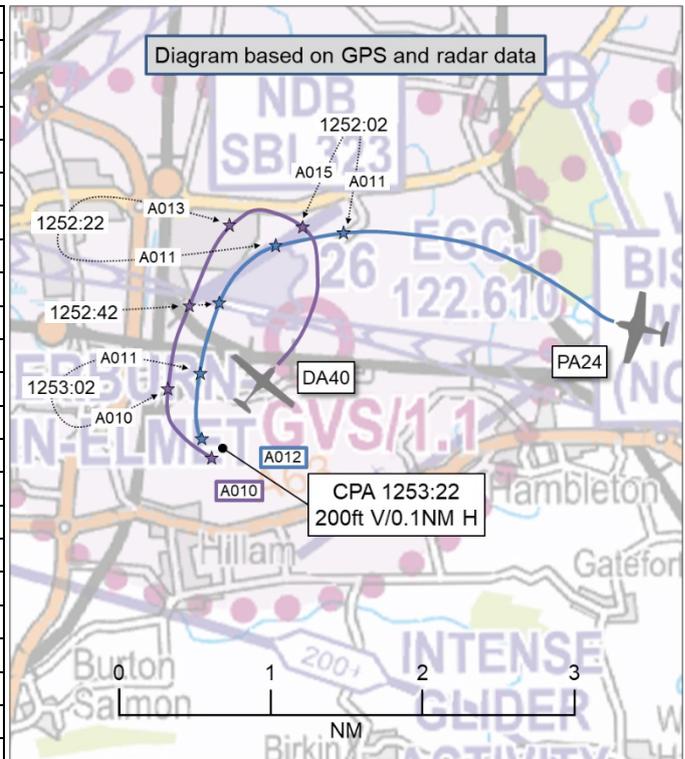


**AIRPROX REPORT No 2025185**

Date: 15 Aug 2025 Time: 1253Z Position: 5346N 00114W Location: Sherburn-in-Elmet ATZ

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA24	DA40
Operator	Civ FW	Civ FW
Airspace	Sherburn ATZ	Sherburn ATZ
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Sherburn Radio	Sherburn Radio
Altitude/FL	1200ft	1000ft
Transponder	A, C, S	A, C, S
Reported		
Colours	White, blue	White
Lighting	Bcn, anti-col, Inding	Strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1007ft	1000ft
Altimeter	QFE (1026hPa)	QFE
Heading	190°	180°
Speed	89kt	100kt
ACAS/TAS	SkyEcho	Not fitted
Alert	Information	N/A
Separation at CPA		
Reported	50ft V/50ft H	NR V/300ft H
Recorded	200ft V/0.1NM H	



**THE PA24 PILOT** reports that, flying solo, they departed [take-off airfield] for a VFR flight to Sherburn-in-Elmet via the overhead of Doncaster Aerodrome (disused). The weather was a stable high pressure system, winds were light, it was CAVOK although with a little haze. En-route, they received a Basic Service from Humberside, changing to Sherburn Radio at Goole (10min to the east of the aerodrome) for in-flight PPR and joining instructions which were 'RW28 left hand, 1026hPa, standard overhead preferred'. They approached from Selby, as instructed in the published arrivals procedure, and entered the ATZ at 2000ft QFE. They called "Sherburn Radio, [PA24 C/S] descending deadside 28 left hand".

Whilst descending, a short sequence of radio traffic followed. The pilot of [the DA40] called descending deadside (the pilot of the PA24 was not aware of any previous calls from them). The Sherburn Radio AGO asked if [the pilot of the PA24] was visual with [the DA40]. They replied "negative, just starting crosswind 28", and [the pilot of the DA40] then called "visual [with the PA24] at 8 o'clock". At the point of that transmission, both aircraft were crosswind RW28 at 1000ft. [The DA40] had 50ft separation from their right, slightly above and half-a-fuselage ahead, at 2 o'clock. Both aircraft were flying a parallel course.

Whilst still crosswind, [the pilot of the DA40] had converged from their right, forcing them to turn left, and then flew abruptly, and unexpectedly, from their right-to-left descending under the nose of [the PA24]. Clearly, [the pilot of the DA40] had turned from crosswind to downwind RW28.

As the DA40 turned across the nose of the PA24, the aircraft converged rapidly and alarmingly. Passing their nose, they would estimate a separation of 50ft [ahead], and 50ft below. The distance may be an estimate, but this was terribly close. They made an exclamatory radio transmission, and then turned downwind. Downwind, [there was an uninvolved PA28], then [the DA40], then their PA24 and then [another uninvolved PA28]. They called "Sherburn Radio [PA24 C/S], downwind 28 left, number 3". They were not aware of any other downwind calls.

Abeam the threshold of RW28, [the first PA28] was still ahead, then [the pilot of the DA40] who had descended throughout the downwind leg and had turned onto base leg RW28. [The pilot of the PA24] called "*Sherburn Radio [PA24 C/S] extending downwind 28*". There was an immediate transmission with no callsign "*you should fly the circuit, and go around if you can't land*". They perceived it to have been made by [the pilot of the DA40]. Already rattled by the near-miss, they immediately decided it was unsafe to continue and called "*Sherburn Radio, [PA24 C/S] abandoning arrival, departing to the east*".

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

**THE DA40 PILOT** reports that they were on a CPL training flight and conducted a standard overhead join for RW28 left-hand circuit. In the overhead, they noticed an aircraft [(the PA24)] flying low over Bishop Wood towards the airfield and they tried to contact them on the radio to check if they were visual with them but no response was received. It looked like [the PA24 pilot] had crossed into the Leeds East ATZ and was possibly on their frequency. The Sherburn AGO heard the calls and had also tried to contact the pilot of that aircraft, also asking them if they were visual with the joining traffic (the DA40). Again, no response was heard. As an experienced CPL instructor and flight examiner, they made sure to keep that aircraft in sight at all times, and were concerned that they had flown through the helicopter circuit within 200ft, because they came in at 1000ft and not the 2000ft join as per the published preferred procedures.

They noticed that [the PA24 pilot] was close and slightly behind, and appeared to have positioned behind [the DA40] before arriving at the downwind position RW28. [The pilot of the DA40] turned left to continue downwind and, at that point, the [pilot of the PA24 reportedly] started shouting at them and [making derogatory remarks]. The Duty Instructor for Sherburn happened to have been in the circuit and asked [the pilot of the PA24] to follow the correct circuit pattern. At that point, the pilot of the PA24 said that they would abandon their landing.

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

**THE SHERBURN AGO** reports that, at approximately 1248, the pilot of [the PA24] requested airfield information. Whilst working on the desk and monitoring the A/G radio, the pilot of [the DA40] made a call asking if the other pilot of the other aeroplane (the PA24) that was on the deadside was visual with them. There was no response. [The Sherburn AGO] proceeded to ask "[PA24 C/S], *are you visual with the DA40 last reported descending deadside?*". The PA24 pilot responded "*visual*". The next thing they observed was a call from the pilot of [the PA24] on frequency (something along the lines of) "*the aeroplane that has just turned in front of me is stupid*". After that, [the pilot of the PA24] reported "*Downwind number 3, extended the downwind to create some space*".

When that call was made, [another aircraft] was in the visual circuit and had just turned downwind. The pilot of [that aircraft was the local Duty Instructor and they] commented that "*we don't normally do that here, we remain in the circuit and go-around if necessary*". [The pilot of the PA24] responded with "*Departing the circuit to the east returning to [their destination], goodbye*".

When the pilot of [the DA40] had landed, they came to the flight desk and had a brief chat regarding what had just happened. The pilot of [the DA40] stated that the [PA24 pilot] had joined the deadside at the circuit height and the pilot of [the DA40] had visual contact with it at all times and had let their student continue to fly, but was ready to take control if necessary.

**THE SHERBURN DUTY INSTRUCTOR (as a witness)** reports that they were [downwind in the circuit] when they had heard an RT exchange between the pilots of [the PA24] and the [DA40]. The pilot of [the DA40] had asked the pilot of the [PA24] if they were visual to which no response was heard. [The Duty Instructor] could see both aircraft downwind, with the [DA40] on the inside of the [PA24], but they were unable to tell who was further ahead from their head-on view. As the DA40 pilot turned base leg, the PA24 pilot announced that they were going to extend downwind around the back of the village at the end of the downwind leg. As the Duty Instructor that day, they informed [the PA24 pilot] that, although it was not going to cause them a problem, they should fly the published circuit and go-around if necessary. The next RT call [from the PA24 pilot] was to say that they were departing to the east.

## Factual Background

The entry for Sherburn-in-Elmet in the UK AIP provides the following procedure:

### EGCJ AD 2.22 FLIGHT PROCEDURES

#### 2 Arrivals

- a. Fixed wing aircraft to join overhead at 2000FT QFE and descend in accordance with the 'Standard Overhead Join' procedure.

The website for Sherburn-in-Elmet airfield provides the following diagram for arriving pilots:

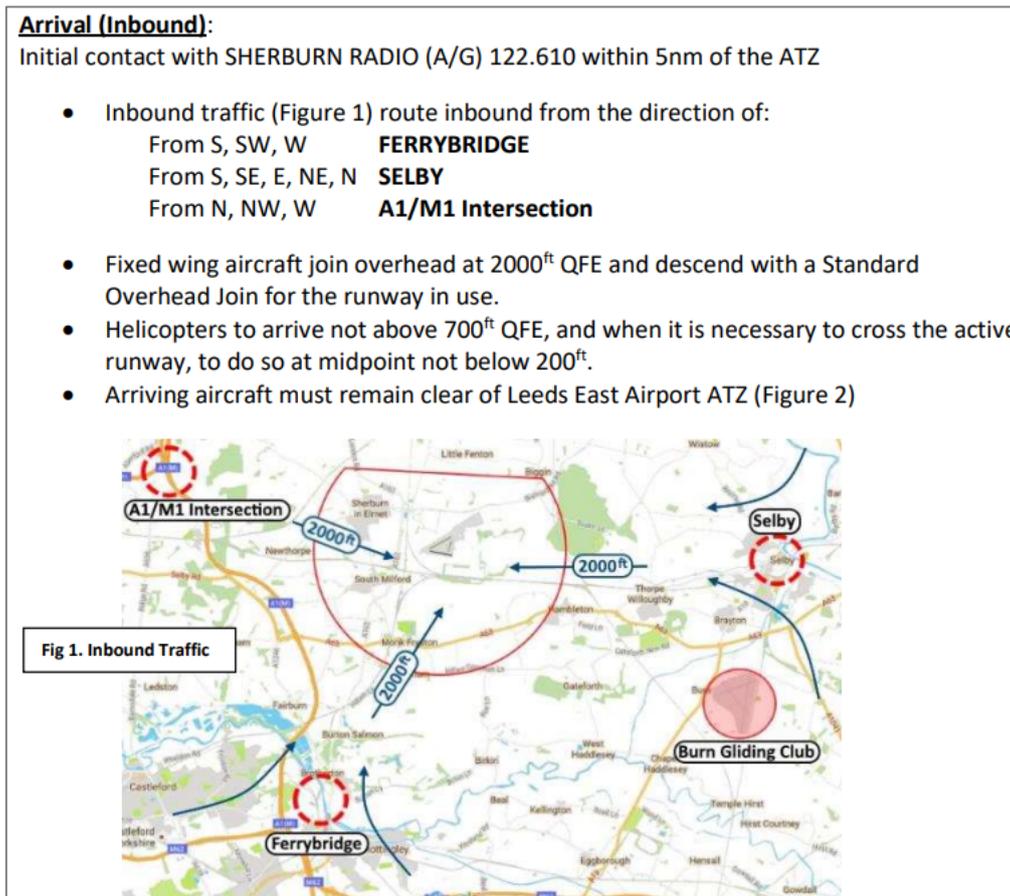


Figure 1

The weather at Leeds Bradford Airport was recorded as follows:

METAR EGNM 151220Z 30009KT 260V340 9999 FEW036 24/14 Q1027

## 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 aircraft were depicted on the replay as having been at Flight Levels. A suitable correction was used to determine their altitudes. The PA24, but not the DA40, was observed by reference to ADS-B data sources. The pilot of the PA24 kindly supplied GPS track data for their flight. The diagram was constructed and the separation at CPA determined by combining the data sources.

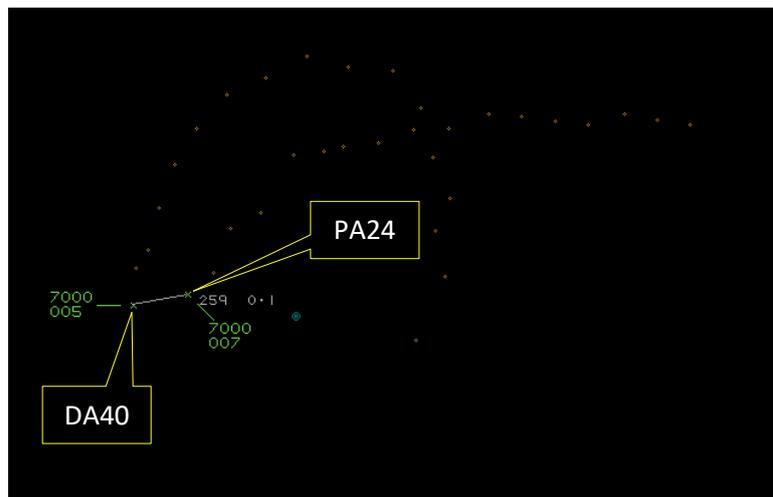


Figure 1 – The pilots of the PA24 and DA40 had been on parallel tracks at 1252:46

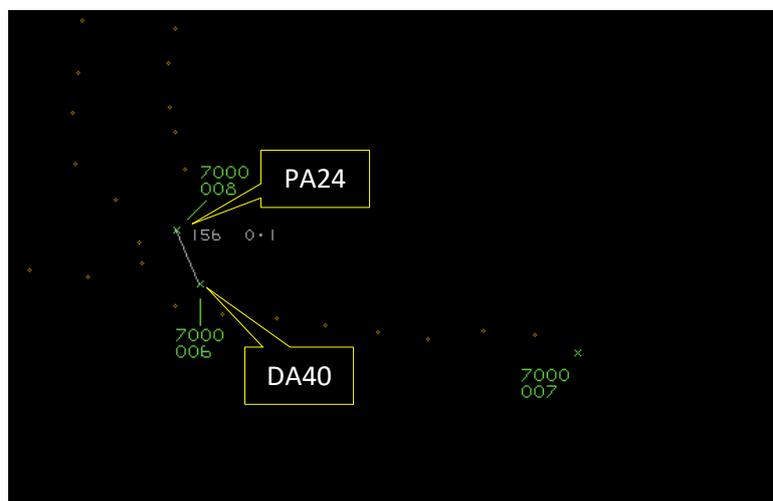


Figure 2 – CPA at 1253:22

The PA24 and DA40 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>1</sup> 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.<sup>2</sup>

## Summary

An Airprox was reported when a PA24 and a DA40 flew into proximity at Sherburn-in-Elmet at 1253Z on Friday 15<sup>th</sup> August 2025. Both pilots were operating under VFR in VMC and in receipt of an AGCS from Sherburn Radio.

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

Information available consisted of reports from both pilots, a report from the AGO involved, GPS track data for the flight of the PA24 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 PA24. It was noted that, during their initial call for joining, the Sherburn AGO had mentioned that an overhead join was 'preferred'. Members recalled the wording of CAP452 Aeronautical Radio Station Operator's Guide and were keen to point out that

<sup>1</sup> (UK) SERA.3205 Proximity.

<sup>2</sup> (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

an AGO is not permitted to provide instructions to a pilot and the word 'preferred' is used to avoid any suggestion that the AGO had provided an instruction:

CAP452, Ch.4. Air Ground Communications Service, Limitations.

'Personnel providing an AGCS shall ensure that they do not pass a message which could be construed to be either an air traffic control (ATC) instruction or an instruction issued by Flight Information Service Officers (FISOs) for specific situations'.

Members agreed that the pilot of the PA24 had perhaps misunderstood the AGO's stated 'preference' for an overhead join, and emphasised that it had been their responsibility to have conformed with Sherburn airfield's local procedures in addition to those specified in the UK AIP. As the pilot of the PA24 had not performed an overhead join, it was agreed that they had not complied with the aforementioned published procedures (CF1) and had not executed their join to the circuit correctly (CF3). This, members suggested, had also restricted their opportunity to have gathered situational awareness of, and to have sighted, other traffic in the circuit. The correct execution of a typical Overhead Join is shown in Figure 3.

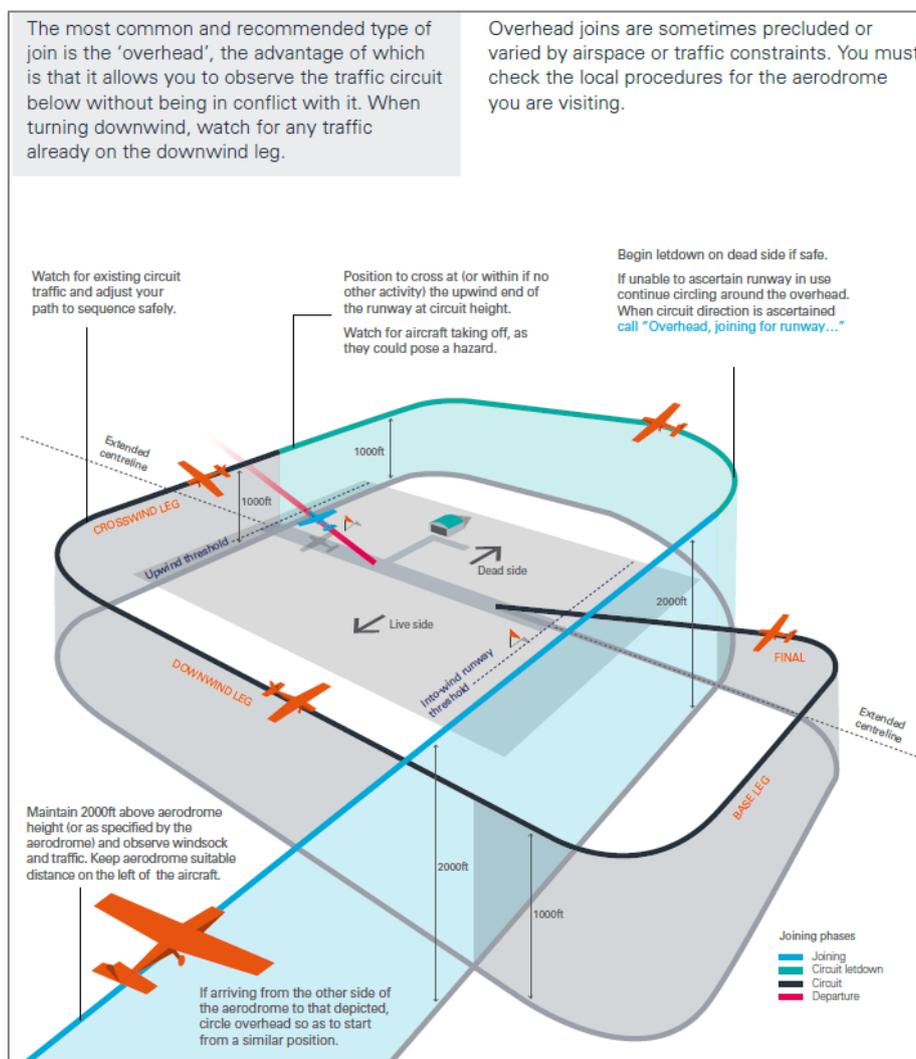


Figure 3 – A diagram of a typical Overhead Join as shown in CAP1535 'The Skyway Code'

It was noted that the pilot of the PA24 had believed that the pilot of the DA40 had not made any position calls until both aircraft had been on the crosswind leg and the pilot of the DA40 had called to say that they had been visual with the PA24 in their 8 o'clock. However, members agreed that the pilot of the PA24 had actually missed earlier calls from the pilot of the DA40 as well as from the AGO (CF6) and had therefore not had situational awareness of the DA40 (CF7) until it had been visually acquired on the crosswind leg. It was agreed that the additional EC device fitted to the PA24 would not have

been expected to have detected the DA40 (**CF8**) and the 'Information' that the PA24 pilot had reportedly received from the device had likely pertained to another aircraft in the circuit.

Members noted that the PA24 pilot had described the DA40 with the following phrases: "*50ft separation from their right*", "*half-a-fuselage ahead*" and "*both aircraft were flying a parallel course*". Given the proximity of the DA40, and that they had positioned 'inside' the track of the DA40 rather than behind it, members were at a loss to understand why the PA24 pilot had considered that the safest course of action had been to have continued along the crosswind leg rather than to have taken positive action to have increased separation. Members agreed that the pilot of the PA24 had not conformed with (nor avoided) the pattern of traffic in the circuit (**CF5**). At the moment when the pilot of the DA40 had turned left to begin the downwind leg, members felt that it had been inevitable that the separation had decreased further. Members agreed that the pilot of the PA24 had not made a sufficiently detailed plan to have met the needs of the unfolding situation (**CF4**) and had, essentially, flown into conflict with the DA40 (**CF9**).

Members next turned their attention to the actions of the pilot of the DA40, an Instructor, and noted that they had first sighted the PA24 as it had converged from their right (from the east) as they had joined in the overhead. Having sighted an aircraft enter the ATZ directly into the deadside and descend to circuit height, some members suggested that it may have been prudent to have remained in the overhead rather than to have initiated their own descent into the circuit. Nevertheless, it was noted that the pilot of the DA40 had been ahead of the PA24 on the deadside and, as such, had therefore formed the pattern of traffic for the PA24 pilot to follow. Members noted that the DA40 pilot had crossed to the live side of the runway upwind of the RW12 threshold and the pilot of the PA24 had subsequently flown 'inside' the DA40, to their left.

Although the DA40 had been ahead of the PA24 in the circuit, it was noted that the DA40 pilot had described that the PA24 had been "*close and slightly behind*" and had had "*visual contact with it at all times*". Consequently, members were in agreement that the DA40 pilot would have realised that the PA24 had been positioned in such a way that their left turn onto the downwind leg would have cut across its track, have reduced the separation considerably, and have forced the PA24 pilot to turn to avoid a collision. Members were puzzled as to why the pilot of the DA40 had considered such a turn to have been a prudent decision or in the best interests of flight safety, particularly as the turn had been made by a student under their instruction. Members were in agreement that the pilot of the DA40 had not adapted their dynamic plan to have resolved the situation (**CF4**) and had flown into conflict with the PA24 (**CF9**).

Members considered the interjection on the radio by the Duty Instructor of the local flying club, and felt that it had not provided any substantial benefit to the situation and may even have had the opposite effect of that intended.

Members next turned their attention to the actions of the Sherburn AGO, and noted that they had called the pilot of the PA24 to ascertain if they had sighted the DA40, but had received no response. Some members suggested that, if they had been aware of the potential conflict between the PA24 and DA40 at the time that both pilots had been on the deadside, it may have been helpful to have relayed the position reports made by each pilot and queried whether they had been in visual contact with the other aircraft. Other than those suggestions, members agreed that there had been little further that they could have done to have assisted matters.

The discussion was concluded and members summarised their thoughts. The Board wished to emphasise that both pilots had borne an equal responsibility for collision avoidance and not to have operated in such proximity to other aircraft as to create a collision hazard. Further, members were keen to point out that it had also been for the pilots to have arranged their sequence in the circuit. Whilst it was acknowledged that the pilot of the DA40 had tried to contact the pilot of the PA24 early in the evolution of the encounter (without success), members agreed that it would have been prudent for both pilots to have communicated their positions clearly, stated their intentions and coordinated their entry into the circuit (**CF2**). Members agreed that the aircraft had been on parallel tracks on the downwind leg, with both pilots in visual contact with the other, but neither pilot had taken action to have resolved

the proximity. The Board agreed that there had been a risk of collision (**CF10**) and assigned Risk Category B to this event.

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

### Contributory Factors:

	2025185			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
<b>Flight Elements</b>				
<b>• Regulations, Processes, Procedures and Compliance</b>				
1	Human Factors	• Use of policy/Procedures	Events involving the use of the relevant policy or procedures by flight crew	Regulations and/or procedures not complied with
<b>• Tactical Planning and Execution</b>				
2	Human Factors	• Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions
3	Human Factors	• Action Performed Incorrectly	Events involving flight crew performing the selected action incorrectly	Incorrect or ineffective execution
4	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
5	Human Factors	• Monitoring of Environment	Events involving flight crew not to appropriately monitoring the environment	Did not avoid/conform with the pattern of traffic already formed
<b>• Situational Awareness of the Conflicting Aircraft and Action</b>				
6	Human Factors	• Monitoring of Communications	Events involving flight crew that did not appropriately monitor communications	
7	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>				
8	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
<b>• See and Avoid</b>				
9	Contextual	• Loss of Separation	An event involving a loss of separation between aircraft	Pilot flew into conflict
<b>• Outcome Events</b>				
10	Contextual	• Near Airborne Collision with Aircraft	An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles	

Degree of Risk: B.

### Safety Barrier Assessment<sup>3</sup>

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

### **Flight Elements:**

**Regulations, Processes, Procedures and Compliance** were assessed as **partially effective** because the pilot of the PA24 had not complied with the published joining procedure.

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

**Tactical Planning and Execution** was assessed as **ineffective** because neither pilot had made a sufficiently detailed plan to have resolved their proximity in the circuit pattern.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the pilot of the PA24 had not had situational awareness of the presence of the DA40 until it had been visually acquired.

**Electronic Warning System Operation and Compliance** were assessed as **ineffective** because the EC device fitted to the PA24 would not have been expected to have detected the presence of the DA40.

**See and Avoid** were assessed as **partially effective** because, despite being in visual contact with the other aircraft, both pilots had, effectively, flown into conflict with each other.

<b>Airprox Barrier Assessment: 2025185</b>		Outside Controlled Airspace						
<b>Barrier</b>		<b>Provision</b>	<b>Application</b>	<b>Effectiveness</b>				
				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	⚠	⚠					
<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								