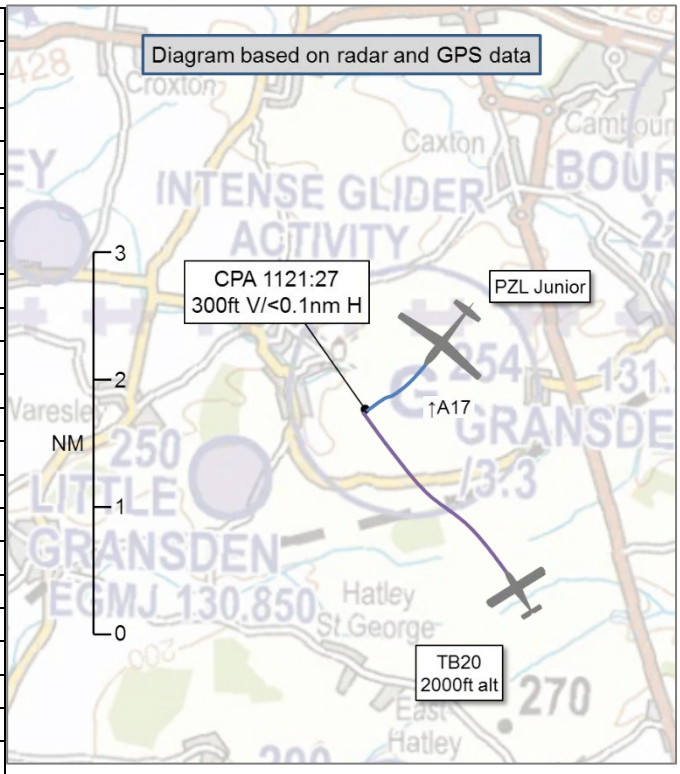
AIRPROX REPORT No 2019020

Date: 03 Feb 2019 Time: 1121Z Position: 5210N 00007W Location: Gransden Lodge

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PZL Junior	TB20
Operator	Civ Gld	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Listening Out	AGCS
Provider	Gransden Lodge	Little Gransden
Altitude/FL	1700ft	2000ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White, red	White, blue
Lighting	Not fitted	NK
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1500ft	NK
Altimeter	QNH (NK hPa)	QNH (NK hPa)
Heading	170°	320°
Speed	50kt	115kt
ACAS/TAS	FLARM	Not fitted
Alert	None	N/A
Separation		
Reported	200ft V/0m H	500ft V/0m H
Recorded	300ft V/<0.1nm H	



THE PZL JUNIOR PILOT reports that he had just taken a winch launch on RW22 at Gransden Lodge airfield. He had released at about 1500ft agl and initially turned to the right. He then banked to the left and immediately saw a white-and-blue, low-wing powered-aircraft heading directly towards him, travelling in an approximately south-to-north direction. There was no lift at the time and his aircraft was in a steady decent. He kept the approaching aircraft in view as it passed directly above. At no time did it deviate in direction or speed. When he first noted the other aircraft, it was approaching with the sun approximately behind it. Once it had passed above his glider, he immediately banked to point in the same direction as the powered craft in an unsuccessful attempt to note its registration. He immediately radioed the Gransden launch point to report the Airprox.

He assessed the risk of collision as 'Medium'.

THE TB20 PILOT reports that he had experienced an undercarriage partial-retraction issue and was positioning for a potential emergency landing at Little Gransden. He saw a glider ahead and zoom-climbed to remain clear above it. A pilot-qualified passenger remarked that the glider was in sight at all times and that being a very cold clear day over open countryside there would be no vertical air currents for the glider to ascend and become dangerously close.

He assessed the risk of collision as 'None'.

Factual Background

The weather at Luton was recorded as follows:

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METAR EGSS 031120Z AUTO 24006KT 9999 NCD 02/M02 Q1024=
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Analysis and Investigation

UKAB Secretariat

The PZL Junior and TB20 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[1]. If the incident geometry is considered as converging then the TB20 pilot was required to give way to the PZL Junior[2].

Comments

Gliding Club CFI

Along with other gliding sites we appear to be experiencing an increasing number of site overflights below winch launch height, even though the site is marked on the charts with an indication that winch launching takes place up to 3100ft AMSL. In this instance, the approaching aircraft routed close to the end of RW22 which at the time was being used for winch-launching with launch heights in excess of 1800ft being achieved and therefore was very close to the position where gliders were releasing from the winch cable.

Summary

An Airprox was reported when a PZL Junior and a TB20 flew into proximity near Gransden Lodge glider site at 1121hrs on Sunday 3rd February 2019. Both pilots were operating under VFR in VMC, the PZL Junior pilot listening out on the Gransden Lodge launch frequency, and the TB20 pilot in receipt of an A/G service from Little Gransden.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, and GPS track log. 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.

Members first discussed the TB20 pilot's flight path and noted that whilst overflight of a winch-launch glider site below the maximum winch launching altitude posed a significant potential risk, in this case the TB20 had flown to the west of the glider site, beyond the point at which the winch was positioned. Consequently, the PZL Junior pilot had had time to release from the wire, turn right and left and then see the TB20. Members wondered whether the TB20 pilot was fully aware of the gliding activity at Gransden Lodge and noted that, even if he had been, neither he nor the PZL Junior pilot had any specific SA on each other (**CF1**). The Board felt that the TB20 pilot was likely and understandably task-focused on his undercarriage problem (**CF2**), although members also felt that such a problem should have been resolved in less congested airspace, perhaps by remaining west of Little Gransden whilst trouble-shooting the problem. It was not clear whether the TB20 pilot had already done this and was simply positioning to land, or whether he was in the first stages of responding to the undercarriage indication.

Members noted that the PZL Junior was equipped with a TAS (FLARM) which, unfortunately, was incompatible with the TB20's transponder (**CF3**). Notwithstanding, although the PZL Junior pilot saw the TB20 at a late stage (**CF4**), he was able to assess that by maintaining his current flight path, collision would not occur. The TB20 pilot stated that he had 'zoom climbed' in order to remain well above the glider but members felt that with a reported initial sighting at 1nm, the TB20 pilot may have been better served by turning to increase lateral separation as well.

[1] SERA.3205 Proximity.
[2] SERA.3210 Right-of-way (c)(2) Converging.

Finally, members discussed the risk and agreed that although safety had been reduced, both pilots had taken timely and effective action (or assessed that inaction was sufficient in the case of the glider pilot), such that the risk of collision had been averted.

PART C: ASSESSMENT OF CAUSE AND RISK

Contributory Factors:

CF	Factor	Description	Amplification
	Flight Elements		
	• Situational Awareness of the Conflicting Aircraft and Action		
1	Contextual	• Situational Awareness and Sensory Events	Pilot had no, or only generic, Situational Awareness
2	Human Factors	• Distraction - Job Related	Pilot was distracted by other tasks
	• Electronic Warning System Operation and Compliance		
3	Technical	• ACAS/TCAS System Failure	Incompatible CWS equipment
	• See and Avoid		
4	Human Factors	• Monitoring of Other Aircraft	Late-sighting by one or both pilots

Degree of Risk: C.

Recommendation: Nil.

Safety Barrier Assessment[3]

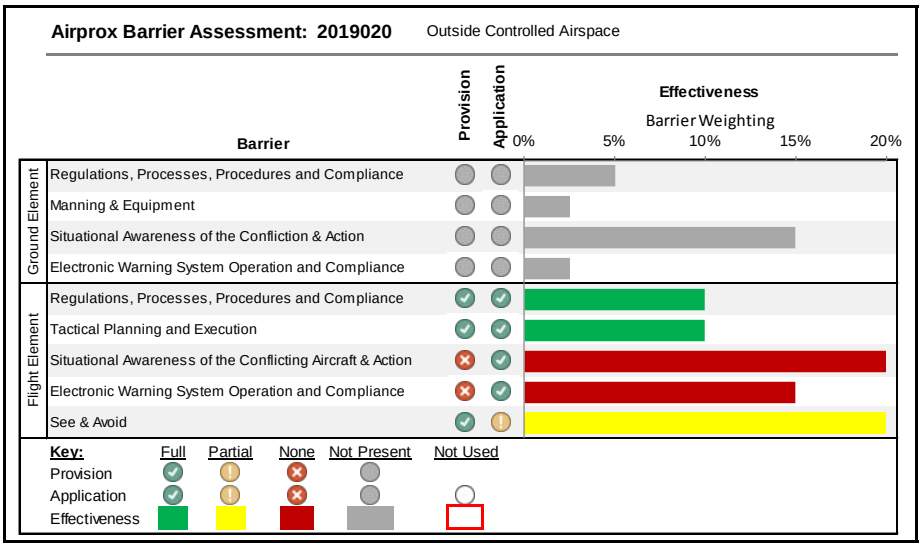
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot was aware of the other aircraft until visually sighted.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the PZL Junior FLARM was not compatible with the TB20 transponder.

See and Avoid were assessed as **partially effective** because although the TB20 pilot reported seeing the glider at a range of 1nm he flew over it with a vertical separation of only 300ft at CPA.



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