AIRPROX REPORT No 2019111

Date: 21 May 2019 Time: 1619Z Position: 5043N 00209W Location: 2nm ENE Eyres Field



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE FA20 PILOT reports that he was under radar vectors for the ILS RW26 at Bournemouth and in the descent through 6000ft. They spotted the glider in their 1 o'clock at the same altitude with approximately 1500ft horizontal separation. The sighting was called between crew, and avoiding action was taken away from the glider via a left turn with continuing descent. The glider appeared to be heading west-north-west and straight-and-level. The glider was then seen turning left through the west. Bournemouth radar was informed of the avoiding action and, once clear of the conflict, radar vectors resumed. The glider was not in communication with Bournemouth nor seen on the Bournemouth radar.

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

THE GLIDER PILOT could not be traced despite extensive effort by the BGA.

THE BOURNEMOUTH CONTROLLER reports that the FA20 was being vectored outside CAS on a Traffic Service for an ILS RW26 and had been given a heading of 095° to avoid a PA28 holding at 4000ft overhead the BIA. The FA20 pilot was given a further descent as they approached CAS and the pilot then reported having taken avoiding action on a glider and coming back onto the original heading. He gave the FA20 pilot a heading of 135° to ensure separation from the PA28 was maintained. The glider was not seen on radar at any stage.

Factual Background

The weather at Bournemouth was recorded as follows:

```
METAR EGHH 211620Z 34005KT 300V030 CAVOK 20/06 Q1018
```

Analysis and Investigation

UKAB Secretariat

The FA20 and unknown glider pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. If the incident geometry is considered as converging then the FA20 pilot was required to give way to the glider².

The glider was not visible on the Bournemouth radar display. A different radar to that used by Bournemouth shows intermittent primary returns around the FA20's reported position at the time of the Airprox.



Figure 1: FA20 transponding 2360

Bournemouth Investigation

The Bournemouth investigation re-iterated the controller's report above.

Comments

BGA

We commend the FA20 pilots for their lookout in a busy area near an active gliding site. In Class G airspace even a Traffic Service can't be relied on to give separation from all aircraft.

Summary

An Airprox was reported when a FA20 and a glider flew into proximity 2nm ENE Eyres Field at 1619hrs on Tuesday the 21st of May 2019. The FA20 pilot was operating under IFR in VMC and in receipt of a Traffic Service from Bournemouth. The glider pilot could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the FA20 pilot, radar photographs/video recordings and reports from the air traffic controller involved. 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.

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c)(2) Converging. MAA RA 2307 paragraph 12.

The Board began by looking at the actions of the FA20 pilot. They commended his lookout for seeing the glider in busy airspace and whilst being vectored to establish on the ILS for an instrument approach. He had no information on the glider because it was not transponding or displaying on the Bournemouth controller's radar (CF3 & 4). It was this lookout that enabled the FA20 pilot to see the glider early enough to alter his course in a timely and effective manner to avoid the glider (CF5).

The Board then turned to the actions of the glider pilot. They agreed that it was unfortunate that the BGA could not positively identify the pilot; a report from the glider pilot would have ensured both perspectives of the incident could have been discussed. With that in mind, the Board wondered how often gliders from Eyers Field operated at that altitude in that area, and members wondered if there was an agreement between Eyres Field and Bournemouth to inform both about each other's likely activities on a daily basis. The BGA member investigated this and found that, whilst there is no formal agreement, most tug pilots will inform Bournemouth, either by landline or R/T, of the activity taking place. Bournemouth sometimes use this information and add it to their ATIS broadcast. The Board and BGA member agreed that this would probably be better enacted as a formal agreement between the two agencies to liaise on a daily basis, especially due to the recent increase in Bournemouth's traffic levels.

Turning to the actions of the Bournemouth controller, the Board noted that the glider was not visible on the controller's radar which meant that he could not provide any information to the FA20 pilot on the glider as he vectored the FA20 to avoid a PA28 holding overhead the BIA **(CF1 & 2)**.

The Board then discussed the risk and quickly agreed that the FA20 pilot had seen the glider early enough to increase the separation between himself and the glider in a timely and effective manner. They therefore agreed that, although safety had been degraded, there was no risk of collision; risk Category C.

PART C: ASSESSMENT OF CAUSE AND RISK

	2019111									
CF	Factor	Description	Amplification							
	Ground Elements									
	Situational Awareness and Action									
1	Contextual	Situational Awareness and Sensory Events	Only generic, late or no Situational Awareness							
2	Human Factors	Conflict Detection - Not Detected								
	Flight Elements									
	Situational Awareness of the Conflicting Aircraft and Action									
3	Contextual	Situational Awareness and Sensory Events	Pilot had no, only generic, or late Situational Awareness							
	Electronic Warning System Operation and Compliance									
4	Technical	ACAS/TCAS System Failure	Incompatible CWS equipment							
	• See and Avoid									
5	Contextual	• Near Airborne Collision with Aircraft, Balloon, Dirigible or Other Piloted Air Vehicle	A conflict in the FIR							

Contributory Factors:

Degree of Risk:

C.

Safety Barrier Assessment³

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 was not visible on the radar which meant that the controller could not detect the conflict.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as ineffective because the FA20 pilot had no situational awareness of the glider, and it was assumed that the glider pilot was equally unaware of the FA20.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the FA20's TCAS II could not detect the non-transponding glider.

	Airprox Barrier Assessment: 2019111	Outside Controlled Airspace						
	Barrier	Provision	Application)%	5%	Effectivenes Barrier Weight 10%	-	20%
Ground Element	Regulations, Processes, Procedures and Compliance	Ø	Ø			··		
	Manning & Equipment		Ø					
	Situational Awareness of the Confliction & Action	8	8					
	Electronic Warning System Operation and Compliance	\bigcirc	\bigcirc					
Flight Element	Regulations, Processes, Procedures and Compliance	Ø	\bigcirc					
	Tactical Planning and Execution		\bigcirc					
	Situational Awareness of the Conflicting Aircraft & Action	8	\bigcirc					
	Electronic Warning System Operation and Compliance	8	8					
	See & Avoid	0	\bigcirc					
	Key: Full Partial None Not Present	Not Us	ed					
	Provision Application Effectiveness	0]					

³ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the <u>UKAB Website</u>.