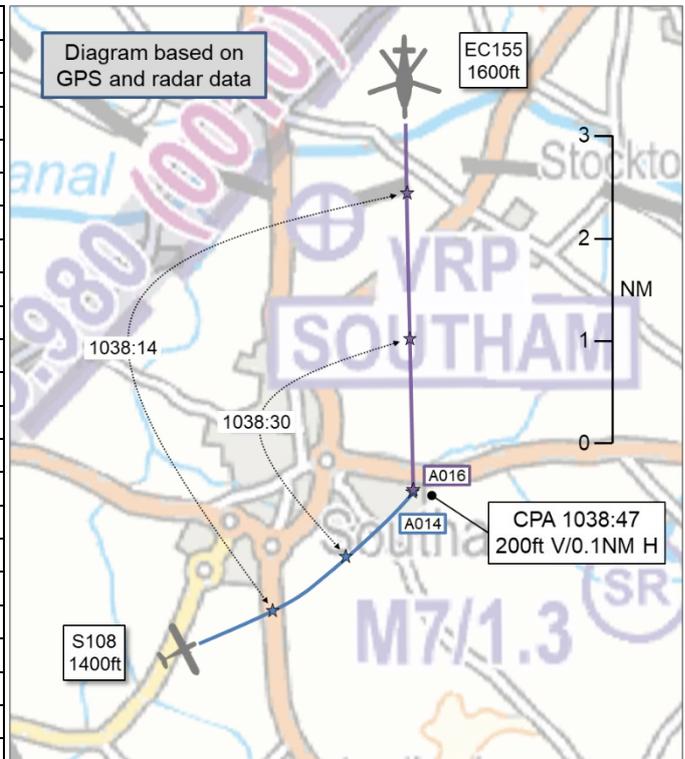


AIRPROX REPORT No 2025192

Date: 29 Aug 2025 Time: 1039Z Position: 5215N 00123W Location: IVO Southam

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	S108	EC155
Operator	Civ FW	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	None ¹
Provider	N/A	N/A
Altitude/FL	1400ft	1600ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White, blue	Private
Lighting	Nav, strobes, ldg	Strobes, landing
Conditions	VMC	VMC ²
Visibility	>10km	<5km
Altitude/FL	1825ft	1600ft
Altimeter	QNH	NK
Heading	045°	177°
Speed	99kt	150kt
ACAS/TAS	SkyEcho	TCAS I
Alert	None	TA
Separation at CPA		
Reported	200ft V/0m H	200ft V/0m H
Recorded	200ft V/<0.1NM H	



THE S108 PILOT reports that a helicopter [was first sighted as it] appeared 200ft above, in close proximity, crossing from left-to-right whilst they flew near the cloudbase. It appeared to be operating in IMC in broken cloud at a slightly higher altitude than their flight. They described their avoiding action as ‘None’.

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

THE EC155 PILOT reports that, while cruising at 1600ft towards Oxford, they saw traffic on TCAS converging from their right 2 o’clock. They had started to go intermittently into cloud but held their height as they thought a descent would have put them in conflict with the converging aircraft (believing it would have been underneath the cloud). They glimpsed the aircraft pass below them within an estimated 200ft.

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

Factual Background

The weather at Birmingham Airport was recorded as follows:

METAR EGBB 291020Z VRB02KT 9999 FEW016 BKN020 17/12 Q0995
 METAR EGBB 291050Z 31004KT 260V030 9999 FEW021 BKN027 18/12 Q0995

¹ The pilot of the EC155 reported having been in receipt of a Basic Service from East Midlands Radar.
² The pilot of the EC155 reported that they had operated in VMC, however, also reported that they had “started to go intermittently into cloud”, therefore they had been in IMC.

Analysis and Investigation

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data. The S108, but not the EC155, was observed by reference to ADS-B data sources. The pilot of the EC155 kindly supplied GPS track data for their flight. The moment of CPA was assessed to have occurred between the radar sweeps at 1038:46 and 1038:50 (Figures 1 and 2). The diagram was constructed and the separation at CPA determined by combining the data sources.

The East Midlands Unit Deputy Head of ATS confirmed that the pilot of the EC155 had been in receipt of a service from East Midlands, however, had left the frequency at 1033:27 (5min 20sec before CPA). At the moment of CPA, the EC155 was observed on the radar replay with a Coventry conspicuity code. A representative of Coventry Airport ATSU confirmed that pilot of the EC155 had not been in receipt of a service from Coventry ATSU.

The pilot of the EC155 reported that they were flying in VMC, however, also reported that they had “started to go intermittently into cloud”. (UK)SERA.5001 ‘VMC visibility and distance from cloud minima’ provides the following criteria:

At and below 3000ft AMSL (in Class G airspace):

Visibility 5km.

Clear of cloud and with the surface in sight.

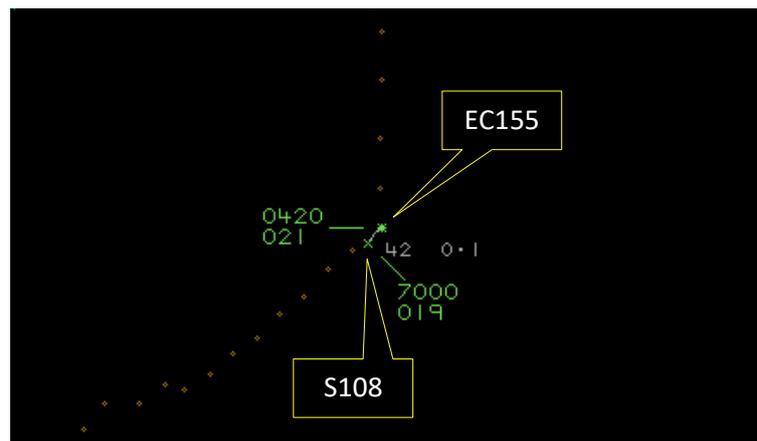


Figure 1 – Aircraft positions at 1038:46 (1sec before CPA)

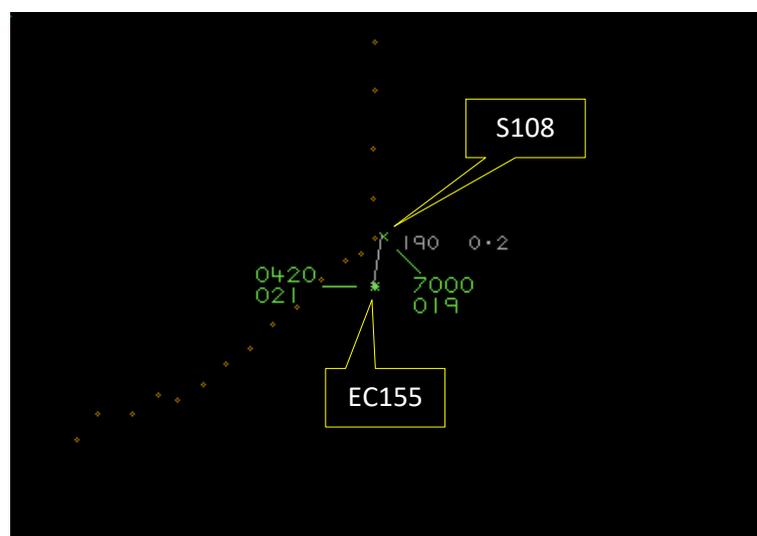


Figure 2 – Aircraft positions at 1038:50 (3sec after CPA)

The S108 and EC155 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.³ If the incident geometry is considered as converging then the EC155 pilot was required to give way to the S108.⁴ VFR flights [below 3000ft AMSL] shall be conducted so that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified.⁵

Summary

An Airprox was reported when an S108 and an EC155 flew into proximity in the vicinity of Southam at 1039Z on Friday 29th August 2025. The S108 pilot was operating under VFR in VMC, and the EC155 pilot was operating in IMC, reportedly under VFR. Neither pilot had been in receipt of a FIS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, GPS track data from the flight of the EC155 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.

The Board first considered the actions of the pilot of the S108, and members noted that they had not been in receipt of a service. It was suggested that it may have been prudent to have requested a surveillance-based service from an appropriate ATSU (**CF1**) to have assisted with their situational awareness of traffic along their route. Members agreed that the S108 had been fitted with an additional EC device which, on this occasion, would not have been expected to have detected the presence of the EC155 (**CF4**). Consequently, it was agreed that the S108 pilot had not had situational awareness of the EC155 until it had been glimpsed above them at a reported distance of 200ft (**CF3**). Members concluded that the EC155 had been obscured, or had been partially obscured, from their view (**CF8**) and had been sighted late (**CF6**). It was noted that the pilot of the S108 had had little room to have manoeuvred vertically but the proximity had not required immediate avoiding action to have been taken.

Members next considered the actions of the pilot of the EC155 and, again, noted that they had not been in receipt of a service. Some members suggested that it may, perhaps, have been a case of unfortunate timing that the EC155 pilot had recently terminated a service from East Midlands. Nevertheless, members wished to highlight that listening out on the Coventry frequency had not provided the EC155 pilot with the fullest available picture of the traffic situation and that to have requested a surveillance-based service may have been prudent (**CF1**). Further, given the prevailing conditions, members agreed that the EC155 pilot had not adapted their dynamic plan sufficiently, and that they could have reasonably anticipated encountering cloud at the altitude at which they had conducted their flight (**CF2**). Notwithstanding, members agreed that the TCAS equipment fitted to the EC155 had provided a TA due to the proximity of the S108 (**CF5**) and that the pilot of the EC155 had correctly assessed that a descent had been inadvisable, particularly as the S108 had been obscured from their view (**CF8**). It was agreed by members that they had subsequently sighted the S108 at the moment of CPA and that that effectively constituted a non-sighting (**CF7**).

Concluding their discussion, members considered the matter of the risk of collision. It was agreed that the decision taken by the EC155 pilot (on receipt of a TCAS TA) to have maintained their level and to have not descended had, essentially, removed the risk of collision from the situation. Ultimately, the separation between the aircraft had been such that further avoiding action had not been necessary. However, members wished to emphasise that ground-element safety barriers had been available to the pilots but had not been engaged. It was agreed that safety margins had been reduced, particularly for these flights in congested Class G airspace with the presence of low cloud and where it had been of paramount importance to have gained early visual acquisition of aircraft nearby. The Board assigned Risk Category C to this event.

³ (UK) SERA.3205 Proximity.

⁴ (UK) SERA.3210 Right-of-way (c)(2) Converging.

⁵ (UK) SERA.5005 Visual flight rules.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK**Contributory Factors:**

2025192				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Flight Elements				
• Tactical Planning and Execution				
1	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
2	Human Factors	• Insufficient Decision/Plan	Events involving flight crew not making a sufficiently detailed decision or plan to meet the needs of the situation	Inadequate plan adaption
• 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	Technical	• ACAS/TCAS System Failure	An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations	Incompatible CWS equipment
5	Contextual	• ACAS/TCAS TA	An event involving a genuine airborne collision avoidance system/traffic alert and collision avoidance system traffic advisory warning triggered	
• See and Avoid				
6	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
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	Contextual	• Visual Impairment	Events involving impairment due to an inability to see properly	One or both aircraft were obscured from the other

Degree of Risk: C.

Safety Barrier Assessment⁶

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 it may have been prudent for each pilot to have been in receipt of a surveillance-based service from an appropriate ATSU.

See and Avoid were assessed as **partially effective** because the pilot of the S108 had sighted the EC155 late. The pilot of the EC155 had not sighted the S108 until the moment of CPA.

⁶ 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: 2025192		Outside Controlled Airspace						
		Provision	Application	Effectiveness				
Barrier				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:		<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>		
Provision	●	●	●	●				
Application	●	●	●	●				
Effectiveness	■	■	■	■	□			