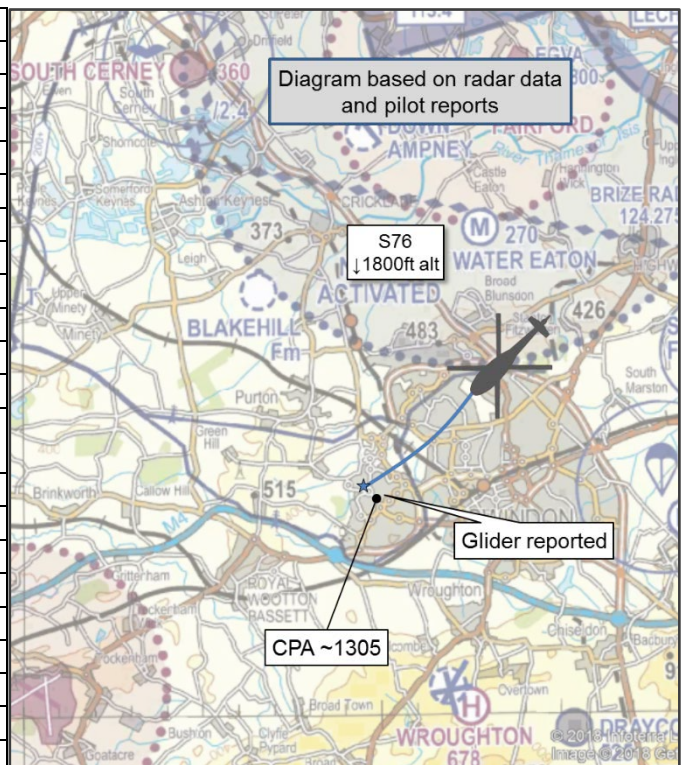


**AIRPROX REPORT No 2018190**

Date: 25 Jul 2018 Time: 1305Z Position: 5132N 00156W Location: 18nm SW Brize

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	S76	Unknown Glider
Operator	Civ Comm	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	
Service	Traffic	
Provider	Brize	
Altitude/FL	1800ft	
Transponder	A, C, S	
<b>Reported</b>		Not reported
Colours	Maroon	
Lighting	Strobes, HISL, Nav	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	1500ft	
Altimeter	QNH (1015hPa)	
Heading	229°	
Speed	140kt	
ACAS/TAS	TCAS I	
Alert	None	
<b>Separation</b>		
Reported	0ft V/0.5nm H	NK
Recorded	NK	



**THE S76 PILOT** reports that he was VFR and receiving a Traffic Service from Brize Radar. He was descending towards his destination when the handling pilot spotted a glider ‘level and turning towards’, less than 1nm away. He took an avoiding action turn to the right and expedited the descent. He thought they were fortunate to have spotted the glider because they had been flying into sun and in moderate haze. He noted that they had not received Traffic Information from Brize and did not get any TCAS indications (presumably because the glider wasn’t SSR equipped). He wasn’t sure whether the glider pilot saw the S76.

He assessed the risk of collision as ‘Medium’.

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

**THE BRIZE CONTROLLER** reports that the pilot did not mention that he had a Airprox on frequency; consequently, he was first told about the incident two weeks later and had very little recollection of the events. However, following a recent request, the Supervisor had been monitoring how many flights appeared to route within the Royal Low-Level Corridor. On this occasion it was 10 tracks, of which 6 were non-squawking and believed to be gliders.

He perceived the severity of the incident as ‘Low’.

**Factual Background**

The weather at Brize was recorded as follows:

METAR EGVN 251450Z 27006KT CAVOK 27/08 Q1017 BLU NOSIG=

## Analysis and Investigation

### Military ATM

A Royal Low-Level Corridor (RLLC) had been established for this flight. Following a recent spate of RLLC infringements, the ATC Supervisor was closely monitoring the flight and noting any aircraft within 10 miles of the S76. The Airprox was not reported on frequency, and neither the controller involved nor the Supervisor were informed of the incident for 2 weeks; therefore, they had little recollection of the Airprox. Analysis of the radar replay did not show the glider in question.

At the time of the incident, the S76 was descending toward its destination and its radar service had been reduced due to the limits of surveillance cover. Traffic Information was passed some 7mins prior to the incident but, given that the Zone Controller and Supervisor were closely monitoring the progress of the S76 it is likely that, had the unknown glider been showing on radar, then Traffic Information would have been passed.

### UKAB Secretariat

The UK AIP1 states as follows:

'4.4.3.1 CAS-T is not normally established for Royal Flights in helicopters.

4.4.3.2 Royal helicopter flights will be afforded the protection of a Royal Low Level Corridor (RLLC). A RLLC is marked by a series of check-points and will be promulgated by Notification Message. These check-points, approximately 20 minutes flying time apart, will coincide with turning points. The Notification Message will indicate the ETDs/ETAs for given check-points. Within the RLLC, protected sectors applying to military aircraft only are established extending 5 nm either side of the helicopter's intended track and from ground level to 1000 ft above the maximum cruise altitude. Military flying within these sectors is strictly controlled and, such aircraft, with the exception of military light aircraft and helicopters with an IAS of 140 kt or less, are to maintain a lateral separation of at least 5 nm from the Royal Helicopter. This may be reduced to 3 nm subject to the military ATC conditions for reduced radar separation being met. Military light aircraft or helicopters, with an IAS of 140 kt or less, and civilian pilots flying near the route should keep a good look out and maintain adequate separation from the Royal aircraft.'

The S76 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>2</sup>. If the incident geometry is considered as head-on or nearly so, then both pilots were required to turn to the right<sup>3</sup>. If the incident geometry is considered as converging, then the S76 pilot was required to give way to the glider<sup>4</sup>.

## Summary

An Airprox was reported when an S76 and a glider flew into proximity at 1305hrs on Wednesday 25<sup>th</sup> July 2018. The S76 pilot was operating under VFR in VMC, and in receipt of a Traffic Service from Brize Radar. The glider pilot could not be traced.

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

Information available consisted of a report from the S76 pilot, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC operating authorities.

The Board first looked at the actions of the S76 pilot. Members noted that he was receiving a Traffic Service from Brize ATC, although this had been limited because he was descending out of radar cover.

<sup>1</sup> ENR 1.1 General Rules, 4.4.3 Royal Flights In Helicopters, ENR 1.1-28 and 1.1-29.

<sup>2</sup> SERA.3205 Proximity.

<sup>3</sup> SERA.3210 Right-of-way (c)(1) Approaching head-on.

<sup>4</sup> SERA.3210 Right-of-way (c)(2) Converging.

He did not receive any Traffic Information on the glider from ATC (presumably because it was not showing on the radar), nor did he receive a TCAS warning (because the glider was not squawking). However, he did manage to see the glider when it was about a mile away, which gave him enough time to take avoiding action and achieve about 0.5nm separation in his estimation.

Turning to the glider pilot, members commented that it was unfortunate that he could not be traced because without his report it was not possible to assess whether he had seen the S76 and considered the separation to be sufficient, or whether he had not seen it at all. Either way, the Board noted that he was operating in Class G airspace as he was entitled to do, and that, regardless of the RLLC being in place, the UK AIP simply required him to maintain 'adequate separation' from the Royal aircraft. Members noted that 'adequate separation' was a highly subjective measure that relied on the personal assessment of the pilots at the time. Moreover, under the Rules of the Air, the S76 pilot was required to give way to the glider if they were converging, and so it was somewhat unclear as to who should be avoiding who up to the point where separation was no longer deemed to be 'adequate' by one or both pilots.

The Board commented that it was unfortunate that the S76 pilot hadn't reported the airprox on frequency at the time because it was then some days before the controller heard about it, and once he did, he had little recollection of the event. Noting that the Supervisor was also looking at the radar at the time and didn't see it, the Board agreed that the glider was unlikely to be showing on the radar and so there was little more the controller could have done. Members opined that the controller's comment regarding aircraft transiting within the RLLC implied that there was a potential misunderstanding within military ATC that all flights must remain 5nm clear of the Royal aircraft, when in fact this only applied to military aircraft. Coincidentally, the Board had also dealt with Airprox 2018185 during the same meeting, and this also indicated the same misunderstanding by military ATC during that incident.

In determining the cause of the Airprox, some members thought that the separations involved indicated that this had simply been a sighting report which had been dealt with within normal safety standards. Others disagreed because the S76 pilot had reported having to take positive avoiding action by turning right and descending, which indicated that the sighting had been much later than desirable. A debate ensued, after which the latter view prevailed, and it was agreed that this incident was best described as a conflict in Class G airspace, resolved by the S76 pilot. Turning to the risk, members felt that although safety had been reduced, see-and-avoid had been effective in removing the risk of collision because the S76 pilot had been able to take sufficiently timely and effective avoiding action; risk Category C.

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

Cause: A conflict in Class G resolved by the S76 pilot.

Degree of Risk: C.

Safety Barrier Assessment<sup>5</sup>

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

#### **ANSP:**

**Situational Awareness and Action** were assessed as **ineffective** because ATC could not see the glider on the radar and therefore did not have any knowledge of it.

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<sup>5</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).

**Flight Crew:**

**Situational Awareness and Action** were assessed as **ineffective** because the S76 pilot did not have any information that the glider was in the vicinity.

**Warning System Operation and Compliance** were assessed as **ineffective** because the TCAS in the S76 could not detect the glider because it was either not fitted with a transponder or its pilot had not selected the transponder on.

