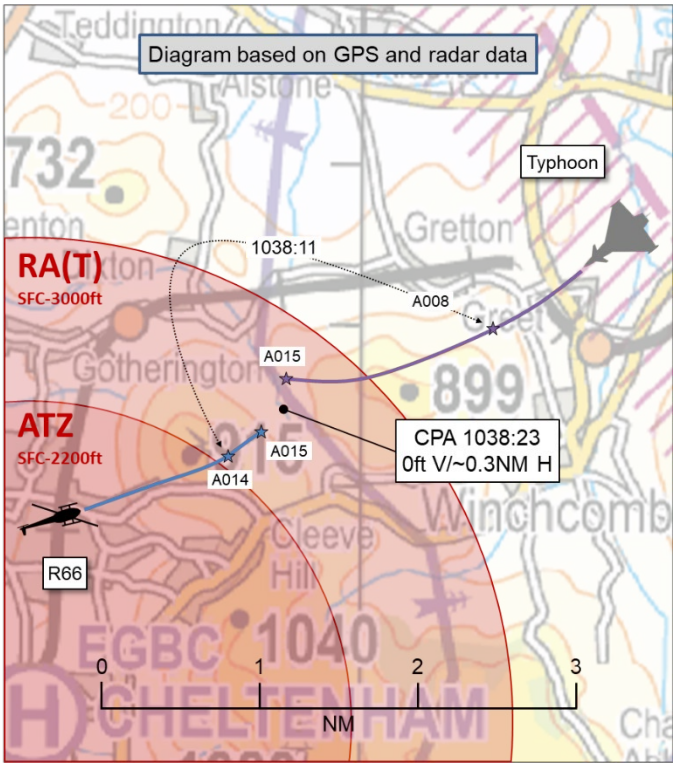
AIRPROX REPORT No 2025032

Date: 11 Mar 2025 Time: 1038Z Position: 5158N 00201W Location: 3.5NM NE Cheltenham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	R66	Typhoon
Operator	Civ Comm	HQ Air (Ops)
Airspace	RA(T)	RA(T)
Class	G	G
Rules	VFR	VFR
Service	ACS	Listening Out
Provider	Cheltenham Tower	Low-level common
Altitude/FL	1500ft	1500ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Black	Grey
Lighting	Nav, strobe, ldg.	'Standard'
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	NK	250ft MSD
Altimeter	QNH	NR
Heading	NK	NR
Speed	NK	420kt
ACAS/TAS	Not fitted	Not fitted
Separation at CPA		
Reported	250ft V/250m H	1000ft V/1NM H
Recorded	0ft V/~0.3NM H	



THE R66 PILOT reports that they had just lifted after dropping people off at Cheltenham and were making their way out of the restricted airspace to the north-east towards Dixton Hill. A fast jet (believed to be a Typhoon) crossed in front of them. It was low-level, quite fast, right-to-left, just in front and below them and inside the restricted area. They then heard another pilot make an urgent call on the radio warning the controller. After that, [the pilot of the R66] heard another helicopter pilot mention that they had seen the Typhoon out to the north. At that point, the controller made a broadcast warning all the pilots in the area that a Typhoon was in the vicinity and not on frequency. The pilot of the R66 described that they took avoiding action by continuing their climb.

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

THE TYPHOON PILOT reports that, during a transit, they were conducting low-level flying currency as part of the sortie. On a section of the low-level route in the vicinity of Cheltenham in Low Flying Area 4 (LFA4), they were flying westbound from Winchcombe towards Ledbury. On that leg of the route, at 1038:30, they received radar 'hits' and became visual with rotary traffic whilst transiting over a small ridge. The rotary traffic was observed in the left 11 o'clock at a range of 2NM approximately 1000ft above and made a 45° right-hand turn to dog-leg around the rotary traffic to increase separation and ensure sufficient deconfliction. Low-level calls were being transmitted throughout the sortie on the VHF low-level common frequency, including a call at 1036:35, with no response heard. [The pilot of the Typhoon] did not assess that visual separation was reduced to a level that had required submission [of an incident report].

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

THE CHELTENHAM TOWER CONTROLLER reports that they were operating the Tower position at Cheltenham Heliport and were responsible for the two visual holds and sequencing the inbound helicopters. It was the first day of the event and the heliport had been open for 8min. Both holds were in use and the inbound flow was regulated as all five gates were in constant use. At approximately

1038, a helicopter pilot in the Bishop's Cleeve area reported a Typhoon flying beneath the helicopters in the hold. The hold altitude was 2000ft QNH. [The Cheltenham Tower controller] believes they made a general broadcast to other helicopter pilots about the Typhoon. When they looked in the direction of the Bishop's Cleeve hold, they could not see the Typhoon. No mention was made of an Airprox at the time. This report has made without reference to the RT recordings and made several days after the event, having been notified of it by UKAB.

Factual Background

A NOTAM for the activation of a Temporary Restricted Area RA(T) at Cheltenham:

J0386/25: Temporary restricted area activated
Q) EGTT/QRTCA/IV/BO/AW/000/030/5155N00207W003
RESTRICTED AREA (TEMPORARY) ACTIVE (CHELTENHAM HELIPORT)
WI AN AREA BOUNDED BY: THE CLOCKWISE ARC OF A CIRCLE RADIUS 3NM CENTRED 515533N 0020316W BTN 515515N 0020805W - 515331N 0020649W THEN THE ANTICLOCKWISE ARC OF A CIRCLE RADIUS 2NM CENTRED 515339N 0021002W BTN 515331N 0020649W - 515515N 0020805W.
APPLIES TO ALL ACFT INCLUDING ANY SMALL BALLOON, ANY KITE, ANY UAS AND ANY PARACHUTE INCLUDING A PARASCENDING PARACHUTE OR PARAMOTOR.
DOES NOT APPLY TO ANY ACFT FLYING IN ACCORDANCE WITH EXCEPTIONS STATED IN THE AIC.
CTC FREQ 121.180(CALLSIGN: CHELTENHAM TOWER). AIC M 011/2025 WITH CHART, REFERS.
FURTHER DETAILS WWW.NATS.AERO/AIS.
RESTRICTION OF FLYING REGULATIONS MADE UNDER ARTICLE 239 OF THE AIR NAV ORDER 2016.
AR-2024-8556/AO1
LOWER: Surface, UPPER: 3,000 Feet AMSL
FROM: 11 Mar 2025 10:15 GMT (10:15 UTC) TO: 14 Mar 2025 20:00 GMT (20:00 UTC)
SCHEDULE: 1015-2000

AIC M 011/2025, provides the following details to supplement NOTAM J0386/25 RA(T):

1. The 2025 Cheltenham Festival will be held at Cheltenham Racecourse from 11 to 14 March 2025. There will be a large number of helicopters operating from the temporary heliport at the racecourse; therefore, the Secretary of State for Transport has decided that it is necessary to introduce Restriction of Flying Regulations under Article 239 of the Air Navigation Order 2016.

2. Subject to paragraph 3, between 1015 hours and 2000 hours on each day beginning with 11 March and ending on 14 March 2025, no aircraft is to fly below 3000 FT AMSL within the area bounded by:

a) the clockwise arc of a circle having a radius of 3 NM centred on 515533N 0020316W, from 515515N 0020805W to 515331N 0020649W; and

b) the anti-clockwise arc of a circle having a radius of 2 NM centred on 515339N 0021002W, from 515331N 0020649W to 515515N 0020805W.

3. Paragraph 2 does not apply to any aircraft flying:

a) an approach to or departure from Runway 04/22 or Runway 09/27 at Gloucestershire Airport while under the control of the Air Traffic Control Unit at that airport; or

b) under the control of the Air Traffic Control Unit at Cheltenham Heliport; or

c) operated by or on behalf of:

i. Police Air Support Unit; or
ii. an Emergency Medical Service; or
iii. the Maritime and Coastguard Agency.

A NOTAM for the establishment of an ATZ at Cheltenham:

B0290/25: Aerodrome traffic zone (ATZ) activated
Q) EGTT/QAZCA/IV/NBO/AE/000/022/5156N00203W003
TEMPO ATZ ESTABLISHED SFC TO 2000FT AGL/2200FT AMSL WI 2NM RADIUS: 515533N 0020316W (CHELTENHEM HELIPORT). SITE NOTIFIED FOR THE PURPOSE OF RULE 11 OF THE RULES OF THE

AIR REGULATIONS 2015. CTC CHELTENHAM TOWER FREQ 121.180. CTC CHELTENHAM PAD FREQ 132.905. FOR INFO 01202 09801. AR-2025-810/04.
FROM: 11 Mar 2025 10:15 GMT (10:15 UTC) TO: 14 Mar 2025 19:15 GMT (19:15 UTC)
SCHEDULE: 1015-1915

A NOTAM for the operation of radio-frequency jamming equipment at Cheltenham:

B0270/25: Unknown Q code 'GW' : miscellaneous plain language
Q) EGTT/QGWXX/IV/NBO/E/000/999/5155N00204W007
GNSS(GPS)SIGNAL AND RADIO FREQUENCY JAMMING. JAMMERS LOCATED 515507N 0020401W (VCY CHELTENHAM HELIPORT). ACTIVITY MAY AFFECT ACFT WI 6NM RADIUS SFC TO 40000FT AMSL OR ABOVE (ALL DIRECTIONS). MAY ALSO AFFECT AIRBORNE ELECTRONIC SITUATIONAL AWARENESS DEVICES AND UAS CONTROL. NOT TO EXCEED 30 SECOND DURATION. GNSS(GPS) RECEIVERS MAY SUFFER INTERMITTENT / TOTAL FAILURE OR GIVE INCORRECT POSITION INFO. SOME ELECTRONIC SITUATIONAL AWARENESS DEVICES AND UAS SYSTEMS MAY SUFFER INTERMITTENT / TOTAL FAILURE OR GIVE INCORRECT NOTIFICATION.
FOR INFO/CEASE JAMMING 07789 541218 OR 07910 377952. AR-2025-842/01.
FROM: 11 Mar 2025 10:15 GMT (10:15 UTC) TO: 14 Mar 2025 20:00 GMT (20:00 UTC)
SCHEDULE: 1015-2000

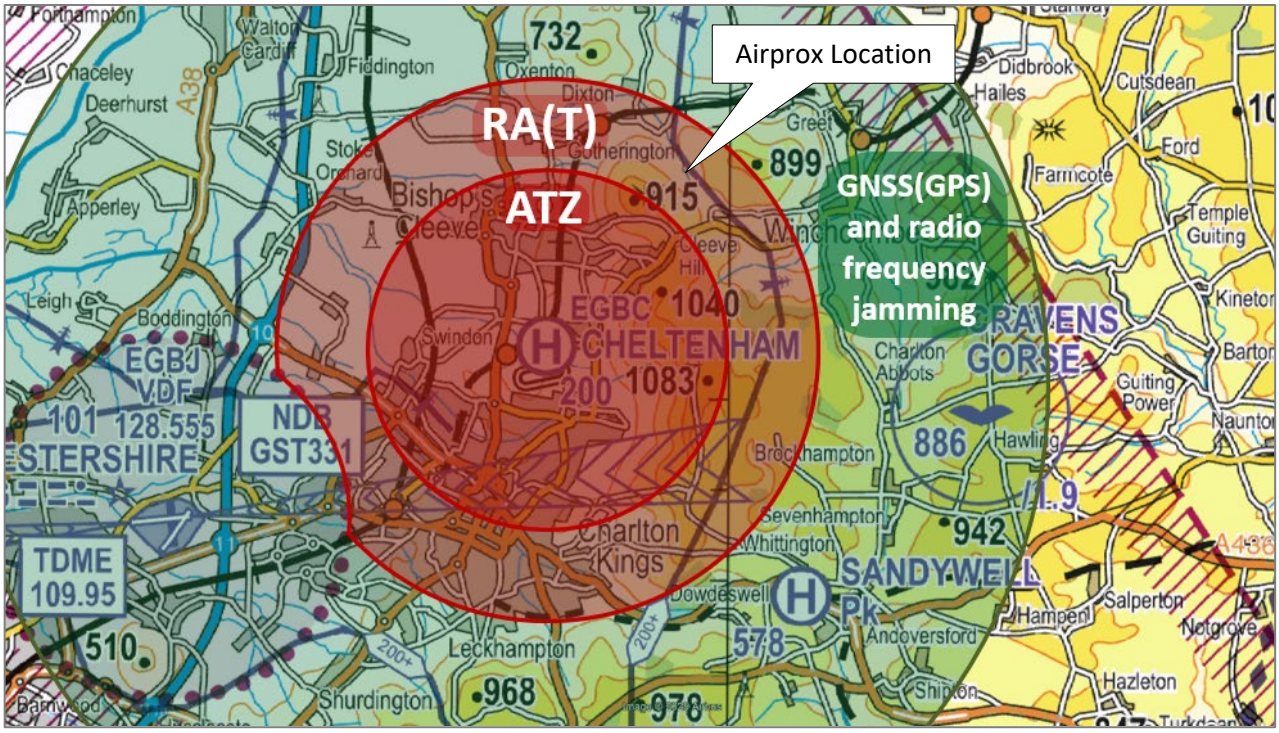


Figure 1 – Active NOTAMs

An entry in CADS for the flight of the Typhoon (planned to be conducted at an MSD of 250ft) provided the following route:

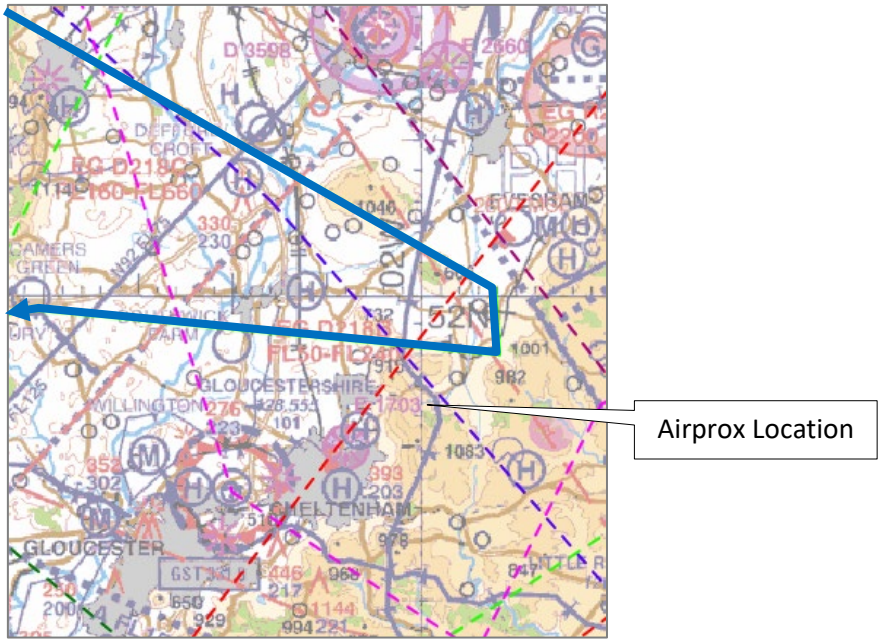


Figure 2 – The planned route of the Typhoon (highlighted in blue) taken from CADS.

The weather at Gloucestershire Airport was recorded as follows:

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METAR EGBJ 111050Z 03010KT 9999 FEW024 07/02 Q1010
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Analysis and Investigation

Cheltenham Heliport Unit Investigation

Background:

The incident occurred on the first day of the Cheltenham Festival Gold Cup meeting where a temporary licensed heliport with an ATC unit had been established to support a large number of public transport helicopters transporting passengers to the event. Restricted Airspace (Temporary) and an ATZ were established; promulgated by AIC and NOTAM respectively.

The ATC service was divided in to two phases: TWR responsible for RA(T), the visual holds and sequencing the landing order and PAD responsible for final approach, landing, take-off and ground movement control. The heliport operating hours were 1030-2000hrs. Movements were not permitted before 1030 due to horses exercising on the course. The pilot of the Typhoon was not in communication with the Cheltenham Heliport ATC Unit on either channel.

Investigation:

Information available included RT recording and a discussion with the ATCO providing TWR service. The Airprox was notified to the Unit on 21/03/2025, by email, by the UK Airprox Board Administration. The ATCO providing the TWR service was contacted, and they submitted an MOR. At that time, the mobile ATC Unit was stored at Cheltenham Racecourse prior to positioning to [another venue] resulting in the delay in accessing the RT recordings.

The reported incident took place within 8min of the heliport opening. During the period 1030-1040, there were 21 inbound movements, and 8 outbound movements booked. The RT loading on the TWR frequency was high with periods of multiple transmissions (some caused by the geography of the location with transmissions from some helicopters screened by high ground). The ATCO (TWR) reported that they remembered a report of a fast jet, low-level, inside the RA(T) passing beneath

helicopters. They made a general broadcast about this traffic. At that time, they were dealing with pilots routeing to the visual holds at Bishop's Cleeve and Prestbury together with establishing a landing order. They did not recall seeing the Typhoon.

The RT recording of the TWR frequency revealed that there were several crossed transmissions. The were no transmissions identifiable as being from [R66 C/S] relating to this incident. At approximately 1038:26, an unidentified pilot transmitted "*Urgent message*" and reported a low-level jet in the vicinity of Dixton Hill. At approximately 1039, [the pilot of an uninvolved helicopter] reported outbound via Bishop's Cleeve and stated "*Typhoon low-level*". Following that report, the TWR ATCO made a general broadcast warning about low-level jet traffic. The pilot of the Typhoon was not in communication with the Cheltenham Heliport ATC Unit on either channel. No reference was made to an Airprox on the TWR frequency.

Conclusion:

There were no Cheltenham TWR elements to this incident as the pilot of the Typhoon was not in contact with Cheltenham ATC (on either channel) nor was the Typhoon visible from the mobile VCR. Without the benefit of a radar recording, it is not possible to determine whether the Typhoon pilot infringed the RA(T) and the ATZ. From the comments made by the pilots it appears that the Typhoon was below the inbound and outbound helicopters.

UKAB Secretariat

An analysis of the NATS radar was undertaken and both aircraft could be positively identified from Mode S data (Figure 3). The aircraft were depicted on the radar replay as having flown at Flight Levels. A suitable correction was applied to determine their altitudes.

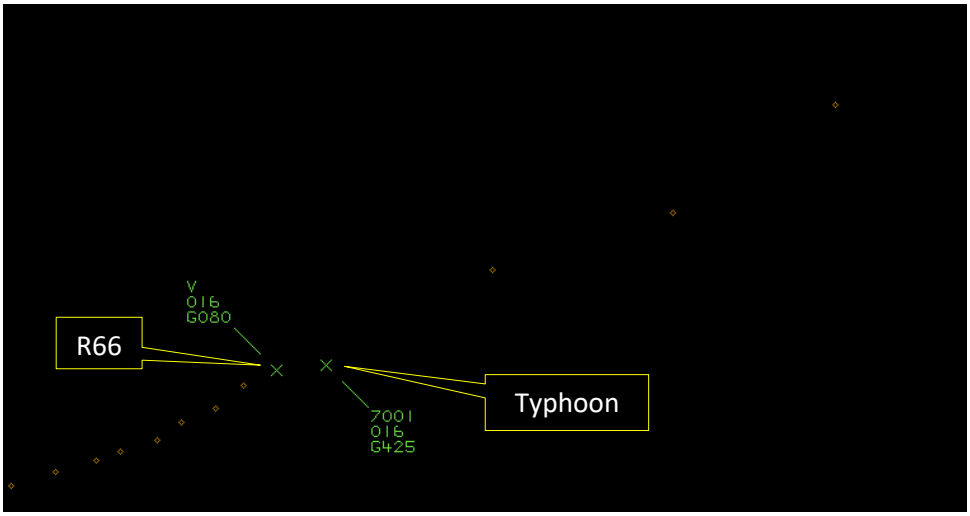

Figure 3

An analysis of ADS-B data was undertaken and the tracks of the R66 and Typhoon were observed (Figure 4).

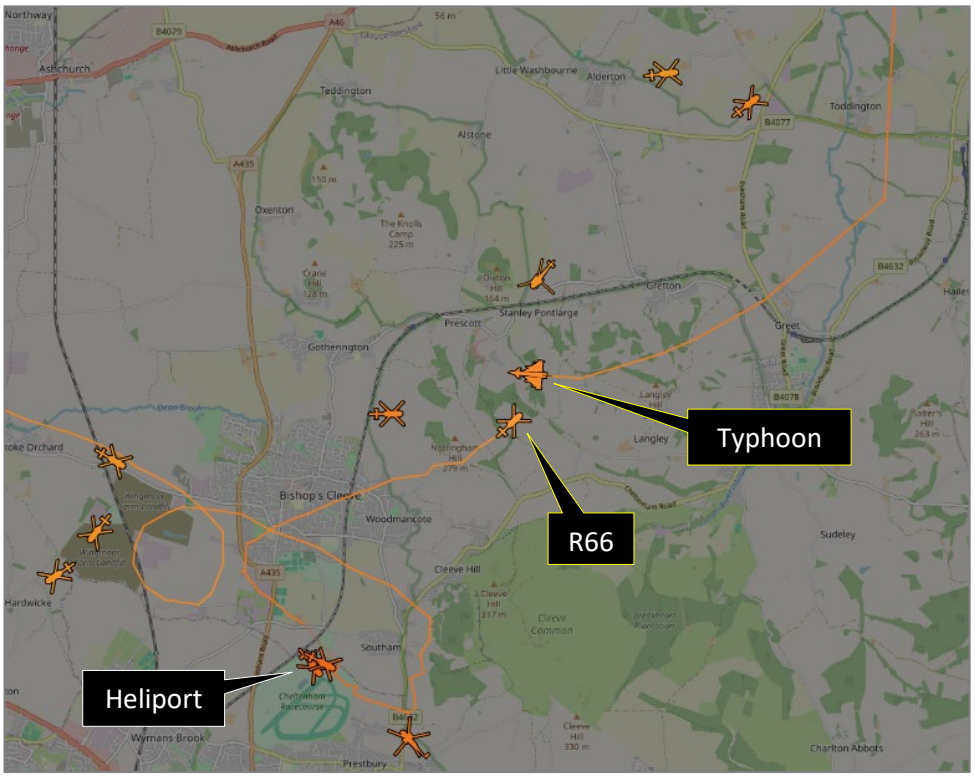

Figure 4 – CPA at 1038:23

The diagram was constructed and the separation at CPA determined by combining the various data sources.

The R66 and Typhoon 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]

Comments

HQ Air Command

The Typhoon pilot was unaware of the activity at Cheltenham as the NOTAM was not displayed on their mission planning system. Operation support specialists are responsible for loading NOTAMs and a review is underway to establish the reasons for error during this process. The pilot believed it was appropriate to operate on Low Level Common despite being within the published provision of Brize Norton LARS. Given the Typhoon operating height of 250ft, it's possible that communications with Brize Norton were impossible. Had the pilot been aware of the NOTAM, they would have either avoided the area or contacted Cheltenham Tower directly. Typhoon is not equipped with TCAS, but the pilot refers to on-board radar SA which augmented an earlier visual detection. The R66's relatively small size may have led the Typhoon pilot to believe that they avoided by a greater margin than the assessed CPA.

Summary

An Airprox was reported when an R66 and a Typhoon flew into proximity 3.5NM north-east of Cheltenham at 1038Z on Tuesday 11th March 2025. The R66 pilot was operating under VFR in VMC in receipt of an Aerodrome Control Service from Cheltenham Heliport, and the Typhoon pilot was operating under VFR in VMC listening-out on the low-level common frequency.

[1] (UK) SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.
[2] (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on. MAA RA 2307 paragraph 13.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, ADS-B-derived track data, a report from the air traffic controller 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 first considered the actions of the pilot of the R66. Members noted that they had been in receipt of an Aerodrome Control Service from the Cheltenham Heliport controller and had been operating within the RA(T). Members agreed that they had not had situational awareness of the presence of the Typhoon until it had been sighted (**CF6**) and appreciated that, to have visually acquired it unexpectedly in the area, had caused them concern (**CF8**). Nevertheless, members noted that the pilot of the R66 had had time to have taken avoiding action by continuing their climb.

Members next considered the actions of the Cheltenham Heliport controller. It was noted that the pilot of the Typhoon had not contacted the controller and the Typhoon had not been visible from the temporary control tower. Members were therefore in agreement that the controller had not had situational awareness of the Typhoon (**CF1**) and acknowledged that there had been little else that they could have done to have assisted matters. Notwithstanding, members commended their action to have made a general broadcast to pilots on frequency to warn them of the Typhoon once they had been informed of its presence.

Turning their attention to the actions of the pilot of the Typhoon, members pondered the flight planning sources that had been at their disposal. A member with particular knowledge of military pre-flight planning explained that, at their base of operations, it had been the responsibility of Operations Support personnel to have been aware of any notices or restrictions (such as NOTAMs) which might affect the flying programme. When AICs and NOTAMs are received from NATS via the Military Aviation Planning Portal (MAPP), any such items would be entered onto a flight planning system that the pilots would use for their pre-flight preparation. Entries made in the system would have been checked for accuracy by a second person and subsequently re-checked by a third. However, on this occasion, it had been clear that the NOTAMs pertaining to the establishment of the Cheltenham Heliport ATZ and associated RA(T) had not been available to the Typhoon pilot on their mission planning system. Human error occurred during the transfer to this system from MAPP. The member also explained that the Typhoon pilot had entered their planned route into CADS (Centralised Aviation Data Service) which is used as a tool to aid deconfliction with other known flights. CADS would not have provided information related to the NOTAMs. Finally, the member explained that the GPS signal and radio frequency jamming equipment in use at Cheltenham Heliport (as promulgated by NOTAM B0270/25) would not have affected the navigation or aircraft-detection systems fitted to the Typhoon. Whilst it was acknowledged that, ultimately, it had been the responsibility of the Typhoon pilot to have ensured that they had had the correct information with which to attend to their flight-planning and to conduct their sortie, members agreed that it had been reasonable for the Typhoon pilot to have relied upon (what would normally have been) a tried-and-tested and effective process. Confident that the ongoing investigation held at station level would uncover and resolve the cause of the process failure, members agreed that the incorrect planning sources had been a contributory factor in this Airprox (**CF5**). Nevertheless, it was agreed that the pilot of the Typhoon had not complied with the applicable regulation concerning entry into the RA(T) (**CF2**) and that it had been entered without permission (**CF3**). Members noted that the pilot of the Typhoon had gleaned some situational awareness of the presence of the R66, albeit somewhat late (**CF6**) and noted that they had manoeuvred to increase separation. One member commented that it had been particularly fortunate that the encounter had occurred shortly after helicopter movements had first been permitted that day and, consequently, the density of helicopter traffic in the area had been lighter than was observed later that morning. Members wondered whether the pilot of the Typhoon had attempted to establish radio contact with the Brize Norton controller during their flight and agreed that it may have been prudent to have done so for the benefit of their situational awareness (**CF4**). It was suggested that the Brize Norton controller may also have passed a caution regarding the temporary airspace restrictions. Notwithstanding, members agreed that the pilot of the Typhoon had caused the R66 pilot concern due to their presence in the area and proximity (**CF7**).

The discussion concluded and members summarised their thoughts. It was agreed that the pilot of the R66 had not had situational awareness of the Typhoon in the area but had sighted it at distance. Members also agreed that the pilot of the Typhoon had not been aware of the airspace restrictions and had entered the RA(T) without permission. However, members noted that both pilots had sighted the other aircraft in time to have taken effective avoiding action. Although agreeing that safety margins had been reduced, members were satisfied that 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:

	2025032			
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			
	• Regulations, Processes, Procedures and Compliance			
2	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			
3	Human Factors	• Airspace Infringement	An event involving an infringement / unauthorized penetration of a controlled or restricted airspace.	E.g. ATZ or Controlled Airspace
4	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
5	Organisational	• Flight Planning Information Sources	An event involving incorrect flight planning sources during the preparation for a flight.	
	• Situational Awareness of the Conflicting Aircraft and Action			
6	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			
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	• 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: 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 **ineffective** because the Cheltenham Heliport controller had not had situational awareness of the presence of the Typhoon.

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

Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because the pilot of the Typhoon had entered the RA(T) without a clearance.

Tactical Planning and Execution was assessed as **ineffective** because the planning resources used by the pilot of the Typhoon had not provided information pertaining to the RA(T).

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of the R66 had not had situational awareness of the presence of the Typhoon until visually acquired.