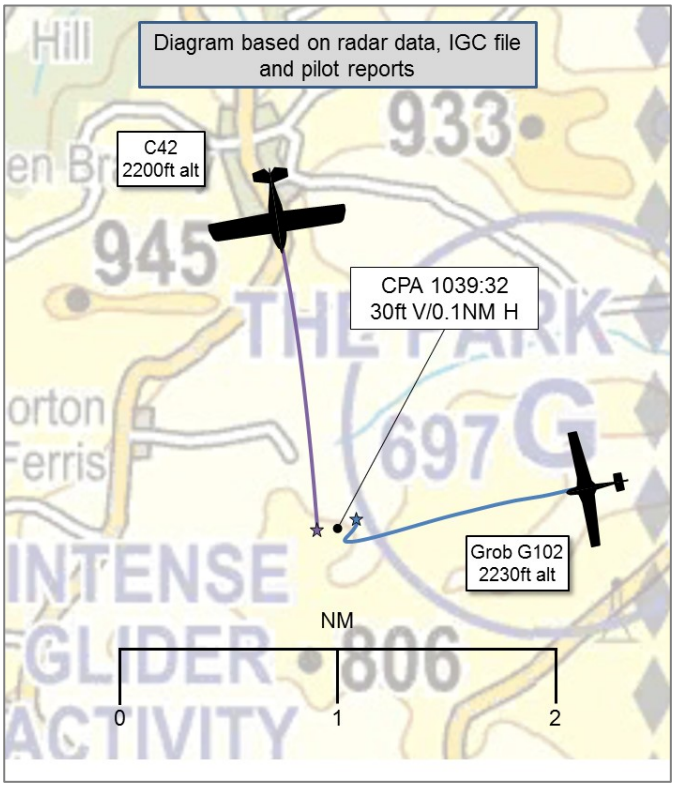
AIRPROX REPORT No 2020070

Date: 11 Jul 2020 Time: 1039Z Position: 5107N 00216W Location: 2km WSW The Park gliding site

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Grob G102	C42
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Listening Out
Provider	North Dorset	Compton Abbas
Altitude/FL	2230ft[1]	2200ft
Transponder	Not Fitted	A, C, S
Reported		
Colours	White, Red	Not reported
Lighting	None	None
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1300ft	2100ft
Altimeter	QFE	QNH (1024hPa)
Heading	260°	160°
Speed	50kt	80kt
ACAS/TAS	FLARM	Not fitted
Alert	None	N/A
Separation		
Reported	50ft V/60m H	Not reported
Recorded	30ft V/0.1NM H	



THE GROB G102 ASTIR PILOT reports that they were trying to find some thermal lift away from the airfield. They saw a Ventus getting lift from overhead a farm and flew towards that area. They arrived there at 1300ft. They looked up to see the Ventus turning to the right. They initiated a slight turn to the right to try to find the lift. As they looked down, to make sure they were clear to start thermaling, the C42 appeared in their 1 o'clock at the same height. Luckily, because of the momentum of the slight right-hand turn, they could pull-back, roll, yaw and dive out of the way around to the right. If they had carried on straight they are confident that they would have been very close to the C42. All of this happened in less than 5 seconds. The sun was on their left-hand side which meant the C42 was flying into the sun.

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

THE C42 PILOT reports that they approached The Park gliding strip and could see that there was activity, so they ensured that they were to the west of the circuit and kept a good lookout as did their passenger. Just after they were abeam the strip, they were suddenly aware of a glider about 200m away at a relative bearing of about 325°. The glider was about 100ft below them and in a descending starboard bank. They did not see the glider in time to take any avoiding action. There was obviously a high probability of a collision. This is another case of gliders being almost invisible, especially when head-on. It does not seem to matter how good your lookout is, you just cannot see them. The problem will only be resolved when we all have a common conspicuity system and everyone uses it.

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

Factual Background

[1] Glider altitude from IGC file.

The weather at Yeovilton was recorded as follows:

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METAR EGDY 111050Z AUTO 30007KT 9999 FEW044/// BKN050/// 18/07 Q1028
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Analysis and Investigation

UKAB Secretariat

The Grob G102 and C42 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.[2] If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.[3] If the incident geometry is considered as converging then the C42 pilot was required to give way to the Grob G102 glider.[4]

Comments

BGA

We commend the C42 pilot for his awareness of potential gliding activity at The Park. It is very likely that gliders will be encountered when passing close to an active gliding site on an exceptionally good soaring day such as this was.

Summary

An Airprox was reported when a Grob G102 and a C42 flew into proximity 2km WSW The Park gliding site at 1039Z on Saturday 11th July 2020. Both pilots were operating under VFR in VMC, the Grob G102 listening out on the North Dorset frequency and the C42 pilot listening out on the Compton Abbas frequency.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, 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 (CF) table displayed in Part C.

Due to the exceptional circumstances presented by the coronavirus pandemic, this incident was assessed as part of a 'virtual' UK Airprox Board meeting where members provided dial-in/VTC comments.

The Board began by looking at the actions of the Grob G102 Astir pilot: In their search for a good area to fly which was away from their glider site, they noticed a glider thermaling well and had tracked towards it to take advantage of the lift. Whilst looking out to ensure that the airspace was clear to start thermaling, they saw the C42. They had already initiated a slight right turn and managed to increase the separation by tightening that turn. The Grob G102 was equipped with FLARM, the other aircraft was fitted with a transponder, however these two pieces of equipment are incompatible and therefore the FLARM offered no electronic warning system information to the Grob pilot (**CF2**).

The Board then looked at the actions of the C42 pilot. The C42 pilot was aware of the enhanced glider activity in the area and was trying to keep a good lookout for any gliders as they transited to the west of the glider site (**CF1**). Regardless, they saw the G102 too late to take any effective action to increase the separation and it was fortunate that the G102 pilot had already commenced an avoiding action turn away from the C42.

[2] SERA.3205 Proximity.
[3] SERA.3210 Right-of-way (c)(1) Approaching head-on.
[4] SERA.3210 Right-of-way (c)(2) Converging.

Finally, the Board turned to the risk. Neither pilot had any specific information on the other aircraft (**CF1**) and were relying on lookout to identify any conflicting aircraft. Neither pilot saw the other aircraft in enough time to turn away early (**CF4**), and it was only the G102 pilots initial turn that enabled them to increase the separation. Therefore, the Board agreed that the safety of the aircraft was not assured, a Risk category B (**CF3**).

PART C: ASSESSMENT OF CONTRIBUTORY FACTOR(S) AND RISK

Contributory Factor(s):

	2020070		
CF	**Factor**	**Description**	**Amplification**
	Flight Elements		
	• Situational Awareness of the Conflicting Aircraft and Action		
1	Contextual	• Situational Awareness and Sensory Events	Pilot had no, late or only generic, Situational Awareness
	• Electronic Warning System Operation and Compliance		
2	Technical	• ACAS/TCAS System Failure	Incompatible CWS equipment
	• See and Avoid		
3	Contextual	• Near Airborne Collision with Aircraft, Balloon, Dirigible or Other Piloted Air Vehicle	Piloted air vehicle
4	Human Factors	• Monitoring of Other Aircraft	Late-sighting by one or both pilots

Degree of Risk: B.

Safety Barrier Assessment[5]

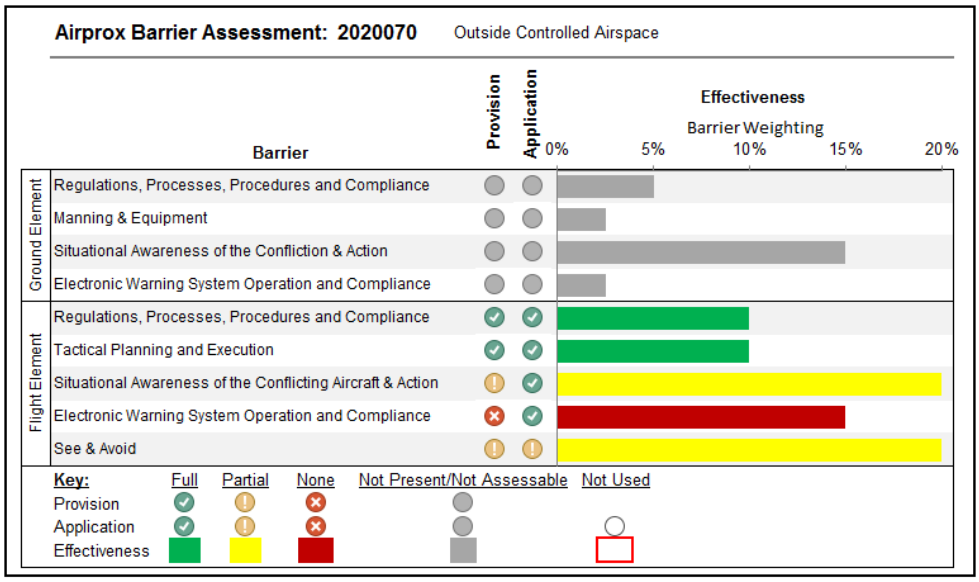
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the G102 pilot did not have any information on the C42. The C42 pilot had generic information on the glider activity at and around The Park gliding site.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the FLARM in the G102 could not detect the transponding C42. The C42 was not fitted with an Electronic Warning System.

See and Avoid were assessed as **partially effective** because both pilots saw the other aircraft late and the G102 pilot carried out emergency avoiding action. The C42 pilot did not have time to carry out any avoiding action.



[5] The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.