that they had no recollection of the Airprox as described in the report filed by the [C152(1)] flying instructor. No Airprox was called by either pilot that afternoon, whether by radio or telephone to the tower. Their only recollection was that [they thought C152(1)] was still on RW18 doing a 'touch-and-go' when a student pilot in [C152(2)] (on a qualifying cross country flight) was on short final for RW18. [They recalled that] they suggested [the student] should go around which they did and landed safely. They did not see any conflict as the two aircraft climbed away.

Factual Background

The weather at Birmingham was recorded as follows:

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METAR EGBB 051350Z 16011KT 9999 SCT034 16/08 Q1012
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The UK AIP entry for Wellesbourne circuit direction states:

EGBW AD 2.22 FLIGHT PROCEDURES

1 CIRCUITS

a. Circuit directions variable. Circuit height 1000 FT QFE. Helicopters 600 FT QFE.
b. Helicopter aiming points Whiskey and Echo for circuits, arrivals and departures. (Echo not available Saturdays and Bank Holidays)
c. No touch-and-go's allowed outside of published hours.

Wellesbourne Airfield website states:

Fixed wing circuit height: 1000ft QFE.
RWY 36 & 05 LHC
RWY 18 & 23 RHC (See diagram below)
Standard overhead join at 2000ft, joining crosswind above the upwind end of the Runway or direct join if traffic permits, giving way to traffic in the circuit.

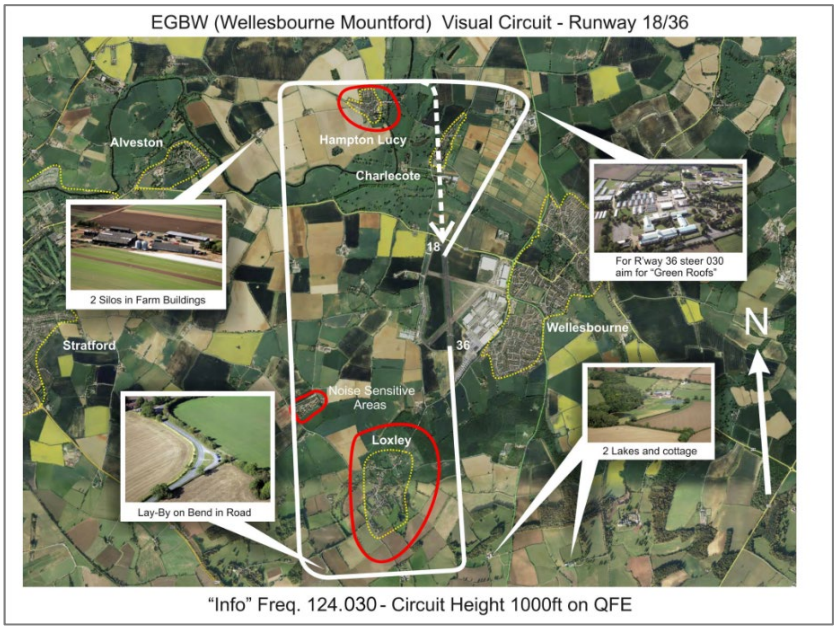

Figure 1 Wellesbourne circuit pattern RW18

CAP 413, Chapter 4, paragraph 4.43 states,

> 4.43 Requests for circuit-joining instructions should be made in sufficient time for a planned entry into the circuit taking other traffic into account. Where ATIS is established, receipt of the broadcast should be acknowledged in the initial call to an aerodrome. When the traffic circuit is a right-hand pattern, it shall be specified. A left-hand pattern need not be specified although it is essential to do so when the circuit direction is variable.

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft were positively identified using Mode S data. CPA was assessed as being at 1403:54 with 300ft vertical and less than 0.1NM lateral separation.

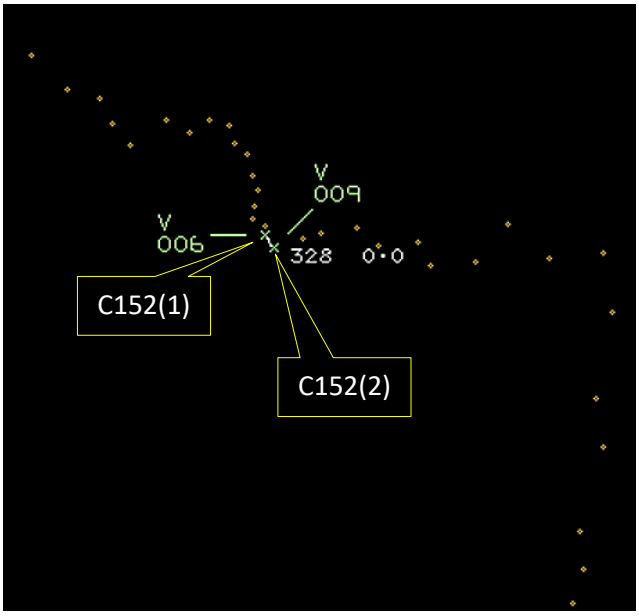

Figure 2 Time 1403:54 CPA separation 300ft vertically and less than 0.1NM horizontally.

The C152(1) and C152(2) 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] 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.[2]

Summary

An Airprox was reported when two C152s flew into proximity at Wellesbourne at 1404Z on Saturday 5th October 2024. Both C152 pilots were operating under VFR in VMC and 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.

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

The Board first turned their attention to the actions of the student pilot on a qualifying cross-country exercise in C152(2). Members were concerned that the student, having successfully located one of their destination airfields, had then realised they had been unsure of the circuit direction on their arrival. Although the Board was unable to assess the accuracy of the information exchange with the AFISO without a recording of the R/T, members were concerned that the student had indicated that information received from the Wellesbourne AFISO and circuit traffic had been insufficient to determine that the circuit direction had been right-hand. Some members surmised that perhaps the student had assumed a default left-hand circuit pattern based on their expectation of what may have been the norm for them in their basic training, while another member noted that glider pilots are more used to calling where they were positioned, be it left-hand or right-hand downwind, and wondered if there had been any value in making this the norm. During the discussion, the Board referred to CAP 413 Chapter 4, paragraph 4.43 (see Factual Information in Part A above) referring to the provision of information on circuit direction needing to be specified if it is right-hand or variable circuit direction. The Board noted that the UK AIP had stated that circuit directions were variable, without further specification, and that the airfield's website and popular navigation software had more specifically annotated the circuit for fixed-wing aircraft using RW18 as right-hand. With the UK AIP being the primary document, members wondered why the Wellesbourne Mountford Aerodrome entry had not better detailed the circuit directions, and there followed a brief discussion regarding the usability of the UK AIP official website presentation compared to private enterprise websites with links to secondary satellite data and alternative useful diagrams. The Board also discussed whether the student could have been expected to call the AFISO and confirm the circuit direction if they had been uncertain, although some members wondered if an inexperienced pilot would have considered this option or have been uncertain how to address it. Nonetheless, with the amount of information available to the student for their pre-flight planning, the Board agreed that the preparation had been insufficient (**CF4**) and members were disappointed that the student's instructor had, seemingly, allowed them to depart without essential arrival information for this destination airfield. The Board noted that it is an essential part of a PPL student's training that they receive good oversight and are thoroughly prepared for the exercise on which they are about to embark, equipping the student with the confidence to suitably perform the required tasks. Members agreed that it had been unfortunate that the pilot of C152(2) had incorrectly executed the overhead join and circuit pattern (**CF2**) and had, therefore, neither complied with the circuit procedures for RW18 right-hand (**CF1**) nor conformed with the pattern of traffic already formed in that circuit (**CF3**). Members also agreed that, due to the circumstances, the C152(2) pilot had had inaccurate situational awareness of the position of C152(1) in the circuit pattern (**CF5**) and had also not seen C152(1) until at or around CPA – effectively a non-sighting (**CF7**).

Addressing the actions of the C152(1) pilot already in the circuit, the Board appreciated that the pilot had had no situational awareness relevant to the scenario based on an expectation that the C152(2) pilot would have positioned behind them in the right-hand circuit (**CF5**). Members were concerned that the pilot's situational awareness had not been improved by their electronic conspicuity device, which had been capable of detecting the emissions from C152(2) but had reportedly not issued an alert (**CF6**) and further acknowledged that the sudden sighting of the C152(2) joining from a left base-leg position had caused the C152(1) pilot to have been concerned by its proximity (**CF8**).

In concluding their discussions, the Board agreed that there was insufficient information available to be able to assess the actions of the AFISO, and members were left wondering what information the AFISO had supplied to the C152(2) student pilot and whether the overhead join had been monitored. Members agreed that safety had been degraded when the C152(2) pilot had made an incorrect opposite direction join, and were heartened that the C152(1) pilot had reacted to the sighting of the C152(2) turning final from a left base-leg by initiating a timely and effective go-around manoeuvre to prevent the aircraft from coming into close proximity. As such, the Board agreed that there had been no risk of collision and assigned a Risk Category C to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2024254			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Regulations, Processes, Procedures and Compliance			
1	Human Factors	• Flight Crew ATM Procedure Deviation	An event involving flight crew deviation from applicable Air Traffic Management procedures.	
	• Tactical Planning and Execution			
2	Human Factors	• Action Performed Incorrectly	Events involving flight crew performing the selected action incorrectly	Incorrect or ineffective execution
3	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
4	Human Factors	• Pre-flight briefing and flight preparation	An event involving incorrect, poor or insufficient pre-flight briefing	
	• Situational Awareness of the Conflicting Aircraft and Action			
5	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			
6	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			
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

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:

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because the C152(2) pilot did not comply with the Wellesbourne Airfield right-hand circuit procedures for RW18.

Tactical Planning and Execution was assessed as **ineffective** because the C152(2) pilot's preflight planning had not been sufficiently detailed regading the Wellesbourne Airfield circuit procedures, and the pilot had subsequently executed an incorrect joining procedure, not conforming with the pattern of traffic already formed.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the C152(1) pilot had no situational awareness of the position of the C152(2), and the C152(2) pilot had inaccurate situational awareness of the position of the C152(1).

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

Electronic Warning System Operation and Compliance were assessed as **ineffective** because C152(1)'s electronic conspicuity device, capable of detecting emissions from the C152(2), had not alerted them to the C152(2)'s presence.