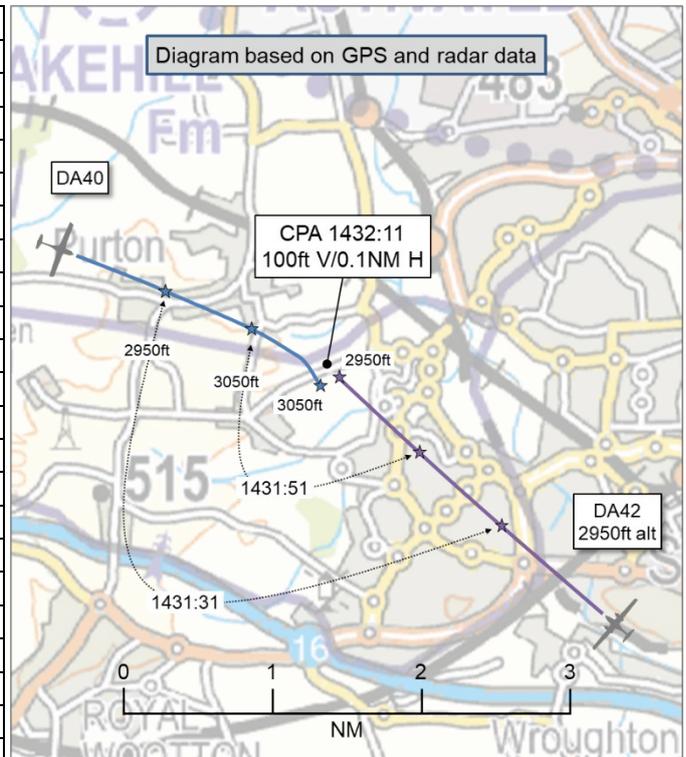


AIRPROX REPORT No 2025180

Date: 10 Aug 2025 Time: 1432Z Position: 5135N 00151W Location: 2NM W Swindon

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	DA40	DA42
Operator	Civ FW	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	None
Provider	Oxford Radar	N/A
Altitude/FL	3050ft	2950ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White	White
Lighting	Landing	Strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2700ft	3000ft
Altimeter	QNH	QNH
Heading	110°	315°
Speed	120kt	140kt
ACAS/TAS	Not fitted	TAS
Alert	N/A	Information
Separation at CPA		
Reported	0ft V/310m H	"Not seen"
Recorded	100ft V/0.1NM H	



THE DA40 PILOT reports that they were a student flying solo and had departed from [their take-off airfield] and had switched to Oxford Radar (125.090MHz) approximately 5min before the Airprox event. Whilst approaching Swindon, the Oxford Radar controller advised “Traffic 12 o'clock same level, 1 mile converging”. They replied that they were looking for the traffic. A few seconds later, the Oxford Radar controller came back to say “Traffic is a Twinstar, now half a mile same level”. They reported looking out again and subsequently switched on all exterior lights. Approximately 3sec after that, they spotted the landing lights of the approaching DA42 and subsequently banked 30° to the right to avoid. The DA42 was not observed to change course. They observed the DA42 pass down their left-hand side, approximately 4sec after the first sighting, at a lateral range of approximately 300m. After that, the flight continued as normal.

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

THE DA42 PILOT reports the flight was in good VMC but a good day for gliders and GA activity. The flight was conducted with the auto-pilot engaged in Altitude Hold and Navigation mode to allow them to concentrate on the lookout. During the flight, several other aircraft were seen, either acquired visually or as a result of warnings from the traffic device. None of those aircraft were considered close enough to present a collision risk. They did see one DA40 which passed down the left side of the aircraft about 1/4 mile away but cannot recall where that was.

THE OXFORD CONTROLLER reports that they have been made aware of an Airprox between [the DA40] and [the DA42] which was not reported on the radio.

From their limited memory of the incident, [the pilot of the DA40] was operating to the south-west, near Swindon, on a Basic Service. During their scan, they observed a 7000-squawk aircraft tracking towards them at a similar level. They called traffic to [the pilot of the DA40] under a duty of care as they felt a risk of collision existed and updated the Traffic Information again shortly afterwards. [The pilot of the

DA40] reported visual with the opposite direction traffic and [the Oxford controller] continued with other routine tasks.

Factual Background

The weather at RAF Brize Norton was recorded as follows:

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METAR EGVN 101420Z 27004KT CAVOK 25/09 Q1027 NOSIG RMK BLU BLU
METAR EGVN 101450Z 26004KT CAVOK 26/10 Q1026 NOSIG RMK BLU BLU
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Analysis and Investigation

CAA ATSI

ATSI has nothing to add to the comprehensive investigation report from Oxford.

Oxford Unit Investigation

The FIR was quite busy with background tracks and lots of non-SSR contacts.

Timeline:

1428:55 The student pilot [of the DA40] called for a Basic Service, which was applied. Their aircraft was 4NM south-east of Kemble. It had only just started to show (PSR only) and the 4520 squawk was not seen.

1430:00 The squawk from [the DA40] became more consistent.

1431:35 The controller selected the predict-vectors (Figure 1) as [the pilot of an unrelated aircraft] called to leave the frequency to change to Cranfield approach. The pilot was told to standby.

The controller then transmitted "[DA40 C/S], *just a Basic Service but there's traffic 12 o'clock, 1-mile, opposite direction, indicating same level*".

1431:49 The pilot of the DA40 responded "*Roger, looking out*".

The controller responded "*I think it might be a Twinstar, 12 o'clock, 1/2-mile opposite direction, same level*".

1432:00 "[DA40 C/S] *we're visual*" (Figure 2).

The conflicting traffic had been in straight-and-level flight for the preceding 10min or so. No report of an Airprox was made on the RTF at the time. Just prior to the Closest Point of Approach, it looked like [the pilot of the DA40] may have turned a little to the right. (Figure 3).

Analysis

In accordance with CAP774, the pilot of [the DA40] should not have expected any form of Traffic Information from a controller under a Basic Service and, whether Traffic Information had been provided or not, the pilot remained responsible for collision avoidance without assistance from the controller. Likewise, even though the controller had access to surveillance-derived information, it was noted that [the pilot of the DA40] was operating under a Basic Service and thus the controller was not required to identify or monitor the aircraft's flight. That said, the controller was deemed to have executed an adequate provision of 'Duty of care' within this incident and similarly acted in accordance with (UK) SERA.9005(b)(2) and GM1 (UK) SERA.9005(b)(2).

[The DA40] had only displayed an SSR code for about 1min prior to the event and the controller interrogated the Mode S ID prior to issuing the Traffic Information. In addition, the controller selected

the predict-vectors when the conflict was spotted in order to provide as accurate Traffic Information as possible. Further, the aircraft type of the conflicting traffic was passed as the Mode S ID had been interrogated and the aircraft registration [had been recognised].

The Unit was content that, given the service that [the pilot of the DA40] had received (a Basic Service), the controller had gone above and beyond that which was required of them. The provision of Traffic Information to [the pilot of the DA40] was supported under a 'Duty of Care' and likely aided the situational awareness of the pilot of [the DA40] in order for them to focus their lookout, gain visual sighting of the conflicting aircraft, and subsequently exercise their own responsibilities in regard to collision avoidance.

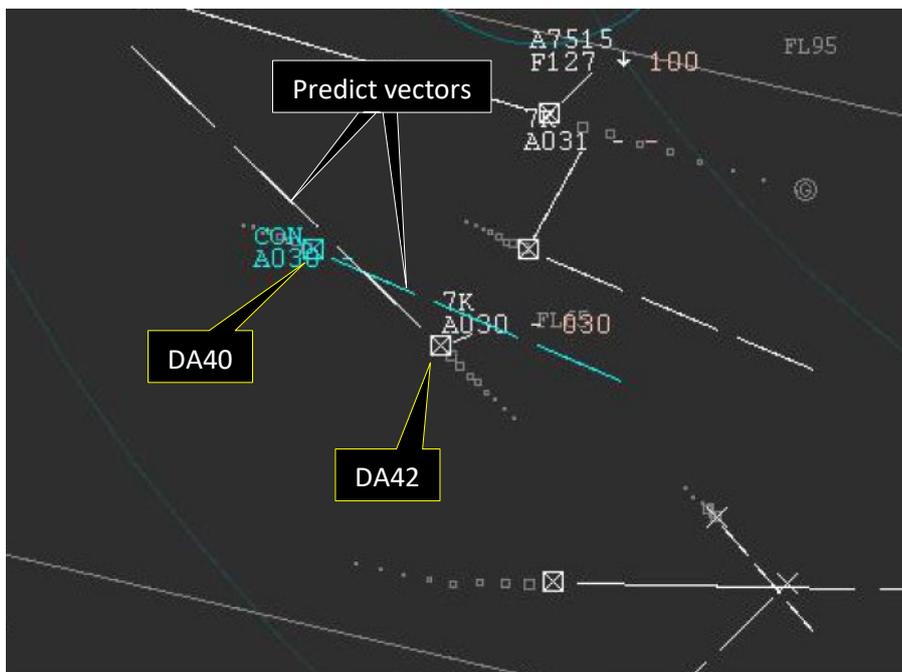


Figure 1 - 1431:32 (Labels displayed in cyan highlight aircraft with the Oxford conspicuity squawk selected)

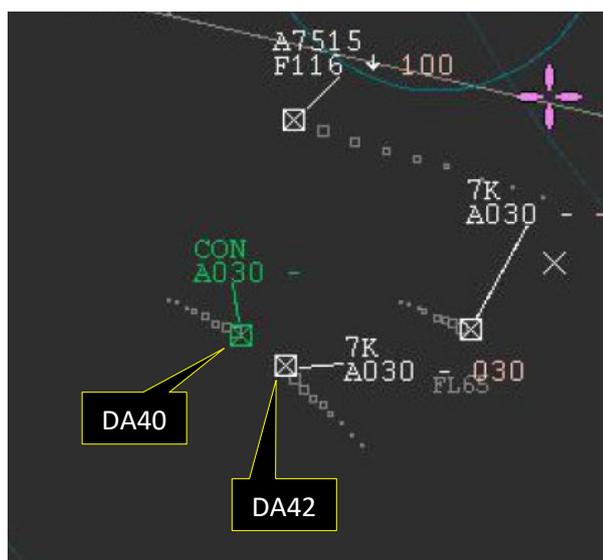


Figure 2 - 1432:00 (Labels displayed in green depict a selection made by the controller)

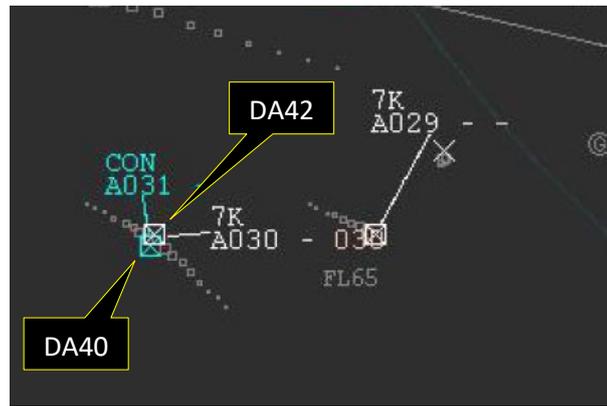


Figure 3 – CPA at 1432:11

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data (Figure 4). Neither aircraft was observed by reference to ADS-B data sources. The pilot of the DA42 kindly supplied GPS track data from their flight. It was by combining the data sources that the diagram was constructed and the separation at CPA determined.

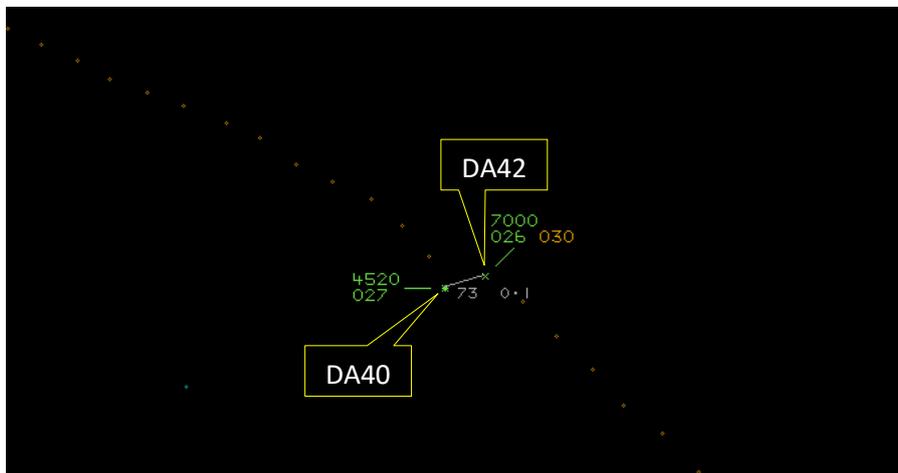


Figure 4 – CPA at 1432:11

The DA40 and DA42 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 If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.²

Summary

An Airprox was reported when a DA40 and a DA42 flew into proximity 2NM west of Swindon at 1432Z on Sunday 10th August 2025. The DA40 pilot was operating under VFR in VMC in receipt of a Basic Service from Oxford Radar, and the DA42 pilot was operating under VFR in VMC not in receipt of a FIS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, a report from the air traffic controller involved, GPS track data from the flight of the DA42, radar photographs/video recordings and a report from the appropriate operating authority. Relevant contributory factors mentioned during the Board's discussions

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

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 DA40, and it was noted that they had requested a Basic Service from the Oxford Radar controller. As such, members agreed that they would not have expected to have received any Traffic Information along their route and that they had borne the responsibility for collision avoidance unaided by the controller. Nevertheless, it was noted that they had been passed Traffic Information pertaining to the DA42: “12 o'clock, 1-mile, opposite direction, indicating same level”. It was noted that updated Traffic Information had been passed moments later when the separation had reduced to 0.5NM. Members commended the decision taken by the DA40 pilot to illuminate their landing lights to assist the other pilot, and it was agreed that the DA42 had been subsequently sighted, albeit somewhat late (**CF3**). It was noted that avoiding action had been taken to increase the separation. Some members suggested that, had the pilot of the DA40 been in receipt of a Traffic Service, Traffic Information may have been passed sooner during the evolution of the encounter. It was also suggested that the fitment of an additional EC device to their aircraft may have assisted their situational awareness.

Turning their attention to the actions of the pilot of the DA42, members agreed that it may have been prudent to have been in receipt of a surveillance-based service (**CF2**), particularly for their transit through congested airspace. Notwithstanding, it was noted that the TAS fitted to the DA42 had provided some ‘information’ to assist with their awareness of the traffic situation. Members pondered the DA42 pilot’s reported separation from “one DA40 which passed down the left side of the aircraft about 1/4 mile away” during an undetermined part of their flight. Given that the recorded separation between the DA40 and DA42 had been 0.1NM, and that it would be reasonable to suggest that an aircraft seen at that distance would have been of concern, it was concluded that the DA42 pilot had effectively not sighted the DA40 in question (**CF4**) or, perhaps, had not appreciated their close proximity to it.

The Board next considered the actions of the Oxford Radar controller. Although the Oxford Radar STCA had been inhibited (**CF1**), members commended the controller for having been aware of a potential conflict and then having passed, and subsequently updated, Traffic Information to assist the DA40 pilot. Members agreed that there had been little else that that they could have done to have assisted matters.

Members agreed that the encounter had presented a risk of collision (**CF5**) and that it had been the avoiding action taken by the pilot of the DA40 that had increased separation at the last minute. The Board assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2025180				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Ground Elements				
• Electronic Warning System Operation and Compliance				
1	Technical	• Conflict Alert System Failure	Conflict Alert System did not function as expected	The Conflict Alert system did not function or was not utilised in this situation
Flight Elements				
• Tactical Planning and Execution				
2	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
• See and Avoid				
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
• Outcome Events				

5	Contextual	<ul style="list-style-type: none"> Near Airborne Collision with Aircraft 	An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles	
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Degree of Risk: B.

Safety Barrier Assessment³

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

Ground Elements:

Electronic Warning System Operation and Compliance were assessed as **not used** because the STCA at the Oxford Unit had been inhibited.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because it may have been prudent for both pilots to have been in receipt of a surveillance-based service.

See and Avoid were assessed as **partially effective** because the pilot of the DA40 sighted the DA42 late. It was determined that the pilot of the DA42 had, effectively, not sighted the DA40.

Airprox Barrier Assessment: 2025180		Outside Controlled Airspace		Effectiveness				
Barrier		Provision	Application	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								

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