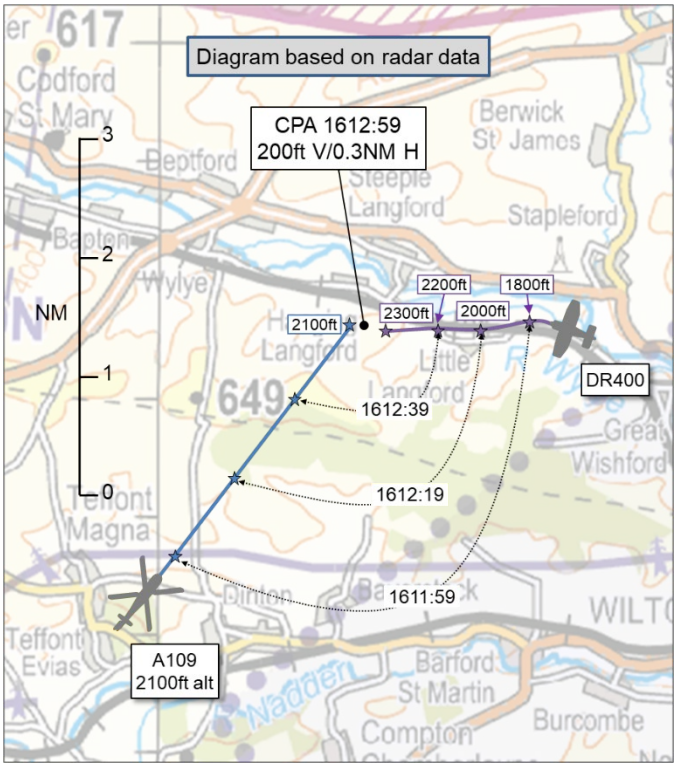
AIRPROX REPORT No 2025190

Date: 26 Aug 2025 Time: 1613Z Position: 5108N 00157W Location: S of Steeple Langford

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	A109	DR400
Operator	Civ Comm	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Traffic	Basic
Provider	Boscombe Appr.	Boscombe Appr.
Altitude	2100ft	2300ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Red and white	NR
Lighting	Nav and strobes	NR
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2000ft	3000ft
Altimeter	QNH	QNH
Heading	NR	270°
Speed	135kt	NR
ACAS/TAS	TAS & SkyEcho	Not fitted
Alert	None[1]	N/A
Separation at CPA		
Reported	<100ft V/0.5NM H	300ft V/ NR
Recorded	200ft V/0.3NM H	



THE A109 PILOT reports that, while they were conducting a student solo test sortie in the vicinity of Wylie Junction at 2000ft, the crew was given a traffic advisory on UHF Boscombe Approach. The transmission was broken, with the only information readable was that the aircraft was 300ft below. It was unclear, based on the broken transmission, the direction and distance. The crew asked [the Approach controller] to say again, at which point the crew was directed to VHF on 130.005MHz. The crew switched to VHF, and a call was made back to [the Approach controller] while the copilot checked the [electronic conspicuity] ADS-B [device] and TAS display, neither of which indicated any traffic in the vicinity. [The Approach controller] repeated the traffic call quickly with a message to the effect of *"traffic 1 o'clock less than one mile 100ft below, climbing, Robin".* The crew was quickly able to sight the traffic at the 1 o'clock, co-altitude, facing their aircraft on a constant bearing with decreasing range. The crew called to turn left and the pilot expeditiously turned left 90° and the Robin passed slightly behind the aircraft. After the turn was conducted, TAS gave a traffic alert. They estimated the closest point of approach as approximately ½ mile and less than 100ft separation. It is possible, if not likely, that if no action was taken, a collision may have occurred.

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

THE DR400 PILOT reports that they were on a training flight with a PPL pilot who had a lapsed SEP rating. Operating around 3000ft QNH to the west of Boscombe Down, south of the Salisbury Plain Training Area (SPTA), north of the Boscombe Down runway extended centreline as required by local procedures and clear of the NOTAM UAS areas. Operating under a Basic Service with Boscombe Approach, they were setting up for a stall with the student completing the HASELL checks. [The Boscombe Approach controller] passed Traffic Information on [the A109]. They did not remember the exact message, but the helicopter was reported to the west of them, heading roughly towards them and 300ft below. They acknowledged the call and looked in the notified direction. They saw the helicopter

[1] The TAS alerted only after the A109 pilot had turned away from the conflict. The additional EC device did not alert.

pass ahead, from left-to-right, and below. They turned away from the helicopter's apparent operating area, maintained situational awareness of its location and continued their sortie.

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

THE BOSCOMBE APPROACH CONTROLLER reports that they were informed of the Airprox 24hrs after the event and their recollection was that they were working [the A109] and [the DR400] on VHF under a Basic Service. They remembered calling each aircraft to each other multiple times and having to switch the A109 to VHF as [the pilot] told them that their transmissions were coming through broken. They believed that both aircraft [pilots] called visual with each other, but the Airprox was not declared on frequency.

The controller perceived the severity of the incident as 'Low'.

THE BOSCOMBE ATC SUPERVISOR reports that they had nothing further to add to the report, although there was no mention of an Airprox on frequency at the time or any phone call that day.

Factual Background

The weather at Boscombe Down Airfield was recorded as follows:

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METAR EGDM 261620Z 21014KT 9999 SCT040 SCT060 22/12 Q1007 NOSIG RMK BLU BLU
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Analysis and Investigation

A109 Operating Authority

Head of Flying – On this occasion we do not believe there was any actual risk of collision. That said, this provided another good example of why we need reliable robust comms and why it is beneficial to have all local aircraft on the same (VHF) frequency. A comprehensive suite of electronic conspicuity devices, including ADS-B In and Out, plus effective lookout and CRM, all contribute to keeping their crews safe. Finally, reporting such as this reminds us of the ever-present threat and where and when it might be a particular issue.

Head of Training – This is a good example of how multiple barriers to MAC may have varying degrees of effectiveness. While we await more detailed analysis from the Airprox Board we note the following:

1. Visual lookout is still essential, as electronic conspicuity is not a panacea. We are pleased to see this student crew appeared to fully understand this.

2. One of our key barriers to MAC is utilising Traffic Service (or greater). This can be undermined by poor comms, and we have identified a trend of poor UHF comms in multiple aircraft, as well as cases of split frequency events leading to reduced situational awareness (because many visiting aircraft are not UHF equipped). We need to continue to push for VHF comms capability at Boscombe Down as soon as practical.

3. [It was considered] interesting that the DR400 was under a Basic Service, when we suspect a Traffic Service was available. We were curious why this was the case, as we would expect our crews to use a Traffic Service in this situation.

4. ATC has (reasonably) commented that the Airprox was not declared on frequency. We have asked our safety team to investigate if we can provide some promotional material (posters) to remind crews of the appropriate procedures.

HQ 2Gp BM

Background

The DR400 [pilot] in receipt of a Basic Service from Boscombe Down was setting up to conduct a stall when they became visual with the A109 and believed to turn away from the helicopter's operating area, whilst maintaining situational awareness of it.

The A109 [pilot] in receipt of a Traffic Service from Boscombe Down was conducting a student solo test sortie and was having communication issues with Boscombe Down Approach UHF.

Sequence of Events

Between 1611:01 and 1611:56, the Boscombe Down Approach [controller] provided the A109 [pilot] with Traffic Information which was reported as *"coming in broken"* by the pilot.

1611:59 the Boscombe Down Approach [controller] instructed the A109 [pilot] to recontact them on the VHF frequency.

1612:21 the Boscombe Down Approach [controller] provided Traffic Information to the A109, *"traffic right, 1 o'clock, 3 miles, crossing right-left ahead, indicating 100ft above, climbing, Robin."*

1612:37 the Boscombe Down Approach [controller] provided Traffic Information to the [pilot of the] Robin DR400, *"traffic, southwest, 1 mile, tracking northeast, indicating 200ft below, 109."*

1612:43 the [pilot of the] A109 called visual with the Robin DR400.

[UKAB Secretariat note: CPA occurred at 1612:59.]

1613:00 the DR400 [pilot] reported visual with the A109.

1614:32 the Boscombe Down Approach [controller] provided the [pilot of the] A109 further Traffic Information on the DR400 *"that previously called Robin now south, 1 mile, tracking west, same altitude"*

1614:41 the [pilot of the] A109 reported that they were *"still visual".*

1616:05 the Boscombe Down Approach [controller] asked the A109 [pilot] if they were *"still visual with that Robin?".*

The A109 [pilot] did not respond, but the DR400 [pilot] responded to state that they were *"still visual with the A109".*

1616:56 the Boscombe Down Approach [controller] asked the [pilot of the A109] again if they were *"still visual with that Robin".*

1617:00 the A109 [pilot] responded *"affirm".*

1617:01 the Boscombe Down Approach [controller] confirmed again if the DR400 [pilot] was *"still visual with the 109".*

1617:06 the DR400 [pilot] confirmed visual still and the Boscombe Approach controller responded *"wonderful".*

There were no more calls indicating the DR400 and A109 were within proximity. The Airprox was not declared on frequency and the controller was content that the [pilots] were visual with each other for the duration.

CPA occurred at 1612:59, with a separation of 0.3NM laterally and approximately 200ft.

Local BM Investigation(s)

A local investigation was being conducted by Boscombe Down to identify any contributing factors to this event.

2Gp BM Analysis

Whilst the local investigation was not complete, from the tape transcript it is apparent that the Boscombe Down Approach controller went above and beyond the requirements of the Basic Service provision to ensure that both pilots maintained sufficient situational awareness of each other.

Given the description of the conflicting Traffic Information, it is evident that Boscombe Down Approach [controller] deemed a risk of collision to have existed between the DR400 and the A109, hence the continuation of Traffic Information and confirmations of visual.

UKAB Secretariat

An analysis of the NATS radar was undertaken and both aircraft were positively identified using Mode S data. CPA was assessed to have occurred at 1612:59 with 0.3NM and 200ft lateral separation (Figure 1).

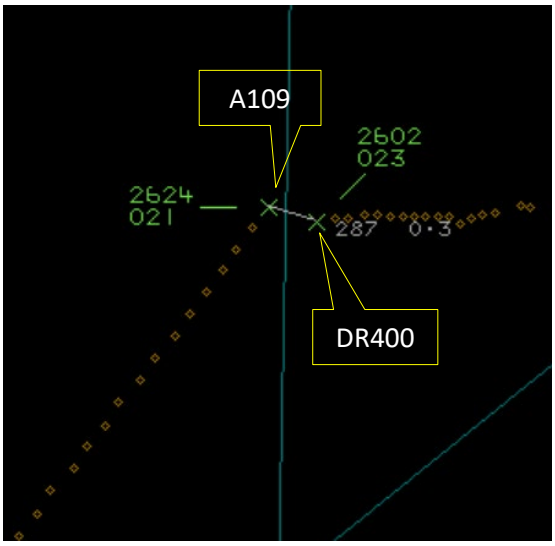

Figure 1 – Time 1612:59

Further analysis of aircraft tracking software was undertaken. The A109 was detected using ADS-B data and the DR400 detected using MLAT data only. The DR400 was seen to pass behind the A109 at 1613:00 using different data sources (Figure 3).

Figure 2 – 1612:50

Figure 3 – 1613:00

The A109 was seen in a turn to the left at 1613:10 as described in the pilot's report, after the DR400 passed behind it.

The A109 and DR400 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.[2] If the incident geometry is considered as converging then the A109 pilot was required to give way to the DR400.[3]

Summary

An Airprox was reported when an A109 and a DR400 flew into proximity south of Steeple Langford at 1613Z on Tuesday 26th August 2026. Both the A109 and DR400 pilots were operating under VFR in VMC, the A109 pilot in receipt of a Traffic Service and the DR400 pilot in receipt of a Basic Service, both from Boscombe Approach.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, a report from the air traffic controller involved and a report from the appropriate operating authority. 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 A109 pilot and noted that they had initially been unable to hear the controller's transmissions on UHF regarding Traffic Information on the DR400 but had, however, been able to make contact on a VHF channel in sufficient time to have copied the Traffic Information and achieve a timely sighting of the DR400. Members agreed that the pilot had been concerned by the proximity of the DR400 and the Board noted that the pilot had then manoeuvred away from it. The Board further noted that, although the aircraft had been fitted with two electronic conspicuity devices, the aircraft's main TAS had not alerted until after the pilot had made a positive left turn and the DR400 had passed behind it, while the additional EC device had been unable to detect the emissions from the DR400. Members agreed that the TAS had not alerted as expected, and that the additional EC device had been incompatible with the EC equipment fitted in the DR400.

The Board then considered the actions of the DR400 pilot and noted that they had sighted the A109 in a timely manner and had been aware of the A109's relative position during their training exercise; members agreed that the pilot had not been concerned by the presence or relative position of the A109. The Board discussed the benefits of requesting a Traffic Service over a Basic Service when available, although members agreed that, as the Boscombe controller had passed Traffic Information on the A109 to the DR400 pilot, this had not been a factor in this Airprox. The Board wished to highlight a key difference between a Basic Service and a Traffic Service, namely that, under the terms of a Basic Service, the controller is not required to monitor the flight and so a pilot should not expect to receive Traffic Information under a Basic Service. Further information regarding UK Flight Information Services can be found in CAP 774[4] – Chapter 2 covers the Basic Service, Chapter 3 encompasses the Traffic Service.

Turning their attention to the actions of the Boscombe Approach controller, the Board noted that the controller had shown a duty of care to the DR400 pilot by providing continued Traffic Information to both them and the A109 pilot. Members agreed that the service provided by the controller had been as expected.

On concluding the Board's discussion, and assessing the risk, members agreed that normal safety parameters had pertained and assigned Risk category E to this Airprox event. Members agreed on the following contributing factors:

CF1: The additional EC device fitted in the A109 had been incompatible with that of the DR400.

[2] (UK) SERA.3205 Proximity.
[3] (UK) SERA.3210 Right-of-way (c)(2) Converging.
[4] UK Flight Information Services: Fourth Edition

CF2: The A109's TAS had not alerted as expected.

CF3: The A109 pilot had been concerned by the proximity of the DR400

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025190			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Electronic Warning System Operation and Compliance			
1	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
2	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			
3	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 Assessment[5]

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

Flight Elements:

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the A109's TAS had not alerted until after the A109 pilot had turned away from the DR400, and the secondary EC device was unable to detect the DR400's EC equipment.

[5] 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: 2025190 Outside Controlled Airspace