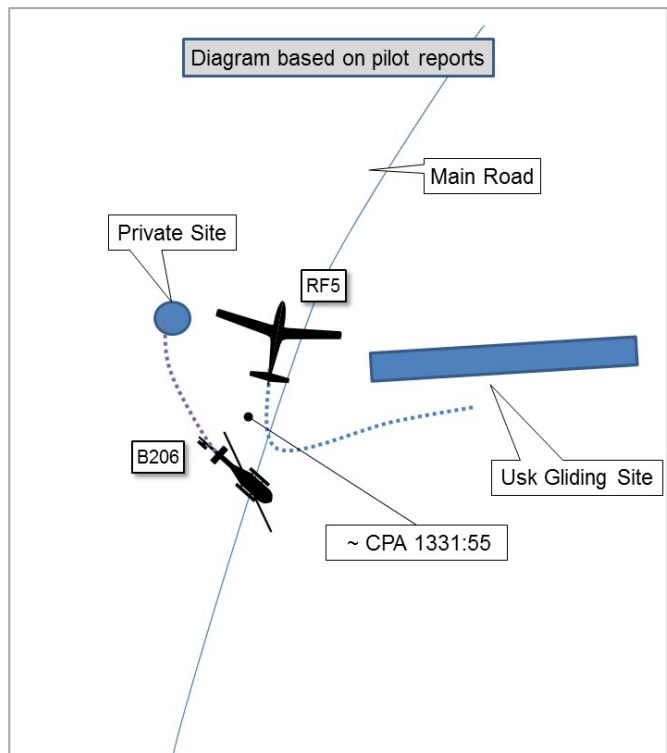


**AIRPROX REPORT No 2016218**

Date: 23 Sep 2016 Time: 1331Z Position: 5143N 00251W Location: USK Glider Site

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	RF5	B206
Operator	Civ Pte	Civ Pte
Airspace	Usk Glider Site	Usk Glider Site
Class	G	G
Rules	VFR	Not reported
Service	None	
Provider	Usk Glider Site	
Altitude/FL	NK	NK
Transponder	N/A	
<b>Reported</b>		
Colours	White, Orange	Not reported
Lighting	Strobe	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	600ft	
Altimeter	QFE (1020hPa)	
Heading	215°	
Speed	55kt	
ACAS/TAS	Not fitted	
Alert	N/A	
<b>Separation</b>		
Reported	0ft V/200m H	250ft V/0.25nm H
Recorded	NK	



**THE RF5 PILOT** reports that he was on a go-round when he saw a helicopter travelling south west across his path, directly in front of his climb-out at about 500-600ft. He took an avoiding turn to the right and completed a circuit as intended. The helicopter was very near where gliders typically operate, near the high key and winch release areas, although there were no glider launches at the time. He did not know if the helicopter saw him.



Figure 1: RF5 Pilot's Submitted Diagram

He assessed the risk of collision as 'High'.

**THE B206 PILOT** chose not to file a report but from an email he stated that he was visiting a friend's private site, whom he regularly visits, and, knowing there is Usk glider field beside his friend's property, he gave it a wide berth, with increased lookout. On many previous occasions he has phoned and tried to use the local Usk frequency to establish contact, but he reported that they are unresponsive or use non-standard R/T when they do respond. As a result, if they don't answer the phone (which they didn't prior to his visit), he has given up on their radio and tends to stay with Bristol. On the day of the Airprox he made an approach to the northern edge of the Usk site, taking into account the wind and surmising that any departures would be to the west. He contacted the owner of the private site he was visiting and realised he wasn't home, he remained in a hover over his grounds whilst in contact. He then decided to return to base via the Severn bridge crossing. On climbing out, he saw a glider to the east at a similar altitude. At this stage he continued to climb and

accelerate ahead of the glider. He recalls the glider was flying straight and level as he climbed. He continued to ascend and accelerate until the glider had disappeared below and behind him and then he turned gently south to return home. He commented that in possibly 8-10 visits in the last 12 months he has never been able to communicate on the radio with the pilots in the Usk zone. He also commented that he has been somewhat unsettled by an official approach to this matter; he understands that gliders take priority over his helicopter under air law, but opined that they were being especially over sensitive to an event that would not have caused a 'bat of an eyelid' if it were 2 helicopters.

## Factual Background

The weather at Bristol was recorded as follows:

METAR EGGD 231320Z AUTO 18011KT 150V220 9999 FEW033 17/10 Q1024

## Analysis and Investigation

### UKAB Secretariat

The RF5 and B206 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>. 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<sup>2</sup>.

The private site that the B206 was routing to is within the marked area of the Usk gliding site. The B206 can be seen on radar recordings prior to the Airprox routing to the private site from the north. The B206 radar contact then fades, presumably whilst it is in the hover, and then is not seen again until after climbing out of the private site and after the reported Airprox. The B206 reappears on the radar recording passing 800ft in the climb and passing to the south of the Usk gliding site (Figure 2). The RF5 does not display on the radar recordings at all.

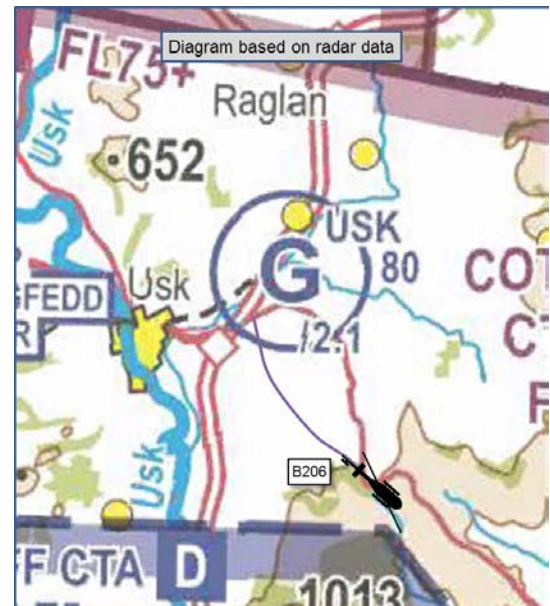


Figure 2: B206 Radar Data Diagram

## Comments

### BGA

There is always an increased likelihood of encountering tugs, gliders and motor gliders when operating close to a notified gliding site. All aircraft should operate with care and consideration for others that may be in the vicinity, and use whatever means are available to increase their own conspicuity.

## Summary

An Airprox was reported when a RF5 and a B206 flew into proximity at 1331 on Friday 23<sup>rd</sup> September 2016. Both pilots were operating under VFR in VMC, neither pilot in receipt of a Service.

<sup>1</sup> SERA.3205 Proximity.

<sup>2</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

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

Information available consisted of reports from the pilots of both aircraft and radar recordings.

The Board began their discussion by looking at the B206 pilot's reported difficulty in contacting Usk Glider site. Contrary to the B206 pilot's reported difficulties, their contact number had been phoned by a Board member in order to establish more information regarding this incident, and he had found it easy to get through to the glider operation. The gliding operator he spoke to said that he was not aware of a B206 regularly operating in and out of the specific private location mentioned, but that Usk Glider site frequently has mixed operations of helicopters and gliders with no problems in the past. He did highlight that although Usk Glider site normally operates at weekends, it is occasionally active during the week, and he opined that this may have been a factor in the B206 pilot perhaps not expecting to encounter a Glider on a Friday.

The Board then looked at the actions of the RF5 pilot. The gliding member informed them that two qualified pilots were onboard, one a very experienced instructor, and, notwithstanding the startle factor that can sometimes be present with a late sighting, they were both of the opinion that their reported separation was accurate. The Board noted that the RF5 pilot's reported diagram showed the aircraft to be well south of the runway as he was carrying out his go-around, and some members wondered if his being south of the notional centre-line had been a factor in the B206 pilot not sighting him earlier. That being said, although the RF5 pilot's report stated that he had turned right and carried out a normal circuit when he saw the B206, the Board were mindful that the circuit could be left or right hand and so those flying near to the site should be prepared for either direction.

The Board then considered the actions of the B206 pilot. Members agreed that the B206 pilot would have been better served in calling Usk Glider site on the Glider frequency as he operated nearby in order to announce his intentions. Even just a blind call could therefore have alerted the RF5 pilot to his presence. The Board agreed that the B206 pilot was fully aware of Usk Glider site, and that his routing was reasonable when departing the private site, especially given the fact that being in a single-engine aircraft, the B206 pilot would have wished to gain altitude as soon as possible. Notwithstanding, some members opined that a more southwesterly track would have been more advantageous in routing him away from the glider site in a more expeditious manner. Nevertheless, the Board noted that he had sighted the RF5, and had judged that his track and acceleration would keep him clear. That his estimate of separation was about double that of the glider pilots' served to highlight how perceptions of separation and risk can greatly vary, and hence the need to fly with consideration for the other pilot's potential concern rather than apply one's own comfort levels. Finally, members noted that the B206 pilot had been attempting to contact the owner of the private site whilst in the hover, presumably by radio rather than mobile phone, and wondered if this had distracted him from conducting a robust lookout before he departed the site.

The Board then looked at the safety barriers that were relevant to this Airprox and decided that the following were the key factors:

- **Flight Crew Pre-Flight Planning** was considered **partially effective** because the B206 pilot had not made contact with the Usk Glider club prior to his flight to the private site close to Usk Glider site.
- **Situational Awareness** was also assessed as being only **partially effective** because the B206 pilot was not monitoring the Glider frequency either to gain information on the Usk circuit traffic or inform them of his presence and intentions.

The Board then considered the cause and risk of the incident and members quickly agreed that both pilots had seen each other later than ideal, but had ultimately been able to carry out timely and effective actions to increase the separation of their aircraft; the incident was therefore assessed as a late sighting by both pilots. Turning to the risk, members agreed that although safety had been degraded there had been no risk of collision due to the actions of both pilots; accordingly, they assessed the risk as Category C.

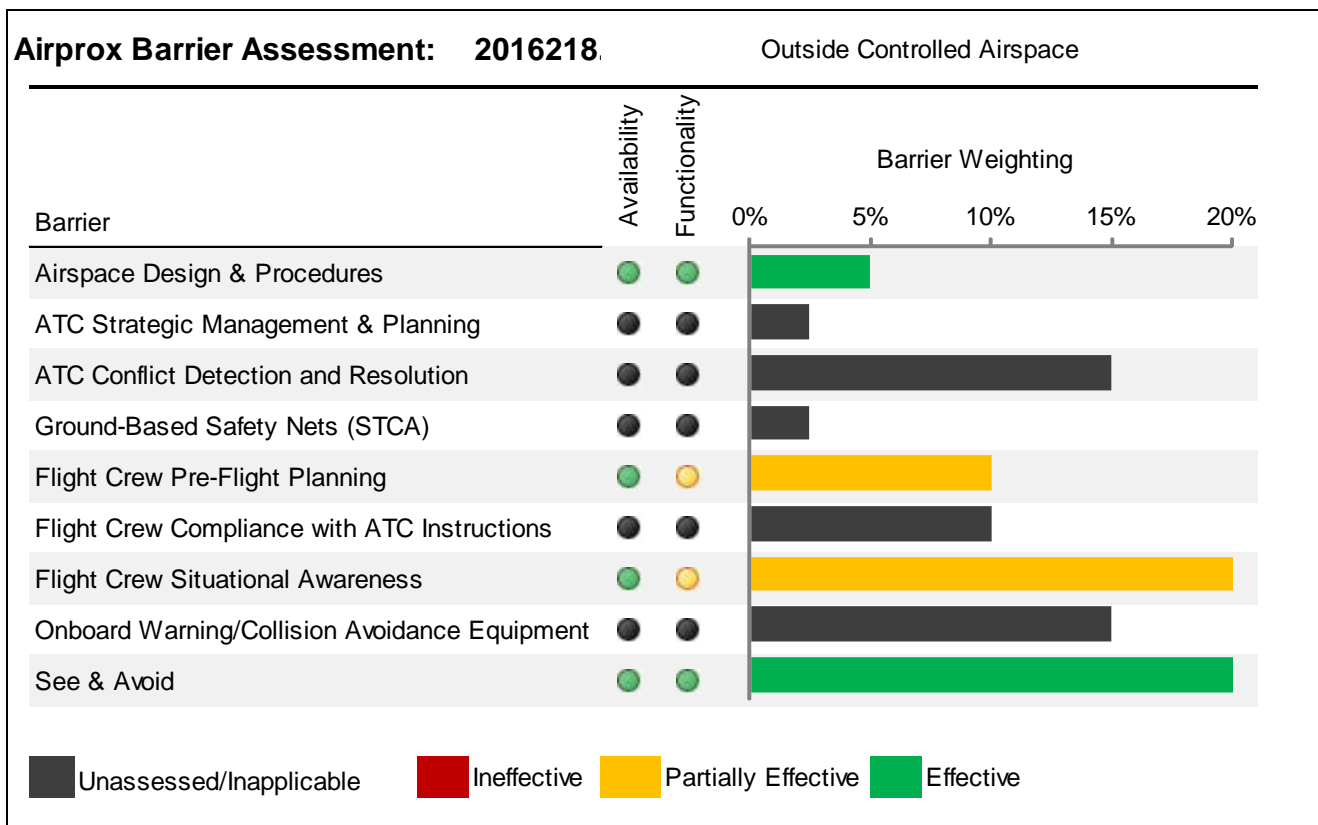
**PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: A late sighting by both pilots.

Degree of Risk: C.

**Barrier Assessment<sup>3</sup>:**

Modern safety management processes employ the concept of safety barriers that prevent contributory factors or human errors from developing into accidents. Based on work by EASA, CAA, MAA and UKAB, the following table depicts the barriers associated with preventing mid-air-collisions. The length of each bar represents the barrier's weighting or importance (out of a total of 100%) for the type of airspace in which the Airprox occurred (i.e. Controlled Airspace or Uncontrolled Airspace).<sup>4</sup> The colour of each bar represents the Board's assessment of the effectiveness of the associated barrier in this incident (either Fully Effective, Partially Effective, Ineffective, or Unassessable/Absent). The chart thus illustrates which barriers were effective and how important they were in contributing to collision avoidance in this incident.



<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](#)

<sup>4</sup> Barrier weighting is subjective and is based on the judgement of a subject matter expert panel of aviators and air traffic controllers who conducted a workshop for the UKAB and CAA on barrier weighting in each designation of airspace.