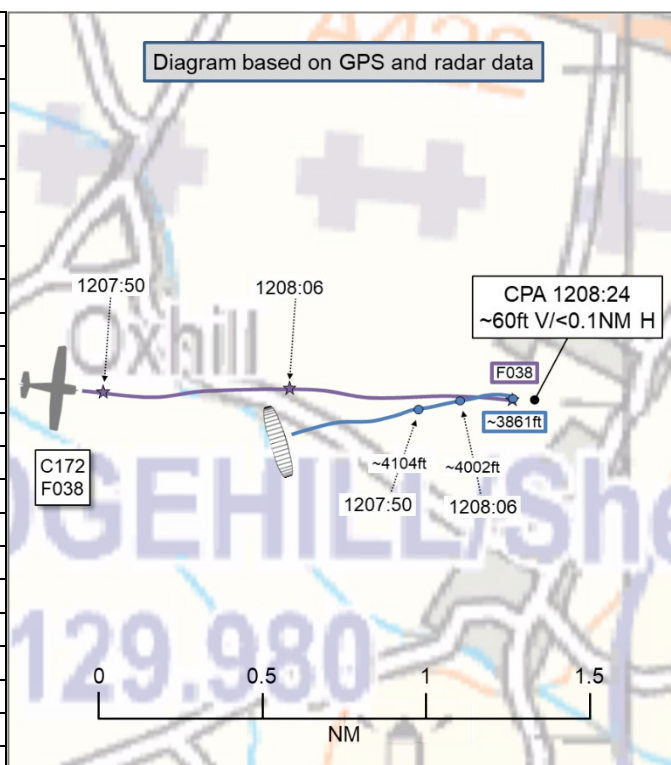


AIRPROX REPORT No 2025098

Date: 23 May 2025 Time: 1208Z Position: 5206N 00130W Location: IVO Edgehill/Shenington

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Paraglider	C172
Operator	Civ Hang	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	Brize Radar
Altitude/FL	~3861ft	F038
Transponder	Not fitted	A, C, S
Reported		
Colours	Yellow	White
Lighting	None	Taxi
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	4200ft	4000ft
Altimeter	QNH	NR
Heading	085°	090°
Speed	22kt	NR
ACAS/TAS	FLARM	Not fitted
Alert	None	N/A
Separation at CPA		
Reported	50ft V/0m H	0ft V/NR
Recorded	~60ft V/<0.1NM H	



THE PARAGLIDER PILOT reports that a large group of paraglider pilots [were flying] a long distance route. The wind was generally westerly and the forecast was for good visibility, some cumulus cloud cover and a cloudbase greater than 4000ft mid-morning rising to well above 5000ft later in the day.

At 1200, they were thermalling above Whatcote to approximately 4800ft and then headed on a downwind glide with two other paragliders, heading roughly 085°. Their descent rate was between 1-2m/s and a glide angle of around 10:1. At roughly 1208, they were just north of Upper Tysoe and heard an increasing engine noise from behind. They initiated a gentle turn but, almost immediately, an aircraft appeared beneath their feet on a similar bearing and carried on past. They judged the vertical separation as a maximum of 50-100ft. There was no discernible wake turbulence.

Their paraglider is flown in a seated position and has good forward and side visibility but, like many aircraft, it is not easy to see directly behind unless initiating a turn. No avoiding action was possible given the relative speeds and the surprise of the incident.

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

THE C172 PILOT reports that they had received a Basic Service from Benson Radar until passing CPT VOR at an altitude of 4000ft. Benson Radar gave them a handover to Brize Radar. They maintained 4000ft until their initial descent for [their destination airfield] and [believed that they were] receiving a 'radar service' from Brize Radar. Their route had passed over Swindon, Kemble and WIN DME east of Cheltenham before turning eastwards. During this easterly leg, Brize Radar advised them of a DA42 or DA62 catching them up from their left. They saw the aircraft and reported visual contact. That aircraft overtook [the C172] in VMC and within clear view and with safe separation. Shortly afterwards, in good VMC, they (and their passenger) saw several paragliders flying in the opposite direction on both sides of their position. Several paragliders were at lower altitudes but two to their left were possibly at their altitude or slightly higher. Those two were close enough to be of concern. They concentrated their scan

on their path, 30° left, right, upwards and downwards. Satisfied that there was nothing directly ahead on their path, they chose to maintain both altitude and track. At that stage, they reported the presence of several paragliders or hang-gliders to Brize Radar. The Brize controller thanked them for the report and said that no event of that nature had been reported to them.

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

THE BRIZE NORTON LARS CONTROLLER reports that they had been working multiple pilots under a Basic Service.

[The pilot of the C172] was under a Basic Service and was in transit to [their destination]. The pilot called to say that they were descending and mentioned changing frequency. [The Brize Norton controller] misheard if it was a request to change frequency, so immediately asked again. [The pilot of the C172] clarified that they were descending and then went on to say that there were numerous hang-gliders in the vicinity. The radar screen showed no returns within a 5NM radius of [the C172] so they asked for further information on the gliders.

Pilot of the C172: *Incidentally, in our environment, there are lots and lots of hang-gliders.*

Brize Norton controller: [C172 C/S] *roger, thank you for that. Do you know, are they at a similar altitude to you?*

Pilot of the C172: *Similar and above and below, very many.*

Brize Norton controller: [C172 C/S] *roger, thank you for letting us know, we don't have anything in your immediate vicinity showing on radar.*

At that point, 1209, a return popped up on the radar to the left of [the C172] within 1NM, at the same time the pilot transmitted "*At the moment I have three just to my right, left and above me*". This was taken that they were visual with the aircraft on radar, and the transmission was acknowledged.

Brize Norton controller: [C172 C/S].

Pilot of the C172: *Thank you.*

There were no further calls from or to [the pilot of the C172] until their request to change frequency at 1211:40. At no time did the pilot mention an Airprox on frequency.

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

Factual Background

The weather at Oxford was recorded as follows:

METAR EGTK 231220Z 26009KT 210V310 9999 R19///// FEW030 BKN044 19/02 Q1018

Analysis and Investigation

Military ATM

Local BM Investigation.

The Brize Norton investigation did not identify any ATS-related causal and aggravating factors, deeming the ATS provision provided by the LARS controller to be of a suitable standard.

2 Gp BM Analysis

The Brize Norton Radar controller displayed a good duty-of-care for all pilots under a Basic Service on frequency, informing them of any tracks within their immediate vicinity. It was not until after the C172 pilot had said they were visual with tracks to their left/right/above that a single radar return displayed on the controller's radar screen. This return had no Mode A/C and, therefore, the controller

deemed it irrelevant to call it, given that the pilot had called visual with tracks to that direction already. The ATS provided by the LARS controller was to an acceptable standard.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the C172 could be positively identified from Mode S data (Figure 1). The paraglider was not observed on the replay.

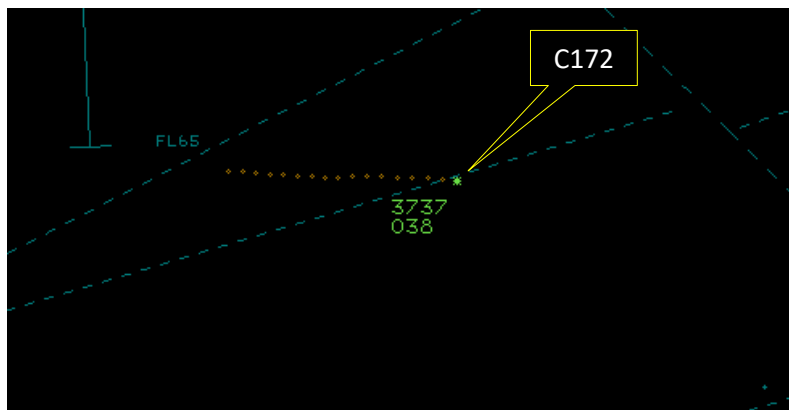


Figure 1 – CPA at 1208:24

The paraglider pilot kindly supplied GPS track data for their flight. The diagram was constructed and the separation at CPA determined by combining the data sources. The recorded altitudes for the paraglider have been converted to Flight Levels for ease of comparison.

The paraglider and C172 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 overtaking then the paraglider pilot had right of way and the C172 pilot, whether climbing, descending or in horizontal flight, was required to keep out of the way of the other aircraft by altering heading to the right. No subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from this obligation until it is entirely past and clear.²

Comments

AOPA

Until a common standard for electronic conspicuity systems is decided upon by the Department for Transport, operations in Class G airspace are reliant on an effective lookout scan and appropriate communication with Air Traffic Control. In this Airprox, an effective lookout allowed both parties to see each other, albeit too late to increase the separation.

BHPA

The BHPA recognises that both the paraglider and C172 pilots exhibited good situational awareness by seeing each other, albeit at quite a late stage. The paraglider pilot would not have been able to do more to avoid the Cessna due to their aircraft's low airspeed and limited manoeuvrability. The C172 pilot's actions would also have been limited to a degree due to their much higher airspeed and aircraft's delayed responsiveness. The BHPA is heartened to note that the C172 pilot had the foresight to inform Brize Norton Radar regarding the numbers and positions of the paragliders.

Although the Brize Norton controller informed the C172 pilot that there was a [radar] return to their left, this may not have been a paraglider as they do not normally show up as a primary return. However, this could well have been an exception or, perhaps, a sailplane.

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(3) Overtaking.

In summary, considering the reported and calculated CPA, the BHPA is surprised that the paraglider pilot assessed the risk as 'Medium'! More importantly, this again highlights a growing trend where more and more cross-country paraglider pilots are carrying lightweight, low-powered devices outputting [proprietary format transmissions] but other aircraft are not carrying receivers to detect these transmissions. It seems that, currently, the only other aircraft which [usually] transmit and receive these transmissions are sailplanes.

Paraglider pilots will never be able to carry and operate any of the currently available transponders, they do not carry or operate air-band radios, they are practically invisible to ATC radar, they fly slowly, have low manoeuvrability and are visually difficult to acquire. This puts paraglider, paramotor and hang-glider pilots at a distinct disadvantage compared with other aircraft despite many BHPA members purchasing EC devices. The BHPA believes this is a situation that needs urgent attention in order to avoid an almost inevitable mid-air collision. Certainly, the BHPA will continue to educate their members on the importance of using the CANP system, carrying an EC device, maintaining a good lookout and informing ATC by telephone of their intentions.

Summary

An Airprox was reported when a paraglider and a C172 flew into proximity in the vicinity of Edgehill/Shenington at 1208Z on Friday 23rd May 2025. The paraglider pilot was operating under VFR in VMC not in receipt of a FIS. The C172 pilot was operating under VFR in VMC in receipt of a Basic Service from Brize Norton LARS.

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 paraglider pilot, 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 pilot of the paraglider. A member with particular knowledge of paragliding operations explained that it would be almost completely impractical for a paraglider pilot to carry and operate an air-band radio. Members noted the paraglider pilot in question had carried an EC device to assist with their situational awareness, however, it was agreed that it would not have been expected to have detected the C172 (**CF3**). It was also noted that the paraglider pilot had heard the C172 approach, and had turned to attempt to visually acquire it, but the C172 had passed by almost immediately. As such, members agreed that the pilot of the paraglider had gathered late situational awareness of the presence of the C172 (**CF2**) and had not sighted it in time to have taken any action to have avoided it. Therefore, it was concluded that it had been, effectively, a non-sighting (**CF5**).

Members turned their attention to the actions of the pilot of the C172, and noted that they had been in receipt of a Basic Service from Brize Radar. Members agreed that, under a Basic Service, they had been responsible for avoiding other traffic, unaided by the controller. It had therefore been of the utmost importance for them to have maintained a very thorough and effective lookout. Members noted that the C172 had not been fitted with an additional EC device, and members suggested that, if one had been fitted, it may have provided sufficient situational awareness of the presence of aircraft along their route, which may have informed a change of track (for example) to have avoided the congregation of paraglider pilots in that area. Notwithstanding, members noted that the pilot of the C172 had sighted several paragliders, two of which had been of particular concern to them. It was noted that they had considered that the safest course of action had been to have maintained their course and altitude with increased vigilance and assistance from their passenger. Given that the track of the paraglider had passed through the C172 pilot's 12 o'clock position from the right, and had been first sighted to their left a few seconds before CPA, members agreed that it had been visually acquired late (**CF4**).

Members commended the C172 pilot's actions in relaying the presence of multiple paragliders to the Brize Radar controller, noting that that information had assisted with their awareness of the traffic situation and, consequently, had then been available for the benefit of other pilots on the frequency.

The Board next turned their attention to the actions of the Brize Radar controller, and it was agreed that, under the terms of a Basic Service, they had not been required to have monitored the flight of the C172 (**CF1**). A member with particular knowledge of radar systems explained that it would have been very unlikely that a paraglider (or even multiple paragliders, as had been the case in this instance) would have produced radar returns observable on the radar display. Nevertheless, members noted that a single return had been observed. However, it was agreed that a fleeting, primary-only return may have been disregarded, particularly as the C172 pilot had already transmitted that they had visually acquired traffic in their vicinity. Members agreed that there had been little else that the Brize Radar controller could have done in this situation to have assisted further.

Concluding their discussion, members turned to the matter of risk and pondered whether the pilot of the C172 had sighted the paraglider in question or one of the many other paragliders in the area at that time. A vote was conducted and, given the description and relative positions of the observed paragliders, the prevailing view was that the pilot of the C172 had sighted the paraglider in question. Nevertheless, members were in agreement that safety margins had reduced much below the norm, the separation from the paraglider pilot had been minimal and that there had been a risk of collision (**CF6**). The Board assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025098			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Ground Elements				
• Situational Awareness and Action				
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
Flight Elements				
• Situational Awareness of the Conflicting Aircraft and Action				
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
• Electronic Warning System Operation and Compliance				
3	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
• See and Avoid				
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
• Outcome Events				
6	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 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:

Situational Awareness of the Confliction and Action were assessed as **not used** because the Brize Radar controller had not been required to have monitored the flight of the C172 under the terms of a Basic Service.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of the C172 had not had situational awareness of the presence of the paraglider until it had been visually acquired.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the EC device carried by the paraglider pilot would not have been expected to have detected the presence of the C172.

See and Avoid were assessed as **partially effective** because the C172 pilot had sighted the paraglider late.

Airprox Barrier Assessment: 2025098		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	!	!					
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](#).