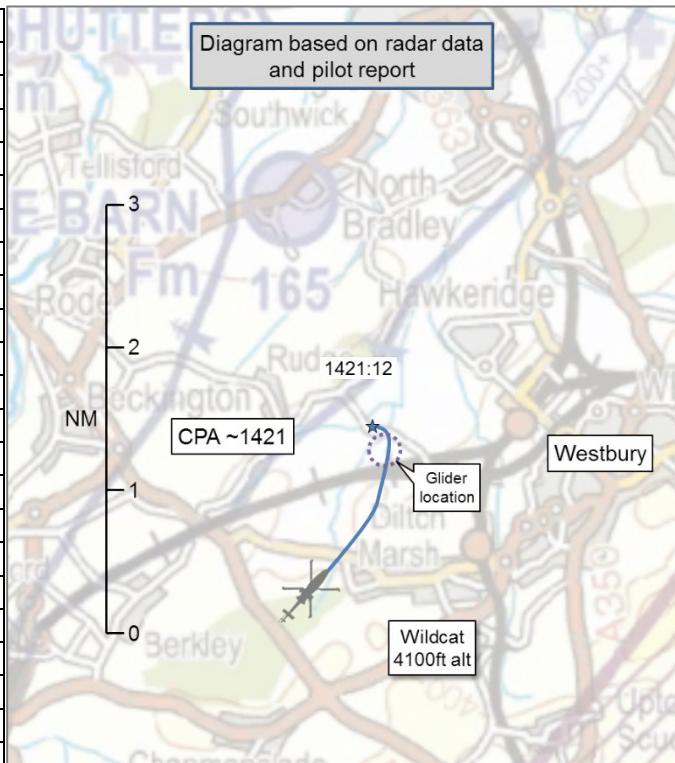


## AIRPROX REPORT No 2019083

Date: 30 Apr 2019 Time: 1421Z Position: 5116N 00213W Location: Westbury

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Wildcat	Glider
Operator	RN	Civ Gld
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	
Service	Traffic	
Provider	Yeovilton	
Altitude	4100ft	
Transponder	A, C, S	
<b>Reported</b>	Not reported	
Colours	Grey	
Lighting	Anti-col, nav	
Conditions	VMC	
Visibility	6km	
Altitude/FL	4000ft	
Altimeter	RPS (1019hPa)	
Heading	360°	
Speed	80kt	
ACAS/TAS	TAS	
Alert	None	
<b>Separation</b>		
Reported	0ft V/2-300m H	Not reported
Recorded	NK	



**THE WILDCAT PILOT** reports operating to the west of the Salisbury Plain Training Area (SPTA), conducting training with the EO/IR system. Whilst flying straight-and-level, a white glider was seen directly ahead at a range of approximately 200-300m. The glider crossed the nose of the helicopter from right to left, at the same level, in a descending left-hand turn. No avoiding action was possible because the glider was first seen at about CPA. The helicopter was then manoeuvred to the west in order to put more distance between the operating area and local glider sites yet continue the training. An Airprox was raised with Yeovilton Approach and the sortie continued. Another glider was seen later in the sortie and therefore the crew elected to depart the area to the south coast. The pilot noted that the workload for the LHS was quite high as this was an instructional sortie on the use of the electro-optical system. Both the instructor and student observer were often eyes in. TAS was being monitored by all crew and no alert was seen from the glider before or after the Airprox.

He assessed the risk of collision as 'Medium'.

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

**THE YEOVILTON CONTROLLER** reports the Wildcat pilot had departed Yeovilton under a Basic Service climbing to 3000ft and heading towards SPTA. About 10nm northeast of Yeovilton, the pilot requested an upgrade to a Traffic Service. This was given, and the controller then asked the Wildcat pilot to report 2-way with SPTA and changing en-route. The Wildcat pilot then informed the controller that they would be operating north of SPTA and wished to remain with Yeovilton Radar. The controller then reduced the service due to limited surveillance performance because of the base of radar cover, as the Wildcat pilot continued to track away from the aerodrome. An intermittent primary return was seen on radar about 20nm north-northeast of Yeovilton and Traffic Information was given. A further secondary radar return, squawking 7000 and indicating 2500ft on 1013hPa, was also visible and further Traffic Information given. The controller's attention then turned to a Tutor pilot requesting a recovery to

Yeovilton whilst a calibrator aircraft was conducting PAR runs and a MATZ crosser was transiting the overhead. Traffic Information was passed to the Tutor pilot when the Wildcat pilot then declared an Airprox. The controller looked at the radar and couldn't see anything else on the radar screen in the Wildcat's vicinity so acknowledged the call and noted the time. Once the controller was happy that the Tutor could safely continue inbound visually, they then returned their attention to the Wildcat pilot to obtain information regarding the Airprox.

**THE YEOVILTON RADAR SUPERVISOR** reports that the Approach controller informed them that an aircraft had called an Airprox with a glider. The supervisor listened to the approach frequency and made a note of the details the aircraft commander passed.

## Factual Background

The weather at Yeovilton was recorded as follows:

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METAR EGDY 301450Z 21009KT 9999 SCT040 BKN200 16/08 Q1022 BLU NOSIG=
METAR EGDY 301350Z 16005KT 9999 SCT035 BKN200 16/07 Q1023 BLU NOSIG=
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## Analysis and Investigation

### UKAB Secretariat

The Wildcat 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<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>. If the incident geometry is considered as converging then the Wildcat pilot was required to give way to the glider<sup>3</sup>.

## Comments

### Navy HQ Comment

This Airprox highlights that see-and-avoid remains key to the prevention of a MAC. Despite briefing accordingly and selecting a suitable area of operations, the nature of Class G determines that other air systems may be encountered at any time. In this instance, on encountering unknown gliding activity and taking necessary action to avoid a MAC, the aircrew chose to re-position to complete their task. Accessing other means of obtaining gliding information is also under investigation.

This incident has also highlighted the need for greater understanding of the limitations of an ATS and the reasons for reductions. Despite being under a TS, the air system's range and bearing from the surveillance system resulted in a reduction of service and the inability of the controller to detect and call timely TI, particularly on gliders. As a result, a briefing package will take place to ensure aircrew are familiar with the reasons for reductions in ATS in order to build greater SA.

### BGA Comment

This area is a pinch point between SPTA and the Bristol CTA where a higher density of GA traffic might reasonably be expected. There are also two active gliding sites within 5 miles.

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

<sup>2</sup> SERA.3210 Right-of-way (c)(1) Approaching head-on. MAA RA 2307 paragraph 13.

<sup>3</sup> SERA.3210 Right-of-way (c)(2) Converging. MAA RA 2307 paragraph 12.

## Summary

An Airprox was reported when a Wildcat and an unknown glider flew into proximity at 1421 UTC on Tuesday 30<sup>th</sup> April 2019 near Westbury. The helicopter pilot was operating under VFR in VMC in receipt of a reduced Traffic Service from Yeovilton.

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

Information available consisted of a report from the Wildcat pilot, radar photographs/video recordings, a report from the air traffic controller involved and reports from the appropriate 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.

Members first discussed the controller's actions. He had placed the Wildcat under a restricted Traffic Service and passed Traffic Information on both secondary and primary returns. It was unfortunate that the Airprox glider was not detected but that was a function of the radar significance of the glider structure and the performance of the radar; in essence, the controller could not detect the glider or pass Traffic Information on it (**CF1, CF2**).

Consequently, the Wildcat pilot had only generic SA that aircraft would likely be operating in the area due to the fine weather (**CF3**). Members discussed to what extent the EO/IR training might degrade the crew's lookout and agreed that although they were obviously operating conscientiously, it was inevitable that the task in hand could distract the left-hand seat occupant from lookout to some extent (**CF4**). Members noted that, unfortunately, the Wildcat TAS was likely not compatible with a FLARM-based TAS, if indeed one was installed in the glider (which was unlikely given that the glider could not be traced, and would likely have been if it were transmitting with FLARM (**CF5**)).

In the event, the glider was reported as being sighted at CPA with no avoiding action possible, effectively a non-sighting (**CF6**). Members surmised that with the glider turning towards the Wildcat at close range, the glider pilot had likely also not detected the Wildcat until a late stage, if at all (**CF6**). Turning to risk, members felt that with a likely non-sighting by the glider pilot and effectively a non-sighting by the Wildcat pilot, it was not possible for either to increase separation at CPA and that safety had therefore been much reduced below the norm.

## PART C: ASSESSMENT OF CAUSE AND RISK

### Contributory Factors:

2019083			
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>• Situational Awareness of the Conflicting Aircraft and Action</b>			
3	Contextual	• Situational Awareness and Sensory Events	Pilot had no, only generic, or late Situational Awareness
4	Human Factors	• Distraction - Job Related	Pilot was engaged in other tasks
<b>• Electronic Warning System Operation and Compliance</b>			
5	Technical	• ACAS/TCAS System Failure	Incompatible CWS equipment
<b>• See and Avoid</b>			

6	Human Factors	• Monitoring of Other Aircraft	Non-sighting or effectively a non-sighting by one or both pilots
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Degree of Risk: B.

Recommendation: Nil.

#### Safety Barrier Assessment<sup>4</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:**

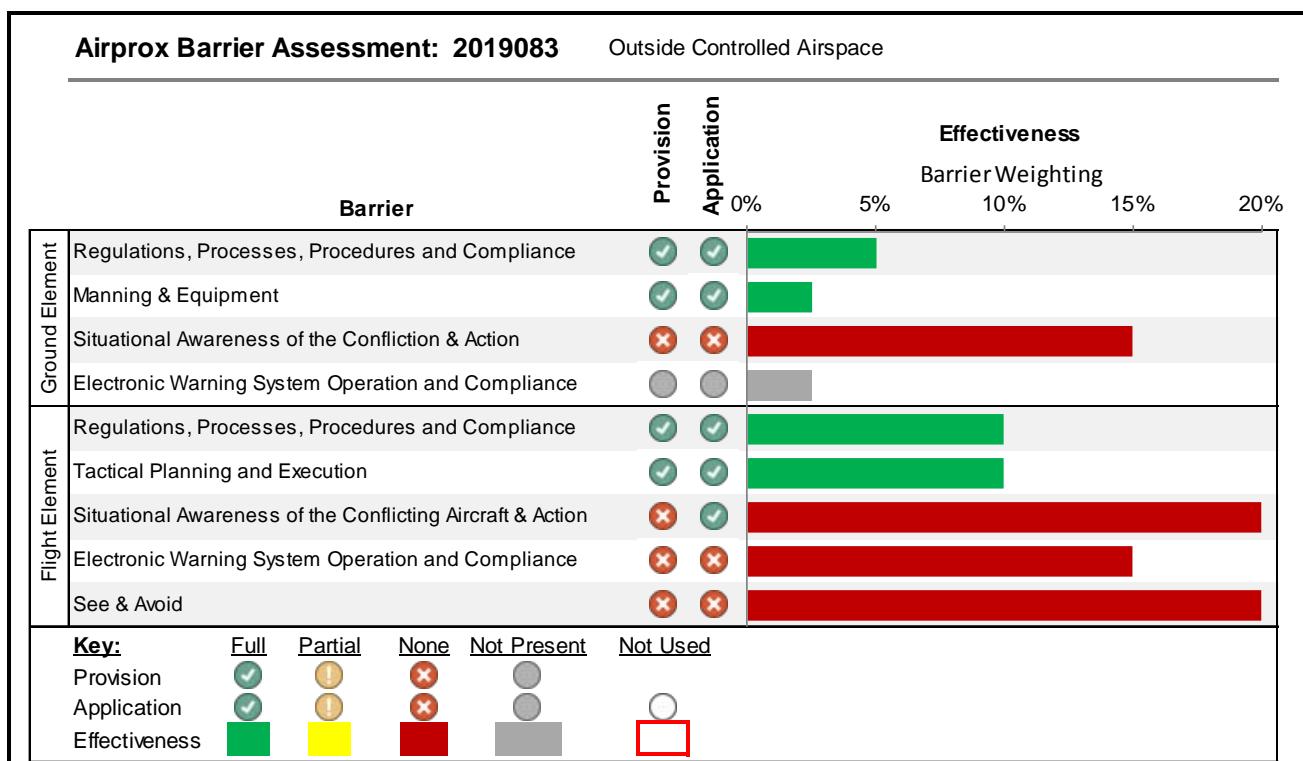
**Situational Awareness of the Confliction and Action** were assessed as **ineffective** because the glider did not appear on the Yeovilton radar screen and consequently the controller could not provide Traffic Information.

#### **Flight Elements:**

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the Wildcat pilot was not aware of the glider until sighted visually.

**Electronic Warning System Operation and Compliance** were assessed as **ineffective** because the glider did not appear on the Wildcat TAS.

**See and Avoid** were assessed as **ineffective** because the glider was first seen at CPA.



<sup>4</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).