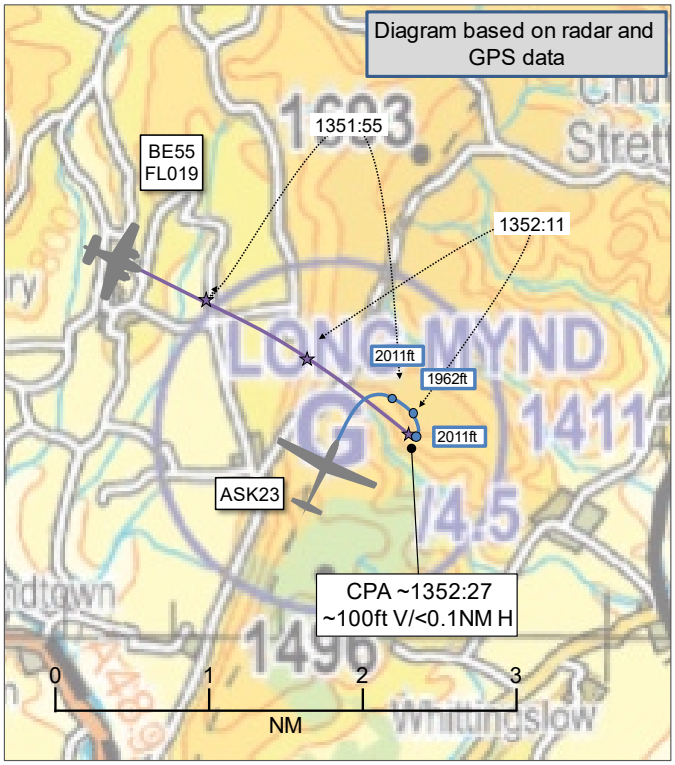
AIRPROX REPORT No 2025101

Date: 17 May 2025 Time: 1352Z Position: 5231N 00252W Location: Long Mynd

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASK23	BE55
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider	N/A	London Information
Altitude/FL	2011ft (1013hPa)	FL019
Transponder	Not fitted	A, C, S
Reported		
Colours	White	White
Lighting	None	
Conditions	VMC	VMC
Visibility	>10km	5-10km
Altitude/FL	7-800ft	NK
Altimeter	QFE	NK
Heading	Southerly	134°
Speed	NK	160kt
ACAS/TAS	FLARM	SkyEcho
Alert	None	None
Separation at CPA		
Reported	100ft V/100ft H	300ft V/1000m H
Recorded	~100ft V/<0.1NM H	



THE ASK23 PILOT reports that they were flying south, ½ mile to the east of Long Mynd airfield, on the downwind leg of the circuit, at approximately 700-800ft above the airfield when, during their lookout cycle, they looked to the west and spotted the Baron pass beneath them at speed. It all happened in about 3sec of elapsed time with no time to take avoiding action.

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

THE BE55 PILOT reports that, on their return flight, their [EWS] lost power and as such their iPad also lost its position reference. While trying to re-establish the [EWS], they kept a look-out, however, whilst doing this, found themself over the Long Mynd gliding site. They increased their lookout and saw a glider on their left, above them, approximately 1km away. They did not believe this was an Airprox as adequate separation was maintained at all times. They further augmented separation by turning away from the glider, but this was not necessary to maintain adequate separation.

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

THE LONDON INFORMATION FISO reports that they were working [the BE55] when a glider pilot from Long Mynd had apparently reported they had an Airprox with it. Nothing was reported on the frequency so they were unaware of the Airprox.

Factual Background

The weather at Birmingham Airport was recorded as follows:

```
METAR EGBB 171350Z VRB04KT 9999 SCT028 14/06 Q1024=
```

Analysis and Investigation

NATS Investigation

[ASK23 C/S] was operating in the vicinity of Long Mynd gliding site. The [pilot of the] Beech Baron BE55 was receiving a Basic Service from London Flight Information Service (LFIS).

The Airprox report from the ASK23 pilot stated that the confliction occurred *'½ mile to the east of Long Mynd airfield on my downwind leg of my circuit at 2pprox. 700 to 800 feet above the airfield when, during my lookout cycle, I looked to the west and spotted the Baron pass beneath me at speed. It happened in about 3 seconds of elapsed time*.'

Figures 1 and 2 display the location of the confliction and approximate track of [the BE55]. The ASK23 was not displayed on NODE Radar.

The VFR Chart (Figure 1) displayed Long Mynd elevation as 1411ft AMSL with associated glider winch activity up to altitude 4500ft. There was no primary or secondary contact on radar representing the glider, therefore, based on the pilot report of an estimated height of 700ft, it was calculated, using the RPS (1019hPa) at the time, that [the ASK23] was at an estimated altitude of 2111ft. [The BE55] Mode-C displayed FL020 (converting to 2157ft using 1019hPa) at the approximate time of the confliction.

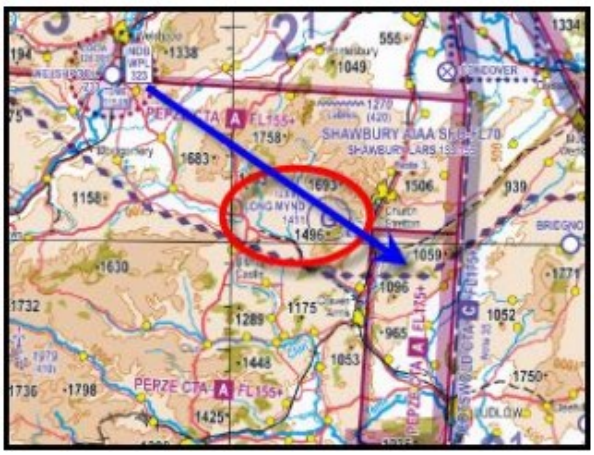


Figure 1

Figure 2

It was therefore estimated that the Closest Point of Approach occurred at approximately 1351 (all times UTC) and was, estimated from the pilot of the glider's report and the BE55's indicated FL, as less than 100ft. Lateral distance was not possible to establish. The glider pilot's Airprox report stipulated that the BE55 was '*Approx 100ft below me'* with a minimum horizontal separation of '*Approx 100ft*', and further stated they took no form of avoiding action.

The BE55 was previously maintaining FL021, however had descended to FL020 whilst approaching Long Mynd. NODE radar displayed a minor lateral change to the track of the BE55 at 1351:54 (Figure 2/Figure 3). The pilot of the BE55 did not report a confliction on the London FIS frequency.

Figure 3

The Airprox occurred when the pilot of the BE55 tracked within the vicinity of Long Mynd gliding site, and came into confliction with a glider, operating ½ mile east of Long Mynd. It was estimated that the Closest Point of Approach occurred at approximately 1351 and was estimated from the glider pilot's report, and available radar information, as less than 100ft [vertically]. Lateral distance was not possible to establish.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the BE55 could be seen indicating FL019; the ASK23 could not be seen on the radar. However, the ASK23 pilot provided a GPS log file, from which the diagram at the top of the report could be compiled. The glider was flying at approximately 2011ft (SPS) when the BE55 transited past at FL019.

The ASK23 and BE55 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] 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.[2]

Comments

AOPA

In the pre-flight planning stage, it is advisable to look at enroute threats and obstructions so that, when the unexpected occurs, there is a plan available. Obtaining the best radar service possible can also assist with obtaining information about threats that occur in-flight, such as other aircraft and routeing close to active gliding sites.

BGA

UK glider launch sites are listed in UK AIP ENR 5.5 and labelled on the CAA VFR charts with a "G" symbol, as shown in the chart segment in Part A. A greater density of gliders may be expected nearby at any time during daylight hours, and at any altitude up to cloudbase. The maximum winch launch altitude permitted at the Long Mynd is 3000ft AAL (4411ft AMSL), again as listed in the AIP and marked on VFR charts.

In this incident the ASK23 had recently been winch-launched in a northerly direction from the gliding site on top of the Long Mynd ridge, with the launch commencing at 1350:55 (1min 32sec before CPA) and the glider releasing the high-tensile-strength steel winch cable at 1351:22 (1min 5sec

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

before CPA), at an altitude of 2285ft AMSL (919ft above its take-off). The glider then climbed a further 70ft as it began a 180° right turn to join right-hand downwind to land on the same runway from which it took off. CPA occurred during that downwind leg.

The difficulties of sighting another aircraft approaching head-on with no relative motion are well-known. Many pilots now opt to permanently switch on forward-pointing high-intensity landing lights, even in full daylight, to aid visual conspicuity in this direction.

The carry-on CAP 1391 ADS-B-based TAS on board the BE55 can also be configured to receive transmissions from the EC equipment carried by almost all gliders (including this ASK23) and display nearby glider traffic via participating EFB applications. Using this option would provide a useful additional safety barrier in airspace where gliders operate.

Almost all glider operators in the UK (including the ASK23's operator) have voluntarily fitted proprietary EC equipment that warns of impending conflicts with other similarly-equipped aircraft. Although this system has proved effective at mitigating the risk of Airprox with other gliders, basic installations do not detect aircraft equipped only with transponders or ADS-B Out, as in this case. However, recent versions of this EC equipment can optionally add a 1090MHz receiver subsystem, and thereby warn of conflicts with transponder and ADS-B Out-equipped aircraft. Upgrading glider EC hardware to add such a 1090MHz receiver subsystem could provide a useful additional safety barrier.

Summary

An Airprox was reported when an ASK23 and a BE55 flew into proximity at Long Mynd at 1352Z on Saturday 17th May 2025. The ASK23 pilot was operating under VFR in VMC not in receipt of an ATS, and the BE55 pilot was operating under VFR in VMC 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, GPS track data, 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.

The Board first discussed the actions of the ASK23 pilot. They had recently been winch-launched into the circuit and had turned onto a downwind track. They, rightly, had not been expecting to see another aircraft in their vicinity at circuit height and had not received any prior warning that the BE55 had been where it was (**CF6**). Although the aircraft had been fitted with EC equipment, this had not been able to detect the transponder on the BE55 and, even if the EC equipment on the BE55 had been operational, it could not have detected that either (**CF7**). The ASK23 pilot reported that they had seen the BE55 late, with no time to take avoiding action, and the Board agreed that this had effectively constituted a non-sighting (**CF8**).

Turning to the actions of the BE55 pilot, the Board first discussed the pre-fight planning undertaken by the pilot. They noted that, even with the loss of the navigation equipment, the aircraft had been flying on a straight-line track directly towards Long Mynd gliding site for some time before the event. Members wondered whether the pilot had planned to avoid the site as they had approached and that the unserviceability had therefore caught them out, but opined that this type of planning was fraught with danger, the slightest distraction could result in unexpectedly flying through the site, as had happened here (**CF5**). Furthermore, members noted that the link between the EC equipment and the navigational software was notoriously fragile, and advised that pilots should always have a back-up plan for navigation, ideally, another device or a paper chart. Whatever the reason behind the route selection, the Board agreed that the BE55 had ended up overflying the glider site (**CF3**), at circuit height, and into proximity with the glider flying downwind (**CF2**, **CF4**). Gliding members cautioned that not only was there a risk of encountering gliders when transiting in the vicinity of a gliding site, but also that the risk from the winch cable was a very real one, and the winch launch altitude at Long Mynd was up to 4500ft.

Members further noted that the BE55 pilot had been receiving a Basic Service from London Information, which was a non-surveillance service and, therefore, they had not received any situational awareness about the proximity of the glider site, or the ASK23 (**CF6**). Members also noted that there was a lack of LARS availability in the area at the weekend, but thought that a radar service from RAF Shawbury during the week could be a better option. Although the pilot reported being visual with the ASK23, because the BE55 pilot reported having been 1000m away, members thought it likely that the pilot had been visual with a different glider as it was known that other gliders had been airborne at the time. Consequently, the Board agreed that the BE55 pilot had not sighted the ASK23 (**CF8**).

The Board briefly discussed the role of the London Information FISO; the BE55 pilot had been receiving a Basic Service from them, but the FISO would have been operating without the use of surveillance equipment and, under the conditions of a Basic Service, had not been required to monitor the aircraft (**CF1**).

When determining the risk of the Airprox, the Board considered the radar replay, GPS data and the reports from both pilots. Although the BE55 pilot had considered the separation adequate, members agreed that they had probably been visual with another aircraft, and the ASK23 pilot described seeing the BE55 at a late stage. Members therefore agreed that safety had been much reduced and that there had been a risk of collision (**CF9**) ; Risk Category B.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025101			
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			
	• Regulations, Processes, Procedures and Compliance			
2	Human Factors	• Use of policy/Procedures	Events involving the use of the relevant policy or procedures by flight crew	Regulations and/or procedures not complied with
	• Tactical Planning and Execution			
3	Human Factors	• Aircraft Navigation	An event involving navigation of the aircraft.	Flew through promulgated and active airspace, e.g. Glider Site
4	Human Factors	• Monitoring of Environment	Events involving flight crew not to appropriately monitoring the environment	Did not avoid/conform with the pattern of traffic already formed
5	Human Factors	• Pre-flight briefing and flight preparation	An event involving incorrect, poor or insufficient pre-flight briefing	
	• Situational Awareness of the Conflicting Aircraft and Action			
6	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			
7	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			
8	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			
9	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 Assessment[3]

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 London FISO was not required to monitor the flight of the BE55.

Flight Elements:

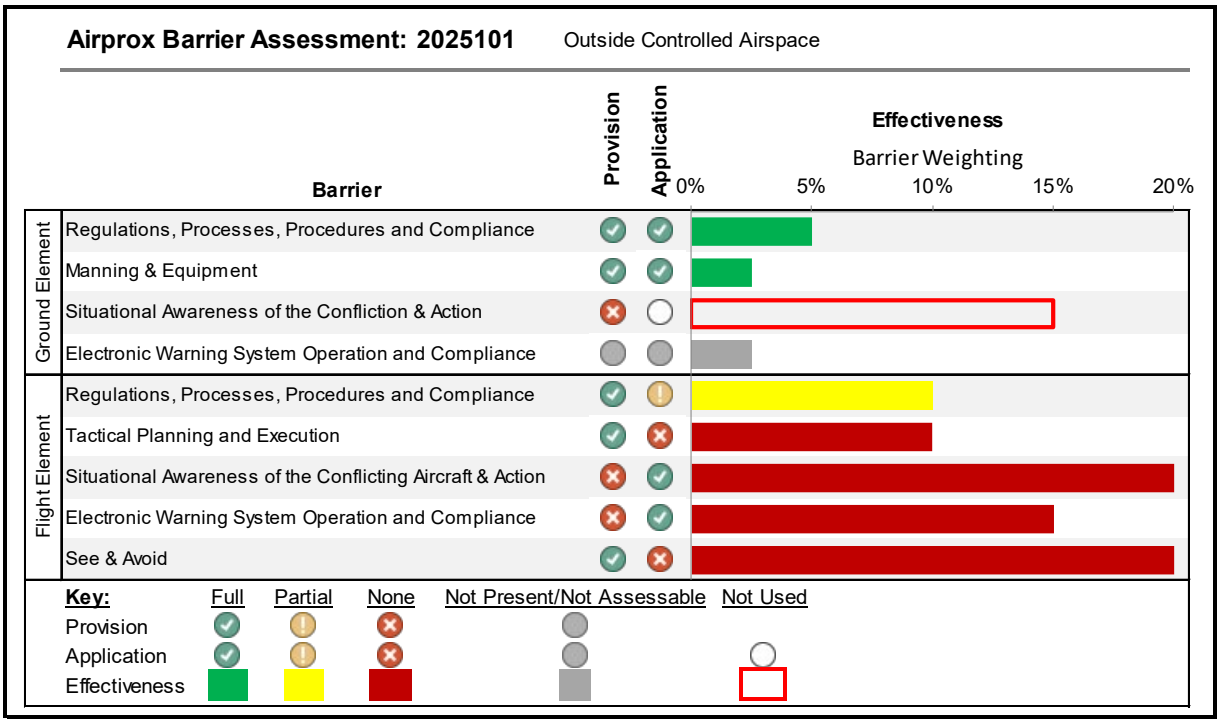
Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because the BE55 pilot had overflown the gliding site, at or around circuit height.

Tactical Planning and Execution was assessed as **ineffective** because the BE55 had not sufficiently briefed pre-flight in order to be aware of the Long Mynd gliding site, and subsequently had not remained clear of the glider in the circuit.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had received any situational awareness that the other aircraft had been in the vicinity, until they became visual.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the EWS on the glider could not have detected the BE55 and the EWS on the BE55 had been unserviceable at the time of the Airprox.

See and Avoid were assessed as **ineffective** because the glider pilot had not seen the BE55 until CPA and the BE55 pilot had probably been visual with a different glider.



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