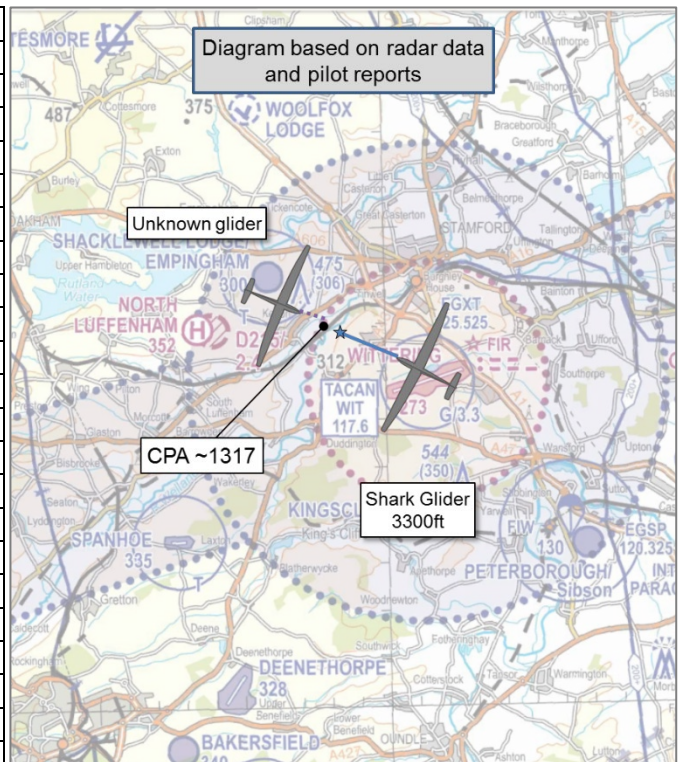


**AIRPROX REPORT No 2019100**

Date: 13 May 2019 Time: 1314Z Position: 5237N 00028W Location: Wittering

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	HPH Shark	Glider
Operator	Civ Gld	Civ Gld
Airspace	London FIR	
Class	G	G
Rules	VFR	
Service	Basic	
Provider	Wittering	
Altitude/FL	3300ft	
Transponder	A, C, S	
<b>Reported</b>		<b>Not Reported</b>
Colours	White, Orange	
Lighting	Nil	
Conditions	VMC	
Visibility	40km	
Altitude/FL	3600ft	
Altimeter	QNH (1040hPa)	
Heading	300°	
Speed	65kt	
ACAS/TAS	FLARM	
Alert	None	
<b>Separation</b>		
Reported	100ft V/10m H	
Recorded	NK	



**THE SHARK PILOT** reports that he was transiting through and above the Wittering MATZ. He was aware that there was other traffic in the Wittering airspace, was actively looking for it, and was told that they were visual with him; one of the reported single-engine piston aircraft was passing on his left and he became visual with it and reported as such to the controller. Moments later, he saw a glider about 30m above and 5-10m to his left pass above him. It had passed before he had time to react. He did not get a FLARM warning from this glider, although he knew his FLARM was serviceable. The other glider was not in contact with Wittering ATC.

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

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

**THE WITTERING CONTROLLER** reports that he has no recollection of the incident and that the Airprox wasn't reported on the frequency at the time.

**Factual Background**

The weather at Wittering was recorded as follows:

METAR EGXT 131250Z 08005KT 9999 FEW040 16/06 Q1039 BLU=

## Analysis and Investigation

### Military ATM

The HPH304 Shark was conducting a local sortie and had contacted Wittering Zone with a request to transit through the Wittering overhead at 3000ft. The Shark pilot was placed under a Basic Service and was assigned a Wittering Squawk.

Analysis of the radar replay conducted by the Radar Analysis Cell could not see the unknown glider and was therefore inconclusive. Analysis of the RT transcript provided by RAF Wittering indicated that the Shark pilot was passed Traffic Information on various aircraft on 5 separate occasions with the final piece of Traffic Information [on a different aircraft to the unknown glider] being passed 20secs prior to the Airprox occurring. Shortly after this final Traffic Information on the other aircraft, the Shark pilot reported the unknown glider to Wittering Zone. The report submitted by the Shark pilot stated that the unknown glider was within 30m vertically and 5-10m laterally at CPA.

A lack of useful radar replay makes analysis difficult. However, because the Shark pilot was receiving a Basic Service and had been passed Traffic Information on other conflicting traffic, it is reasonable to assume that had the unknown glider been displaying on radar then Traffic Information would have been passed on it to the Shark pilot. Given this, the actions of the Wittering Zone Controller were considered to have been appropriate.

### UKAB Secretariat

Figure 1 is taken from the NATS area radars and is not the radar that the Wittering controller had access to. The HPH Shark can be seen squawking 3750, passing to the south-west of Wittering.

At 1319:34 the Shark pilot reports seeing another glider at the same altitude, but does not report an Airprox. The unknown glider cannot be seen on the NATS radars.

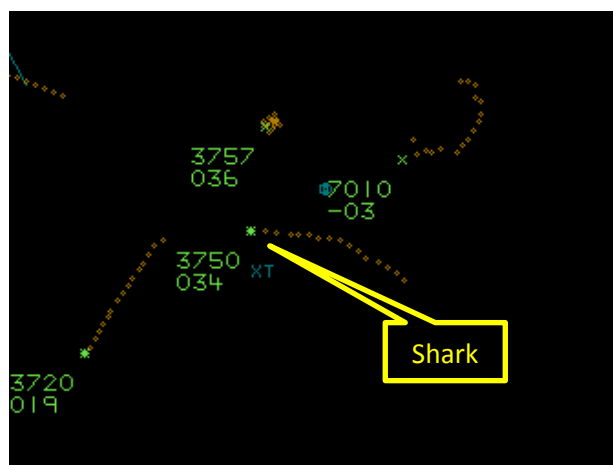


Figure 1: 1316:08 Shark Squawking 3750

The Shark and untraced 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<sup>1</sup>.

## Comments

### BGA

We commend the Shark pilot for taking an ATS for his transit over Wittering. The BGA actively encourages pilots to contact ATC when they are passing close to airfields. It is unfortunate that this was not done by the unknown glider pilot.

<sup>1</sup> SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

## Summary

An Airprox was reported when a Shark and an untraced glider flew into proximity in the vicinity of Wittering at 1314 on Monday 13<sup>th</sup> May 2019. The Shark pilot was operating under VFR in VMC, and in receipt of a Basic Service from Wittering.

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

Information available consisted of reports from the Shark pilot, transcripts of the relevant RT frequencies, radar photographs/video recordings, a report from the air traffic controller involved and reports from the appropriate ATC 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.

The Board first discussed the actions of the Shark pilot and commended him for calling Wittering to inform them of his intentions. In doing so he received Traffic Information on a number of aircraft in the area but it was unfortunate that the glider involved in the Airprox was not known to the Wittering controller and therefore could not be called. Accordingly, without any Traffic Information from the controller, and with no alert or information from FLARM, the Shark pilot had no situational awareness about the other glider (**CF4**). By the time the Shark pilot had seen the other glider it passed just above, before the Shark pilot had time to react, making it effectively a non-sighting (**CF6**). Although the Shark pilot mentioned that he had just seen a glider on the radio, he did not state that he intended to report an Airprox, which meant that by the time the controller found out about the Airprox, he had forgotten much of the detail. The Board wished to highlight to pilots the benefits of reporting the Airprox on the frequency at the time of the incident because that alerts controllers and other pilots who might have been involved to note their actions and save any pertinent material. If a call is not feasible due to a busy frequency or high workload, then a telephone call to the ATC unit once on the ground will also ensure that the Airprox process is promptly initiated.

Turning to the unknown glider pilot, the Board thought that it was unfortunate that despite the BGA's efforts in educating glider pilots to call ATC units when transiting nearby, this pilot had chosen not to, despite operating just above the ATZ (**CF3**). Members commented that even if they did not require an ATS themselves, a call to ATC could provide important situational awareness if not to the glider pilot themselves, then to other operators in the area. That being said, the Board acknowledged that the glider may not have been fitted with a radio, and that many glider pilots did not hold a radio licence. Noting that the FLARM in the Shark did not alert to the unknown glider, members wondered whether the unknown glider either did not have FLARM itself or, if it did, then whether it was fully updated. Gliding members commented that, in the latter respect, if FLARM units are not updated periodically then they can cease to fully interact with other, updated, FLARM units (**CF5**). The BGA member reported that they estimated that 80-90% of gliders flying cross-country were fitted with FLARM, but that the message to ensure they were fully updated might not be common knowledge; this was being actively promoted by the BGA. Without any information from ATC or from FLARM, the Board thought it likely that the unknown glider pilot did not have any situational awareness on the Shark (**CF4**) and, from the description by the Shark pilot, it was highly probable that they hadn't seen the Shark (**CF6**).

Finally, the Board looked at the actions of the controller. He was providing a Basic Service to the Shark pilot but had given Traffic Information on numerous aircraft in the vicinity. The Board thought that had he known about it, he probably would have provided Traffic Information on the unknown glider. However, it was not on frequency and was probably not displaying on the radar so the controller had no situational awareness of it and could not detect the conflict (**CF1**, **CF2**). Some members thought that when the Shark pilot told the controller that he had come close to another glider the controller should have asked more questions to establish whether or not he intended to report an Airprox. Had he done so, this may have resulted in the Board receiving a more meaningful ATC report on the incident.

In assessing the risk, some members opined that it was possible that the other glider pilot may have seen the Shark and simply been content with the separation. However, whilst acknowledging that glider pilots often fly in close proximity to other gliders whilst thermaling, others felt that the separation was

such that it was unlikely that the unknown glider pilot would have allowed the two aircraft to pass so close when on reciprocal headings, without knowing the intentions of the Shark pilot. For his part, the Shark pilot had not seen the other glider in time to take any avoiding action and therefore members agreed that there had been a serious risk of collision where providence had played a major part; risk Category A.

## **PART C: ASSESSMENT OF CAUSE AND RISK**

### Contributory Factors:

2019100			
CF	Factor	Description	Amplification
<b>Ground Elements</b>			
<b>• Situational Awareness and Action</b>			
1	Contextual	• Situational Awareness and Sensory Events	Only generic, late or no Situational Awareness
2	Human Factors	• Conflict Detection - Not Detected	
<b>Flight Elements</b>			
<b>• Tactical Planning and Execution</b>			
3	Human Factors	• Communications by Flight Crew with ANS	Pilot did not communicate with appropriate controlling authority
<b>• Situational Awareness of the Conflicting Aircraft and Action</b>			
4	Contextual	• Situational Awareness and Sensory Events	Pilot had no, only generic, or late Situational Awareness
<b>• Electronic Warning System Operation and Compliance</b>			
5		• Any other event	<b>No FLARM alert; Unk glider EC equipage unknown</b>
<b>• See and Avoid</b>			
6	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<sup>2</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 Conflicting Aircraft and Action** were assessed as **ineffective** because the controller had no situational awareness about the conflicting glider.

#### **Flight Elements:**

**Tactical Planning and Execution** was assessed as **partially effective** because the unknown glider pilot did not contact Wittering ATC despite flying close to the upper limit of their MATZ.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the Shark pilot had no knowledge about the other glider and the unknown glider pilot was unlikely to have any knowledge on the Shark.

<sup>2</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

**Electronic Warning System Operation and Compliance** were assessed as **ineffective** because although the Shark was fitted with FLARM, it did not alert.

**See and Avoid** were assessed as **ineffective** because the Shark pilot had no time to take avoiding action after he had seen the other glider.

