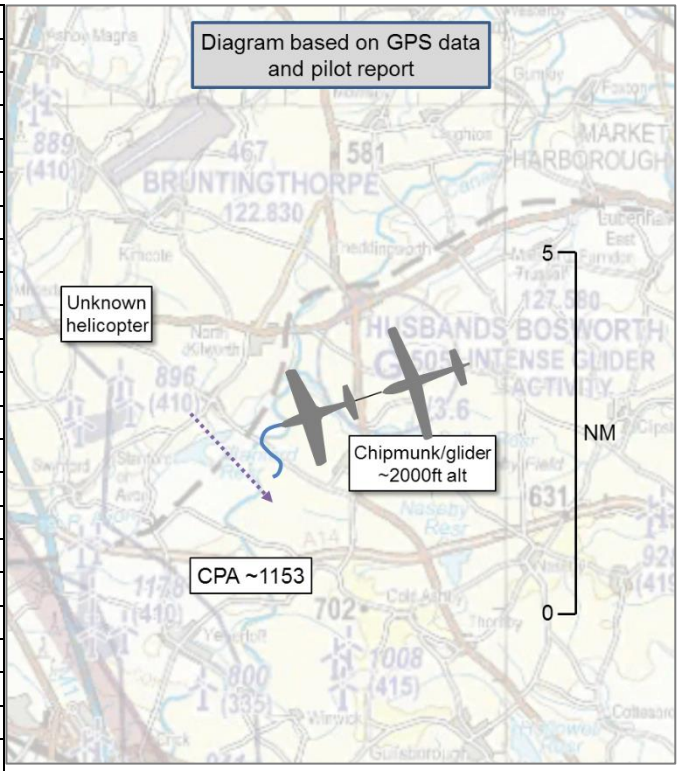
AIRPROX REPORT No 2020003

Date: 05 Jan 2020 Time: 1153Z Position: 5225N 00105W Location: 2NM SW Husbands Bosworth

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Chipmunk	Helicopter
Operator	Civ FW	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	NK
Service	AGCS	NK
Provider	Hus Bos	NK
Altitude/FL	~2000ft	NK
Transponder	Not fitted	NK
Reported		Not reported
Colours	Yellow, white	
Lighting	Strobe, landing	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	1400ft	
Altimeter	NK	
Heading	215°	
Speed	65kt	
ACAS/TAS	PowerFLARM	
Alert	NK	
Separation		
Reported	50ft V/500m H	N/A
Recorded	NK	



THE CHIPMUNK PILOT reports approaching the cloudbase whilst towing a glider when a grey and red helicopter crossed ahead and slightly above from right to left. There was no time to take avoiding action.

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

THE HELICOPTER PILOT could not be traced.

Factual Background

The weather at Birmingham and Wittering was recorded as follows:

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METAR EGBB 051150Z 21007KT 160V250 9999 BKN009 BKN032 08/06 Q1031=
METAR EGXT 051150Z AUTO 22010KT 9999 OVC028/// 08/06 Q1030=
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Analysis and Investigation

UKAB Secretariat

The Chipmunk and helicopter 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 helicopter pilot was required to give way to the Chipmunk towing the glider[2]. The Chipmunk pilot identified a helicopter using an internet flight tracking app. However, this helicopter was not in the vicinity of the Airprox position at the time of the Airprox. No

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

secondary radar tracks or traceable primary tracks were recorded in the Airprox area at the time of the Airprox.

Comments.

BGA

The likelihood of encountering glider and tug traffic is significantly higher within a few miles of active gliding sites. An aerotow combination has much less manoeuvrability than a normal aircraft and takes up more space in the sky. When the tow finishes, the glider will usually turn and climb while the tug turns in the opposite direction and descends; this is one good reason, of many, to give the combination a wide berth.

Summary

An Airprox was reported when a Chipmunk/glider tow and an unknown helicopter flew into proximity near Husbands Bosworth gliding site at about 1152Z on Sunday 5th January 2020. Both pilots were operating in VMC, the Chipmunk pilot under VFR and listening out on the Husbands Bosworth A/G frequency.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate operating authorities. 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.

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 a combination of written contributions and dial-in/VTC comments. Although not all Board members were present for the entirety of the meeting and, as a result, the usual wide-ranging discussions involving all Board members were more limited, sufficient engagement was achieved to enable a formal assessment to be agreed along with the following associated comments.

Members first discussed the Chipmunk pilot's report. Although the suspected other aircraft was reported on the basis of a flight tracking website, it was subsequently determined that the reported aircraft was not at the Airprox location at the reported time. Members noted that such flight tracking websites can be prone to large errors in aircraft position and timing, depending on surveillance coverage in any particular area. Surveillance radar recordings had not shown a traceable primary track or a secondary track in the area, which members found unusual; a helicopter member noted that he could not recall any helicopter that was not fitted with a transponder. Although this may of course have been unserviceable or inadvertently not selected on, members though that even so, a primary track should have been apparent. In the event, the Husbands Bosworth A/G Operator was not required to monitor the tug/glider position (**CF1**) and in any case could not reasonably have been aware of the helicopter at the reported range from the airfield. Electronic conspicuity was defeated by the incompatible equipment of the helicopter's TAS, if any, relying on transponder output, which was not fitted to the Chipmunk. Similarly, the Chipmunk's PowerFLARM relied on FLARM or Mode C of the helicopter, which was, respectively, likely not fitted and apparently not available (**CF3**). Consequently, the Chipmunk pilot had no SA on the approaching helicopter (**CF2**). The Chipmunk pilot reported a late sighting (**CF4**) and assessed the risk of collision as 'High'. He had also reported the helicopter as passing 500m ahead which, at the reported speed of 65kt, represented a spacing of about 15sec, which members agreed was more a case of being concerned by the proximity of the other aircraft (**CF5**). Some members felt that the helicopter should have given the gliding site a wider berth but after further discussion the Board agreed that, other than direct overflight of a gliding site, Class G airspace was designed such that it was equally accessible to all and that all users had an equal responsibility to avoid the risk of mid-air collision. The Board then discussed the risk and agreed that without a report from the helicopter pilot

or any factual information to support an assessment of separation at CPA there was insufficient information available to determine the risk involved.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2020003		
CF	**Factor**	**Description**	**Amplification**
	Ground Elements		
	• Situational Awareness and Action		
1	Contextual	• ANS Flight Information Provision	Not required to monitor the aircraft under the agreed service
	Flight Elements		
	• Situational Awareness of the Conflicting Aircraft and Action		
2	Contextual	• Situational Awareness and Sensory Events	Pilot had no, late or only generic, Situational Awareness
	• 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
5	Human Factors	• Perception of Visual Information	Pilot was concerned by the proximity of the other aircraft

Degree of Risk: D.

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:

Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because the pilot was not in receipt of a service that required ATC monitoring.

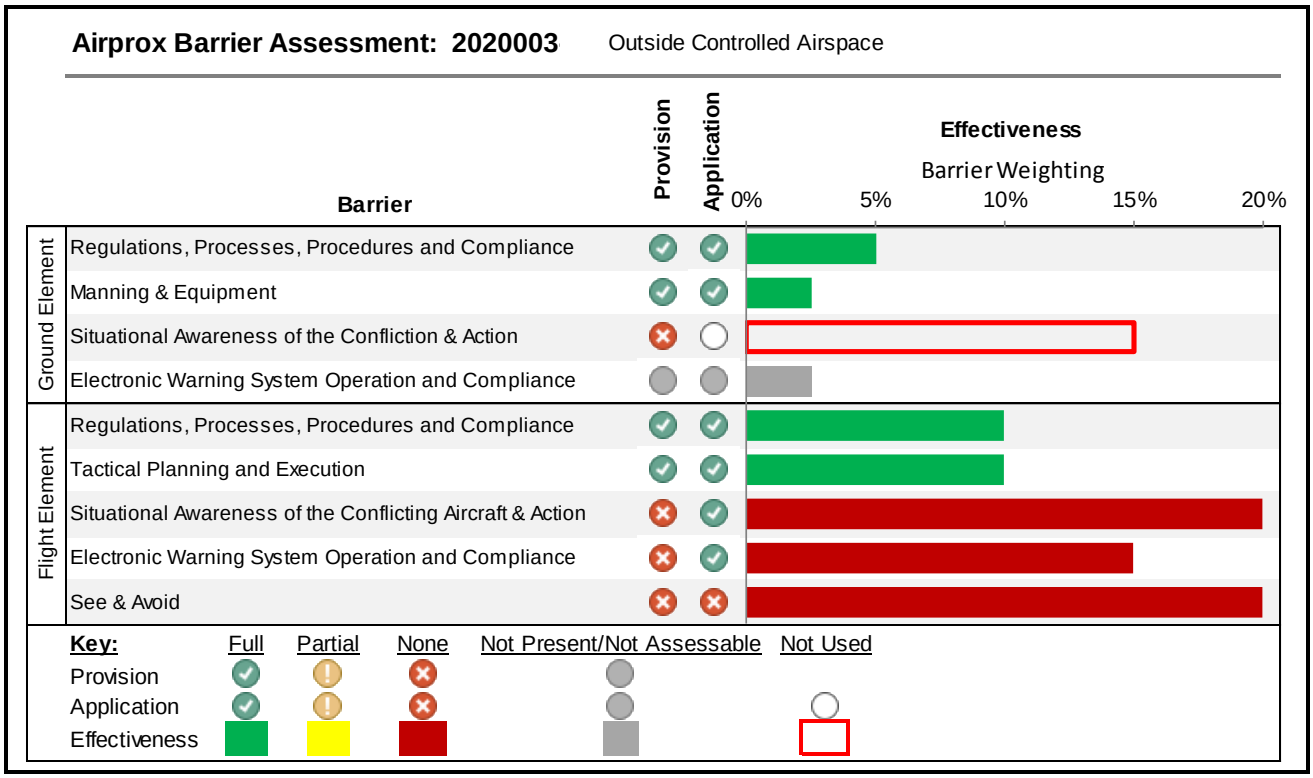
Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the Chipmunk pilot was not aware of the helicopter until visually sighted.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the Chipmunk PowerFLARM likely could not alert against the other aircraft and a helicopter TAS could not alert against the non-transponding Chipmunk.

See and Avoid were assessed as **ineffective** because the Chipmunk pilot did not see the helicopter in time to increase separation 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.


Airprox Barrier Assessment: 2020003
Outside Controlled Airspace
Barrier
Provision
Application
Effectiveness
Barrier Weighting
0%
5%
10%
15%
20%
Ground Element
Regulations, Processes, Procedures and Compliance
Manning & Equipment
Situational Awareness of the Confliction & Action
Electronic Warning System Operation and Compliance
Flight Element
Regulations, Processes, Procedures and Compliance
Tactical Planning and Execution
Situational Awareness of the Conflicting Aircraft & Action
Electronic Warning System Operation and Compliance
See & Avoid
Key:
Full
Partial
None
Not Present/Not Assessable
Not Used
Provision
Application
Effectiveness