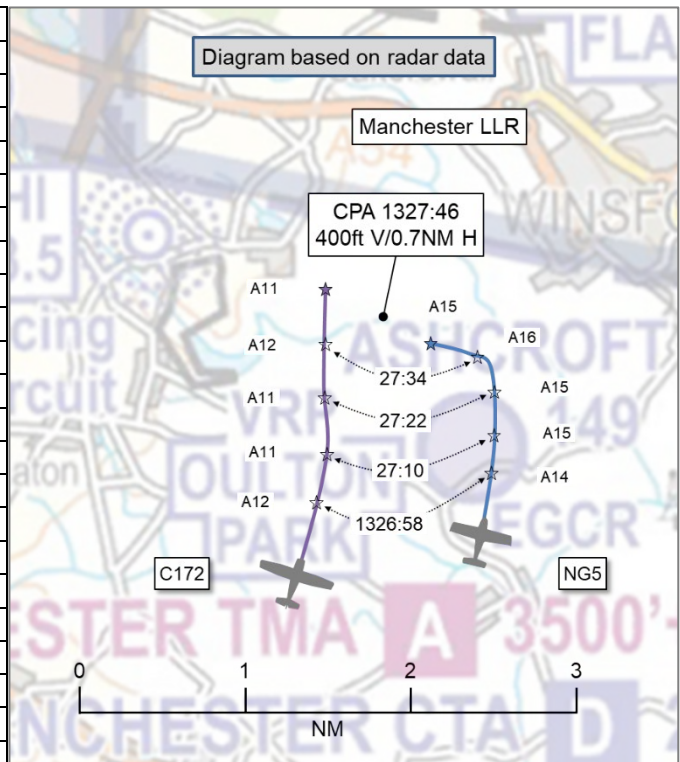


AIRPROX REPORT No 2023153

Date: 15 Jun 2023 Time: 1328Z Position: 5311N 00235W Location: near Little Budworth

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Bristell NG5	C172
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Listening Out
Provider	(SafetyCom)	Manchester
Altitude/FL	1500ft	1100ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Blue/white	Blue/white
Lighting	Nav, landing	Nav, landing
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1000ft	↓1100ft
Altimeter	QNH (NK hPa)	QNH (NK hPa)
Heading	004°	350°
Speed	73kt	90kt
ACAS/TAS	PilotAware	SkyEcho
Alert	Information	Information
Separation at CPA		
Reported	0ft V/<1NM H	500ft V/0.5NM H
Recorded	400ft V/0.7NM H	



THE BRISTELL PILOT reports on approach to Ashcroft airfield, having recently changed frequency from a Basic Service from Shawbury to SafetyCom. They saw a Cessna and wanted to join crosswind for RW09 at Ashcroft, but were unable to fly the circuit pattern as that would have put them in conflict with the Cessna. The Bristell pilot felt that the Cessna should not have been flying so close to the circuit at Ashcroft at about 1000ft.

The pilot assessed the risk of collision as ‘Low’.

THE C172 PILOT reports flying with a fellow pilot carrying out navigation, radio and traffic awareness tasks. The pilot was descending from 2000ft to 1100ft on Manchester's QNH prior to entry into the Manchester Low Level Route (LLR) to the west of Ashcroft airfield. They had flown [the C172] out of [a local airfield] since 2016 ([for a total flying time of] almost 130hrs) and were very familiar with the LLR and the position of Ashcroft airfield. Their routing was ½ mile to the east of Beeston Castle, overhead Oulton Park racetrack. The other pilot identified an aircraft using [the TAS and display] and made them aware of it. After being notified of the Airprox report, the other pilot confirmed that they recalled they were visual with the [other] aircraft at all times and did not assess there to be any risk of collision.

The pilot assessed the risk of collision as ‘None’.

Factual Background

The weather at Manchester was recorded as follows:

METAR COR EGCC 151320Z AUTO 04006KT 350V110 9999 NCD 24/08 Q1021 NOSIG=

Analysis and Investigation

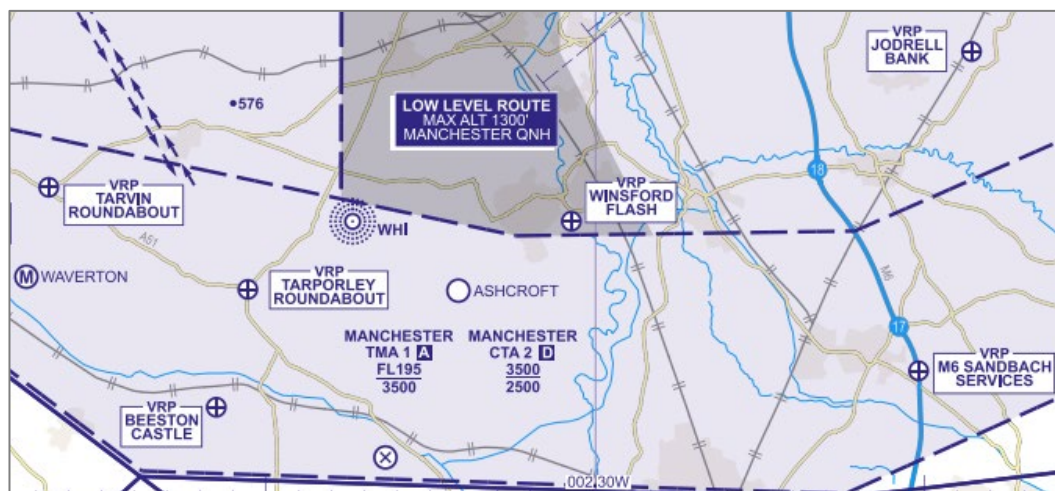
UKAB Secretariat

The Bristell and C172 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

7 MANCHESTER LOW LEVEL ROUTE

- a. The Manchester Low Level Route is that part of Manchester CTR bounded by the following coordinates: 533124N 0023102W - 531411N 0023105W - 531050N 0022814W - 531050N 0023224W - 531130N 0023744W - 532708N 0023744W - 533011N 0024123W - 533124N 0023102W to an upper limit of 1300 FT AMSL Manchester QNH (Manchester QNH available from Manchester ATIS frequency 128.180 MHz).
- b. The Manchester Low Level Route is not aligned on the M6 Motorway, or on any railway line, and these should not therefore be used as navigational line features to be followed when flying along the route. However, to the northwest and southeast of the route, stubs are aligned on the M6 and the Crewe-Winsford railway line to enable pilots to access the route accurately.
- c. Aircraft operating VFR in accordance with the procedures notified for the operation of the Manchester Low Level Route are exempt from the provisions of an air traffic control service (ORS4 No. 1489). As such, within the Manchester Low Level Route, aircraft may be flown by day or night, without individual ATC clearance, subject to the aircraft being flown;
 - i. in accordance with SERA.5005 (VFR);
 - ii. at a speed which according to its airspeed indicator is 140 KT or less, to give adequate opportunity to observe other aircraft and any obstacles in time to avoid a collision;
 - iii. in a flight visibility of at least 5 KM;
 - iv. in accordance with the radiocommunications and secondary surveillance radar transponder operation procedures applicable to the Manchester Low Level Route.
- d. Suitably equipped aircraft are to be flown in the Manchester Low Level Route with SSR code 7366 selected (unless displaying a special purpose code or code allocated/agreed by Manchester ATC) and listening out on Manchester Radar frequency 118.580 MHz, to enable the use of an alerting service if necessary, or to facilitate the early resolution of an airspace infringement.
- e. Pilots of non-transponder equipped aircraft operating within the Manchester Low Level Route are to monitor Manchester Radar, frequency 118.580 MHz to enable the use of an alerting service if necessary, or to facilitate the early resolution of an airspace infringement.
- f. Pilots of aircraft flown within the Manchester Low Level Route in accordance with the conditions in paragraph c) are responsible at all times for their own separation from all other flights, however Manchester Radar will endeavour to pass traffic information as far as practicable.
- g. In circumstances where pilots are unable to comply with paragraph c):
 - i. For VFR flights wishing to transit the Manchester Control Zone, a clearance shall be requested from Manchester Radar, frequency 118.580 MHz. For VFR flights wishing to transit the Liverpool Control Zone, a clearance shall be requested from Liverpool Approach, frequency 119.855 MHz;
 - ii. For all Special VFR flights wishing to transit the Manchester Control Zone, a clearance shall be requested routing to the east of the Manchester Low Level Route from Manchester Radar, frequency 118.580 MHz, or to the west within the Liverpool Control Zone from Liverpool Approach, frequency 119.855 MHz;
 - iii. Aircraft wishing to land or depart from an aerodrome inside the Manchester Low Level Route, or transit across the route, may request a VFR or Special VFR clearance from Manchester Radar frequency 118.580 MHz. Aircraft are responsible for their own separation at all times from all other flights within the Manchester Low Level Route.
- h. For the purposes of SERA.5005(c)(5) and SERA.5005(f), aircraft flying within the Manchester Low Level Route are permitted (ORS4 No.1496) to fly below 1000 FT above the highest obstacle within a radius of 600 M from the aircraft if;
 - i. it is operating in accordance with the procedures notified for the route;
 - ii. it is flown no closer than 500 FT to any person, vessel, vehicle or structure;
 - iii. it is flown at a height that will permit, in the event of an emergency arising, a landing to be made without undue hazard to persons or property on the surface.
- i. Pilots should be aware of the possibility of wake turbulence at all times, particularly when flying in the vicinity of the Liverpool and Manchester extended runway centre-lines. Pilots operating in accordance with paragraph c) above will not be passed wake turbulence warnings.
- j. See AD 2-EGCC-4-1 CONTROL ZONE AND CONTROL AREA CHART - ENTRY/EXIT LANES AND VRPs.

Extract from EGCC AD 2.22 Flight Procedures



Southern end of the Manchester LLR, as depicted by AD 2.EGCC-4-1

¹ UK Reg (EU) SERA.3205 Proximity.

² UK Reg (EU) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Summary

An Airprox was reported when a Bristell NG5 and a C172 flew into proximity near Little Budworth at 1328Z on Thursday 15th June 2023. Both pilots were operating under VFR in VMC, the Bristell pilot not in receipt of a FIS and the C172 pilot listening out on the Manchester Radar frequency.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots and radar photographs/video recordings. 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.

Members agreed that although the C172 had passed to the west of Ashcroft airfield at 1000ft, the pilots' situational awareness, visual acquisition and separation between the aircraft had been such that there had been no risk of collision and that safety had not been degraded. The NG5 pilot had been concerned by the proximity of the C172 in terms of it avoiding or conforming with the pattern of traffic at Ashcroft airfield but members felt that lateral and vertical separation had been such that although some may consider it to have been too close, the C172 pilot had in effect avoided the pattern of traffic.

CF1: Both pilots received 'information' from their TAS.

CF2: The NG5 pilot was concerned by the proximity of the C172.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2023153				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Flight Elements				
• Electronic Warning System Operation and Compliance				
1	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
• See and Avoid				
2	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: E.

Safety Barrier Assessment³

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the safety barriers had functioned as intended.

³ 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: 2023153		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	●	●					
Key:		Full	Partial	None	Not Present/Not Assessable	Not Used		
Provision	●	●	●	○				
Application	●	●	●	○				
Effectiveness	■	■	■	■	□			