### **AIRPROX REPORT No 2019092**

Date: 30 Apr 2019 Time: 1551Z Position: 5209N 00304W Location: 10nm NE Talgarth

## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	712
Aircraft	PA28	Glider	5
Operator	Civ FW	Civ Gld	To San
Airspace	London FIR	London FIR	1778
Class	G	G	House American
Rules	VFR		
Service	None <sup>1</sup>		1718
Provider			Company To New
Altitude/FL	4000ft		Rhulen 1671 Bryngwyn
Transponder	A, C, S		lam Doly-Canval
Reported		Not reported	Rhos-good 1276
Colours	White, Blue, Red		Panscastle
Lighting	Strobes		1201
Conditions	VMC		1361
Visibility	10km		
Altitude/FL	4000ft		
Altimeter	QNH (1022hPa)		Sharphood Silwich
Heading	013°		Glasbury
Speed	130kt		Thee?
ACAS/TAS	Not fitted		
Separation			Diagram based on radar
Reported	0ft V/250m H		and pilot reports
Recorded	N	IK	2538

**THE PA28 PILOT** reports that he was flying at 4000ft in the cruise and had left Cardiff Radar and switched to RAF Shawbury over the A40 roadway. As they approached Talgarth glider centre, extra vigilance was required because on the outbound leg he noticed that Talgarth was active. Approximately, 10nm North East of Talgarth the co-pilot identified a glider at the same altitude bearing away to their right and descending. At the time of spotting, he estimated the horizontal separation was no more than 250m. He immediately banked to the left. He was not sure if the glider pilot had spotted them and was taking avoiding action. He opined that had both aircraft continued on their original flight paths he was very confident they may have hit.

He assessed the risk of collision as 'High'.

THE GLIDER PILOT could not be traced.

### **Factual Background**

The weather at Cardiff was recorded as follows:

METAR EGFF 301550Z AUTO 11006KT 9999 NCD 15/09 Q1022=

<sup>1</sup> The pilot had called RAF Shawbury for a Basic Service but was outside their AOR.

### **Analysis and Investigation**

#### **UKAB Secretariat**

Although the PA28 was visible on NATS radar recordings the glider was not and so no meaningful analysis of the incident could be made.

The PA28 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 converging then the PA28 pilot was required to give way to the glider<sup>3</sup>.

#### **Comments**

#### **BGA**

We commend the PA28 pilot for his awareness of Talgarth Gliding Site and his co-pilot for their vigilance.

#### Summary

An Airprox was reported when a PA28 and a glider flew into proximity at 1551hrs on Tuesday 30<sup>th</sup> April 2019. The PA28 pilot was operating under VFR in VMC, and although he had called Shawbury ATC for a Basic Service, was outside their AOR. The glider pilot could not be traced.

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

Information available consisted of reports from the PA28 pilot and radar photographs/video recordings, 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.

The Board first looked at the actions of the PA28 pilot. He was commended for factoring in Talgarth in his plan as being active having observed it on the way past earlier in the day. Although members noted that it could well have been a glider from another gliding club that he subsequently saw, at least he was primed to keep a good look-out. The Airprox occurred in an area that fell between radar coverage of Cardiff and Shawbury ATC and so, even though he had called Shawbury for an ATS, he was not yet receiving one, and could not receive any situational awareness on other traffic from them (**CF1**). That being said, members opined that gliders were often not detected by ATC radars anyway, and because this one was not displaying a transponder, receiving an ATS may not have made any difference in this case. Modern gliders are notoriously difficult to see in the head-on aspect and, having seen it ahead, the PA28 pilot was able to take avoiding action, albeit later than desirable (**CF2**).

Turning to the glider pilot, it was not known whether he had seen the PA28 or not, and the observed turn could either have been coincidental or deliberate in order to increase his conspicuity to the other pilot, a manoeuvre recommended by the BGA. That being said, had it been the latter case, some members thought it likely that he might have reported the incident himself. The glider pilot was not traced, which meant that he was probably not FLARM equipped, so the Board surmised that he had no prior situational awareness about the PA28 either (**CF1**).

The Board then assessed the risk. Some members felt that it had a been a late sighting and therefore safety had been reduced well below the norm. Others thought that the avoiding action taken by the PA28 pilot, whilst later than desirable, had been timely and effective enough in providing sufficient separation. In the end the latter view prevailed and the Board agreed that although safety had been reduced, the risk of collision had been averted; risk Category C.

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

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

### PART C: ASSESSMENT OF CAUSE AND RISK

# **Contributory Factors:**

	201992-Barriers.)					
CF	Factor	Description	Amplification			
	Flight Elements					
	Situational Awareness of the Conflicting Aircraft and Action					
1	Contextual	I • Situational Awareness and Sensory Events	Pilot had no, only generic, or late Situational Awareness			
	• See and Avoid					
2	Human Factors	Monitoring of Other Aircraft	Late-sighting by one or both pilots			

## Degree of Risk: C.

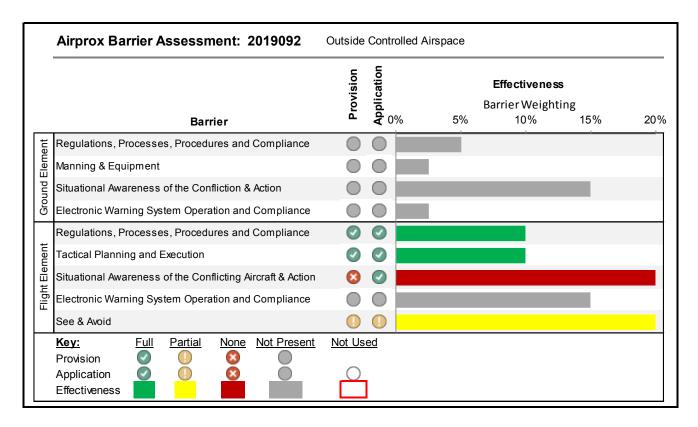
### Safety Barrier Assessment<sup>4</sup>

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

# Flight Elements:

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **ineffective** because the PA28 pilot had no knowledge of the glider prior to seeing it.

**See and Avoid** were assessed as **partially effective** because the PA28 pilot saw the glider later than desirable.



<sup>&</sup>lt;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.