# AIRPROX REPORT No 2024198

Date: 04 Aug 2024 Time: ~1055Z Position: 5107N 00134W Location: Middle Wallop ATZ



# PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE MIDDLE WALLOP AIR/GROUND RADIO OPERATOR** reports that they were the Nominated Airfield Supervisor (NAS) responsible at the time of the Airprox for the day's gliding operations at Middle Wallop airfield. They, or other authorised Duty Instructors, operate 'Middle Wallop Radio' (118.605MHz) in an Air/Ground capacity.

At 1054, they initiated a winch-launch for a glider pilot, [the witness in the ASK21], on RW26 after having checked and noted no conflicting traffic. That launch took around 60sec for the glider to climb to 1200ft AGL and start a thermalling turn. At 1055, a fast-moving helicopter was seen by them, and others on the ground, to transit from the south to north, in between the glider and the launch point, across the centre of the airfield and, without doubt, being well within the ATZ both horizontally and vertically. No radio call had been received, nor responded to.

The [ASK21] pilot reported that [the R44] looked to have passed a few hundred feet lower than them, just offset to the east.

[The Middle Wallop AGO opined that,] clearly, there was a serious risk of the helicopter contacting the winch cable if it had been a short period earlier. At the same instant, the tug aircraft, [the Rallye 180], was 1000ft AGL downwind, left-hand for RW26 (to the south). The tug pilot reported that the helicopter flew at almost a right-angle, immediately underneath them, at a height differential of only 100-200ft.

[The Middle Wallop AGO] immediately sought to identify the helicopter callsign from online conspicuity services. It was visibly apparent, and shown online, that the helicopter had descended towards Thruxton airfield just to the north. They rang Thruxton 'tower' at 1158 and explained what had happened.

**THE RALLYE 180 PILOT** reports that they were conducting left-hand circuits on RW26. At approximately 1100 local, they were midway downwind, somewhere between 1200 and 1000ft, when

<sup>&</sup>lt;sup>1</sup> The pilot of the Rallye 180 reported that their aircraft was fitted with a transponder with Modes A and C.

they heard the duty instructor announce on the radio (118.605MHz) that a winch launch was in progress. It was very shortly after that they observed a black helicopter, possibly an R44, pass directly underneath them and continue across the airfield passing midway across RW26 (fortunately missing the winch launch). No radio communication was heard.

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

**THE R44 PILOT** reports that they were on a leg from [a private site on the south coast], transiting the Middle Wallop ATZ, inbound to Thruxton. They were, at all times, visual with the Rallye aircraft and a glider which, they assumed, had been winched up to altitude moments before. They took avoiding action from both aircraft and reported the incident immediately to Thruxton 'tower' after landing. They had called Boscombe Zone on their way to [the private site earlier] and had been informed that there was no flying at Middle Wallop that day. There was also nothing in the NOTAMs regarding any flying or gliding, so they didn't expect any activity from Middle Wallop ATZ, as they would have otherwise avoided the zone.

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

**THE ASK21 PILOT** (as a witness) reports that they had been launched at 1054 by winch and had a student in the front of their glider. Once released from the winch launch at 1200ft, they did a 360° turn. They were looking out for other gliders and noticed the helicopter to the east of them and the launch point. The helicopter (black in colour) came from the south and was heading in a north-north-westerly direction, possibly going to Thruxton. [The pilot of the ASK21 opined that] the height was about 700 to 800ft and over the winch line. They did not hear any radio calls from the helicopter pilot requesting airfield information or any other call from them (but could hear other calls on the radio, so the radio was working as normal in the glider). The DCFI, who was at the launch point at that time, then called [the ASK21 pilot] on the radio asking them if they had seen the helicopter. [The ASK21 pilot] confirmed that it had flown over the winch line at a height lower than [the ASK21]. They were well below the cloudbase at that time which, they estimate, had been more than 3000ft.

**THE THRUXTON AIR/GROUND RADIO OPERATOR** reports that they were the Duty Operations Manager at Thruxton Aerodrome. They received a phone call from someone at Middle Wallop airfield. [The caller] enquired if Thruxton had recently had a helicopter land and, [after the caller had provided a registration for the helicopter], they confirmed that this was the rotary that had recently arrived. [The caller] asked to speak to the pilot but they were told that they had shut down and were no longer contactable.

[The AGO] recorded [the R44] as having landed at Thruxton but they don't recall if the pilot gave a position report or height when they had called inbound. The runway in use (RW25) and QFE was passed. They don't recall there being any other traffic to affect [the R44 pilot's] respective inbound flight into [the Thruxton] ATZ, or whilst on the Thruxton assigned R/T frequency.

# Factual Background

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

| ENR 2.2 OTHER REGULATED AIRSPACE   |                       |   |                                 |   |  |  |
|--|-----------------------|---|---------------------------------|---|--|--|
| Name<br>Lateral limits<br>Vertical limits<br>Class of Airspace   | Unit ProvidingService | Callsign<br>Language<br>Hours of Service<br>Conditions of Use | Frequency<br>Channel<br>Purpose | Remarks   |  |  |
| MIDDLE WALLOP ATZ<br>A circle, 2 NM radius, centred at 510828N<br>0013422W<br>Upper limit: 2000 FT AGL<br>Lower limit: SFC<br>Class: G | BOSCOMBE DOWN         | BOSCOMBE ZONE<br>English<br>H24                               | 126.705 MHz<br>ATC              | Elevation: 297 FT AMSL.<br>Hours of applicability for Rule 11<br>- See Column 3 Hours of<br>Service.<br>Note: Outside of hours of ATS,<br>ATZ remains active. |  |  |

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

| ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES                 |  |                         |  |  |  |
|---|--|-------------------------|--|--|--|
| Designation<br>Lateral limits                                       | Vertical Limits                              | Operator/User<br>Tel No | Remarks<br>Activity times  |  |  |
| 1   | 2  | 3                       | 4  |  |  |
| MIDDLE WALLOP GLIDER SITE, HANTS (AD) (W AND T)<br>510858N 0013413W | Upper limit: 2000 FT AGL<br>Lower limit: SFC |                         | Site elevation: 297 FT AMSL.<br>Hours: Weekends and Public Holidays SR-30 to<br>SS+30. |  |  |

The entry in the UK MIL AIP for Middle Wallop (AD 2) provides the following information:

| AD 2 - EGVP - 1 - 1 MIDDLE WALLOP |                  |  |  |
|-----------------------------------|------------------|--|--|
|                                   |                  |  |  |
| EGVP AD 2.3 - OPERATIONAL HOURS   |                  |  |  |
| 1 AD:                             | PPR HO, ATZ H24. |  |  |

The weather at Middle Wallop was recorded as follows:

METAR EGVP 041050Z AUTO 25005KT 9999 OVC034/// 19/10 Q1016

#### Analysis and Investigation

#### **UKAB Secretariat**

An analysis of the NATS radar replay was undertaken and the R44 could be positively identified from Mode S data. However, the R44 faded from the radar replay at 1053:38 when it had been 2.5NM SSW of Middle Wallop (Figure 1) and reappeared to the north of the Middle Wallop runway centreline at 1055:29 (Figure 2).



Figure 1 - 1053:38

Figure 2 - 1055:29

An analysis of other data sources was undertaken and the ASK21 was observed from GPS data (Figure 3).



Figure 3 – The position of the ASK21 at 1055 (approximately 30sec after CPA) from GPS data.

The R44 was observed from ADS-B data (Figure 4).



Figure 4 - The position of the R44 at 1054:30 (the approximate time of CPA) from MLAT data.

The Rallye 180 was not observed on the NATS radar replay, nor by reference to MLAT data, nor from ADS-B data sources. The track of the Rallye 180 could not be determined and has been shown in the diagram as an approximation based upon the Rallye 180 pilot's narrative report. The track of the R44 has been constructed by combining various data sources. The exact moment of CPA, and the separation of the aircraft at CPA, could not be determined. CPA has been estimated to have occurred at 1054:30.

The Rallye 180 and R44 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.<sup>2</sup> 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.<sup>3</sup>

# Summary

An Airprox was reported when a Rallye 180 and an R44 flew into proximity in the Middle Wallop ATZ at approximately 1055Z on Sunday 4<sup>th</sup> August 2024. Both pilots were operating under VFR in VMC, the Rallye 180 pilot in receipt of an AGCS from Middle Wallop Radio and the R44 pilot in receipt of an AGCS from Thruxton Radio.

<sup>2</sup> (UK) SERA.3205 Proximity.

<sup>&</sup>lt;sup>3</sup> (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

# PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, a witness report, radar photographs/video recordings and reports from the Air/Ground Radio Operators involved. 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 Rallye 180. Members noted that they had not heard any transmissions from the pilot of the R44 or from the Middle Wallop AGO concerning the R44. Members noted that the Rallye 180 had not been fitted with an additional EC device and consequently agreed that they had not had any situational awareness of the presence of the R44 until it had been visually acquired (**CF6**). Members appreciated that to have first sighted the R44 as it had passed beneath them had caused considerable concern (**CF7**) and agreed that to have visually acquired the R44 at the moment of CPA effectively constituted a non-sighting (**CF8**).

Members turned their attention to the actions of the Middle Wallop AGO and noted that they had sighted the R44 as it had passed in close proximity to the Rallye 180 and the ASK21. Members agreed that they had not had any situational awareness of the R44 until sighted and, consequently, there had been little that they could have done to have helped matters. Members noted that the Middle Wallop AGO had not been required to have sequenced the traffic in the circuit at Middle Wallop.

Members next considered the actions of the Thruxton AGO and agreed that they had not had any responsibility to the pilot of the R44 for their navigation or traffic avoidance and that that responsibility had lain entirely with the R44 pilot.

The Board next considered the actions of the pilot of the R44. Members noted that they had stated that they had been informed by the Boscombe Zone controller earlier in the day that there had been "no flying at Middle Wallop that day". Also noted was their comment that "There was also nothing in the NOTAMs regarding any flying or gliding, so they didn't expect any activity from Middle Wallop ATZ".

The BM advisor stated that, to the best of their knowledge, Boscombe Down had been closed on the day of the Airprox and could not understand why such a statement would have been made by the Boscombe Zone controller had they been open. It was clear to members from the entries in the UK AIP (and MIL AIP) that the Middle Wallop ATZ remains open 'H24'. Additionally, it was clear to members that the UK AIP (ENR 5.5) states that the Middle Wallop glider site is active 'SR-30 to SS+30' (30min before sunrise to 30min after sunset). 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".

Members were in agreement that the pilot of the R44 had not contacted the Middle Wallop AGO to inform them of their intentions (**CF3**). It was further agreed that they had entered the Middle Wallop ATZ without permission and had therefore not complied with the applicable regulation (**CF1**) and had infringed the ATZ (**CF2**). Further still, it was agreed that the pilot of the R44 had not performed adequate pre-flight preparation to have been aware that the Middle Wallop ATZ, and Middle Wallop gliding site, had been active (**CF5**).

Members next considered the statement made by the R44 pilot in their narrative report that they ".were, at all times, visual with the Rallye aircraft and a glider which, they assumed, had been winched up to altitude moments before". Members agreed that, as the R44 had not been fitted with an additional EC device, and that the pilot of the R44 had not tuned their radio to the Middle Wallop Radio frequency, the R44 pilot had not had any situational awareness of the presence of the Rallye 180 (or ASK21) (**CF6**). However, given that the R44 pilot had clearly become aware that winch launching had been in progress and that there had been traffic in the Middle Wallop circuit, members were at a loss to understand why they had maintained their track through the overhead at circuit height. It was agreed that the pilot of the R44 had not appropriately monitored the airfield to have avoided (or conformed with)

the pattern of traffic in operation (**CF4**) and, consequently, had flown close enough to the Rallye 180 to have caused is pilot concern (**CF8**).

Concluding the discussion, members considered the reported position and altitude of the Rallye 180, the position of the ASK21 and the status of the winch launch cable (having just been operated and therefore assumed to have already fallen to the ground). Although the exact separation between the Rallye 180 and R44 at CPA could not be determined, members were in agreement that safety had been degraded but there had not been a risk of collision. The Board assigned Risk Category C to this event.

# PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

### Contributory Factors:

|  | 2024198  |  |   |  |  |  |  |  |
|--|--|--|---|--|--|--|--|--|
| CF   | Factor Description   |  | ECCAIRS Amplification   | UKAB Amplification   |  |  |  |  |
|  | Flight Elements  | Flight Elements  |   |  |  |  |  |  |
|  | • Regulations, Pro   | Regulations, Processes, Procedures and Compliance                  |   |  |  |  |  |  |
| 1 Human Factors • Use of policy/Procedures |  | <ul> <li>Use of<br/>policy/Procedures</li> </ul>                   | Events involving the use of the relevant policy or procedures by flight crew                                | Regulations and/or procedures not complied with  |  |  |  |  |
|  | • Tactical Planning  | g and Execution  |   |  |  |  |  |  |
| 2  | Human Factors  | Airspace Infringement  | An event involving an infringement /<br>unauthorized penetration of a controlled<br>or restricted airspace. | E.g. ATZ or Controlled Airspace  |  |  |  |  |
| 3  | Human Factors  | • Communications by<br>Flight Crew with ANS                        | An event related to the communications<br>between the flight crew and the air<br>navigation service.        | Pilot did not request appropriate<br>ATS service or communicate with<br>appropriate provider |  |  |  |  |
| 4  | Human Factors  | <ul> <li>Monitoring of<br/>Environment</li> </ul>                  | Events involving flight crew not to<br>appropriately monitoring the<br>environment                          | Did not avoid/conform with the pattern of traffic already formed                             |  |  |  |  |
| 5  | Human Factors  | <ul> <li>Pre-flight briefing and<br/>flight preparation</li> </ul> | An event involving incorrect, poor or<br>insufficient pre-flight briefing                                   |  |  |  |  |  |
|  | Situational Awareness of the Conflicting Aircraft and Action |  |   |  |  |  |  |  |
| 6  | Contextual   | <ul> <li>Situational Awareness<br/>and Sensory Events</li> </ul>   | Events involving a flight crew's awareness and perception of situations                                     | Pilot had no, late, inaccurate or only generic, Situational Awareness                        |  |  |  |  |
|  | See and Avoid  |  |   |  |  |  |  |  |
| 7  | Human Factors  | Incorrect Action     Selection                                     | Events involving flight crew performing<br>or choosing the wrong course of action                           | Pilot flew close enough to cause concern   |  |  |  |  |
| 8  | Human Factors  | <ul> <li>Monitoring of Other<br/>Aircraft</li> </ul>               | Events involving flight crew not fully<br>monitoring another aircraft                                       | Non-sighting or effectively a non-<br>sighting by one or both pilots                         |  |  |  |  |

Degree of Risk:

#### Safety Barrier Assessment<sup>4</sup>

C.

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 Middle Wallop AGO and the Thruxton AGO had not been required to have sequenced the traffic at their respective airfields.

<sup>&</sup>lt;sup>4</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the <u>UKAB Website</u>.

#### Flight Elements:

**Regulations, Processes, Procedures and Compliance** were assessed as **ineffective** because the pilot of the R44 had entered the Middle Wallop ATZ without permission.

**Tactical Planning and Execution** was assessed as **ineffective** because the pilot of the R44 had entered the Middle Wallop ATZ without permission when it had been active.

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 until visually acquired.

|        | Airprox Barrier Assessment: 2024198  | Outside      | Contr       | olled Airspace     |  |          |     |
|--------|--|--------------|-------------|--------------------|--|----------|-----|
|        | Barrier  | Provision    | Application | % 5%               | <b>Effectiveness</b><br>Barrier Weighting<br>10% | g<br>15% | 20% |
| lent   | Regulations, Processes, Procedures and Compliance  | Ø            |             |                    |  | ,        |     |
| Elem   | Manning & Equipment  | $\checkmark$ |             |                    |  |          |     |
| pun    | Situational Awareness of the Confliction & Action  | 8            | 0           |                    |  |          |     |
| Gro    | Electronic Warning System Operation and Compliance   |              |             |                    |  |          |     |
|        | Regulations, Processes, Procedures and Compliance  | Ø            | 8           |                    |  |          |     |
| ment   | Tactical Planning and Execution  | $\bigcirc$   | 8           |                    |  |          |     |
| t Elei | Situational Awareness of the Conflicting Aircraft & Action   | 1 🙁          | $\bigcirc$  |                    |  |          |     |
| Fligh  | Electronic Warning System Operation and Compliance   |              |             |                    |  |          |     |
|        | See & Avoid  | Ø            | $\bigcirc$  |                    |  |          |     |
|        | Key:     Full     Partial     None     Not Preser       Provision     Image: Constraint of the second secon | nt/Not Ass   | essab       | le <u>Not Used</u> |  |          |     |