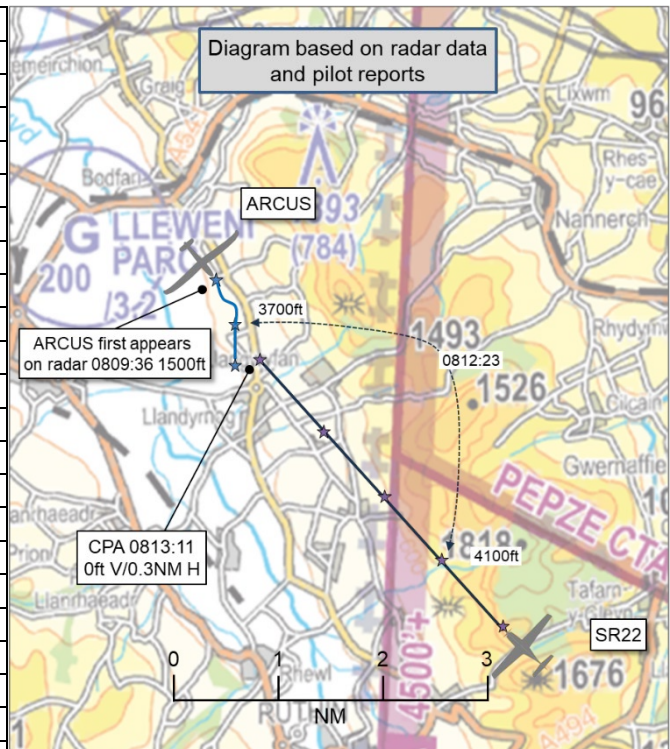


**AIRPROX REPORT No 2023239**

Date: 18 Oct 2023 Time: 0813Z Position: 5311N 00320W Location: 2NM southwest of Lleweni Parc

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Arcus	SR22
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Basic
Provider	Lleweni Parc	London Info
Altitude/FL	A041	A041
Transponder	A, C, S	A, C, S
<b>Reported</b>		
Colours	White	Red
Lighting	Red strobe	Yes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	3500ft	4000ft
Altimeter	QFE (996hPa)	QNH
Heading	160°	300°
Speed	55kt	160kt
ACAS/TAS	FLARM	SkyEcho
Alert	None	None
<b>Separation at CPA</b>		
Reported	0ft V/200m H	Not seen
Recorded	0ft V/0.3NM H	



**THE ARCUS PILOT** reports that they had been airborne for around 4min, taking an aerotow into the mountain wave conditions 3km southeast of Lleweni Parc. As they had been climbing through roughly 3500ft, they spotted an SR22 passing at the same height close by, opposite direction. Just before passing, the Arcus pilot rocked their wings to show they had seen them, but [the SR22 pilot] did not reciprocate, indicating they may not have seen them. This would be incredibly worrying as they had been rather close. The Arcus pilot notes that they had a nose strobe flashing red which should have been obvious. They immediately called Hawarden, which is the nearest airport, and asked if the Cirrus had been working them; they responded by saying the Cirrus had been with London Info. [They opined that] had the SR22 been with Hawarden, they would have received Traffic Information regarding the Arcus, as they had been squawking 7000. The Cirrus had also passed on the eastern boundary of the gliding airfield with no call on the radio, which would be a sensible thing to do. The Arcus pilot wondered if they even knew if they had been overflying a gliding airfield.

The pilot assessed the risk of collision as ‘Medium’.

**THE SR22 PILOT** reports that they have no knowledge of this Airprox. Nothing was seen or heard. Their altitude had been at least 500ft above the maximum winch launch altitude [at Lleweni Parc]. They had been equipped with an ADS-B in/out conspicuity unit but had received no indications of any aircraft in the vicinity. They report that the weather had been clear with no visual obstructions and, despite maintaining a vigilant lookout throughout the flight, particularly given the proximity to the glider site, they did not observe any gliders or other aircraft in their vicinity that could have resulted in an Airprox situation. The SR22 pilot notes that they had adhered to the standard operating procedures and airspace regulations, maintaining an altitude well above the operational ceiling of the gliders from Lleweni Parc. [They commented that] the altitude at which their aircraft had been operating significantly reduced the likelihood of an Airprox incident with a winch-launched glider from Lleweni Parc.

**THE LONDON FISO** reports that the pilot of a glider (not working London) had reported an Airprox on 18th October 2023 at 0813 with an SR22 (the pilot of which had been in receipt of a Basic Service from the London FISO). The SR22 [pilot] had checked in with the previous FISO at 0734:30. At 0818:03 the FISO pre-noted the SR22 to Ronaldsway ATC at 3800ft. Ronaldsway had told the FISO to ensure the aircraft remained outside CAS, gave an SSR code of 4553 and 135.905MHz. After this, at 0819:04, the FISO gave the pilot the SSR code issued by Ronaldsway and transferred them to the Ronaldsway frequency. The SR22 pilot had not reported any interaction with another aircraft on the frequency.

## Factual Background

The weather at Hawarden was recorded as follows:

METAR EGNR 180750Z 12008KT 9999 FEW020 11/08 Q1001=

## Analysis and Investigation

### NATS Safety Investigations

Lleweni Parc glider site is located in Denbigh, Clwyd and is prescribed in the UK AIP as having an upper limit of 3000ft AGL, a site elevation of 200ft AMSL and an activity time of HJ (from sunrise to sunset). On the day of the event there had been no published NOTAM relating to activity at Lleweni Parc. The pilot of the SR22 checked in with the London FISO at 0734:30 and reported 5NM west of WCO, routeing from [departure airfield] to [destination airfield] at 3200ft on QNH 1000hPa. In response to the pilot's check-in, the FISO had instructed the pilot to select the London FIS SSR code (1177), agreed a Basic Service, and asked for the pilot's intended routeing. The pilot responded that they were *"...pretty much routeing direct. Keeping out to the west of Birmingham, and will remain out of their CTA. Over the IOM. And going erm coasting out to the East of Colwyn Bay [...]"*. This had been acknowledged by the FISO who reminded the pilot to remain clear of Birmingham Airspace, gave them the Birmingham QNH of 1001hPa and asked for an estimate for the Colwyn Bay area. The pilot responded with an estimate of *"approximately 0816"*.

At 0737:50 the SR22 pilot reported they were *"...making a short climb to three thousand eight hundred feet on one zero zero one"* and this had been acknowledged by the FISO. At this time the aircraft had been 10.5NM northwest of WCO, tracking northwest in line with their proposed routeing. CAP774 (UK Flight Information Services) prescribed, *'Basic Service relies on the pilot avoiding other traffic, unaided by controllers/FISOs. It is essential that a pilot receiving this ATS remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight'*. London Flight Information is not a radar-based service and outwith activity prescribed in the UK AIP, the FISO would only be aware of specific gliding activity if there had been an accompanying NOTAM. In this case, Safety Investigations confirmed that there was not and the UK NOTAM Office added, *'...their active hours are HJ. If they are operating within those hours and AIP published limits they do not need to submit a NOTAM, there would only be a NOTAM if they extend the hours or upper height'*.

The tug with the Arcus (glider) from Lleweni Parc first appeared on radar at 0809:26 climbing through 1500ft heading in a westerly direction. The SR22 had been 12.7NM southeast of the location indicating 3800ft and had been flying directly toward the Lleweni Glider site. The Arcus glider appeared on radar with the towing aircraft at 0809:36. The tug and glider then turned to a southeasterly direction, on a reciprocal track to the SR22. Tug and glider appeared on radar to separate at around 0810:11, with the tug aircraft recovering to the west, and the Arcus continuing in a southeasterly direction, squawking 7000 and indicating that they had been climbing through 2200ft. The Arcus continued to track in a southeasterly direction, with a low groundspeed but a rate of climb of approximately 700fpm and then commenced low speed manoeuvres in a position 7NM west of KEGUN.

At 0812:31, with the aircraft 2.3NM apart, the pilot of the SR22 climbed to 4200ft, whilst the Arcus had been climbing through 3700ft. The SR22 pilot had not reported this climb to the FISO. The closest point of approach between the Arcus and the SR22 came at 0813:11 and was recorded on

multi-track radar as 0.3NM and 0ft. The pilot of the SR22 did not report the sighting of any other aircraft to the FISO.

At 0817:46 the SR22 pilot reported that they had coasted out east of Colwyn Bay and they were subsequently transferred to Ronaldsway ATC, after a pre-note from the FISO, at 0819:04.

The UK Airprox Board notified Safety Investigations on 1st December 2023 that the pilot of the Arcus had reported this incident as an Airprox.

## UKAB Secretariat



CPA 0813:11 0ft V/0.3NM H

The Arcus and SR22 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> If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.<sup>2</sup>

## Comments

### AOPA

It is heartening to see transponders becoming more used by gliders and both parties having electronic conspicuity which, unfortunately, in this case weren't compatible. Obtaining a Traffic Service in this case may have given both parties a warning of each other's presence.

### BGA

The SR22 pilot is to be commended for their awareness of the location, and maximum permitted winch launch altitude, of the Lleweni Parc gliding site. As notified in UK AIP ENR 5.5, gliders are also aerotow launched from this site, with no regulatory limits on maximum aerotow launch altitude. Under the right conditions, nearby hills generate mountain lee wave, which gliders launched from Lleweni Parc use to achieve altitudes of FL120 and above when flying in this area. A greater density of gliders, and aircraft towing gliders, may be expected nearby at any time during daylight hours, and at any altitude up to the base of Controlled Airspace (variously FL55, FL145 or FL195, according to time of day and exact location).

Gliders and glider tugs launching from, and recovering to, Lleweni Parc use the VHF radio channel notified in UK AIP ENR 5.5 as a Common Traffic Advisory Frequency; if transiting nearby, a brief

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

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

broadcast call on this channel using "Unattended Aerodrome" phraseology (CAP 413 Ed 23 §4.162 et seq) could help avoid conflicts and increase everyone's situational awareness.

## Summary

An Airprox was reported when an Arcus and an SR22 flew into proximity 2NM southwest of Lleweni Parc at 0813Z on Wednesday 18<sup>th</sup> October 2023. Both pilots were operating under VFR in VMC, the Arcus pilot had been listening out on the Lleweni Parc frequency and the SR22 pilot had been in receipt of a Basic Service from London Information.

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

Information available consisted of reports from both pilots, radar photographs/video recordings, a report from the FISO 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.

Members first discussed the actions of the Arcus pilot. Having just launched and recently separated from the tug, they had been establishing their climb and had spotted the SR22 on a reciprocal track close to their east and had rocked their wings to show that they had seen the other aircraft. The Board noted that the Arcus had been well-equipped, with radio, transponder and electronic conspicuity equipment, so the Board felt it disappointing that there had been no alert registered by the Arcus or the SR22 as the aircraft had passed, and assessed the equipment carried to have been incompatible (**CF3**). The Arcus pilot had called Hawarden to check their knowledge of the passing SR22 but noted that the SR22 pilot had in fact been working with London Information. The Board agreed that the Arcus pilot had gained no situational awareness of the presence of the SR22 (**CF2**). The Arcus pilot opined that had the SR22 pilot been in contact with Hawarden they might well have received Traffic Information on the Arcus because it had been transponding. Members accepted that notion, but recalled that under a Basic Service there is no requirement for the FISO to monitor the flight (**CF1**).

Turning to the SR22 pilot, members noted that they had not seen the Arcus (**CF4**) but accepted that they had been aware of the gliding site and had planned to allow additional vertical separation, aiming to pass the airfield above the indicated 3200ft winch-launch limit but wondered if the pilot had registered it as the height to which gliders may be launched by tug or winch, had been unaware that gliding in such areas can extend to many thousands of feet AAL and suggested that lateral separation was as important as vertical when planning to avoid active glider sites. The Board acknowledged that the pilot had chosen to be supported by a Basic Service from London Information and suggested that the pilot might have considered alternatives for that area, such as a LARS or perhaps even a Traffic Service from Hawarden (had the Hawarden controller had the capacity to provide such a service). The SR22 had been equally well-equipped with radio, transponder and electronic conspicuity but had also had no alert from the Arcus and, with the aircraft on different frequencies, it had meant that the SR22 pilot had only had generic situational awareness of gliding activity in the area (**CF2**).

When determining the risk of the Airprox, the Board considered the reports from both pilots together with that of the FISO. They noted that the Arcus pilot had visually acquired the SR22 and judged it to be close enough to concern them (**CF5**) but that avoiding action had not been required and that the SR22 pilot had been aware of the gliding site and had been in receipt of a Basic Service, albeit from London Information rather than perhaps a closer provider or perhaps even a LARS from those available in the area. Members agreed that, although safety had been degraded, there had been no risk of collision; Risk Category C.

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

### Contributory Factors:

	2023239			
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	• 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
5	Human Factors	• Perception of Visual Information	<del>Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement</del>	Pilot was concerned by the proximity of the other aircraft

Degree of Risk: C.

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:

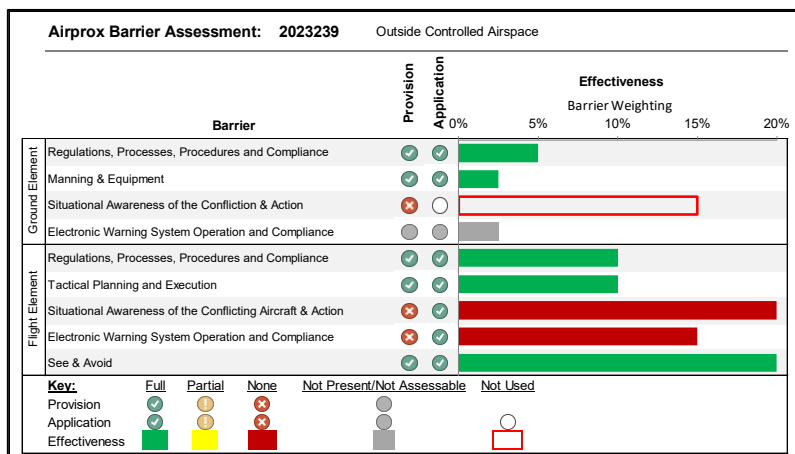
**Ground Elements:**

**Situational Awareness of the Confliction and Action** were assessed as **not used** because under a Basic Service, there is no requirement for the FISO to monitor the flight.

**Flight Elements:**

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the Arcus pilot had no situational awareness of the presence of the SR22, and the SR22 pilot had only generic situational awareness of glider activity in the area.

**Electronic Warning System Operation and Compliance** were assessed as **ineffective** because the conspicuity equipment carried by each aircraft was incompatible with that carried by the other.



<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](#).