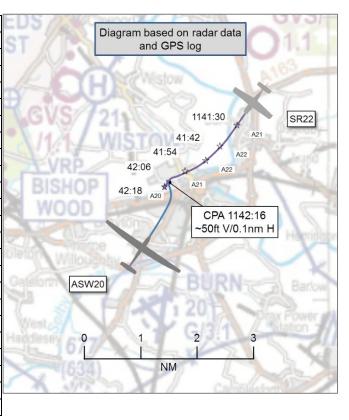
#### **AIRPROX REPORT No 2018181**

Date: 21 Jul 2018 Time: 1142Z Position: 5347N 00105W Location: Selby

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

		I	
Recorded	Aircraft 1	Aircraft 2	
Aircraft	ASW20	SR22	
Operator	Civ Gld	Civ FW	
Airspace	London FIR	London FIR	
Class	G	G	
Rules	VFR	VFR	
Service	None	AGCS	
Provider	(Burn Base)	Sherburn Radio	
Altitude/FL	2010ft	2000ft	
Transponder	Not fitted	A, C, S	
Reported			
Colours	White, red	White	
Lighting	None	Strobes	
Conditions	VMC	VMC	
Visibility	50km	>10km	
Altitude/FL	2005ft	2000ft	
Altimeter	QFE (NK hPa)	QNH (NK hPa)	
Heading	350°	270°	
Speed	50kt	110kt	
ACAS/TAS	Not fitted	TCAS I	
Alert	N/A	None	
	Separation		
Reported	100ft V/100m H	0ft V/200m H	
Recorded	0ft V/~0.1nm H		



**THE ASW20 PILOT** reports that after winch launch he had joined another glider in a thermal and then climbed away to 2400ft agl before departing the airfield. He headed north over Selby and, when situated just west of Selby Abbey at 2000ft, noticed a single-engine, low-wing, tricycle-undercarriage, light-aircraft coming straight towards him from the right. He dived out of its way.

He assessed the risk of collision as 'High'.

**THE SR22 PILOT** reports that whilst on a long straight-in approach to Sherburn from the east, he suddenly saw a white and red glider in the left 11 o'clock at the same height and at a range of about 250-300m, about to cross his track from left-to-right. As he saw it, the glider pilot started a dive and the SR22 pilot immediately turned sharply to the left to pass behind it.

He assessed the risk of collision as 'Medium'.

# **Factual Background**

The weather at Doncaster/Sheffield airport was recorded as follows:

METAR EGCN 211150Z 21007KT 9999 SCT038 23/12 Q1015=

#### **Analysis and Investigation**

#### **UKAB Secretariat**

The ASW20 and SR22 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 converging then the SR22 pilot was required to give way to the ASW20<sup>2</sup>.

#### Summary

An Airprox was reported when an ASW20 and an SR22 flew into proximity at 1142hrs on Saturday 21<sup>st</sup> July 2018. Both pilots were operating under VFR in VMC, the SR22 pilot in receipt of an Air Ground Communication Service from Sherburn Radio and the ASW20 pilot not in receipt of a service.

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

Information available consisted of reports from both pilots, radar data and a video recording.

Members first discussed the pilots' actions and noted that neither had seen the other until at a late stage. Members felt that this was compounded by well-known and understood factors such as lack of contrast (predominantly white aircraft being viewed against a pale background), lack of relative motion (constant bearing on converging headings) and probably some focus of attention of the SR22 pilot looking towards his destination. Nonetheless, members agreed that each pilot did see the other aircraft in time to take avoiding action, with the glider pilot diving away and the SR22 pilot turning left. Members discussed the cause and risk at some length, ultimately agreeing that the cause had been a late sighting by both pilots. The glider pilot had been able to provide a video of the incident taken from the wing of his aircraft and looking towards the approaching SR22; the video was reviewed by UKAB inspectors. Some members felt that the avoiding action and mutual sighting had been sufficient for risk of collision to have been averted (Category C), but the majority were of the opinion that, in this case, the separation at CPA was close enough that safety had been much reduced below the norm (Category B).

Finally, members noted that a robust lookout was essential for operation in Class G airspace, including the need to pause lookout at points around the scan; the video associated with this incident showed that the glider pilot was predominantly conducting rapid and continuous sweeps across the horizon, which does not allow the eye to focus on a closing aircraft until it comes sufficiently close that its size makes it more readily detected. The Board commented that numerous articles about scan techniques have been published on this subject, including information on the UKAB website<sup>3</sup>, and that these could be useful revision for all pilots, no matter what their experience.

### PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: A late sighting by both pilots.

Degree of Risk: B.

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

<sup>&</sup>lt;sup>1</sup> SERA.3205 Proximity.

<sup>&</sup>lt;sup>3</sup> https://www.airproxboard.org.uk/Topical-issues-and-themes/Collision-Avoidance/

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

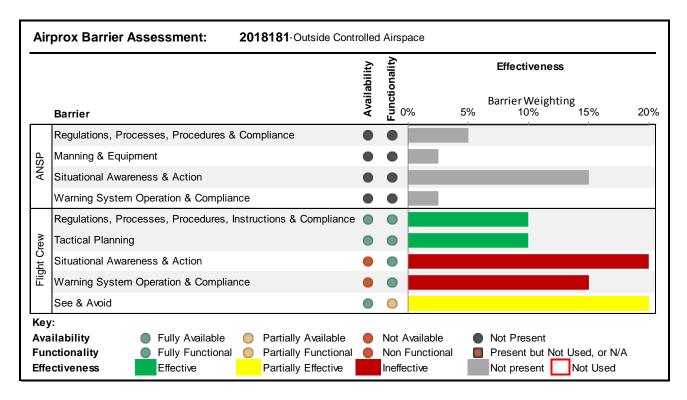
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

# Flight Crew:

**Situational Awareness and Action** were assessed as **ineffective** because neither pilot was aware of the proximity of the other until shortly before CPA.

**Warning System Operation and Compliance** were assessed as **ineffective** because the SR22 TCAS could not detect the glider.

**See and Avoid** were assessed as **partially effective** because both pilots only saw the other aircraft at a late stage.



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<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 <u>UKAB Website</u>.