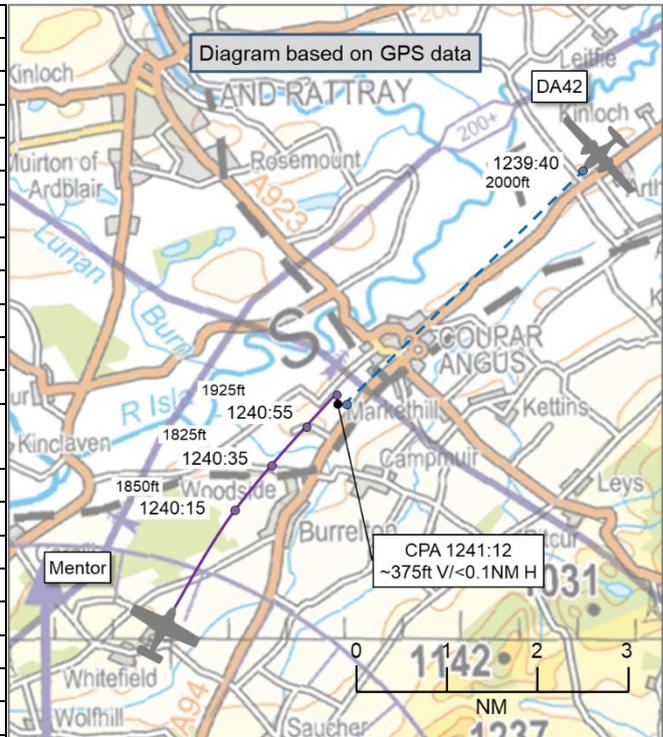


**AIRPROX REPORT No 2025221**

Date: 11 Oct 2025 Time: 1241Z Position: 5632N 00317W Location: IVO Coupar Angus

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

Recorded	Aircraft 1	Aircraft 2
Aircraft	DA42	Mentor
Operator	Civ FW	Civ FW
Airspace	Scottish FIR	Scottish FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Basic
Provider	Perth Radio	Scottish Info
Altitude/FL <sup>1</sup>	~2375ft	~2000ft
Transponder	A, C, S	A, C, S+
<b>Reported</b>		
Colours	White, grey	White
Lighting	Nav, strobes, ldg	Nav, strobe, taxi, ldg
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2000ft	NK
Altimeter	QNH (1032hPa)	QNH
Heading	215°	NK
Speed	130kt	70kt
ACAS/TAS	TCAS II	TCAS I
Alert	Information	None
<b>Separation at CPA</b>		
Reported	500ft V/200m H	Not seen
Recorded	~375ft V/<0.1NM H	



**THE DA42 PILOT** reports that they had been doing ILS approaches at Dundee (EGPN) and were returning to [destination airfield]. [Destination airfield] was using RW21 at the time as they had just received the airfield information and were aware of circuit traffic. There was no mention of a departure to the northeast so it is assumed the other aircraft pilot was now talking to Scottish Information. Shortly after this, their aircraft’s traffic system announced that there had been traffic at the same level at ONM with no bearing information. The student in the back of the aircraft then spotted the traffic, off the nose to the right and closing. Given the position of the aircraft, they made a climbing left turn to avoid it as it was clear they had not seen [the DA42] [they opine].

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

**THE MENTOR PILOT** reports that, upon departing [...] and heading north towards Coupar Angus, they were still ascending to their cruise altitude of approximately 3000ft QNH for that day. After conducting their climb check, around 2500ft (by lowering the nose to have a quick visual inspection of their surroundings), they then resumed their ascent. At that time, they did not notice any other aircraft in the vicinity. Upon reaching their cruise altitude, they continued their flight as usual. Upon landing, they were informed by the instructor of another aircraft that was close to theirs. This was the only detail they can recall from this incident. [...].

**THE PERTH AIR/GROUND OPERATOR** reports that the Mentor [pilot] was not working Perth at the time of the alleged incident, having departed to the northeast at 1234 and having transferred to Scottish FIS [they believe] at 1239. The DA42 was inbound, as far as they can recall, from a training detail at

<sup>1</sup> Neither aircraft showed on radar at CPA. Altitudes were taken from open-sourced tracking systems, converted to the same QNH pressure level and CPA calculated.

[...] and had been milling around (general handling) to the north and northeast prior to rejoin, but their recollection of the exact details are sketchy to say the least.

**THE SCOTTISH FLIGHT INFORMATION SERVICE OFFICER** reports that they were informed of this event approximately 3 months after it had happened, they have no recollection of it.

## **Factual Background**

The weather at Dundee Airport was recorded as follows:

METAR EGNP 111220Z 25009KT CAVOK 17/13 Q1032=

## **Analysis and Investigation**

### **NATS Safety Investigation**

The UK Airprox Board notified NATS Safety Investigations of a pilot reported Airprox between a DA42 and a Mentor to the northeast of Perth airfield. The Mentor pilot had been in receipt of a Basic Service from Scottish Information at the time of the conflict, however, the event was not reported on the frequency.

#### **Description and Investigation**

The pilot of the Mentor contacted the Scottish Flight Information (ScFIS) frequency at 1240:40 and requested a Basic Service. The pilot reported outbound from [...], VFR, overhead Coupar Angus at altitude 2000ft on QNH 1032hPa and on a navigational exercise routeing towards Arbroath, Montrose, Pitlochry and then returning to [...]. The ScFIS SSR of 7401 was issued. The Mentor was not visible on NATS radar at that time. The DA42 pilot was on a training flight, routeing from [...] where they had been performing ILS approaches, returning to [...]. Third Party ADS-B data displayed the conflict between both aircraft had occurred southwest of Coupar Angus at approximately 1241 with both aircraft on opposite direction tracks. The DA42 was displaying Mode-A 7000 and was initially displayed on radar, however, it had dropped from radar coverage prior to the conflict and had re-appeared on radar at 1241:32 (CPA +20sec), tracking southwest, at altitude 1800ft. The Mentor was also initially displayed on radar, but had then also dropped from radar coverage prior to the conflict, reappearing on radar at 1243:28 (CPA +2min16sec). As neither aircraft were displayed on NODE radar at the time of the conflict, it was not possible to determine a closest point of approach.

### **CAA ATSI**

ATSI has reviewed all the reports. The DA42 pilot was not in receipt of an ATS (they had been monitoring an AGCS). The Mentor pilot had just contacted Scottish Information and was in receipt of a Basic Service from a FISO. Any reference to the use of surveillance systems in the NATS investigation should be discounted as the system is not available for use in the provision of that service. The FISO would not have been aware of the presence of the DA42.

UKAB Secretariat

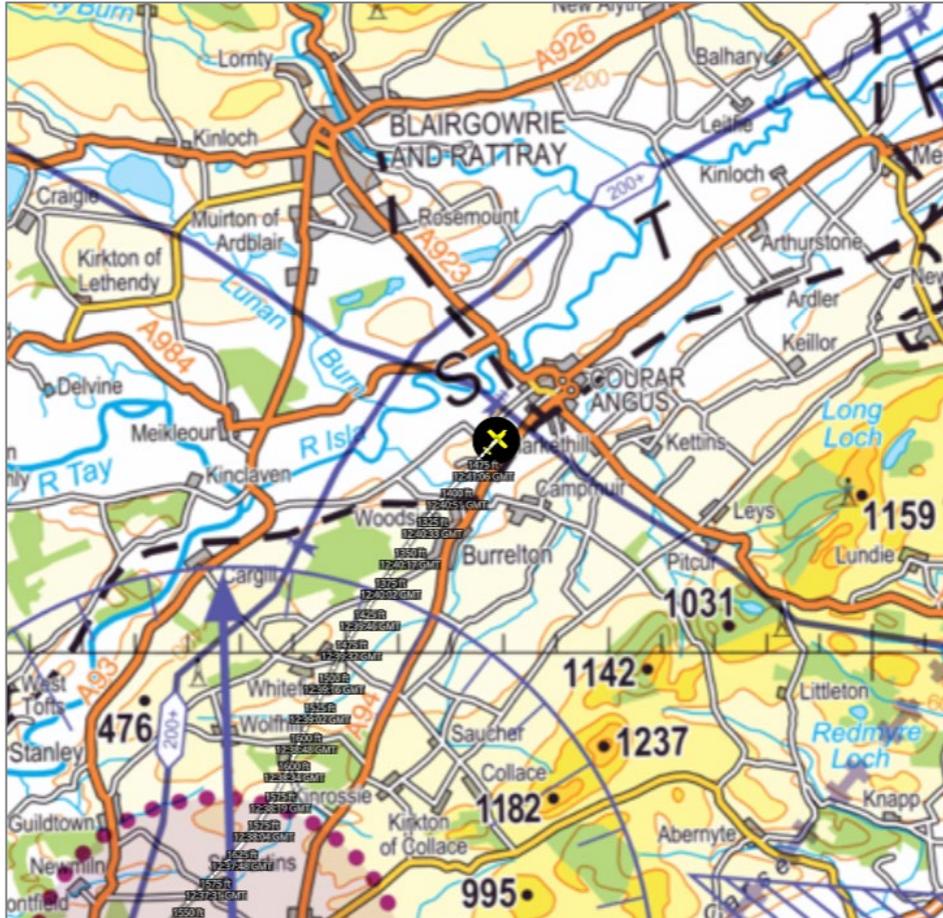


Figure 1: From the CAA's Airspace Analyser Tool – Only the Mentor is displayed and is shown here at CPA (1241:12) at 1500ft (SPS) equating to 2000ft Alt (QNH of 1032hPa)

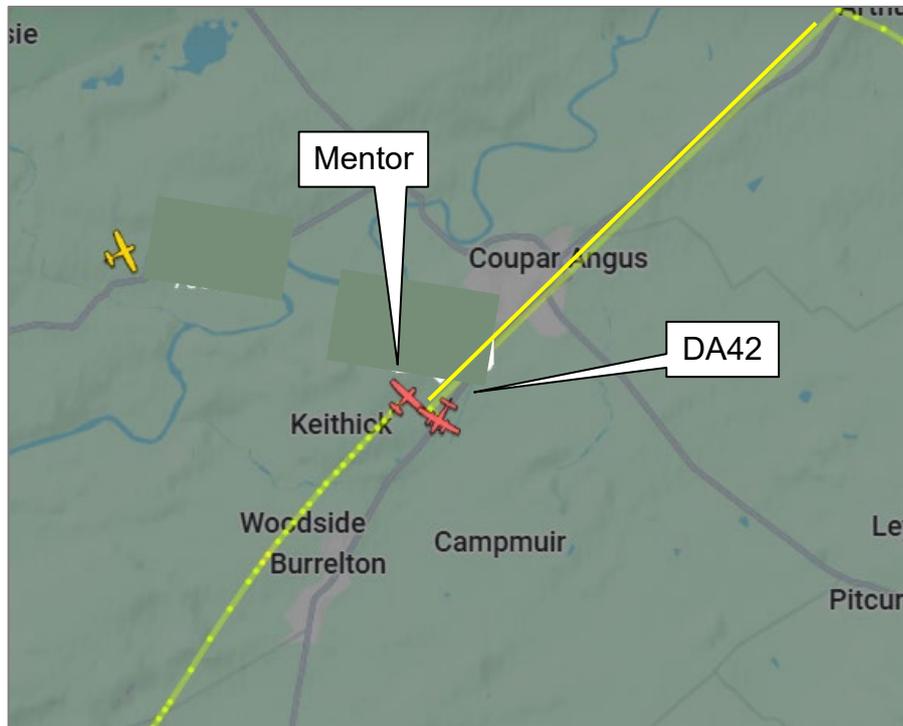


Figure 2: From an open-source ADS-B tracking system at 1241:12. The DA42 is shown to be at 1875ft (2375ft Alt) and the Mentor at 1500ft (2000ft Alt)

Neither aircraft showed consistently on radar, although both were identified through Mode S data. Additionally, only the Mentor could be tracked clearly to CPA via ADS-B sources, with the DA42 showing intermittently on an open-source ADS-B tracking system. The diagram at page 1 is constructed using ADS-B data.

The DA42 and Mentor pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.<sup>2</sup> If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.<sup>3</sup>

## Summary

An Airprox was reported when a DA42 and a Mentor flew into proximity in the vicinity of Coupar Angus at 1241Z on Saturday 11<sup>th</sup> October 2025. The DA42 pilot was operating under VFR in VMC and listening out on the Perth Radio frequency, and the Mentor pilot was operating under VFR in VMC in receipt of a Basic Service from Scottish Information.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data, a report from the FISO and Air/Ground Operator involved and reports from the appropriate operating authorities. 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 firstly considered the actions of the DA42 pilot, noting that they had been instructing students in approach techniques at Dundee Airport and at CPA had been heading toward Perth. The DA42 pilot had not been in receipt of a surveillance-based air traffic service (they had been monitoring the Perth Radio frequency) but had been equipped with a Traffic alert and Collision Avoidance System (TCAS) capable of receiving electronic emissions from the Mentor. Members noted that the system alerted at a very late stage in the event, but offered an 'Information' indication which had enabled the pilot to gain late situational awareness (**CF2**) and a late visual sighting (**CF4**), which had led the pilot to be sufficiently concerned by its proximity (**CF6**) that they immediately initiated avoidance action.

Secondly, members reviewed the actions of the Mentor pilot, noting that they had been operating a similar exercise to the DA42 pilot and, at CPA, had been heading in the opposite direction. Although the Mentor pilot had been in receipt of a Basic Service from Scottish Information, there had been no Traffic Information passed regarding the DA42 and, although equipped with a TCAS unit capable of receiving electronic emissions from the DA42, no alert had been received (**CF3**) and the Mentor pilot had therefore been left with no situational awareness of the presence of the DA42 (**CF2**). The Mentor pilot reports that they had been informed of the event after landing and confirmed that they had not sighted the DA42 at any stage (**CF5**).

In considering the role played by the two air traffic service providers, members noted that the DA42 pilot had been between frequencies and displaying a VFR (7000) squawk and had not been in receipt of a service from Perth, Scottish FIS or Dundee, whilst the Mentor pilot had initiated contact with the Scottish Flight Information Service approximately 30sec before CPA, requesting a Basic Service, and had been issued a squawk. Scottish FIS notes that radar coverage in that area at the aircraft operating altitudes was poor, with the Mentor not displayed at CPA. The subsequent investigation had utilised third party tracking sources to determine the events as understood. However, members were clear in their understanding that, under a Basic Service, regardless of the quality of displayed information, the FISO is not required to monitor the flight of an aircraft in receipt of that service (**CF1**).

In considering risk, members noted that, although the Mentor pilot had no situational awareness of the proximity of the DA42, the DA42 pilot had gained late situational awareness of the Mentor which had enabled them to achieve a late sighting of it and they had initiated avoidance action to increase

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<sup>2</sup> (UK) SERA.3205 Proximity.

<sup>3</sup> (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

separation between the two aircraft. Board members consequently judged there to have been no risk of collision but agreed that safety had been degraded; Risk Category C.

## **PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK**

### Contributory Factors:

	2025221			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
<b>Ground Elements</b>				
• <b>Situational Awareness and Action</b>				
1	Contextual	• ANS Flight Information Provision	Provision of ANS flight information	The ATCO/FISO was not required to monitor the flight under a Basic Service
<b>Flight Elements</b>				
• <b>Situational Awareness of the Conflicting Aircraft and Action</b>				
2	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
• <b>Electronic Warning System Operation and Compliance</b>				
3	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
• <b>See and Avoid</b>				
4	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
5	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
6	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<sup>4</sup>

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

#### **Ground Elements:**

**Situational Awareness of the Confliction and Action** were assessed as **not used** because the Scottish FISO is not required to monitor the flight under a Basic Service.

#### **Flight Elements:**

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the DA42 pilot gained only late situational awareness of the proximity of the Mentor and the Mentor pilot had no situational awareness of the proximity of the DA42.

**See and Avoid** were assessed as **partially effective** because the Mentor pilot had not sighted the DA42 and the DA42 pilot had achieved a late sighting of the Mentor.

<sup>4</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

<b>Airprox Barrier Assessment: 2025221</b>		Outside Controlled Airspace						
		Provision	Application	Effectiveness				
Barrier				Barrier Weighting				
				0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓	<div style="width: 50%; background-color: green;"></div>				
	Manning & Equipment	✓	✓	<div style="width: 25%; background-color: green;"></div>				
	Situational Awareness of the Confliction & Action	✗	○	<div style="width: 15%; background-color: red; border: 2px solid red;"></div>				
	Electronic Warning System Operation and Compliance	●	●	<div style="width: 10%; background-color: gray;"></div>				
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✓	<div style="width: 10%; background-color: green;"></div>				
	Tactical Planning and Execution	✓	✓	<div style="width: 10%; background-color: green;"></div>				
	Situational Awareness of the Conflicting Aircraft & Action	✗	✓	<div style="width: 20%; background-color: red;"></div>				
	Electronic Warning System Operation and Compliance	✓	✓	<div style="width: 15%; background-color: green;"></div>				
	See & Avoid	⚠	⚠	<div style="width: 20%; background-color: yellow;"></div>				
<b>Key:</b>		<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>		
Provision	✓	⚠	✗	●				
Application	✓	⚠	✗	●				
Effectiveness	■	■	■	■	○			