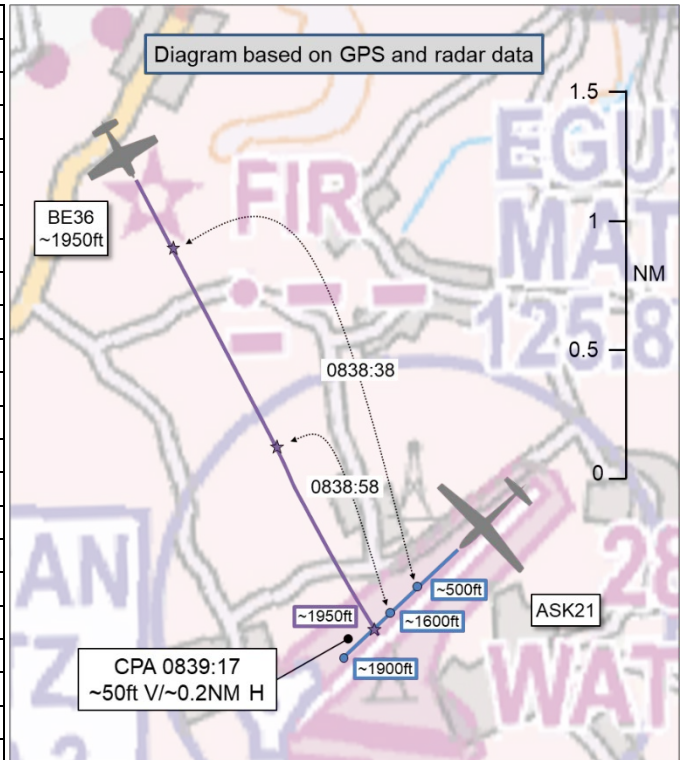


AIRPROX REPORT No 2024158

Date: 22 Jun 2024 Time: 0839Z Position: 5208N 00057E Location: Wattisham ATZ

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

| Recorded | Aircraft 1 | Aircraft 2 |
|--------------------------|------------------|-------------------|
| Aircraft | ASK21 | BE36 |
| Operator | Civ Gld | Civ FW |
| Airspace | Wattisham ATZ | Wattisham ATZ |
| Class | G | G |
| Rules | VFR | VFR |
| Service | Listening Out | Traffic (reduced) |
| Provider | Anglia Base | Southend Radar |
| Altitude/FL | ~1900ft | ~1950ft |
| Transponder | Not fitted | A, C, S |
| Reported | | Not reported |
| Colours | White | NR |
| Lighting | None | NR |
| Conditions | VMC | NR |
| Visibility | >10km | NR |
| Altitude/FL | "ascending" | NR |
| Altimeter | QFE | NR |
| Heading | 230° | NR |
| Speed | 60kt | NR |
| ACAS/TAS | FLARM | NR |
| Alert | None | NR |
| Separation at CPA | | |
| Reported | not seen | NR |
| Recorded | ~50ft V/~0.2NM H | |



A WITNESS AT THE GLIDER LAUNCH-CONTROL reports that the pilot of the approaching aircraft, [the BE36], had made two blind-calls to Wattisham Approach on 125.800MHz whilst approaching the airfield. The pilot of another aircraft nearby called to say words to the effect of 'Wattisham is closed at weekends'. However, no return call was made from [the gliding club] using their airband radio at the Wattisham glider launch-point to warn that 'although Wattisham Air Traffic is closed, the ATZ remains active with gliding operations in the local area and cables up to 3000ft over the airfield'. All calls were heard by another glider pilot that had just landed back at the launch-point, having made the normal downwind and final calls on 125.800MHz prior to landing. Meanwhile, the [ASK21] was being made ready to launch again by the team with the glider at the launch-point.

The person hooking the [ASK21] onto the cable made a visual check around the airspace above and behind the launch area to ensure no other aircraft were in the immediate area, and then called for the launch procedure to begin, which then took around 30sec to get the glider airborne. The [BE36] was not seen or heard during this time against the clouds nearby.

[The witness] was stood behind the launch-point when the [ASK21] launch began. As the [ASK21] launched, and was passing through around 1000ft, the [BE36] was first seen, and then heard, moving from right-to-left at approximately 2000ft and 120kts, on what appeared to be a course to pass very close to the launching [ASK21]. The [BE36] then made a sharp left turn to avoid the launching glider and cable. The pilots in the [ASK21] were unaware, as the aircraft was initially in a high right position, and then behind in the 'overhead' position as it climbed up at around 45° on the launch and continued with the launch to around 1800ft QFE. No further contact was made or heard with the [pilot of the BE36] at the time or after the incident.

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

THE ASK21 PILOT reports that their trainee carried out the normal pre-flight checks. The order was given to attach the winch cable and [the pilot of the ASK21] carried out a final visual check ahead (all clear) at time of launch. They were unaware during the launch and release of any aircraft behind them. After landing they were informed of an occurrence that had taken place during the launch. Due to the seating position (tandem) it would have been extremely difficult to have seen any air traffic behind them.

THE BE36 PILOT declined to submit a report.

THE SOUTHEND CONTROLLER reports that, at the time of the event, they were providing Aerodrome and Radar services in the Tower position with frequencies 127.730Mhz, 130.780Mhz, and 128.965Mhz cross-coupled. The [pilot of the BE36] was in receipt of a Traffic Service (which had been reduced) and had been advised of possible late warnings of traffic due to their distance from Southend and their altitude [Wattisham is 35NM from Southend]. In the area of the reported Airprox there were no radar contacts or traffic observed on the radar display. Also, the pilot did not advise them of the traffic or that they had had an Airprox whilst on frequency.

Factual Background

The entry for Wattisham in the UK AIP (ENR 2.2) provides the following information:

| ENR 2.2 OTHER REGULATED AIRSPACE | | | | |
|--|------------------------|---|---------------------------------|--|
| Name Lateral limits Vertical limits Class of Airspace | Unit Providing Service | Callsign Language Hours of Service Conditions of Use | Frequency Channel Purpose | Remarks |
| WATTISHAM ATZ A circle, 2.5 NM radius, centred at 520737N 0005719E on longest notified runway (05/23) Upper limit: 2000 FT AGL Lower limit: SFC Class: G | WATTISHAM | WATTISHAM APPROACH English H24 | 125.800 MHz ATC | Elevation: 283 FT AMSL. Hours of applicability for Rule 11 - See Column 3 Hours of Service. |

2.1.5 [...] Although civil recognition of a MATZ is not mandatory, pilots are to comply with the provisions of Rule 11 of the Rules of the Air Regulations 2015 in respect of the ATZ.

2.1.6 A MATZ is operative when the aerodrome concerned, or in the case of a CMATZ, any one of the aerodromes, is open.

The entry for Wattisham in the UK AIP (ENR 5.5) provides the following information:

| ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES | | | |
|---|--|-------------------------|---|
| Designation Lateral limits | Vertical Limits | Operator/User Tel No | Remarks Activity times |
| 1 | 2 | 3 | 4 |
| WATTISHAM GLIDER SITE, SUFFOLK (AD) (W AND T) 520739N 0005722E | Upper limit: 3000 FT AGL Lower limit: SFC | | Site elevation: 284 FT AMSL. Hours: HJ |

The entry for Wattisham in the Mil AIP (AD 2.20) provides the following information:

| EGUW AD 2.20 - LOCAL TRAFFIC REGULATIONS | |
|--|---|
| d. | Gliding out of ATC hours, weekends and Public Holidays. (2,000ft cables). |

The weather at Wattisham was recorded as follows:

METAR EGUW 220850Z AUTO 25010KT 9999 OVC017/// 17/13 Q1011

Analysis and Investigation

Southend Unit Investigation

At the time of the Airprox, the pilot of the BE36 was on a flight [...] via the Clacton (CLN) VOR, and was in receipt of a reduced Traffic Service from Southend Radar. The pilot of the ASK21 glider was not in communication with Southend Radar. No mention of the Airprox was made on the RT and, after the surveillance recordings were reviewed, the ASK21 was not visible on the radar.

Whilst investigating this occurrence, the investigator had access to the recorded RT and surveillance data consisting of the 'at the glass' recordings of the Southend Radar Controller's Working Position (CWP).

At the time of the occurrence, the Southend Radar controller was providing a combined Aerodrome and Approach Control Service in Radar in the Tower (RiT) configuration. Traffic loading was low.

At time 0836:34, [the pilot of the BE36] called Southend Radar and requested a Traffic Service, they reported that they were in a BE36, from [departure airfield] to [destination airfield], approaching Wattisham at altitude 2000ft on QNH 1011hPa. The Southend Radar controller instructed them to squawk 4575¹, and passed the Southend QNH 1012hPa. The controller then identified the aircraft, and a reduced Traffic Service (due to their level and distance from Southend) was agreed.

At time 0838:00, according to the recorded surveillance data, [the BE36] was approximately 3.5NM to the north-northwest of Wattisham. At that time, the aircraft's Mode C indicated level at altitude 2000ft (Figure 1).

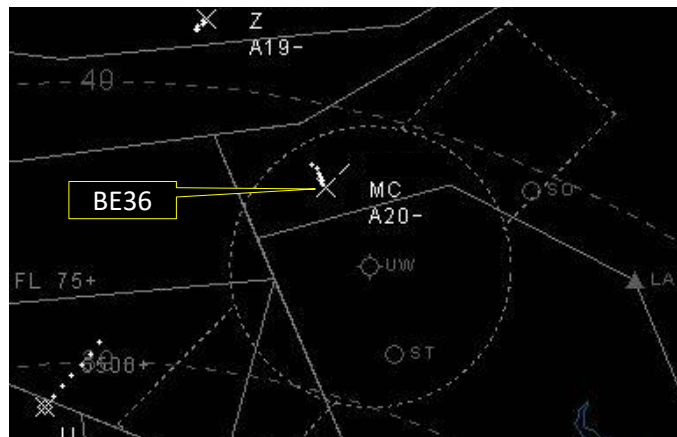


Figure 1 – Southend Radar at 0838:00

At time 0839:18 (Figure 2), according to the recorded surveillance data, [the BE36] was overhead Wattisham.

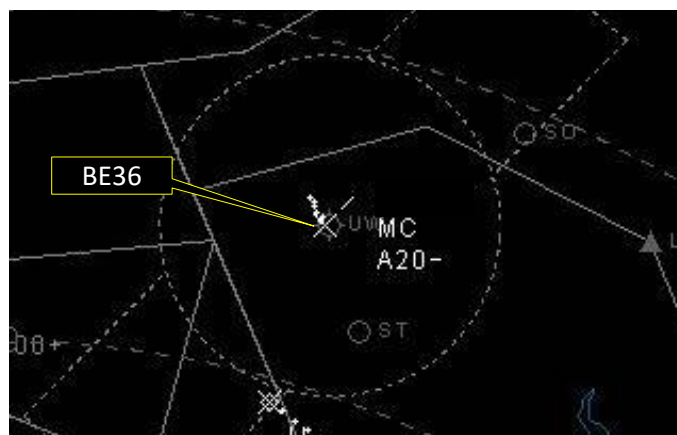


Figure 2 – Southend Radar at 0839:18

¹ Southend Airport conspicuity code. On the radar display, these codes are presented as 'MC'.

At time 0843:37, the Southend Radar controller observed that [the BE36] had descended, and therefore instructed the pilot to take their own terrain clearance. The pilot reported that Southend's transmission was "readability 1".

At time 0854:43, the Southend Radar controller advised [the pilot of the BE36] that they were approaching the edge of their radar cover, instructed them to squawk conspicuity, and suggested that they change to [an en-route] frequency.

Analysis: At the time the Airprox occurred, [the pilot of the BE36] was operating in Class G airspace, and was in receipt of a reduced Traffic Service from Southend Radar. The Southend Radar controller reduced the service due to the BE36's level, their distance from Southend and warned the pilot of possible late warning of traffic.

The CAP 774 – UK Flight Information Services, Chapter 3, Para 3.1 states that:

'A Traffic Service is a surveillance based ATS, where in addition to the provisions of a Basic Service, the controller provides specific surveillance derived traffic information to assist the pilot in avoiding other traffic. Controllers may provide headings and/or levels for the purposes of positioning and/or sequencing; however, the controller is not required to achieve deconfliction minima, and the pilot remains responsible for collision avoidance.'

Post-occurrence, the Southend Radar controller stated in their report, that in the area in which the Airprox was reported, "*there was no radar contact/traffic observed on the radar display*". When the surveillance recordings were reviewed, the recorded data confirmed that the ASK21 was not showing on the Southend radar.

According to the recorded surveillance data, the BE36's track was via the Wattisham airfield overhead. Wattisham is a military airfield but is also a notified gliding site outside of their ATC hours, at weekends and on Public Holidays. The UK AIP section ENR 5.5 states that Wattisham can be active with gliders from the surface to 3000ft AGL. Additionally, the UK MIL AIP, section AD 2 - EGUW - 1 – 4 states that winch cables operate up to 2000ft AGL.

The reported Airprox time was coincident with the BE36 approaching the Wattisham airfield overhead from the north. Shortly after the reported time, according to the recorded surveillance data, the BE36 was observed to turn onto an easterly track in the airfield overhead before it then resumed its southerly track towards Clacton.

CAP 774 – Chapter 3, Para 3.9 states that:

'When operating under their own navigation, pilots may alter course as required; however, unless safety is likely to be compromised, pilots shall not change their general route or manoeuvring area without first advising and obtaining a response from the controller.'

When the aircraft turned onto an easterly track, it is possible that the BE36 was avoiding other traffic, however, nothing was mentioned on the RT.

Conclusion: An Airprox was reported to Southend ATC by UKAB regarding an occurrence in Class G airspace between a BE36 and an ASK21 glider.

The track of the BE36 was via the Wattisham airfield overhead which is a notified gliding site. The BE36 pilot was in receipt of a reduced Traffic Service from Southend Radar, and the pilot had been advised that there may be late warning of traffic. The ASK21 was not in communication with Southend and, at the reported Airprox time, no conflicting traffic was observed on the Southend radar. Therefore, in those circumstances, the pilots of both aircraft had equal responsibility for avoiding other traffic.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and the BE36 could be positively identified from Mode S data (Figure 3). The BE36 was depicted on the radar replay as having flown at Flight Levels. A suitable correction was applied to determine its altitude which has been shown as an approximation in the diagram. The ASK21 was not observed on the radar replay before CPA. However, a primary-only return was observed on radar after CPA which, by reference to GPS data for the flight of the ASK21 as obtained by the UKAB Secretariat, broadly correlated to the position of the ASK21 (Figure 4). The altitude of the ASK21 had changed rapidly during the moments leading to CPA and has therefore been shown as estimated values.

CPA was determined to have occurred between the radar sweeps at 0838:14 and 0838:18. The diagram was constructed and the separation at CPA determined by combining the data sources.

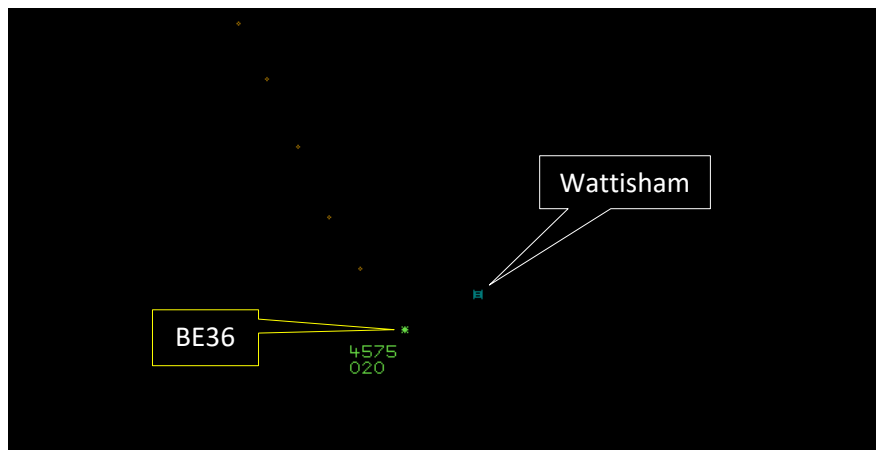


Figure 3 - 0839:18 (1sec after CPA)

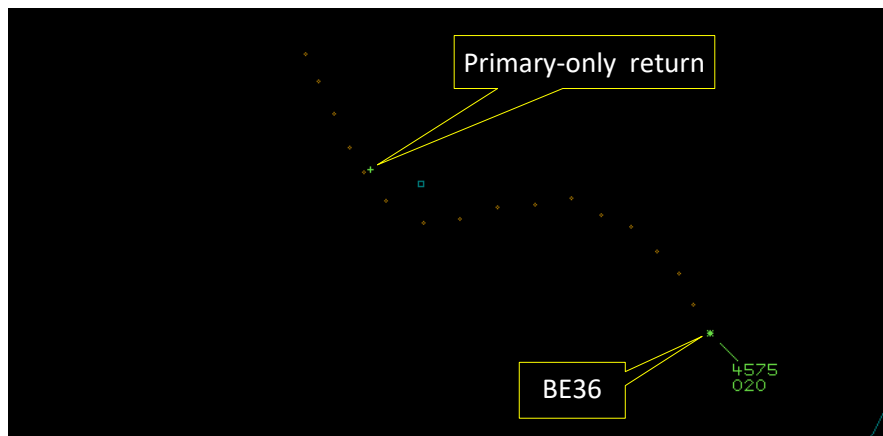


Figure 4 - 0840:02 (45sec after CPA)

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.² 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.³

Comments

AOPA

This Airprox highlights the importance of knowing that, even if an airfield is declared closed by an unknown source, the hours of operation of an ATZ should be checked in the UK AIP during pre-

² (UK) SERA.3205 Proximity.

³ (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

flight planning. GASCo provides excellent documentation on its website regarding navigation for the avoidance of known sites of aeronautical activity which, when used in pre-flight planning, can assist in ensuring this type of Airprox is avoided.

BGA

UK glider launch sites are listed in UK AIP ENR 5.5 and labelled on the CAA 1:500,000 and 1:250,000 charts with a "G" symbol, as shown in figure 5. A greater density of gliders may be expected nearby at any time during daylight hours, and at any altitude up to cloudbase. Where winch launching is used, the maximum winch launch altitude is listed in the AIP and marked on the chart; this is 3300ft AMSL at Wattisham, as indicated by the black arrow in the figure.



Figure 5

A glider being winch-launched achieves a climb angle of 45° and an initial climb rate in excess of 4000ft/min within 10sec of starting its ground roll. Under the right conditions it will then take about a minute to climb to 2500ft AGL; hence the pilot of an aircraft overflying a winch site below its notified maximum winch altitude will have little warning of a launching glider that suddenly appears at or above their level. Overflying a winch site below the notified altitude during daylight hours also risks encountering high tensile strength cable (as pictured) connecting a launching glider to the winch on the ground.

Because of the steeply pitched-up attitude, the pilot of a glider being winch launched has a very restricted view of any aircraft approaching at a similar level. Winch-launch ground crew will not initiate a launch if they see a powered aircraft about to overfly the active runway. However, an aircraft flying towards the site at typical GA cruising speeds, and which will arrive overhead at the same time as the winch launch finishes, could still be over 2NM away at the moment the launch starts, and hence out of sight of the ground crew.

Summary

An Airprox was reported when an ASK21 and a BE36 flew into proximity in the Wattisham ATZ at 0839Z on Saturday 22nd June 2024. The ASK21 pilot was operating under VFR in VMC and not in receipt of an ATS; the BE36 pilot was operating in unreported flight conditions and in receipt of a reduced Traffic Service from Southend Radar.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the pilot of the ASK21, radar photographs/video recordings, GPS track data for the ASK21 and a report from the Anglia Base radio operator. 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 first considered the actions of the pilot of the ASK21. Members noted that they had not reported having heard any radio transmissions that had alerted them to the presence of the BE36. Members agreed that the EC device fitted to the ASK21 would not have been expected to have detected the presence of the BE36 (CF8). Consequently, it was agreed by members that the pilot of the ASK21 had not had situational awareness of the presence of the BE36 (CF7). A member with particular knowledge of gliding operations explained that, during the launch of the ASK21 by winch, it would have been extremely unlikely that they would have been able to have seen an aircraft approaching the airfield. It was noted that the pilot of the ASK21 reported that they had not been aware of any unusual incident during their flight and members agreed that they had not sighted the BE36 (CF10).

Members next considered the actions of the Anglia Base radio operator and it was noted that they had heard two radio transmissions made by the pilot of the BE36. Members also noted that they had heard a third transmission, this time from an individual who had not identified themselves, which had, apparently, been a message to the pilot of the BE36 to suggest that Wattisham had been closed. Members would return to consider that third transmission later in the discussion. Members pondered the timing of the transmissions made by the pilot of the BE36 with respect to the commencement of the launch of the ASK21. Although a time-stamped recording of the radio transmissions had not been available, members analysed the sequence of known events.

The Southend Unit investigation had recorded that the initial call made by the BE36 pilot on the Southend Approach frequency had been at 0836:34. Consequently, members deduced the most likely time that the two blind calls had been made on the Anglia Base/Wattisham Approach frequency. Members agreed that it was reasonable that the blind calls had been made before the pilot of the BE36 had entered the Wattisham ATZ. Members also agreed that the time taken for the BE36 pilot to have made two calls on the Anglia Base/Wattisham Approach frequency, to have waited for a response to each transmission and then to have subsequently re-tuned their radio to the Southend Approach frequency, may have been about one minute. As the BE36 had been at the edge of the Wattisham ATZ at approximately 0838 (from radar data), members agreed that it was reasonable to suggest that the first of the two blind-calls had been made at approximately 0835.

Turning to the launch of the ASK21, a member with significant experience of the process of launching a glider explained that the time taken to prepare and launch a glider would, in most cases, not be in excess of three minutes. Members noted that the first data point (from a GPS source) for the ASK21 was timed at 0838:40, with the ASK21 at approximately 240ft AGL, and surmised that the ASK21 had commenced its takeoff roll at approximately 0838. Members agreed that the launch-control operatives would, most likely, not have been able to have visually acquired the BE36 during a scan of the immediate area as the BE36 had been at or around the ATZ boundary at that time.

However, some members wondered whether it may have been more prudent to have halted the launch of the ASK21 having gleaned situational awareness of the BE36 pilot's intentions from the blind calls made. Explaining further, it was suggested that it would not have been unreasonable to have deduced that a powered aircraft, whose pilot had called 'approaching Wattisham' but which had not yet been visually acquired, would have arrived in the Wattisham overhead a couple of minutes after that call had been made. As such, it was suggested that, on this occasion, to have relied solely on a visual scan to have ensured the area had been clear had not been sufficient and that information gleaned from the radio about an approaching aircraft had not been assimilated. Other members suggested that the launch-control operatives may have believed that there had been sufficient time for the ASK21 to have been launched safely before the BE36 might have become a factor.

Members attention turned to the privileges of the Radio Operator's Certificate of Competence (ROCC) and the nature of the role of the launch-control radio operator at Anglia Base. One member suggested that it may have been particularly prudent for the radio operator to have responded to the BE36 pilot's blind calls and to have explained that the Wattisham ATZ had been active and that gliding operations had been underway. Members recalled the guidance provided in CAP452 that states:

"Personnel providing an AGCS shall ensure that they do not pass a message which could be construed to be either an air traffic control (ATC) instruction or an instruction issued by Flight Information Service Officers

(FISOs) for specific situations. Clearances initiated by an air traffic control unit may be relayed, but the name of the authority must be included in the message, e.g. 'London control clears you to join controlled airspace...'

Another member suggested that the radio operator at the launch-control had not been providing the 'Service' element of an AGCS and that, as such, there existed a perceived powerlessness to have transmitted a response to the pilot of the BE36. Members agreed that the Anglia Base launch-control procedures had not provided sufficient clarity for the radio operator to have reacted to the situation to have achieved the most prudent safety-conscious outcome (**CF1**).

Members next considered the actions of the Southend controller. One member suggested that it may have been prudent for the Southend controller to have passed a caution to the pilot of the BE36 regarding their proximity to the Wattisham ATZ and a generic caution regarding the possibility of gliding activity taking place. Other members countered that the pilot of the BE36 had first contacted the Southend controller when they had been "approaching Wattisham". It had therefore been entirely reasonable that the Southend controller had assumed that the BE36 pilot had already taken the appropriate actions to have entered the ATZ, and to have attended correctly to their safe passage through the ATZ (as it had been entirely their responsibility to have done so). Nevertheless, members were in agreement that the Southend controller had had generic situational awareness of the gliding operation at Wattisham (**CF2**).

The Board next turned their attention to the actions of the pilot of the BE36 and members were disappointed that they had elected to not take part in the Airprox process. To not have done so had hindered their analysis of some of the pertinent flight-safety aspects of the encounter. Nevertheless, it was clear to members that the pilot of the BE36 had been aware of the location of the Wattisham ATZ. One member pointed out that the reported cloud had been overcast at 1700ft and members agreed that, other than to have tracked around the ATZ, the pilot of the BE36 had had to consider entering the ATZ in order to have maintained VMC. Members appreciated that the pilot of the BE36 had attempted to establish two-way communication before entering the ATZ and noted that two calls had been made on the Wattisham Approach frequency (the same frequency as Anglia Base) but no response from a ground element had been forthcoming. Members recalled their thoughts on the transmission from an unknown station, believed to have been a pilot but who had not identified themselves, that "Wattisham was closed". Members were keen to emphasise that, not only had the information been incorrect, it had been dangerously misleading.

Firstly, members noted that the entry for Wattisham in the UK AIP (ENR 2.2) states that the Hours of Applicability for Rule 11(*qv*) are H24. Additionally, it was noted that the entry for Wattisham in the UK AIP (ENR 5.5) states that the Wattisham gliding site is active 'HJ' (sunrise to sunset).

Secondly, members recalled the Rules of the Air Regulations 2015, Rule 11 - Flight within aerodrome traffic zones, paragraph 5 that states:

"If there is no flight information centre at the aerodrome the commander must obtain information from the air/ground communication service to enable the flight to be conducted safely within the aerodrome traffic zone".

Accordingly, members agreed that the pilot of the BE36 had entered the ATZ without sufficient information to have been able to have conducted their flight safely and had therefore not complied with the applicable regulation (**CF3**) and had infringed the ATZ (**CF4**). It was further agreed that the pilot of the BE36 had not performed adequate pre-flight preparation to have been aware that the Wattisham ATZ, and Wattisham gliding operations, had been active (**CF6**).

Members could not determine whether the BE36 had been fitted with an additional EC device but surmised that the pilot of the BE36 had not had situational awareness of the presence of the ASK21 (**CF7**). Members noted that the radar data showed that the pilot of the BE36 had made an abrupt manoeuvre to the east when they had been approximately overhead the runway. Members could not determine whether the pilot of the BE36 had visually acquired the ASK21 at or before the moment of CPA, or whether they had reacted to the movement of other gliders or people on the ground. Notwithstanding, members agreed that a contributory factor in this encounter had been that the sighting

and reaction had been late (**CF9**). Additionally, members were in agreement that the pilot of the BE36 had not avoided the pattern of traffic (as formed by the ASK21) at Wattisham (**CF5**).

One member pointed out that the entry for the Wattisham gliding site in the UK 'civilian' AIP states that the upper limit of the activity is 3000ft (and that the certificate from the CAA which has authorised the use of a cable for use in glider operations also states 3000ft) whereas the corresponding entry in the UK Mil AIP states that gliding is conducted with 2000ft cables. Whilst members felt that the discrepancy had not been a factor in this particular case, the BM advisor undertook to address the issue. The Board resolved to make a Recommendation that:

"The MAA reviews the UK Mil AIP aerodrome entries for gliding activity maximum winch altitudes and hours of operation to ensure coherence with information contained within the UK 'Civilian' AIP".

The discussion concluded and members considered the risk of collision. Members were unanimous in their determination that safety margins had been degraded far below the norm. It was agreed that the pilot of the BE36 had flown into the Wattisham ATZ without knowledge that it had been active and, most likely, without an expectation of encountering gliding traffic. Whilst the horizontal separation at CPA had been measured as approximately 0.2NM, members agreed that it had been purely a matter of fortuitous timing that the BE36 pilot had crossed behind the track of the ASK21 and had not encountered the high-tensile steel winch cable or the ASK21 itself. Members were in agreement that there had been a risk of collision (**CF11**) and assigned Risk Category B to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

| | 2024158 | | | |
|---|----------------|--|--|---|
| CF | Factor | Description | ECCAIRS Amplification | UKAB Amplification |
| Ground Elements | | | | |
| • Regulations, Processes, Procedures and Compliance | | | | |
| 1 | Organisational | • Aeronautical Information Services | An event involving the provision of Aeronautical Information | The Ground entity's regulations or procedures were inadequate |
| • Situational Awareness and Action | | | | |
| 2 | 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 | | | | |
| • Regulations, Processes, Procedures and Compliance | | | | |
| 3 | Human Factors | • Use of policy/Procedures | Events involving the use of the relevant policy or procedures by flight crew | Regulations and/or procedures not complied with |
| • Tactical Planning and Execution | | | | |
| 4 | Human Factors | • Airspace Infringement | An event involving an infringement / unauthorized penetration of a controlled or restricted airspace. | E.g. ATZ or Controlled Airspace |
| 5 | Human Factors | • Monitoring of Environment | Events involving flight crew not to appropriately monitoring the environment | Did not avoid/conform with the pattern of traffic already formed |
| 6 | Human Factors | • Pre-flight briefing and flight preparation | An event involving incorrect, poor or insufficient pre-flight briefing | |
| • Situational Awareness of the Conflicting Aircraft and Action | | | | |
| 7 | 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 |
| • Electronic Warning System Operation and Compliance | | | | |
| 8 | Technical | • ACAS/TCAS System Failure | An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations | Incompatible CWS equipment |
| • See and Avoid | | | | |

| | | | | |
|------------------|---------------|--|---|--|
| 9 | Human Factors | • Identification/ Recognition | Events involving flight crew not fully identifying or recognising the reality of a situation | Late sighting by one or both pilots |
| 10 | Human Factors | • Monitoring of Other Aircraft | Events involving flight crew not fully monitoring another aircraft | Non-sighting or effectively a non-sighting by one or both pilots |
| • Outcome Events | | | | |
| 11 | Contextual | • Near Airborne Collision with Aircraft | An event involving a near collision by an aircraft with an aircraft, balloon, dirigible or other piloted air vehicles | |

Degree of Risk: B.

Recommendation: The MAA reviews the UK Mil AIP aerodrome entries for gliding activity maximum winch altitudes and hours of operation to ensure coherence with information contained within the UK 'Civilian' AIP.

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:

Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because the procedures in use by the Anglia Base launch-control had not provided sufficient clarity for the radio operator to have transmitted a response to the BE36 pilot's radio calls.

Situational Awareness of the Confliction and Action were assessed as **ineffective** because the Southend controller did not have situational awareness of the ASK21.

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because the pilot of the BE36 had entered the Wattisham ATZ without sufficient information to have been able to have conducted their flight safely.

Tactical Planning and Execution was assessed as **ineffective** because the pilot of the BE36 had entered the Wattisham ATZ and had not avoided the pattern of traffic formed by the ASK21.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because neither pilot had situational awareness of the presence of the other aircraft.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the EC device fitted to the ASK21 would not have been expected to have detected the presence of the BE36.

See and Avoid were assessed as **partially effective** because, by analysis of the radar returns from the BE36, it was determined that the pilot of the BE36 had sighted the ASK21 late.

⁴ 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: 2024158 | | 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: | | <u>Full</u> | <u>Partial</u> | <u>None</u> | <u>Not Present/Not Assessable</u> | <u>Not Used</u> | | |
| Provision | | | | | | | | |
| Application | | | | | | | | |
| Effectiveness | | | | | | | | |