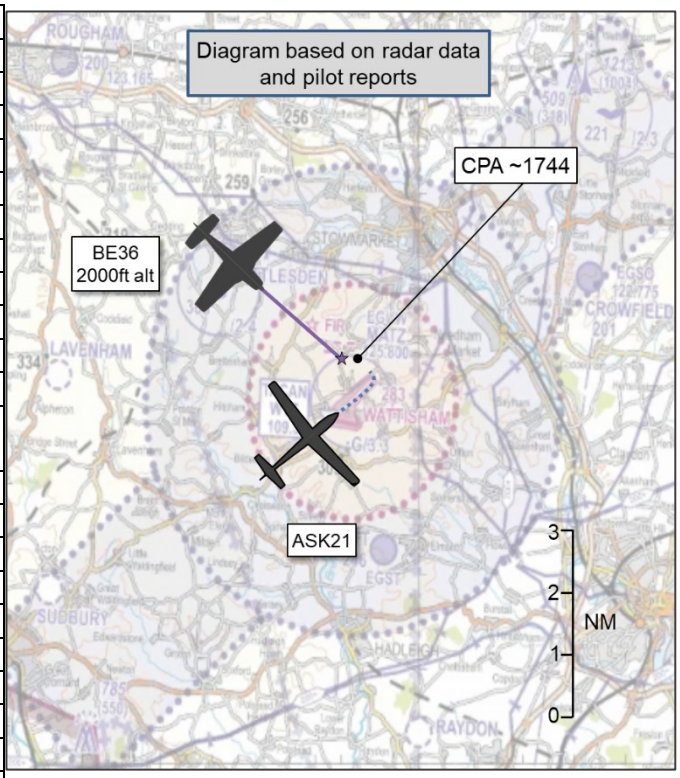
AIRPROX REPORT No 2020129

Date: 19 Sep 2020 Time: 1744Z Position: 5208N 00057E Location: Wattisham elevation 283ft

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASK 21	BE36
Operator	Civ Gld	Civ FW
Airspace	Wattisham ATZ	Wattisham ATZ
Class	G	G
Rules	VFR	VFR
Service	None	Basic
Provider		London Information
Altitude/FL	NK	FL020
Transponder	Not Fitted	A, C, S
Reported		
Colours	White	White, Gold
Lighting	Nil	Strobes, Nav, Beacon
Conditions	VMC	VMC
Visibility	30km	>10km
Altitude/FL	2100ft	3000ft
Altimeter	QFE	QNH
Heading	300°	120°
Speed	45kt	160kt
ACAS/TAS	Not fitted	TCAS I
Alert	N/A	None
Separation		
Reported	150ft V/50m H	Not Seen
Recorded	NK V/NK H	



THE ASK21 PILOT reports they had just winch launched from RW05 at Wattisham to a height of 2250ft. They came off the launch and made a gentle left turn at 90° to the runway and saw the BE36 ahead, lower but coming towards them. They continued the left turn so that the other aircraft wouldn't go directly underneath and straightened up after a 180° turn to see where the other aircraft was going. It didn't alter course and carried on past Ipswich. The ASK21 pilot opined that had it been a few seconds earlier they would have been attached to 2250ft of Dyneema launching cable. The aircraft was well within the ATZ, no radio call was heard before, during or after. There was an air traffic controller (off duty) at the launch-point who witnessed the event and brought the details up on flight radar.

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

THE BE36 PILOT reports that they were in contact with London Information continuously throughout the flight. They also called on the necessary frequencies to see whether areas on their route were active. They believed that they asked whether the MATZ of Wattisham was active, they recalled that it was not busy and they received no further Traffic Information. They were not aware of the Airprox until informed by the UKAB.

The pilot did not assess the risk of collision.

THE LONDON INFORMATION FISO reports that they had no recollection of the incident.

Factual Background

The weather at Wattisham was recorded as follows:

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METAR EGUW 191650Z AUTO 05015KT 9999 NCD 18/10 Q1017=
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Analysis and Investigation

NATS ATSI

The pilot of [BE36 C/S], reported onto the London Flight Information Service (FIS) frequency, on a VFR flight maintaining 3400ft at 1604:18 (all times UTC). The pilot reported passing Workington and was instructed to display Mode-A code 1177 and issued a Basic Service. At 1653:17 the pilot of [BE36] reported that their planned routeing after Sheffield was Barkston then Clacton. The pilot was advised of parachuting activity en-route at other locations. Note: a direct route from Barkston to Clacton would penetrate the western stub of the Wattisham MATZ, however remaining clear of the Wattisham ATZ. The pilot requested at 1716:31 whether Lakenheath or Mildenhall were active. The FISO stated that the units frequently were, passing the Lakenheath frequency which the pilot stated they would free call. The pilot reported back on the FIS frequency at 1719:23 stating "*negative contact with Lakenheath*."

The BE36 tracked south-east beneath and outside the airway structure towards its destination, subsequently approaching Wattisham. No reference was made on the R/T by either the pilot or the FISO as to the proximity of Wattisham. [ASK21 C/S] was an ASK21 glider operating out of Wattisham in communication with Anglia Gliding Club. UK MIL AIP detailed the Wattisham airfield elevation as 283ft and the surrounding airspace was defined as:

Designation and lateral limits	Vertical limits	Airspace Classification
1	2	3
Wattisham MATZ. Circle 5nm radius centred on N52 07 37-30 E000 57 19-49 with stubs aligned Rwy 05/23.	3,000ft AAL SFC	G
Wattisham ATZ. Circle 2·5nm radius centred on N52 07 37-30 E000 57 19-49.	2,000ft AAL SFC	G

Figure 1

[BE36 C/S] maintained an indicated FL020 (local QNH 1016hPa, therefore pressure adjusted altitude of 2090ft) entered the Wattisham MATZ at 1742:19. The BE36 (displayed as FIS on radar) entered the Wattisham ATZ at 1743:23 (Figure 2).

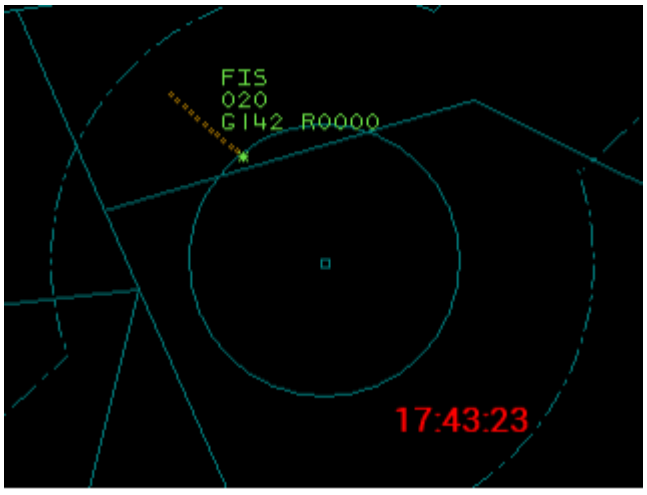


Figure 2

As the BE36 transited the MATZ, there were no radar contacts associated with the gliding activity until 1746:12, see Figure 3, at which point the BE36 was vacating the MATZ.

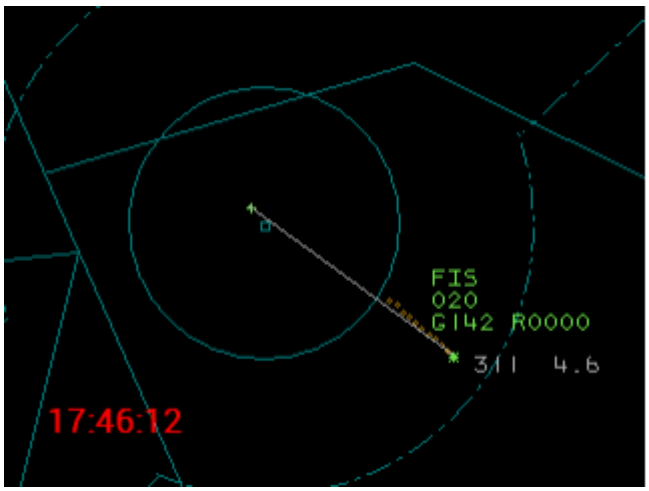


Figure 3

The UK MIL AIP EGUW AID detailed '*When ATC closed all traffic to make blind calls on 125·800. If gliding in progress request Anglia Base (125·8) cease launching prior to arr/dep*.' FIS is a non-radar derived information service, with recognised limitations, and it is ultimately the pilot's responsibility to make themselves aware of notified aerial hazards on their intended routeing. It is also a pilot's responsibility to employ the 'see and be seen' principles of VFR flight.

No reference was made on the FIS R/T as to the potential confliction by the pilot of [BE36 C/S] prior to transfer to Ostend Approach at 1801. NATS ATSI was notified by the UKAB of this event on the 22nd October 2020 and a retrospective report was requested from the FISO. The FISO's report relayed a factual description of the event, as the FISO had no recollection of the specific aircraft.

UKAB Secretariat

The ASK21 and BE36 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 head-on or nearly so then both pilots were required to turn to the right.[2] If the incident geometry is considered as converging then the BE36 pilot was required to give way to the glider.[3] An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation.[4]

Comments

BGA

We are very concerned over the continuing overflight of notified winch launch sites by GA aircraft, with more than 100 recorded instances during less than two years. The existence of winch sites and the altitudes of their operation is widely promulgated via maps, both paper and electronic, and by the AIP.

The dangers of so doing should be obvious to all and at the current rate, the likelihood of a serious incident or even accident is distinctly worrying. A tiny deviation, whether made at the planning stage or en-route, is all that is required to avoid flying directly overhead the launch run, which will be contained within the boundaries of the airfield. This will be no surprise to anyone possessing even a modicum of airmanship.

[1] SERA.3205 Proximity.
[2] SERA.3210 Right-of-way (c)(1) Approaching head-on.
[3] SERA.3210 Right-of-way (c)(2) Converging.
[4] SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Summary

An Airprox was reported when an ASK21 and a BE36 flew into proximity at Wattisham at 1744Z on Saturday 19th September 2020. Both pilots were operating under VFR in VMC, the ASK21 pilot was not in receipt of an ATS and the BE36 pilot was in receipt of a Basic Service from London Information.

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.

The Board first looked at the actions of the BE36 pilot. They were routing overhead Wattisham, and members wondered whether the pilot may have thought they were above the ATZ at 2000ft amsl, because they appeared to make no attempt to avoid it (**CF2**). Furthermore, the winch launch height was 3300ft, and was clearly displayed on the charts (**CF4, CF5**). Gliding members noted that there have been over 100 incidents of pilots flying through glider sites below the winch launch height in the last two years alone. They noted that the BE36 also flew directly overhead Rattlesdon, another glider site to the north west of Wattisham with a winch launch height of 2400ft. They informed the Board that the Dyneema cable being used by the gliders at Wattisham was 8 times stronger than steel and would cause significant damage if it hit an aircraft. Given that an early turn of just a few degrees would have kept the aircraft clear of the overhead, members questioned the planning processes that the BE36 pilot followed (**CF3**). Although the pilot was receiving a Basic Service from London Information, the FISOs do not maintain radar contact on their traffic and so would not have been able to inform the pilot that they were about to enter the Wattisham ATZ. Members thought that at the very least the pilot could have contacted Wattisham to find out whether they were flying, as they had done earlier with other airfields (**CF6, CF7**). Without such a call, the pilot had no situational awareness about the glider winch launching and this was further compounded because the TCAS in the BE36 could not detect the non-transponding glider (**CF8**, **CF9**). In the event, the BE36 pilot did not see the glider and was not aware of the Airprox until notified later (**CF10**).

A long discussion followed about whether the BE36 pilot was receiving an appropriate ATS, given that London Information were not required to monitor the aircraft on radar (**CF1**) and therefore could not warn the pilot about the Wattisham ATZ. The Airprox took place on a Saturday and many of the usual ATC units that would provide a LARS were closed. Some members noted that Farnborough LARS North could provide a service in the area, although it was generally considered to be on the edge of their area of responsibility, and so whether they could provide a Traffic Service would be dependant upon workload at the time. Eventually, members agreed that because the BE36 was routing from the north, the paucity of ATS providers in the area at the weekend meant that the pilot was probably receiving the best service available.

The ASK21 pilot had just conducted their winch launch and after turning 90° saw the BE36 approaching the airfield from the north-west. They had no prior knowledge about the BE36 until they saw it and did not have a CWS fitted (**CF8**). However, once the glider pilot had spotted the BE36, they were able to take action to keep clear and ensure the safety of their aircraft (**CF11**).

Finally, in determining the risk of the Airprox members noted that although the BE36 pilot had not seen the glider, the ASK21 pilot had seen the BE36 in time to take action to ensure separation. They therefore determined that there had been no risk of collision, but given that the BE36 pilot had not been visual with the glider and had flown through the ATZ, they agreed that safety had been degraded; Risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2020129		
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		
	• Regulations, Processes, Procedures and Compliance		
2	Human Factors	• Flight Operations Documentation and Publications	Regulations and/or procedures not complied with
	• Tactical Planning and Execution		
3	Human Factors	• Flight Planning and Preparation	
4	Human Factors	• Action Performed Incorrectly	Incorrect or ineffective execution
5	Human Factors	• Aircraft Navigation	Flew through promulgated and active airspace
6	Human Factors	• Monitoring of Other Aircraft	Did not avoid/conform with the pattern of traffic already formed
7	Human Factors	• Accuracy of Communication	Ineffective communication of intentions
	• Situational Awareness of the Conflicting Aircraft and Action		
8	Contextual	• Situational Awareness and Sensory Events	Pilot had no, late or only generic, Situational Awareness
	• Electronic Warning System Operation and Compliance		
9	Technical	• ACAS/TCAS System Failure	Incompatible CWS equipment
	• See and Avoid		
10	Human Factors	• Monitoring of Other Aircraft	Non-sighting or effectively a non-sighting by one or both pilots
11	Human Factors	• Perception of Visual Information	Pilot was concerned by the proximity of the other aircraft

Degree of Risk: C.

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:

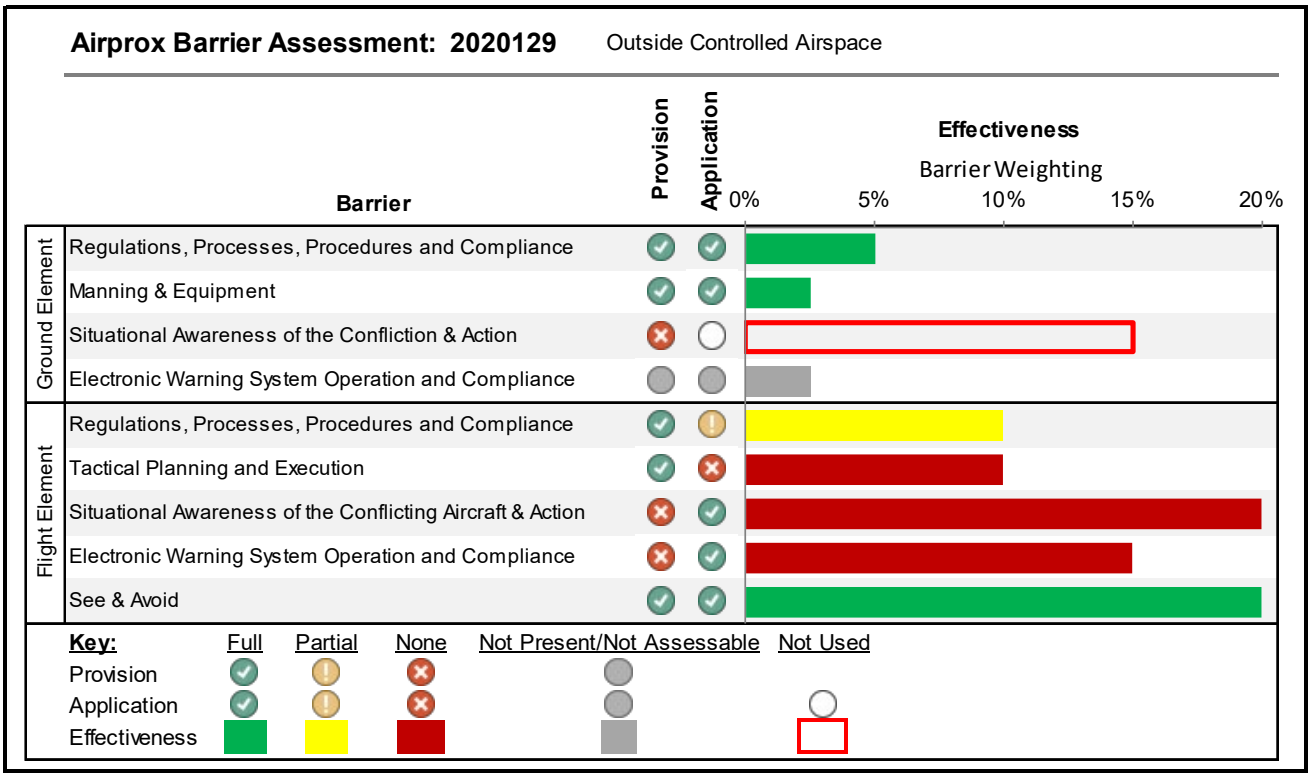
Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because the BE36 flew inside the ATZ and overhead the winch launch.

Tactical Planning and Execution was assessed as **ineffective** because the BE36 pilot could have planned to avoid the ATZ.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had any prior knowledge that the other was in the vicinity.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the TCAS I in the BE36 could not detect the glider.

[5] 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: 2020129
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