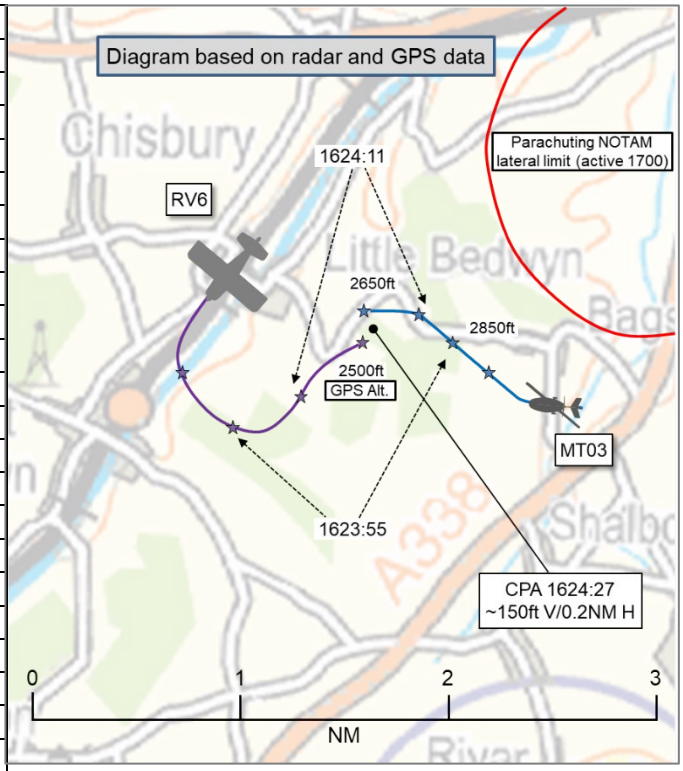
AIRPROX REPORT No 2024152

Date: 29 Jun 2024 Time: 1624Z Position: 5123N 00134W Location: 1NM Northeast of Great Bedwyn

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	MT03	RV6
Operator	Civ Helo (Autogyro)	Civ FW
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Listening Out
Provider	London Information	Farnborough
Altitude/FL	2650ft	~2500ft
Transponder	A, C, S	A
Reported		
Colours	Red	Cream and blue
Lighting	Navigation, strobes	None
Conditions	VMC	VMC
Visibility	5-10km	5-10km
Altitude/FL	2500ft	2500ft
Altimeter	QNH (1011hPa)	QNH
Heading	~300°M	~090°
Speed	~60kt	105kt
ACAS/TAS	SkyEcho	SkyEcho
Alert	Information	None
Separation at CPA		
Reported	0ft V/500ft H	0ft V/800m H
Recorded	~150ft V/0.2NM H	



THE MT03 PILOT reports that this flight had been from [departure airfield] to [destination airfield]. At the time of the Airprox they had been talking to London Information. Their route had been direct to […] remaining clear of Rivar Hill gliding site to the west and the Hungerford NOTAM parachute site to the east. For conspicuity, the pilot reports that they use the [TAS] and SkyDemon combination on a Samsung TAB2 for visual and voice alerts. East of Great Bedwyn village and south of the Kennet and Avon canal [the TAS] had started warning of an approaching aircraft low in their 3 o'clock position. The [TAS] alerts for the other aircraft kept appearing and then disappearing as it approached. They had started a gentle turn to the east [they recalled] to offer a different visual clue to the approaching pilot. They still had not gained a visual sighting of the other aircraft. The other aircraft icon disappeared from the SkyDemon screen and then reappeared as a danger close warning 300ft below and climbing. The SkyDemon icon then disappeared again. The pilot looked left and right below them but could not see the other aircraft. Believing the other aircraft had now climbed above them, they descended from 2500ft to 2000ft. They report that they had then been heading north when the icon reappeared behind them. The pilot had then looked behind and visually identified the aircraft approaching [they recall] in their 8 o'clock and at a similar height. They had then turned left and the other aircraft passed approximately 500ft away, left-to-right behind them. The MT03 pilot had then turned right to ensure the other aircraft had passed clear and had ceased to be a threat, but had not been able to regain it visually. Additionally, the Skydemon icon had now completely disappeared and it never reappeared for the remaining flight. After resuming course for [destination airfield], they had radioed London Information and filed an Airprox.

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

THE RV6 PILOT reports that it had been a hot day. They had been on a local flight in the local area. They note that this was a congested area of airspace and other traffic was often encountered sometimes at quite close quarters. The pilot had a recollection of seeing an Autogyro pass by their port side

relatively closely - only because it had been interesting to see the other aircraft and watch it in flight. The Autogyro had been seen some distance ahead as it had been flying on a reciprocal heading (approximately west) to their port side. They vaguely remember a couple of things about the encounter - firstly that they hadn't seen the Autogyro that far ahead, because its 'footprint' when viewed nominally front-on is very small. The rotor is not seen at all at a distance and its silhouette is extremely small. Secondly, as it had been relatively close, they had expected to see/hear a warning from their [electronic conspicuity equipment] but hadn't. However, as they had mentioned previously, it is possible that their iPad Mini which displays their [electronic conspicuity equipment] had been in one of its 'dark-modes' due to overheating (they assume) and the bright sunlight of the hot day. But, this should not have prevented an audible warning through their headset. This had been their main memory of the encounter, not the potential for any collision. They had seen the Autogyro approaching, assessed that there was no risk of collision (although it was a little closer than might have been ideal) and watched it as it passed by their port wing. The pilot reports that they have filed this report because they had been asked to. From their perspective, they would not have considered this incident as an Airprox.

The pilot assessed the risk of collision as 'None'.

THE LONDON INFORMATION FISO reports that at approximately 1620 the MT03 pilot reported a near-miss […]. The registration had not been obtained but the pilot had recalled a yellow single-engine aircraft with a fixed undercarriage. The reported altitude at the time had been 1500ft at a position approximately 5NM north of Great Bedwyn. The aircraft had been seen descending into the Hungerford parachute NOTAM (which had been notified as active for the weekend). The other aircraft had not been on frequency with London Information.

Factual Background

The weather at Boscombe Down was recorded as follows:

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METAR EGDM 291620Z AUTO 28008KT 9999 NCD 24/10 Q1011=
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Analysis and Investigation

NATS

The pilot of the MT03, contacted the London Information frequency at 1613:35 and reported routeing VFR from […] to […], via Hungerford. A Basic Service had been established with information on parachuting at Hungerford (H3509/24 NOTAM) and Netheravon provided by the London FISO. The pilot reported that they would amend their track further south to avoid Hungerford parachute activity.

London Information is a non-radar Basic Service provision only. *CAP774 Chapter 2, 2.1 stipulates that under a Basic Service, 'The avoidance of other traffic is solely the pilot's responsibility. Basic Service relies on the pilot avoiding other traffic, unaided by controllers/ FISOs. It is essential that a pilot receiving this ATS remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight.'*

Traffic Information had been passed to the pilot of the MT03 at 1616:03, regarding a microlight, outbound from a private site near Salisbury that had also been on the London FIS frequency within their vicinity.

At 1618:02, the pilot of the MT03 had requested confirmation that the aforementioned microlight tracking towards Hungerford had been [the RV6]. The London FISO clarified that the Traffic Information had in fact related to [a non-involved aircraft]. The MT03 pilot had then reported that an aircraft, the RV6, had been heading towards the Hungerford [parachuting NOTAM]. The London FISO had then attempted a blind transmission to the pilot of the RV6 on the frequency with no response. Radar displayed the MT03 to have been 4.3NM south of the reported RV6 (squawking 4572) at the time, which had been approximately 3.5NM southeast of the Hungerford [parachuting NOTAM]. The RV6 had subsequently turned and remained clear of the [parachuting NOTAM]

overhead, however, it appeared to have entered the NOTAM 1.5NM radius by approximately 0.3NM (Mode C information not displayed).

The pilot of the MT03 subsequently reported at 1627:20 that "they would like to file a near miss report." The pilot had then provided further details of the other aircraft involved in the encounter; "low wing mono-plane, yellow in colour, I only got the end of the registration, […].. [single engine] fixed undercarriage." The reported conflict aircraft did not display Mode-S data, therefore the identity could not be confirmed from radar, however a third party online ADS-B provider suggested the aircraft to have been the RV6. The pilot of the MT03 had further stated they were 4/5 miles north of Great Bedwyn, *"[The RV6] had been following me in a turn, I got very close about 300ft on the ADS-B and proceeded to pass me into the Hungerford drop zone*." Review of radar had displayed the MT03 change track in a left turn towards the RV6, as described in the pilot's report, with a closest point of lateral approach being 0.2NM.

The MT03 had subsequently displayed descent to 2500ft after the RV6 had passed behind. Closest Point of Approach had occurred at 1624:27 and recorded on multi-track radar as 0.2NM. The vertical distance could not be established as the RV6 had not displayed Mode-C, however the pilot of the MT03 stated that the RV6 had been 'initially below and then at the same altitude.' The RV6 had then turned southeast (away from the Hungerford parachuting NOTAM) and continued to perform what appeared to be general handling manoeuvres.

At 1645:08, the RV6 had changed squawk to 7000 and had then disappeared from radar in the vicinity of Brimpton at approximately 1654:30. The RV6 had displayed Mode A 4572 which had been the Farnborough Listening squawk. Review of Farnborough Radar/RT displayed the aircraft had not been in communication with Farnborough LARS West at the time of the event.

Conclusions

The Airprox had occurred when the pilot of the RV6 had turned behind the track of the MT03 and, according to the report from the pilot of the MT03, climbing through its level. Both aircraft had been operating outside CAS. The CPA occurred at 1624:27 and was recorded on multi-track radar as 0.2NM. The vertical distance could not be established as the RV6 had not displayed Mode-C.

UKAB Secretariat

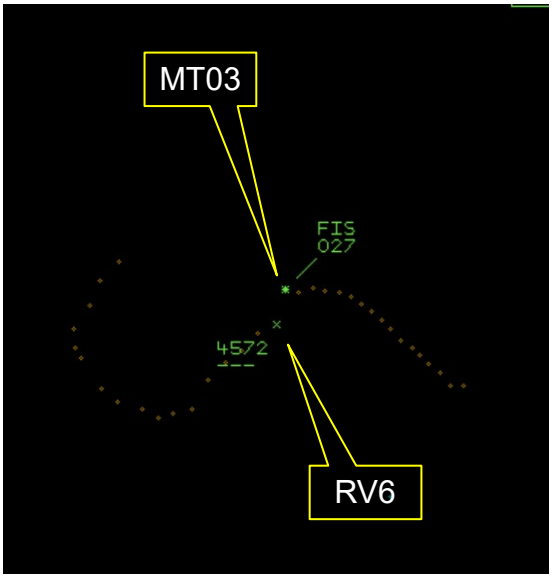


Figure 1: CPA 1624:27 ~150ftV/0.2NM H

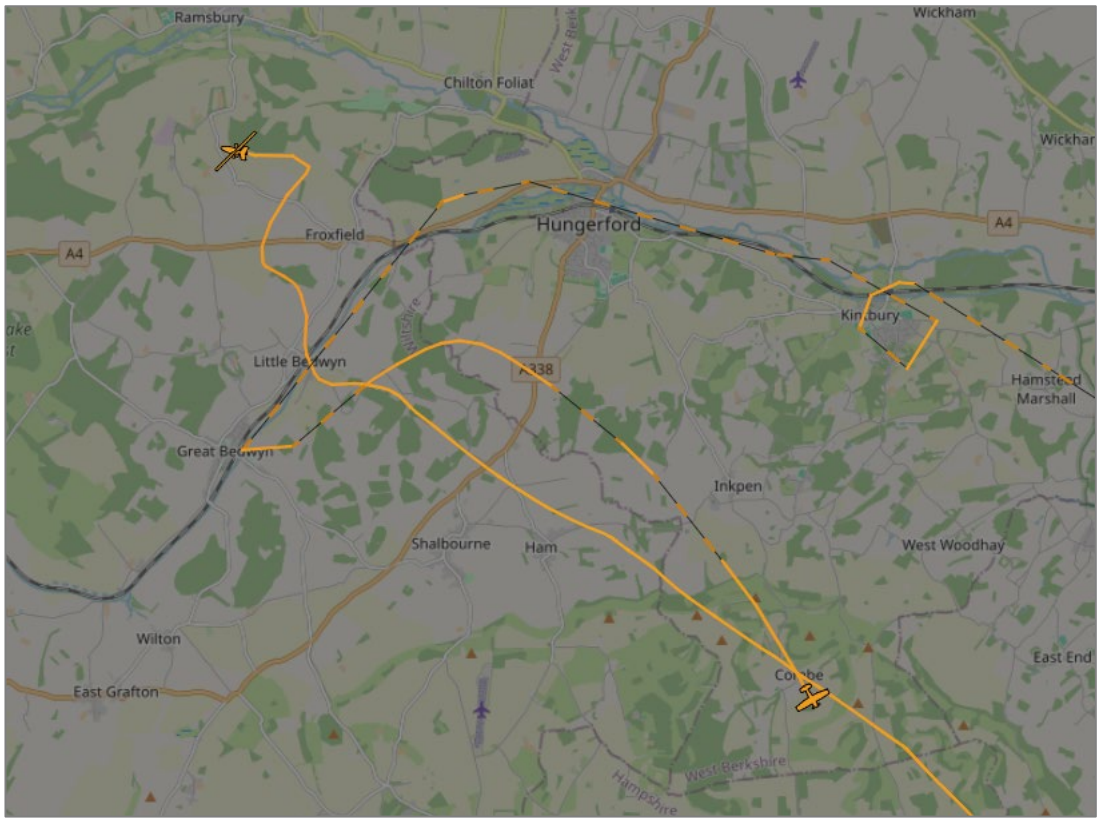


Figure 2: ADS-B Exchange extract showing the respective flight paths of the MT03 and the RV6 where they can be tracked up to, and 3min beyond, CPA.

Parachuting NOTAM text as described by the MT03 pilot:

H3509/24 NOTAMN
Q) EGTT/QWPLW/IV/M /W /000/045/5124N00131W002
A) EGTT B) 2406291700 C) 2406301430
E) PARACHUTING WI 1.5NM RADIUS: 512420N 0013039W (HUNGERFORD) .
DROP HGT SUBJ ATC CLR. FOR INFO 07766 203104. AR-2024-3750/AU4.
F) SFC G) 4500FT AMSL

Although the MT03 pilot's pre-flight planning had recognised the NOTAM, the reported Airprox had occurred before it was active.

Figure 2 shows the respective flightpaths of the 2 aircraft up to CPA plus 3min. As the tracking source is ADS-B, the picture shows a solid amber line where coverage is achieved, and is broken with a black line where coverage is intermittent.

The MT03 and RV6 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 RV6 pilot was required to give way to the MT03.[2]

Summary

An Airprox was reported when an MT03 and an RV6 flew into proximity 1NM northeast of Great Bedwyn at 1624Z on Saturday 29th June 2024. Both pilots were operating under VFR in VMC, the MT03 pilot in receipt of a Basic Service from London Information and the RV6 pilot Listening Out on the Farnborough West frequency.

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

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, ADS-B data, a report from the FISO involved and a report from the appropriate operating authority. 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 firstly discussed the actions of the MT03 pilot, acknowledging that they had utilised a Flight Information Service, and that they had equipped with an electronic conspicuity device which, together, would enable an improved opportunity for situational awareness of other traffic in the area. They note that they had chosen their route for the day cognisant of other activity planned in the area, including notification (via NOTAM) of parachuting activity to have been taking place later that day. Having had indications via their conspicuity equipment of the RV6 in their proximity (**CF5**), the MT03 pilot had made every effort to acquire the aircraft visually and members recognised the actions taken to improve the likelihood of the RV6 pilot seeing them by manoeuvring their aircraft to offer a changing profile. Despite their efforts, the MT03 pilot had effectively not visually acquired the RV6 until at or around CPA (**CF8**) and had been concerned by its proximity (**CF4**).

Members then considered the actions of the RV6 pilot, noting that they had been listening-out on the Farnborough West frequency but felt that this had been of limited value and opined that other service providers, including that chosen by the MT03 pilot (**CF2**), could have offered more in terms of situational awareness. The Board noted positively that the RV6 pilot had carried electronic conspicuity equipment that had been compatible with that carried by the MT03 pilot and felt that it had been unfortunate that they had not received indications of the proximity of the MT03 (**CF6**) and that this, combined with the lack of an active Flight Information Service, had contributed to a lack of situational awareness of the MT03 (**CF3**). Having visually acquired the MT03, Board members felt that the RV6 pilot had allowed themselves to fly close enough to cause its pilot some concern (**CF7**).

In considering the role played by the London Information FISO, the Board thanked NATS for a comprehensive report and noted that although they had been providing a Basic Service which, as they highlight within that report, does not require the FISO to monitor the flight (**CF1**), they had in fact proactively offered Traffic Information on aircraft of interest to the MT03 pilot. As the RV6 had not been on the London FIS frequency, and had therefore been unknown traffic to the London FISO (who does not operate with any form of surveillance equipment), the Board felt that the FISO could not have done more in this event.

Concluding their discussion, members agreed that it would have been helpful if the pilot of the RV6 had utilised an active Air Traffic Service but acknowledged that both aircraft had utilised compatible electronic conspicuity equipment to aid situational awareness. The Board agreed that, although safety had been degraded and that the MT03 pilot had been concerned by the proximity of the RV6, ultimately, the separation between the aircraft had been such that no avoiding action had been necessary, and no risk of collision had existed. The Board assigned Risk Category C to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2024152			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Ground Elements			
	• Situational Awareness and Action			
1	Contextual	• ANS Flight Information Provision	Provision of ANS flight information	The ATCO/FISO was not required to monitor the flight under a Basic Service
	Flight Elements			
	• Tactical Planning and Execution			
2	Human Factors	• Communications by Flight Crew with ANS	An event related to the communications between the flight crew and the air navigation service.	Pilot did not request appropriate ATS service or communicate with appropriate provider

	• Situational Awareness of the Conflicting Aircraft and Action			
3	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
4	Human Factors	• Unnecessary Action	Events involving flight crew performing an action that was not required	Pilot was concerned by the proximity of the other aircraft
	• Electronic Warning System Operation and Compliance			
5	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
6	Human Factors	• Response to Warning System	An event involving the incorrect response of flight crew following the operation of an aircraft warning system	CWS misinterpreted, not optimally actioned or CWS alert expected but none reported
	• See and Avoid			
7	Human Factors	• Incorrect Action Selection	Events involving flight crew performing or choosing the wrong course of action	Pilot flew close enough to cause concern
8	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

Degree of Risk: C.

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:

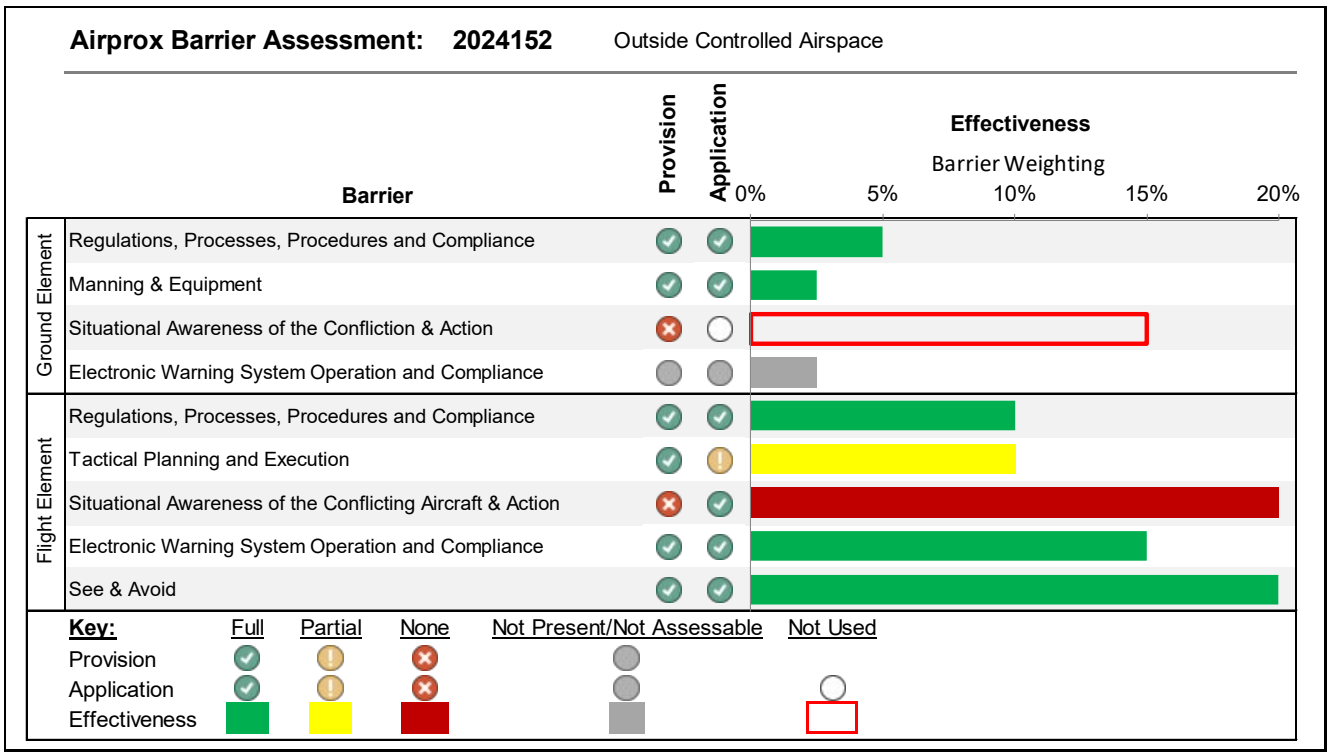
Situational Awareness of the Confliction and Action were assessed as **not used** because the FISO is not required to monitor the flight under a Basic Service.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the RV6 pilot could have utilised an active Flight Information Service.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the RV6 pilot had no situational awareness of the presence of the MT03 and the MT03 pilot had been concerned by the proximity of the RV6 as displayed on their EC equipment.

[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: 2024152
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