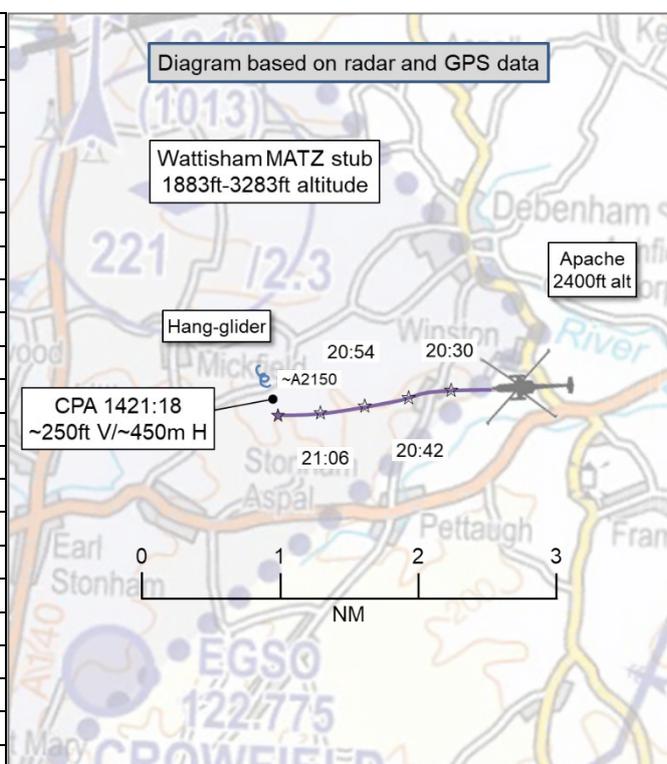


AIRPROX REPORT No 2022161

Date: 04 Aug 2022 Time: 1421Z Position: 5212N 00109E Location: 8NM NE Wattisham (elev 283ft)

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Hang-glider	AH64 Apache
Operator	Civ Hang	HQ JHC
Airspace	Wattisham MATZ	Wattisham MATZ
Class	G	G
Rules	VFR	IFR
Service	None	Traffic
Provider	N/A	Wattisham
Altitude/FL	~2150ft	2400ft
Transponder	Not fitted	A, C, S
Reported		
Colours	White, grey, black	Green
Lighting	Not fitted	HISL, landing, nav
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2150ft	2000ft
Altimeter	QNH (NK hPa)	QFE (1017 hPa)
Heading	NK	NK
Speed	NK	110kt
ACAS/TAS	Not fitted	Not fitted
Separation at CPA		
Reported	0ft V/100m H	NK V/1NM H
Recorded	~250ft V/~450m H	



THE HANG-GLIDER PILOT reports conducting a cross country flight, circling in a gentle thermal, when they saw a black 'thing' to the northeast and at the same height. They wondered whether it was a bird, but after one more 360° turn they realised it was an aircraft flying directly towards them. They wanted to do a high banked 360° turn to make sure it had seen them but there was no time because it was closing too fast, so they 'pulled onto high speed' to get out of its way. The hang-glider pilot identified the aircraft as a military helicopter, perhaps an AH64 Apache, presumably on its way to Wattisham. They did not know if it had seen them but, as far as they could tell, it didn't appear to alter course or altitude. They guessed it passed at a distance of about 100m so they braced for turbulence. In the event, it was not too bad; just a bit bumpy for a short while. The hang-glider pilot stated that they were very concerned and certainly felt in danger because the helicopter was at exactly the same height and flying straight at them. The hang-glider pilot noted that they had been fortunate to see the helicopter in sufficient time to take collision avoidance action. Because the incident was over very quickly, they had difficulty recalling and visualising how close the helicopter was when it passed.

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

THE APACHE PILOT reports being in the vicinity of Framlingham, returning to base, when they identified a hang-glider from an estimated 3-4NM away and reported it to ATC. The Apache pilot was on approach vectors in VMC and they had not thought the incident noteworthy. In hindsight, they felt they should have submitted a DASOR.¹ They did not consider the incident an Airprox given the early identification and put it down to a hang-glider [pilot] disregarding the MATZ Stub at Wattisham on the RW23 approach. Their recollection and statement to ATC at the time was that it was at 8NM on the RW23 approach path at approximately 1800ft QFE, which would have put it into direct conflict had the Apache been conducting a straight-in approach. However, they were being vectored left-base on a converging course for a RW23 final at 2000ft QFE. The hang-glider passed to the right at an estimated

¹ Defence Air Safety Occurrence Report.

range of 1NM. They conducted one further approach but elected for a short pattern at 1500ft QFE due to the hang-glider still occupying a similar position.

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

THE WATTISHAM PAR CONTROLLER reports that no mention of an Airprox was made at the time and thus this report was a retrospective submission. Their recollection of what they believed to be the event was as follows: The Apache pilot was in receipt of a Traffic Service from Approach Radar Control (APR) and being vectored for a PAR approach to RW23. Transfer of control from APR to themselves occurred at approximately eight miles, offset to the south. On initial contact, the Apache pilot advised them of the presence of a hang-glider on the approach path at eight miles, at a conflicting level (the Apache was at standard pattern height of 2000ft QFE), which they acknowledged. Nothing indicating such traffic was showing on either the PAR or combined PSR/SSR surveillance radar screens, however, the unit was aware that Mendlesham hang-gliding site was active, and they believe APR gave generic information of this activity to the Apache pilot prior to turning the aircraft in and transferring control. The PAR approach was continued and completed, with the pilot's intention to conduct a low-approach for one further PAR. With the presence of the hang-glider in mind, the pilot requested a short pattern circuit for the subsequent approach, in order to deconflict, which was agreed and conducted without further incident. A retrospective Military Occurrence Report was submitted by the Apache crew upon notification of the event by the UK Airprox Board, in which it was stated that they did not consider it to be an Airprox situation, because they saw the hang-glider in good time. No phone calls from the hang-gliding club at Mendlesham were received by the Unit.

Factual Background

The weather at Wattisham was recorded as follows:

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EGUW 041450Z 32011KT CAVOK 24/09 Q1015 NOSIG RMK BLU BLU
EGUW 041350Z 31010KT 9999 SCT040 BKN250 23/10 Q1015 NOSIG RMK BLU BLU
EGUW 041250Z 35008KT CAVOK 23/09 Q1014 NOSIG RMK BLU BLU
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Analysis and Investigation

UKAB Secretariat

The hang-glider and Apache 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 converging then the Apache pilot was required to give way to the hang-glider.³

Wattisham Investigation

The Wattisham investigation found that the cause of the incident was as follows: 'Perception of the third party was such that they felt an Airprox should be filed. The aircraft Captain of [Apache C/S] had a visual padlock with the hang-glider throughout and did not perceive a loss of safe separation.', with one causal factor as follows: This incident falls outside of service control.

The DDH commented as follows: I commend the captain of [Apache C/S] for their lookout and for quickly alerting ATC of the traffic. The MATZ Stub is not recognised, formally, by civilian users and as such we must remain vigilant in our lookout, it is the only barrier to Loss of Safe Separation against non-transponding [aircraft] with little radar cross-section.

The Wattisham Unit Safety Manager made the following comment: Civil aircraft, including hang-gliders, are not bound by any rules of a MATZ and are under no legal obligation even to observe its existence. Generally speaking there is a high degree of courtesy among the GA community in requesting approval for MATZ penetration, and they do receive such approval (it isn't within ATC's

² (UK) SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

³ (UK) SERA.3210 Right-of-way (c)(2) Converging. MAA RA 2307 paragraph 12.

remit to deny such requests to a civil aircraft though we may deny them entry into the ATZ). However, from experience, there will always be a handful – not that this particular hang-gliding pilot is necessarily one of those – who choose to take the “I’m fully entitled to be here without even talking to you” stance rather than following the accepted etiquette like everyone else. Just something to be aware of, with Rattlesden and Mendlesham, and Elmsett and Crowfield in the vicinity, and the seemingly ever-increasing number of GA aircraft that fill the skies.

Wattisham NATS Unit Investigation

The Wattisham NATS Unit Investigation found the following:

Executive summary:

1415Z, an Apache helicopter was in receipt of a Traffic Service from Approach Radar Control and was vectored for a PAR Approach to Runway 23. Transfer of control from APR to PAR controller occurred at approximately eight miles, offset to the south. On initial contact, [Apache C/S] advised the controller of the presence of a hang-glider on the approach path at eight miles, at a conflicting level, which was acknowledged. The Unit was aware that Mendlesham hang-gliding site was active, and APR gave generic information of this activity to [Apache C/S] prior to turning the aircraft in and transferring control.

The PAR Approach was completed without incident.

Investigation:

The Unit was aware that Mendlesham hang gliding site was active, and APR gave generic information of this activity to [Apache C/S] prior to turning the aircraft in and transferring control. No indication of hang-gliding traffic was showing on either the PAR or combined PSR/SSR surveillance radar screens.

Conclusions:

From the description given by the pilot, the controller did not believe an Airprox had occurred.

From the pilot's statement there was no Airprox. The Hang Glider disregarded the MATZ Stub at EGUW on runway 23 Approach (CF1).

The Airprox was filed by an external agency on 04/08/22 but was not notified to the unit until 08/09/2022 (UKAB reference: 2022161).

Comments

JHC

Due to a good lookout by the Apache pilot, this hang-glider was identified at a good distance and as such a dangerous situation was avoided. It is incumbent on all airspace users within Class G airspace, both civil and military, to maintain good airmanship as well as a strong lookout. The continued engagement between Wattisham Flying Station and the surrounding hang-gliding units will help.

BHPA

The BHPA notes from the hang-glider pilot's report that whilst they saw the Apache quite late, the Apache captain's lookout and timely avoiding action was commendable. We accept that the hang-glider pilot was rightly concerned about the helicopter's wake turbulence and as always, surmise whether the Apache pilot was fully aware of the far-reaching effects of their downwash despite their avoiding action.

A MATZ is Class G airspace and neither permission nor clearance is required by civilian pilots to enter it. However, we strongly advise all BHPA members intending to launch and fly from any site in close proximity to a military aerodrome or MATZ - especially on weekdays - to contact the military controlling authority and advise of their operations and intentions. This not only shows good airmanship and courtesy but is positively helpful in avoiding Airprox such as this. The BHPA also

recommends the filing of a CANP and, where possible, carrying some form of portable EC which may all contribute to mitigating Airprox.

The BHPA will once again promulgate these recommendations to their members via its SkyWings magazine.

Summary

An Airprox was reported when a hang-glider and an Apache flew into proximity about 8NM northeast of Wattisham at 1421Z on Thursday 4th August 2022. Both pilots were operating in VMC, the hang-glider pilot under VFR and not in receipt of a FIS and the Apache pilot under IFR, in receipt of a Traffic Service from Wattisham Approach.

PART B: SUMMARY OF THE BOARD'S DELIBERATIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data, a report from the air traffic controller 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.

The Board discussed the Airprox and agreed that the separation at CPA and situational awareness of the Apache pilot was such that normal parameters had pertained, albeit that the hang-glider pilot had perceived a risk and had correctly reported an Airprox. The Board established the following contributory factors:

- CF1.** The hang-glider was not a radar-significant object and hence Wattisham Approach had no situational awareness of it until reported by the Apache pilot.
- CF2.** Neither pilot had situational awareness of the other aircraft until sighted.
- CF3.** The hang-glider pilot was concerned due to their perception of the trajectory and proximity of the Apache.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

2022161				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Ground Elements				
• Situational Awareness and Action				
1	Contextual	• Traffic Management Information Action	An event involving traffic management information actions	The ground element had only generic, late, no or inaccurate Situational Awareness
Flight Elements				
• Situational Awareness of the Conflicting Aircraft and Action				
2	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness
• See and Avoid				
3	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft

Degree of Risk:

E.

Safety Barrier Assessment⁴

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 **partially effective** because the available situational awareness was generic only.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the available situational awareness was generic only.

		Airprox Barrier Assessment: 2022161		Outside Controlled Airspace					
		Barrier	Provision	Application	Effectiveness				
					Barrier Weighting				
					0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓	✓	0%	5%	10%	15%	20%
	Manning & Equipment	✓	✓	✓	0%	5%	10%	15%	20%
	Situational Awareness of the Confliction & Action	⚠	⚠	⚠	0%	5%	10%	15%	20%
	Electronic Warning System Operation and Compliance	⊖	⊖	⊖	0%	5%	10%	15%	20%
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✓	✓	0%	5%	10%	15%	20%
	Tactical Planning and Execution	✓	✓	✓	0%	5%	10%	15%	20%
	Situational Awareness of the Conflicting Aircraft & Action	⚠	✓	⚠	0%	5%	10%	15%	20%
	Electronic Warning System Operation and Compliance	⊖	⊖	⊖	0%	5%	10%	15%	20%
	See & Avoid	✓	✓	✓	0%	5%	10%	15%	20%
Key:		Full	Partial	None	Not Present/Not Assessable	Not Used			
Provision		✓	⚠	✗	⊖	⊖			
Application		✓	⚠	✗	⊖	⊖			
Effectiveness		■	■	■	■	□			

⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).