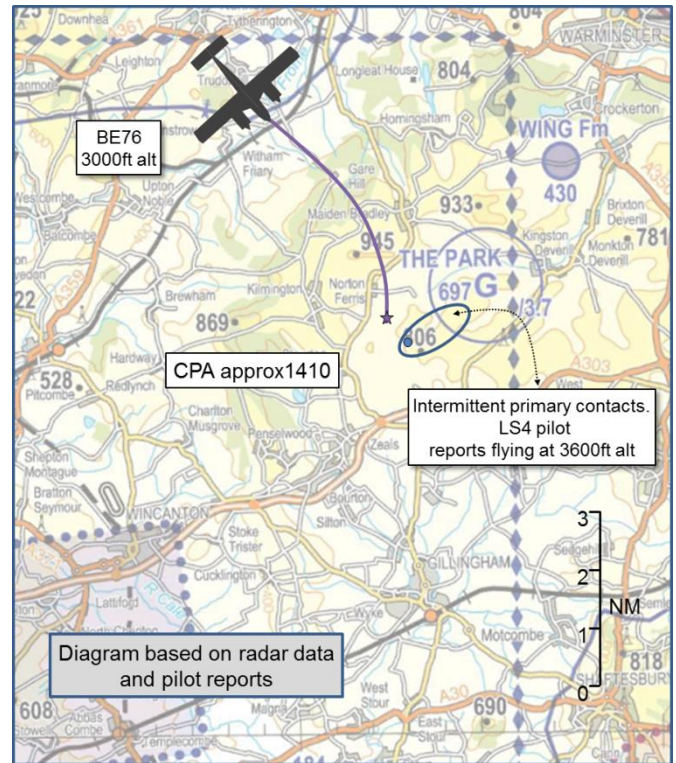


AIRPROX REPORT No 2014149Date/Time: 22 Aug 2014 1410ZPosition: 5106N 00217W
(Bath, Wilts and Dorset Gliding Club)Airspace: Yeovilton AIAA (Class: G)Aircraft 1 Aircraft 2Type: LS4 Glider BE76Operator: Civ Pte Civ TrgAlt/FL: 3600ft 3000ft
QNH (1015hPa)Conditions: VMC VMCVisibility: 30km 5kmReported Separation:

100ft V/0ft H 500ft V/2000m H

Recorded Separation:

NK

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

THE LS4 GLIDER PILOT reports flying a white glider with conspicuity markings on the wings and nose. The aircraft was fitted with FLARM. He was thermalling over Zeal airfield whilst listening out on the Bath and Dorset Glider Club frequency. He was keeping a good look-out, ensuring that he checked his 45° arc, when he suddenly saw a two-engine aircraft at a 90° angle off, 400m away heading straight for him. He hoped the thermal would lift him above it, and it didn't seem as if the other pilot took any form of avoiding action as he passed directly underneath him.

He assessed the risk of collision as 'High'.

THE BE76 PILOT reports flying a white and red aircraft with SSR transponder Modes 3A, C and S selected. The aircraft was not fitted with TCAS or FLARM. He was flying a navigational exercise at 3000ft and he recalled that he was receiving a Basic Service from Yeovil Radar. He had just done a dog-leg to avoid The Park glider site. He first saw a white glider 1nm away, but then it turned left to cross their path. It was slightly higher than him, so he descended to avoid. There were multiple gliders thermalling just below a small patch of cumulus so he couldn't be sure which glider was actually reporting the incident. He opined that the number of gliders around on that day, and the days leading up to it, were hazardous, most don't have transponders, nor are they speaking to anybody. There were three people in his cockpit looking out, yet the gliders were very difficult to spot and he wondered what the solution was to avoid a similar situation in the future.

He assessed the risk of collision as 'Low'.

Factual Background

The weather at Boscombe Down was reported as:

METAR EGDM 221250Z 31011KT 9999 SCT046 17/08 Q1012 BLU NOSIG

Analysis and Investigation

Military ATM

The BE76 was under a Basic Service from Boscombe LARS; RTF transcript portions are below:

From	To	Speech Transmission	Time
LARS	BE76	[BE76 callsign] as you track south back towards Bournemouth just be reminded that the Park Glider Site is active up to 4000' on the regional.	13:01:26
BE76	LARS	Roger [BE76 callsign].	13:01:30
LARS	BE76	[BE76 callsign] Park Glider Site 12 o'clock 4 miles with a possible two gliders to the west of that area.	13:09:55
BE76	LARS	Roger [BE76 callsign].	13:09:59
LARS	BE76	[BE76 callsign] traffic believed to be you has traffic south half a mile manoeuvring no height information. Second track south south east manoeuvring no height information.	13:10:44
BE76	LARS	Roger we will keep a good lookout [BE76 callsign].	13:10:22
LARS	BE76	The first ones painting a poor aspect on primary radar possibly below, the second one is painting a good aspect on primary similar altitude or base of the cloud.	13:10:38
BE76	LARS	Eh Roger [BE76 callsign].	13:10:48

The Boscombe LARS controller demonstrated commendable controlling skills and duty of care by maintaining track ident and by providing warnings of the glider site, as well as specific gliders.

Both pilots were responsible for their own collision avoidance through 'see and avoid'. It is not certain if the BE76 pilot was ever visual with the specific Airprox glider because no avoiding action was apparent from the glider's perspective and the respective CPAs and assessments of collision risk have marked differences. The glider had FLARM but no form of TAS was fitted to the BE76. Under the circumstances, lookout and routing were key to maintaining separation.

UKAB Secretariat

All pilots shared an equal responsibility for collision avoidance and not to fly into such proximity as to create a danger of collision¹. If the incident geometry is considered as converging then the BE76 pilot was required to give way to the glider².

Comments

BGA

Another Airprox that illustrates a) the importance being extra vigilant when flying close to gliding sites; and b) the potential benefits of FLARM as an aid to lookout. We endorse the commendation of the LARS controller.

Summary

An Airprox was reported when a LS4 glider and a BE76 flew into proximity at 1410z on 22nd August 2014. Both pilots were operating under VFR in VMC, the LS4 was listening out on the local air-to-ground frequency and the BE76 was receiving as Basic Service from Boscombe Down. The BE76 pilot received Traffic Information from Boscombe Down. The gliders did not show on the NATS radar therefore the exact separation is not known.

¹ Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

² *ibid.*, Rule 9 (Converging).

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar recordings, and reports from the appropriate ATC operating authorities.

The BE76 pilot was under a Basic Service from Boscombe Down ATC when he received Traffic Information on gliding activity at The Park gliding site. He suitably positioned to avoid the site and whilst doing so reported that he saw numerous gliders. The Board opined that the discrepancy in distance between his and the glider pilot's estimated separations probably meant that, in fact, the BE76 pilot likely recalls seeing a different glider to the one in the Airprox. The difficulty in visually spotting white gliders is well documented and, in order to mitigate the risk of collision, gliding members of the Board recommended P-FLARM as a relatively cheap and easy to fit collision avoidance option.

For the LS4 pilot's part, some members of the Board wondered whether his look-out was as good as it could have been whilst he was thermalling. Although he had reported seeing the BE76 close aboard, some members also wondered whether he might have been able to do more to help, such as changing his aspect, rather than just hoping that the thermal would lift him above the BE76. However, those with gliding experience confirmed that, once he was thermalling, there was probably little he could have done to increase his lift any more, or to manoeuvre out of the way, other than by rolling out and trying to generate separation in that way.

Although the BE76 pilot was only receiving a Basic Service from Boscombe down, the controller had clearly kept track ident on the aircraft and gave good Traffic information both on the whereabouts of the gliding site, and then on specific radar contacts which he believed to be gliders. The Board commended him for his actions, and especially in highlighting the location of The Park glider site to the BE76 pilot so that he was made aware of the intensive gliding activity that was ongoing.

Turning to the cause, the Board judged this to be a late sighting by the LS4 pilot and a probable non-sighting by the BE76 pilot. Because of the probable non-sighting, they assessed the risk as Category A; a situation that had just stopped short of an actual collision, where separation had been reduced to the minimum and where chance had played a major part in events.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u>	A late sighting by the LS4 pilot and a probable non-sighting by the BE76 pilot.
<u>Degree of Risk:</u>	A.
<u>ERC Score</u> ³ :	100.

³ Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.