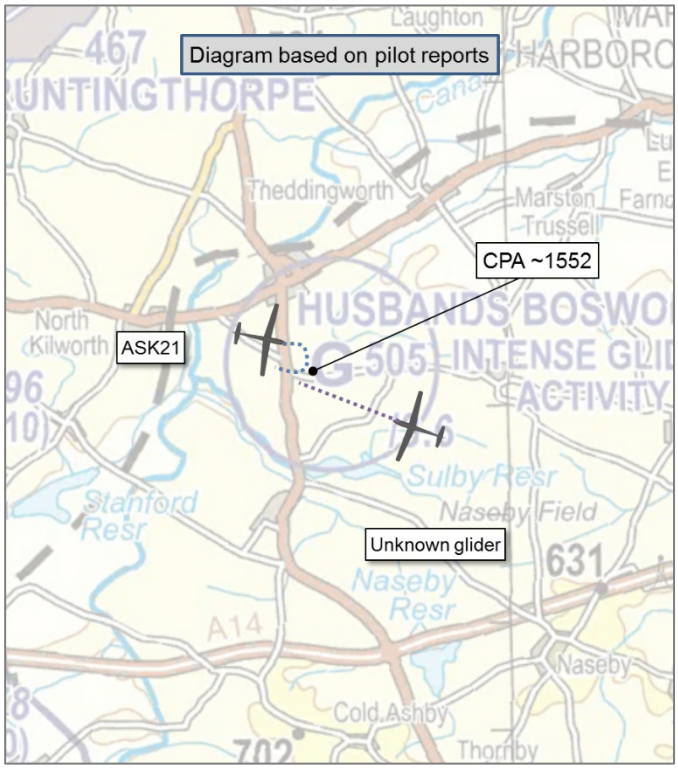
## AIRPROX REPORT No 2019064

Date: 13 Apr 2019 Time: 1552Z Position: 5226N 00103W Location: 1nm NW Husband Bosworth

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|---|---|---|
| Aircraft | ASK21 | Glider |
| Operator | Civ Gld | Civ Gld |
| Airspace | London FIR | London FIR |
| Class | G | G |
| Rules | VFR | |
| Service | Listening Out | |
| Provider | Husbands Bosworth | |
| Altitude/FL | | |
| Transponder | Not Fitted | |
| **Reported** | | |
| Colours | White | |
| Lighting | None | |
| Conditions | VMC | |
| Visibility | 10km | |
| Altitude/FL | 4700ft | |
| Altimeter | NK | |
| Heading | 290° | |
| Speed | 60kt | |
| ACAS/TAS | FLARM | |
| Alert | None | |
| **Separation** | | |
| Reported | 30ft V/0m H | NK |
| Recorded | NK | |




**THE ASK21 PILOT** reports that he was carrying out a check flight with another pilot who hadn't flown for a while. There were plenty of strong thermals and, after getting airborne, they climbed to 5200ft. About 25mins later they were circling to the right in a thermal at 4700ft, when a single-seat glider suddenly appeared above them flying at high speed and moving from SE to NW. It was about 30ft directly above them when they first saw it, descended in front of them and dived away. Neither pilot saw it coming despite keeping a good look-out and there were no FLARM indications. It had dark coloured registration letters under the port wing, but was too fast for them to see the registration. After landing they spoke to other glider pilots, but no-one was aware of the incident.

He assessed the risk of collision as 'High'.

**THE GLIDER PILOT** could not be identified.

### Factual Background

The weather at East Midlands was recorded as follows:

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METAR EGNX 131520Z 09012KT 9999 FEW030 08/M04 Q1027=
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### Analysis and Investigation

#### UKAB Secretariat

Neither glider was visible on radar recordings and so a detailed analysis of the incident was not possible.

The ASK21 and Glider 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 ASK21 pilot had right of way and the unknown glider pilot was required to keep out of the way of the other aircraft by altering course to the right or left[2].

## Comments

### BGA

It is very unfortunate that the second glider could not be identified. This incident serves to re-emphasise the importance of lookout even when electronic conspicuity systems are fitted, and the likelihood of encountering gliders when near cloudbase overhead a gliding site.

## Summary

An Airprox was reported when an ASK21 and a glider flew into proximity in the vicinity of Husbands Bosworth at around 1552hrs on Saturday 13th April 2019. The ASK21 pilot was operating under VFR in VMC, not in receipt of an ATS, the other glider pilot could not be traced.

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

Information available consisted of a report from the ASK21 pilot. 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 looked at the actions of the ASK21 pilot. He was thermaling at around 4700ft and was operating below the cloud base when he first saw the glider as it crossed from behind and descended in front of him. He was not aware of the glider before it appeared before him (**CF2**) and his FLARM did not alert (**CF3**). Without any prior knowledge of the other glider, and with the glider approaching from behind, members agreed that this was effectively a non-sighting at CPA (**CF4**) because he was unable to take any avoiding action to materially affect the separation.

Turning to the pilot of the unknown glider, without his report the Board did not know whether he had seen the ASK21 and thought the separation was sufficient, or whether he had not seen it at all. Noting that the FLARM in the ASK21 did not alert, they surmised that either he didn't have FLARM fitted, or it was unserviceable (**CF3**). Members familiar with FLARM informed the Board that it needs to be updated annually, and that without such updates it becomes ineffective, no longer compatible with updated versions. The Board thought that this was worth highlighting to users of FLARM to ensure the software on their equipment was up-to-date to ensure its continued relevance. The ASK21 pilot was listening out on the Husbands Bosworth frequency, and so the Board thought that the unknown glider pilot either wasn't listening on the frequency, or had missed an opportunity to articulate his own intentions to the benefit of those operating at that location (**CF1**).

Finally, the Board assessed the risk. Noting that glider pilots are generally used to seeing other gliders in close proximity during thermalling, members thought that it was likely that the estimation of separation by the ASK21 was reasonably accurate given the ASK21 pilot's concern. Despite not knowing whether the other glider pilot had been visual with the ASK21, it was clear that the ASK21 pilot had not had the opportunity to take any avoiding action and the Board therefore assessed that there had been a serious risk of collision where providence had likely played a major part; risk Category A.

## PART C: ASSESSMENT OF CAUSE AND RISK

Contributory Factors:

[1] SERA.3205 Proximity.
[2] SERA.3210 Right-of-way (c)(3)(i) Overtaking.

| | 2019064-Barriers. | | |
|---|---|---|---|
| CF | **Factor** | **Description** | **Amplification** |
| | **Flight Elements** | | |
| | **• Tactical Planning and Execution** | | |
| 1 | Human Factors | • Accuracy of Communication | Ineffective communication of intentions |
| | **• Situational Awareness of the Conflicting Aircraft and Action** | | |
| 2 | Contextual | • Situational Awareness and Sensory Events | Pilot had no, only generic, or late Situational Awareness |
| | **• Electronic Warning System Operation and Compliance** | | |
| 3 | Technical | • ACAS/TCAS System Failure | CWS did not alert as expected |
| | **• See and Avoid** | | |
| 4 | Human Factors | • Monitoring of Other Aircraft | Non-sighting or effectively a non-sighting by one or both pilots |

Degree of Risk: A.

Safety Barrier Assessment[3]

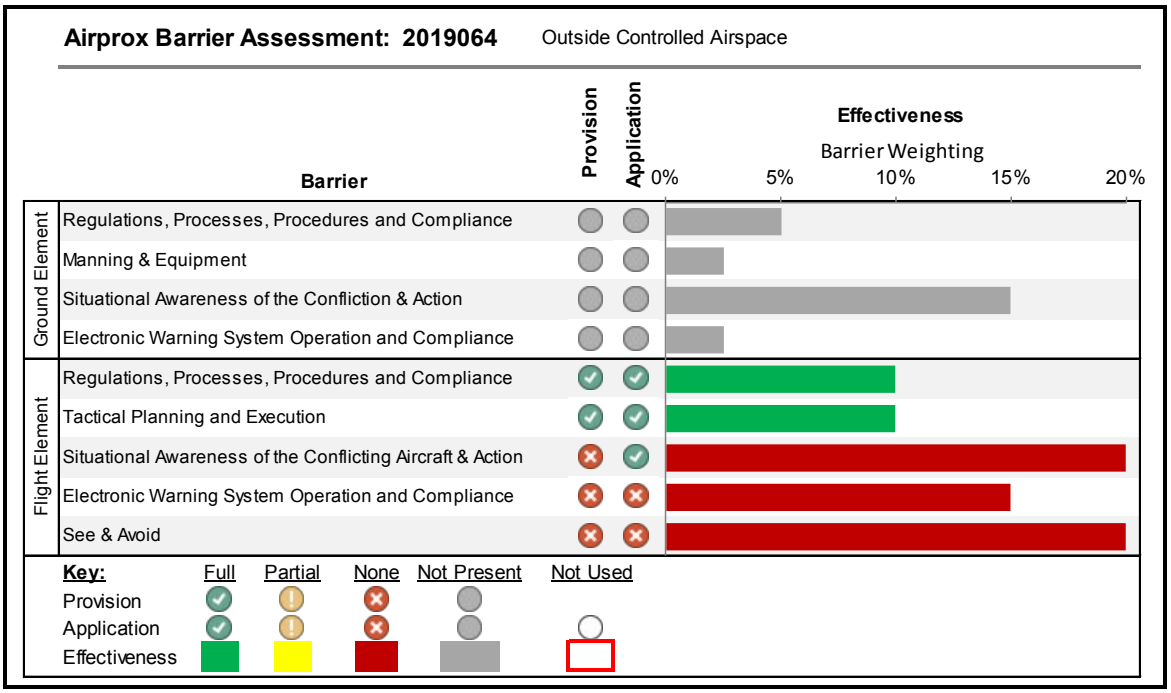
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

**Flight Elements:**

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the ASK21 pilot had no prior warning of the glider.

**Electronic Warning System Operation and Compliance** were assessed as **ineffective** because The FLARM in the ASK21 did not detect the other glider.

**See and Avoid** were assessed as **ineffective** because the ASK21 pilot was not able to take any avoiding action due to not sighting the unknown glider until after CPA.




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