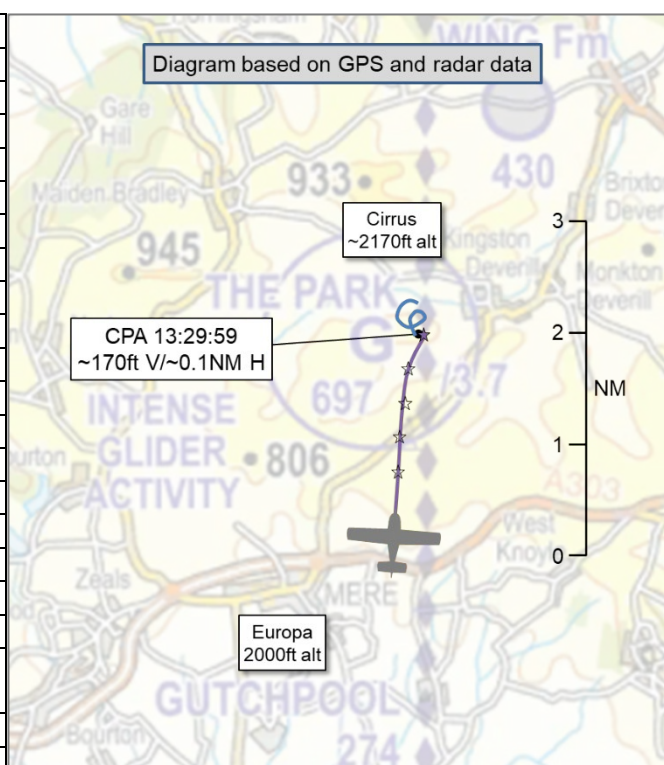


AIRPROX REPORT No 2021211

Date: 10 Oct 2021 Time: 1330Z Position: 5108N 00214W Location: ivo The Park gliding site

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Cirrus Glider	Europa
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	None
Provider	N/A	N/A
Altitude/FL	~2170ft	2000ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White	White
Lighting	Not fitted	Not fitted
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	~1600ft	NK
Altimeter	QFE (NK hPa)	QNH (NK hPa)
Heading	Turning left	NK
Speed	50kt	~115kt
ACAS/TAS	FLARM	PilotAware, PowerFLARM
Alert	Alert	Unknown
Separation at CPA		
Reported	250ft V/175m H	Not seen
Recorded	~170ft V/~0.1NM H	



THE CIRRUS PILOT reports conducting a winch launch from RW08. Following release, at about 1200ft QFE, they found a weak thermal above and slightly to the east of the trees at the eastern end of the airstrip. After about two left-hand thermalling turns, the TAS issued an urgent alarm (short-spaced beeps and red LEDs). The pilot was startled by this alarm as there was no glider in the vicinity of the release point when they released from the cable shortly before. However, they quickly noticed a fast-approaching single-engine aircraft in the one o'clock position and immediately straightened out of the turn, or else they would have come even closer to the aircraft. With only a minimal turn to its right, the aircraft passed no more than 200-300ft below and 150-200m to the east, which allowed the glider pilot to clearly identify its registration markings. They communicated the incident and registration to the Launch Point Controller via radio.

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

THE EUROPA PILOT reports in the cruise with a passenger who was also a PPL holder and an experienced glider pilot. The planned track passed to the east of The Park gliding site. Due to a carbon monoxide alarm on the climb out from [departure aerodrome] they stayed in the circuit and extended to the west by about 3NM until the readings became acceptable. They then turned north to regain planned track. They were constrained by cloud base with scattered clouds. They had a good view of The Park airstrip on the left. They could see they were well to the east of the upwind end of the runway, at around 2300ft and therefore there was no conflict with any possible winch launch activity. Being aware of The Park gliding site, they kept a good lookout and saw a glider ahead, close to cloudbase. Being aware of the glider in front and aware that gliders can operate in any free airspace the pilot thought they kept a very good lookout, noting that white gliders can be difficult to see unless the sun reflects off them. Neither of the pilots on board believe in relying on anti-collision technology [alone] and both were keeping an active lookout. Sometime later, while ensuring they avoided the glider they were visual with,

the pilot had a fleeting image of something on the left, passing behind them. It was seen so momentarily as it passed that they could not identify it before it went out of view. The passenger advised the pilot that 'it' was a glider which passed behind and above, turning away, and was lost from view almost immediately.

The pilot did not make an assessment of the risk of collision.

Factual Background

The weather at Yeovilton and Boscombe was recorded as follows:

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METAR EGDY 101320Z 01008KT 9999 SCT030 18/11 Q1030 NOSIG RMK BLU BLU=
METAR EGDM 101350Z AUTO 34009KT 9999 FEW030/// 18/10 Q1029=
METAR EGDM 101250Z AUTO 01010KT 9999 NCD 18/10 Q1030=
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Analysis and Investigation

UKAB Secretariat

The Cirrus and Europa 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 head-on or nearly so then both pilots were required to turn to the right.² If the incident geometry is considered as converging then the Europa pilot was required to give way to the Cirrus.³

Comments

AOPA

It is heartening to observe EC becoming more common place in aerial systems, however it must be remembered that effective lookout whilst thermalling is also part of the TEM for mid-air collision avoidance and thereby reducing the startle factor, distractions in the cockpit can lead to looking in for too long and therefore the checking of aerial systems position laterally and vertically can be delayed, effective delegation by the PIC could have assisted on this occasion, with qualified two pilots on board one could have been left to fly the aircraft monitor its position and lookout whilst the other resolve the distraction in the cockpit. As in most instances there are several factors leading to an incident, this is a classic example of those instances.

BGA

We are very pleased to read that the Europa pilot chose to equip with [EC equipment that is compatible with that carried by many gliders], resulting in the Cirrus receiving and acting on a collision alert.

It is unfortunate that despite this and their reported awareness of gliding activity, they routed close to the overhead of The Park. The Park is notified for winch launching to 3700ft amsl (3000ft above the airfield), so a transit at 2000ft amsl (1300ft above the airfield) would not be clear of 'any possible winch launch activity' and was inside the lateral boundaries of the circuit for RW08.

Summary

An Airprox was reported when a Cirrus glider and a Europa flew into proximity near The Park airfield at 1330Z on Sunday 10th October 2021. Both pilots were operating under VFR in VMC, neither pilot in receipt of a FIS.

¹ (UK) SERA.3205 Proximity.

² (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

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

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, reports from the air traffic controllers 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 first discussed the circumstances of the Airprox from the gliding point of view. They applauded the Europa pilot for the degree to which they had embodied electronic conspicuity (EC) and were in no doubt that this was a major factor in the incident progressing only as far as an Airprox. Unfortunately, the distraction of the CO alarm after take-off resulted in the Europa pilot(s) not re-considering their plan (**CF2**), resulting in them passing closer to The Park than they had intended and in close proximity to the gliding site (**CF1**). Members wondered to what degree the Europa pilots used electronic mapping to inform their position and route and felt that they had had at least generic situational awareness (**CF3**) that there was an increased likelihood of gliding activity at The Park and, more importantly, activity involving winch launching and gliders positioning for landing. The Board discussed whether the Cirrus pilot had flown through the gliding visual circuit and decided by a majority that this was not the case but that, unlike powered aircraft circuits, glider circuits are by necessity not as fixed or predictable. The Cirrus pilot released from the winch-launch about 3min before CPA, received an alarm from their EC device (**CF4**) on their third left-hand orbit and was able to visually acquire the Europa (**CF5**) and take avoiding action. The Board could not establish why the Europa pilot did not receive an alert from their EC equipment and noted that they had seen the Cirrus only as it passed by, effectively a non-sighting (**CF6**). Turning to risk, the Board felt that the recorded separation and pilots' descriptions of the event were such that safety had been much reduced (**CF7**).

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2021211			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Flight Elements				
• Tactical Planning and Execution				
1	Human Factors	• Aircraft Navigation	An event involving navigation of the aircraft.	Flew through promulgated and active airspace, e.g. Glider Site
2	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
• Situational Awareness of the Conflicting Aircraft and Action				
3	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				
4	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
• See and Avoid				
5	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
6	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				
7	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.

Recommendation: Nil.

Safety Barrier Assessment⁴

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 were assessed as **partially effective** because the Europa pilot did not adapt their plan after leaving their departure airfield and subsequently flew closer than desirable to The Park gliding site.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the Cirrus pilot gained SA from their TAS alert and the Europa pilot had generic SA from their onboard aeronautical information that gliding was likely at The Park, marked as a gliding site.

See and Avoid was assessed as **partially effective** because the Cirrus pilot saw the Europa at a late stage and took avoiding action and the Europa pilot had a fleeting glance of the Cirrus at about CPA, effectively a non-sighting.

		Barrier		Provision		Application		Effectiveness Barrier Weighting				
				0%	5%	10%	15%	20%				
Ground Element	Regulations, Processes, Procedures and Compliance	●	●									
	Manning & Equipment	●	●									
	Situational Awareness of the Conflicting Aircraft & 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	■	■	■	■	□							

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