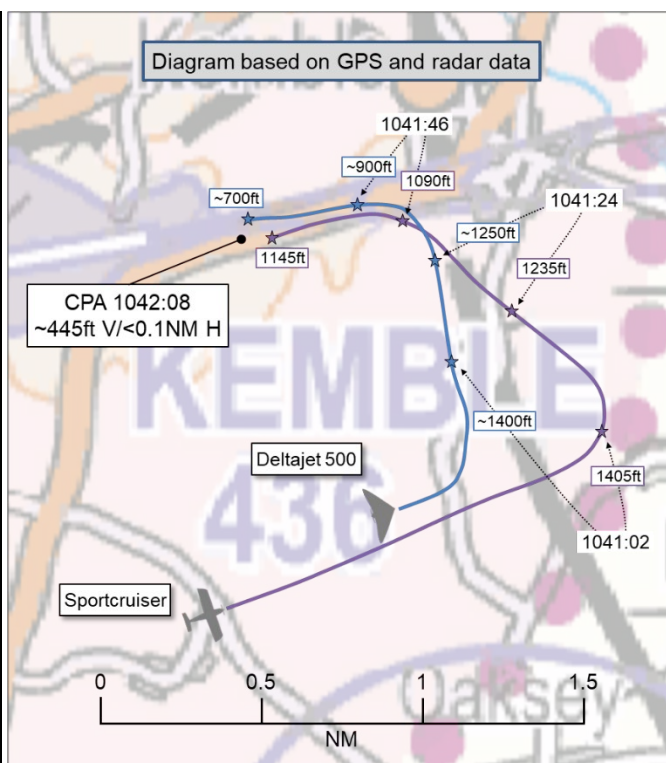


**AIRPROX REPORT No 2025049**

Date: 11 Apr 2025 Time: 1042Z Position: 5140N 00202W Location: Kemble

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Deltajet 500	Sportcruiser
Operator	Civ FW	Civ FW
Airspace	Kemble ATZ	Kemble ATZ
Class	G	G
Rules	VFR	VFR
Service	AFIS	AFIS
Provider	Kemble Information	Kemble Information
Altitude/FL	~700ft	1145ft
Transponder	A, C, S	A, C, S
<b>Reported</b>		
Colours	Green	White
Lighting	None	Nav, ldg, strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	900ft	600ft
Altimeter	QFE	QFE (1007hPa)
Heading	260°	260°
Speed	55kt	65kt
ACAS/TAS	Not fitted	SkyEcho <sup>1</sup>
Alert	N/A	Information
<b>Separation at CPA</b>		
Reported	0ft V/200ft H	500ft V/0.5NM H
Recorded	~445ft V/<0.1NM H	



**THE DELTAJET 500 PILOT** reports that they had returned from a training flight to the south. Their student was a qualified pilot and was undergoing differences training for the aircraft that they were flying. The student made a standard overhead join and descended deadside. They were aware of one other aircraft joining behind them and were visual with it. Their student had momentary confusion in the descent and started a right turn which they corrected and they descended normally into the circuit, joining crosswind and, at all times, in communication with, and following the reporting requests of, the AFISO. When they turned downwind, there was a PA28 ahead whose pilot had declared an intention to do a touch-and-go on RW26 hard so they positioned themselves far enough behind [the PA28] to ensure that it would be clear of the runway when [the Deltajet 500] was on final.

As they were just finishing turning final, their student (who was flying) alerted them to an aircraft behind which, [the student] later explained, they had briefly seen in their peripheral vision. They had not heard [the Sportcruiser pilot] establish communication with Kemble so they had been unaware of it. At first they didn't immediately see it, but they acquired its shadow and that helped them locate the aircraft which, at that stage, was level with them and perhaps 200ft behind. Meanwhile, their student had closed the throttle to increase the rate of descent and [the pilot of the Deltajet 500] contacted the AFISO to ask what the aircraft behind them was. The AFISO replied that they didn't know as the aircraft was not in contact with them. As the aircraft passed by, probably 20 to 40ft above them, they heard a radio call which they thought was "[last two characters of callsign] *going around*". The [pilot of the Deltajet 500] completed their approach and landed. They didn't track the flightpath of the other aircraft after it passed them but they had an impression that it flew level down the runway at about 900 to 1000ft AAL.

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

<sup>1</sup> The EC device carried by the pilot of the Sportcruiser had transmitted the identity of an uninvolved aircraft.

**THE SPORTCRUISER PILOT** reports that they were inbound to Kemble from the east. They, and their passenger (also a pilot), were aware of a microlight [the Deltajet 500] returning to Kemble from the south having heard its radio calls, and had seen it on [their EC device] and had acquired it visually. They were visual with the [Deltajet 500] at all times and identified it as a flex-wing with a green pod. They presume that this is the microlight in question.

They elected to orbit over Oaksey Park at around 2400ft to allow the [Deltajet 500] to join ahead of them. They then made a standard overhead join over the RW26 threshold, descended on the deadside, crosswind and into downwind. Being visual with the [Deltajet 500], they widened the crosswind and downwind legs a little. They reduced power to slow down on the downwind leg and also extended downwind whilst being mindful of the noise abatement constraints. Remaining number 2 to the [Deltajet 500] and visual throughout, they believe they had adequate horizontal separation at all times. They included the phrase 'contact one ahead' to their downwind and final calls, they believe. The [Deltajet 500]'s height appeared to vary relative to theirs and, they estimate, was 100 to 150ft higher at times. At some point, the AFISO advised that the [Deltajet 500] was in the circuit and also intended to use the hard runway. The [Deltajet 500] appeared to maintain around 1000ft height until its final turn, when it began to descend. [The pilot of the Sportcruiser] realised that they may have to go around but, since they remained visual, they were not unduly concerned at that point.

The [Deltajet 500] pilot asked if there was a "*3-axis microlight above them*", presumably information from an EC device. [The pilot of the Sportcruiser] does not recall the AFISO's response but they, the Sportcruiser pilot, [believed that they] reported that the aircraft was them and that they were visual with the [Deltajet 500]. They did not hear anyone report an Airprox over the radio.

At around 600ft height, still visual with the [Deltajet 500], they initiated a go-around and made a radio call to that effect. They were visual with the [Deltajet 500] at all times and, therefore, they do not believe there was any collision risk. However, they can understand that the [Deltajet 500] pilot may have felt uncomfortable knowing that there was a (faster) aircraft behind them.

The pilot assessed the risk of collision as 'None'.

**THE KEMBLE AFISO** reports that it was a busy circuit at Kemble with multiple aircraft joining, in the visual circuit and departing. Two of the aircraft joining were [the Deltajet 500] and [the Sportcruiser]. The Sportcruiser was following the Deltajet 500 and both pilots were made aware of each other by the Duty AFISO. It was acknowledged by the [the pilot of the Sportcruiser] that crosswind-to-downwind they were in visual contact with the Deltajet 500 ahead.

On final, [the pilot of the Deltajet 500] questioned whether they had an aircraft behind them, to which the AFISO informed them that they had. That aircraft was the Sportcruiser. [The pilot of the Deltajet 500] then asked about a "*three axis above*". [The Kemble AFISO believed that they were referring to] a transiting aircraft that had not made contact with Kemble and was high enough to not impact the Deltajet 500 in any way. The AFISO replied '*the aircraft is not in contact*'.

The following pilot (of the Sportcruiser) then initiated a go-around as they were getting closer to the Deltajet 500 which was low over the runway. The Deltajet 500 landed without issue and vacated. [The pilot of the Sportcruiser] did a circuit and landed without issue and vacated. Neither pilot mentioned an Airprox and, from the position of the AFISO, at no time did the aircraft appear to get too close to have impacted safety.

## Factual Background

The weather at Fairford was recorded as follows:

METAR EGVA 111055Z 00000KT 9999 CLR 18/06 A3019 RMK A02A SLP227 T01810060 \$

## Analysis and Investigation

### CAA ATSI

At 1032:16, the Deltajet 500 pilot called the Kemble AFISO for rejoin from the south at 2000ft on QFE 1006hPa and advised that they would be joining through the overhead and that they were 2min from the overhead. The AFISO responded, “[C/S], *thank you, we’re still 26 left-hand, report overhead*”. The pilot responded, “*26 left-hand*”.

At 1034:30, the Sportcruiser pilot called the AFISO and advised that they were conducting an orbit outside the ATZ for spacing. This was acknowledged and the AFISO advised, “*circuit active with 3 in and also one other joining*”.

At 1036:40, the Deltajet 500 pilot reported, “*overhead, deadside descending for 26 left*”. The AFISO responded, “*Roger, keep a good lookout, there is also a Sportcruiser overhead to descend and there’s 3 in the circuit, report crosswind*”. This transmission was acknowledged by a different pilot and the AFISO immediately turned their attention to other aircraft. The missing readback from the Deltajet 500 pilot went unchallenged.

At 1037:40, the Sportcruiser pilot reported, “*joined overhead, 26 and descending deadside 26*”. The AFISO responded, “*report crosswind, there is a stingray microlight [the Deltajet 500] also descending*”. The pilot responded. “*traffic in sight*”.

#### Analysis:

When the pilot of the Sportcruiser made initial contact with the AFISO they were provided with Traffic Information on the circuit activity and “*also one other joining*”. There was no response from the pilot and the lack of readback was not challenged. However, this was not considered to be a factor in the Airprox because further Traffic Information on the Deltajet 500 was provided at 1037:40 and the Sportcruiser pilot responded that they had the traffic in sight. The report submitted by the Sportcruiser pilot also stated that they had the Deltajet 500 in sight throughout the event.

The Sportcruiser was not relevant traffic to the Deltajet 500 pilot when the Deltajet 500 pilot made initial contact with the AFISO. Traffic Information on the circuit traffic and the Sportcruiser was provided to the Deltajet 500 pilot when they reported overhead, however, this Traffic Information was acknowledged by the pilot of an unrelated aircraft and the lack of readback from the Deltajet 500 pilot was not challenged by the AFISO.

After passing through the overhead northbound, the Deltajet 500 pilot appeared to conduct a left-hand orbit before crossing the upwind end of the runway. This may have exacerbated the situation where the Sportcruiser started gaining on the Deltajet 500 sooner than expected.

The Deltajet 500 pilot stated in their report that they had been aware of an aircraft behind them when they were initially joining the circuit. They also reported that they had not heard the Sportcruiser pilot make contact with the AFISO and so were unaware of its presence.

The Deltajet 500 pilot believed that the aircraft above them when they reached final approach, was a ‘3-axis’, when it was in fact the Sportcruiser, the pilot of which had been visual with the Deltajet 500 throughout the lead-up to the event and had tried orbiting outside the ATZ, widening and extending their circuit and slowing their aircraft, to assist in integrating themselves into the circuit behind the Deltajet 500 and, ultimately, elected to initiate a go-around.

#### Conclusion:

The spacing achieved from the initial orbit conducted by the Sportcruiser pilot outside the ATZ was reduced when the Deltajet 500 pilot conducted an orbit after passing through the overhead and before crossing the upwind end of the runway.

The Deltajet 500 pilot appeared to be startled by the presence of the Sportcruiser. It would appear that the Deltajet 500 pilot either did not hear the Traffic Information passed about the Sportcruiser or did not assimilate it (they had not acknowledged it). The lack of readback of this Traffic Information was either not picked up by the AFISO or not challenged.

### UKAB Secretariat

A review of the Kemble RT was undertaken. The following transmissions were heard:

- 1041:33 Deltajet 500: *"Have we got an aircraft behind us? [Deltajet 500 C/S]"*
- 1041:38 Kemble AFISO: *"[Deltajet 500 C/S]. Affirm. There is traffic behind to land".*
- 1041:42 Deltajet 500: *"There is a three-axis almost directly above us".*
- 1041:48 Deltajet 500: *"[Deltajet 500 C/S] is final for 26 hard".*
- 1041:50 Kemble AFISO: *"[Deltajet 500 C/S]. That three-axis microlight is not talking to me".*
- 1041:55 Sportcruiser: *"[Sportcruiser C/S] Going around".*
- 1041:57 Kemble AFISO: *"[Sportcruiser C/S] Thank you. Report downwind. There is traffic climbing away to remain in the circuit".*

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data (Figure 1). Both aircraft were observed by reference to ADS-B data sources. The pilot of the Sportcruiser confirmed that the EC device fitted to their aircraft had transmitted the identity of an uninvolved aircraft (a PA28). The pilot of the Sportcruiser kindly supplied GPS track data for their flight. It was by combining the data sources that the diagram was constructed and the separation at CPA determined.

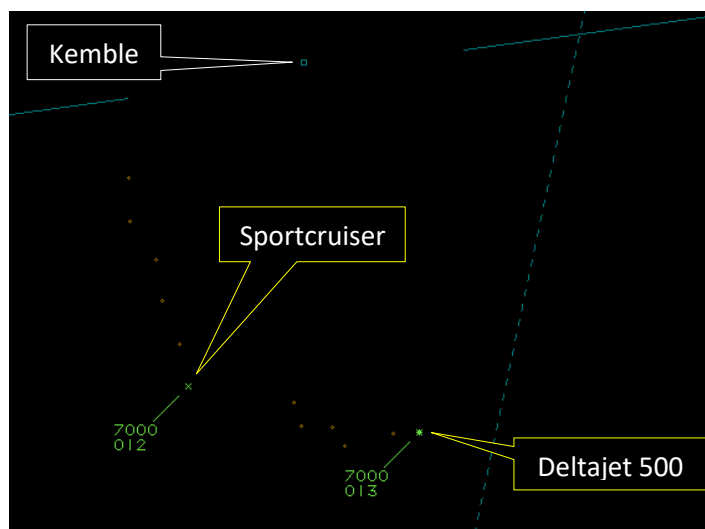


Figure 1 – 1039:24

A two-seat light sport aircraft had transited immediately east-abeam the Kemble ATZ at approximately 3400ft at the time that the Deltajet pilot 500 had turned onto base-leg. No other aircraft were observed in the vicinity by reference to radar and ADS-B data sources.

The Deltajet 500 and Sportcruiser 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> 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>3</sup>

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

<sup>3</sup> (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

## Summary

An Airprox was reported when a Deltajet 500 and a Sportcruiser flew into proximity at Kemble at 1042Z on Friday 11<sup>th</sup> April 2025. Both pilots were operating under VFR in VMC and in receipt of an AFIS from Kemble Information.

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

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS track data for the flight of the Sportcruiser, a report from the AFISO 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 pilot of the Deltajet 500. Members noted that, when descending on the deadside, they had been passed Traffic Information by the Kemble AFISO regarding the Sportcruiser. They had also sighted an aircraft that had joined the circuit behind them. Members agreed that they had gathered generic situational awareness of the presence of the Sportcruiser (**CF2**) but, apparently, had not assimilated that it had been the Sportcruiser that had been the aircraft behind them.

When the Deltajet 500 pilot had turned onto final, their student had glimpsed an aircraft in their peripheral vision. That had prompted the Deltajet 500 pilot to query the traffic with the Kemble AFISO. The Kemble AFISO had responded to confirm that there had, indeed, been an aircraft behind them to land. It was clear to members that the Deltajet 500 pilot's subsequent comment regarding "*a three-axis almost directly above us*" had also referred to the Sportcruiser (which had been both behind and above the Deltajet 500). However, it was noted that the Kemble AFISO had understood their comment to have been in relation to an uninvolved aircraft that would not have been a factor in the Deltajet 500 pilot's approach to the runway. Nevertheless, it was agreed that the AFISO's response, that "*that three-axis is not talking to me*" had exacerbated the Deltajet 500 pilot's concern for the proximity of the aircraft behind them (**CF5**). Some members wondered whether the use of the term 'three-axis', which is not a term found within CAP 413, had introduced confusion in a crucial moment.

Turning to the actions of the pilot of the Sportcruiser, members noted that the EC device fitted to the Sportcruiser had provided an alert to the presence of the Deltajet 500 (**CF3**). However, members acknowledged that the Deltajet 500 had been visually acquired at an early stage and they had followed it around the circuit. Members pondered the relative position of the aircraft in the circuit pattern and it was noted that the Sportcruiser pilot had been aware that they had been gaining on the Deltajet 500 and that it had been necessary for them to have formulated a plan to have maintained separation. It was noted that they had slowed their aircraft and had widened the downwind and crosswind legs. Some members wondered whether the Sportcruiser pilot could have maintained a wide base-leg (and still have turned on to final before reaching Kemble Village) rather than executing an acute angle back towards the final approach. Nevertheless, members appreciated that the pilot of the Sportcruiser had attempted to maintain their separation from the Deltajet 500 but, ultimately, agreed that their actions had not been sufficient to have prevented their close proximity. Members agreed that an earlier decision to have conducted a go-around would have been prudent and that, given the reducing safety margins, they had not made a sufficiently detailed plan to have met the needs of the situation (**CF1**).

Members next considered the actions of the Kemble AFISO and noted that they had not been required to have sequenced the traffic in the circuit. However, the Kemble AFISO had provided Traffic Information to each pilot on the other aircraft. They had also confirmed to the Deltajet 500 pilot when they had been on finals that the Sportcruiser had been behind them. Aside from clarifying the use of the phrase 'three-axis' that the Deltajet 500 pilot had introduced, members felt that there had been little else that the Kemble AFISO could have done to have helped matters.

Concluding the discussion, members thoughts turned to the consideration of the risk of collision. Whilst it was acknowledged that the pilot of the Sportcruiser had attempted to maintain an adequate separation

from the Deltajet 500, members were in agreement that they had flown close enough to have caused its pilot concern (**CF4**). Members agreed that safety margins had been reduced but were satisfied that there had not been a risk of collision. The Board assigned Risk Category C to this event.

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

### Contributory Factors:

	2025049			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	<b>Flight Elements</b>			
	<b>• Tactical Planning and Execution</b>			
1	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
	<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	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
	<b>• See and Avoid</b>			
4	Human Factors	• Lack of Individual Risk Perception	Events involving flight crew not fully appreciating the risk of a particular course of action	Pilot flew close enough to cause concern
5	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:

### **Flight Elements:**

**Tactical Planning and Execution** was assessed as **partially effective** because the pilot of the Sportcruiser had not adapted their dynamic plan sufficiently to have maintained adequate separation from the Deltajet 500.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **partially effective** because the pilot of the Deltajet 500 had generic situational awareness of the presence of the Sportcruiser.

<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](#).

Airprox Barrier Assessment: 2025049		Outside Controlled Airspace			
Barrier		Provision	Application	Effectiveness	
				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>		Full	Partial	None	Not Present/Not Assessable
Provision		✓	!	✗	○
Application		✓	!	✗	○
Effectiveness		■	■	■	■