## AIRPROX REPORT No 2022071

Date: 08 May 2022 Time: ~1455Z Position: ~5105N 00214W Location: IVO The Park

Recorded	Aircraft 1	Aircraft 2	
Aircraft	KA-6E	C172	Diagram based on GPS data
Operator	Civ Gld	Civ FW	and pilot reports
Airspace	London FIR	London FIR	41
Class	G	G	945
Rules	VFR	VFR	TUEDADIZ
Service	Listening Out	None	HE PARA
Provider	CGFF <sup>1</sup>	N/A	CPA ~1455
Altitude/FL	NK	2280ft	
Transponder	Not fitted	A, C, S	s 0 091 V
Reported			
Colours	Red, Beige	White	PENSE JA2
Lighting	None	Nav	LINDL
Conditions	VMC	VMC	IDFR • 806
Visibility	>10km	>10km	
Altitude/FL	2150ft	~2500ft	
Altimeter	QFE (NK hPa)	QNH (NK hPa)	
Heading	179°	~360°	
Speed	50kt	~105kt	
ACAS/TAS	Not fitted	Not fitted	MERE
	Separatio		
Reported	100ft V/30m H	Not seen	Zeals
Recorded	NK V/NK H		

# PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE KA-6E PILOT** reports that, at approximately 1500, they were flying their glider on a southerly heading, 100m to the east of the upwind boundary of The Park when they saw a Cessna heading in a northerly direction. When they saw it they estimate that it was 300m ahead of them and approximately 100ft below them on a [relative] bearing of 015°. They didn't have a lot of time to react and thought that the safest course of action would be to stay on their heading. At the time, they were flying around the gliding site boundary in preparation for a circuit and landing. The Cessna pilot seemed unaware of the gliding site and that winch launching was active. The duty instructor on the ground also noticed the incident and expressed their concern.

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

**THE C172 PILOT** reports that their planned route was from [departure airfield] to [destination airfield] routing around EGD123. They recall that after departure they had a Basic Service from London Information and later changed frequency to Farnborough Radar. It seems that the reported Airprox happened in the proximity of The Park gliding site which they flew over, heading to the north toward Westbury. At the point closest to The Park airfield, they had the airfield on their left, it was clearly visible. On that day, gliding activity was very intense along the route they had chosen. [For a large proportion of the route they] had to keep a very intense visual lookout to keep gliders in sight. They remember there was an event in the proximity of The Park that they could characterise as an Airprox: a glider appeared in sight on an approximately perpendicular trajectory, no immediate actions were taken because the trajectories did not intersect (in their judgement). After the glider passed they immediately returned to keeping their intense lookout with normal routines (aviation, navigation, communication, checks). They didn't make any notes of the situation because they were focused on the following part of the flight, so can't remember more details. The overall workload was slightly busier than usual due to intense lookout and the number of gliders was higher than they expected which made the flight more

<sup>&</sup>lt;sup>1</sup> Common Glider Field Frequency.

stressful than usual. At the time of the supposed Airprox they maintained approximately 2500ft altitude. This flight was the third of the day for them as PIC.

#### Factual Background

The weather at Yeovilton was recorded as follows:

METAR EGDY 081450Z AUTO 18009KT 9999 BKN050/// 18/10 Q1026

#### Analysis and Investigation

#### **UKAB Secretariat**

An analysis of the NATS radar reply was carried out and, although the C172 was detected, the KA-6E was not. The C172 pilot kindly supplied the UKAB Secretariat with a GPS data file which has been directly overlaid on to a CAA 1:250,000 VFR chart to accurately represent the aircraft's location and altitude in relation to The Park gliding site. The plotted position of the KA-6E is a best estimation made using the pilot's reported position and their position relative to the C172. Although it has been determined that the glider mentioned by the C172 pilot on the "perpendicular trajectory" was not the glider involved in the Airprox, it has not been possible to determine whether any of the gliders sighted by the C172 pilot was the glider involved.

NATS Safety Investigations was contacted to confirm whether the pilot of the C172 had been in contact with London Information at the time of the Airprox and, following an extensive check of the Flight Progress Strips from that day, they reported that the pilot had not been in receipt of a service from them at the time.

The KA-6E 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.<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> 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>4</sup>

#### Comments

#### AOPA

When flying in the vicinity of airfields and in Class G airspace effective lookout is essential especially if electronic conspicuity or a radar service isn't available. Additionally, an Airprox should be reported as soon as possible by radio, which permits ATC to take the necessary immediate actions to preserve data for any subsequent investigation.

#### BGA

UK gliding sites are usually marked on CAA 1:500,000 and 1:250,000 VFR charts using the symbology shown below. A greater density of gliders may be expected nearby at any time during daylight hours, and at any altitude up to cloudbase.

Although it's not a factor in this incident, it should be noted that each site's maximum winch launch altitude is also marked on the chart; 3,700 feet AMSL at The Park, as indicated by the black arrow, Figure 1. Overflying a winch site below this notified altitude risks encountering the cable (Figure 1 insert) connecting a launching glider to the winch on the ground.

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

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

<sup>&</sup>lt;sup>4</sup> (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.



## Summary

An Airprox was reported when a KA-6E and a C172 flew into proximity in the vicinity of The Park at approximately 1455Z on Sunday 8<sup>th</sup> May 2022. Both pilots were operating under VFR in VMC, neither pilot was in receipt of an ATS.

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

Information available consisted of reports from both pilots and a GPS data file. 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 KA-6E pilot and agreed that, considering that they had been in the process of preparing to return to land at The Park, listening-out on the common glider field frequency had been appropriate. Members discussed whether the KA-6E pilot had had any situational awareness regarding the presence of the C172 and determined that they had not (**CF3**). However, the pilot had visually acquired the C172 at an early enough stage to enable them to assess the collision risk and take appropriate action.

Next, members discussed the actions of the C172 pilot and noted that it had been their intention to route through the area of The Park and, as they had been aware of the gliding site, they would have had generic situational awareness regarding the presence of gliders (**CF3**). A GA pilot member stated that, whilst there had been nothing to prohibit the C172 pilot from operating in this area, pilots should consider what the level of traffic might be in a given area as part of their pre-flight planning and, if able, avoid potential areas of high congestion (**CF2**). Similar consideration should be given when planning flight in the vicinity of an area notified as being used for the take-off and landing of aircraft (**CF1**). Members debated whether the C172 pilot had become visual with the KA-6E at any stage and agreed that, due to the reported geometry of the event and the track of the C172, the glider on a "perpendicular trajectory" had not been the KA-6E involved and therefore the Board determined that the C172 pilot had not become visual with it at any stage (**CF4**).

Finally, the Board considered the risk involved in this Airprox. Members were grateful to the C172 pilot for having supplied their GPS log file from the flight, as this had enabled the Board to understand the geometry of the event. Members noted that, although the pilot of the C172 had had generic awareness of the presence of the KA-6E, they had not become visual with it. The KA-6E pilot had become visual with the C172 early enough to have enabled them to have taken effective avoiding action if it had been required and, although safety had been degraded, members were satisfied that there had been no risk of collision. Consequently, the Board assigned a Risk Category C to this event.

## PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

С

#### Contributory Factors:

	2022071						
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification			
	Flight Elements						
	Tactical Planning and Execution						
1	Human Factors	<ul> <li>Aircraft Navigation</li> </ul>	An event involving navigation of the aircraft.	Flew through promulgated and active airspace, e.g. Glider Site			
2	Human Factors	<ul> <li>Pre-flight briefing and flight preparation</li> </ul>	An event involving incorrect, poor or insufficient pre-flight briefing				
	Situational Awareness of the Conflicting Aircraft and Action						
3	Contextual	<ul> <li>Situational Awareness and Sensory Events</li> </ul>	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness			
	See and Avoid						
4	Human Factors	<ul> <li>Monitoring of Other Aircraft</li> </ul>	Events involving flight crew not fully monitoring another aircraft	Non-sighting or effectively a non- sighting by one or both pilots			

Degree of Risk:

## Safety Barrier Assessment<sup>5</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 C172 pilot had planned to operate their flight in an area notified as being used for the take-off and landing of aircraft.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the KA-6E pilot had had no prior awareness of the presence of the C172 and the C172 pilot had had only generic awareness that there may have been aircraft operating in the vicinity of The Park.



<sup>&</sup>lt;sup>5</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the <u>UKAB Website</u>.