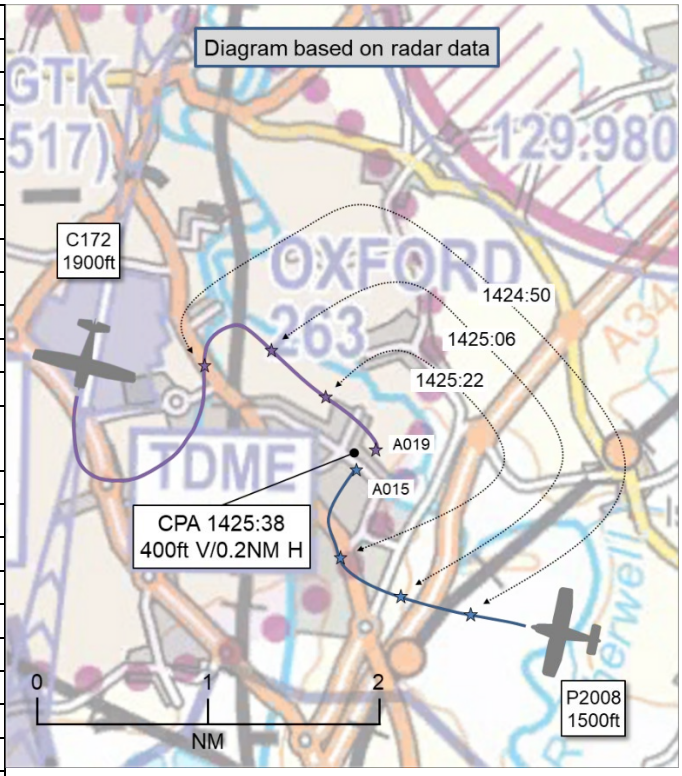
AIRPROX REPORT No 2023051

Date: 16 Apr 2023 Time: 1426Z Position: 5150N 00117W Location: Oxford ATZ

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	P2008	C172
Operator	Civ FW	Civ FW
Airspace	Oxford ATZ	Oxford ATZ
Class	G	G
Rules	VFR	VFR
Service	ACS	ACS
Provider	Oxford Tower	Oxford Tower
Altitude/FL	1500ft	1900ft
Transponder	A, C, S	A, C, S+
Reported		
Colours	White, grey	White, blue
Lighting	Strobes, landing, taxy, nav	Beacon, nav, strobes, wing lights
Conditions	VMC	VMC
Visibility	5-10km	5-10km
Altitude/FL	1300ft	1800ft
Altimeter	QNH (NR hPa)	QNH (1026hPa)
Heading	010°	225°
Speed	100kt	108kt
ACAS/TAS	Not fitted	Not fitted
Separation at CPA		
Reported	200ft V/0.5NM H	300ft V/0.3NM H
Recorded	400ft V/0.2NM H	



THE P2008 PILOT reports that they were joining the left downwind for RW19 from the east of Beckley Mast (5NM east of Oxford). After being transferred to the TWR frequency, they were informed of an aircraft, which was a C172, conducting a low approach for RW19 and departing to the southeast. Whilst descending from 2000ft and joining the downwind for RW19, they levelled-off at a slightly lower altitude, around 1300ft on QNH (by memory). This was lower than the normal 1500ft circuit altitude at Oxford Airport. During this time, they recall ATC giving Traffic Information about [the P2008] to the [pilot of the] other aircraft [C172 callsign] twice, however, ATC didn't receive a response [they recall]. After a while, ATC queried the [pilot of the C172] about their intentions and received a response that they were turning southbound for Compton VOR. At this time, [the pilot of the P2008] was performing downwind checks when they suddenly spotted the C172 crossing from their left-to-right in a hard right turn approaching in an almost opposite direction to [the P2008] on downwind, at approximately 100-200ft above (judged by sight). [The pilot of the P2008] initiated a quick descent to keep clear, and did a slight left turn before continuing downwind. At this point, they reported left-downwind to Oxford Tower and told them they were visual with the aircraft flying the opposite direction above. At this time, they also mentioned to ATC that this was a 'close call'. After switching the other aircraft to Oxford Radar, the Tower controller came back to [the pilot of the P2008] and said [that they] had been visual with both aircraft and were happy with the separation. The subsequent approach and landing were uneventful and the flight came to an end.

After the flight, they phoned ATC and had a chat with the controller who mentioned that Mode C was indicating a 300-400ft separation between the aircraft at the time, and that the other aircraft had performed a non-standard departure. [The controller] said that they were happy with the separation and had been visual with both aircraft at all times. However, [the pilot of the P2008] believes the separation was much closer than it should have been and, had they been a bit higher, at the circuit altitude, it may have been a much greater risk.

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

THE C172 PILOT reports that they had departed from [departure airfield] to Oxford via CPT [21NM to the south of Oxford] to practice an ILS approach. A recently qualified ATPL-holder was on-board as a safety pilot and was operating the radio. They opted for a radar-vectored ILS with a Traffic Service for RW19. After the go-around, they were asked to climb not above 2000ft and to turn left to avoid Brize Zone. They climbed to 1800ft in VFR conditions and were able to see an aircraft below them that was joining the circuit. The Radar controller gave Traffic Information to both aircraft's pilots, and both acknowledged [that they were] in sight of each other. However, when [the pilot of the C172] climbed, they turned further left than anticipated and the controller immediately asked for their intentions. They confirmed [that they were] turning right and immediately headed in the correct direction to CPT. [The pilot of the C172 opines that] at no point was their aircraft on a collision-course (as all the traffic was seen moving) and the joining aircraft was in sight and a minimum of 300-400ft below them. There was no risk of any collision at any point as the joining aircraft was in the phase of landing whilst they were climbing and leaving the zone in VFR conditions. They continued with 133.430MHz [Oxford Tower] frequency until 1427 and then changed to [an en-route frequency].

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

THE OXFORD TOWER CONTROLLER reports that they were the ADC controller on duty with RW19 in use. At around 1425, [the pilot of the C172] was conducting an instrument approach. They were informed by the Radar controller that it would go-around VFR on track to CPT (to the southeast). At the same time, [the pilot of the P2008] was inbound from the east and was instructed to join and report left-base [they recall]. The geometry was such that the aircraft paths should not have crossed but, regardless, they passed Traffic Information to each pilot on the other at around the time [the pilot of the C172] began a 'missed-approach'. [The Oxford controller] saw [the pilot of the C172] take up a south-easterly track in the climb-out and continued with other tasks.

[The pilot of the C172] then made a tight left turn to position downwind, unusually close to the aerodrome compared to the normal circuit pattern. This was inconsistent with the coordinated route so they asked [the pilot of the C172] to confirm their intentions. [The pilot of the C172] replied they were departing on track to "*...ton*", where the name of the point was distorted. Having seen the aircraft take up a positive track to the north, they suspected that the CPT route had been an error and they immediately passed the activity status of D129 to [the pilot of the C172] as the danger area was imminently ahead on the suspected intended route. This route also took [the pilot of the C172] safely ahead of [the P2008]. [The Oxford controller] was about to confirm [the C172 pilot's] intended track again and coordinate with Radar to query and confirm the departure routeing, when they saw [the pilot of the C172] make a tight turn to the right. With the assistance of the ATM, they saw that [the C172] was now directly over the usual downwind leg and about to cross with [the pilot of the P2008] (who had joined downwind) on reciprocal tracks around 400ft above on Mode C. [The Oxford controller] visually assessed the vertical distance between aircraft and saw that there was sufficient separation and that there was no risk of collision. There was no time to act or to pass further Traffic Information before the aircraft crossed.

[The pilot of the P2008] mentioned on the RT at the time that they thought it was close. [The Oxford controller] explained briefly that the other aircraft had made an unexpected turn but they had visual with both aircraft and thought the distance was sufficient. They later spoke to the pilot of [the P2008] and explained the situation in more detail. [The pilot of the P2008] was [reportedly] satisfied with the explanation.

This report has not been checked against radar or RT recordings.

THE OXFORD RADAR CONTROLLER reports that their report was submitted over two weeks after the event due to no notification to ATC of an Airprox event at the time.[1] They were the APS controller at the time, and an aircraft (they can't remember the callsign) was on a training instrument approach. The aircraft was departing VFR afterward and, although they have no recollection of the instructions

[1] UKAB Note: Oxford ATC was informed of the Airprox by the UKAB Secretariat on 20th April; this was acknowledged by Oxford ATC on the same day.

that they had actually passed, it would have been normal for a VFR aircraft to: Depart VFR, not above altitude 2000ft, no turns until south of the runway or passing 1500ft.

They believe this aircraft was routing toward CPT so should not have conflicted with circuit traffic. They do remember the aircraft doing something unusual that they noted on radar, routing toward the east [rather than] southeast as instructed.

Factual Background

The weather at Oxford was recorded as follows:

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METAR EGTK 161420Z 23010KT 190V260 9999 SCT027 BKN037 13/07 Q1026
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Analysis and Investigation

Oxford Airport Unit Investigation

An MOR was not filed initially by Oxford ATC as no Airprox was reported at the time. Retrospective MORs have since been filed by the controllers in the Tower and Radar positions at the time. The investigation was necessarily limited to the role of Oxford ATC in the incident. It consisted of research into the traffic and staff levels at the time, any weather-related or engineering issues which may have been extant, and review of the radar and radiotelephony recordings of the event. The controllers were interviewed to record their recollections and observations.

Timeline: RTF recordings for both the Tower and Radar positions were analysed to give the timeline below. Statements are not verbatim, but accurately represent the instructions provided and the sequence of events. Transmissions to other aircraft and phone calls not directly relevant are omitted, in the light of the low traffic levels.

1400 [The pilot of the C172] was identified and placed under a Traffic Service by Oxford Radar ('Radar').

1401 Radar enquired whether the pilot would be routeing from CPT to the 'OX' NDB. The pilot replied that they would be. Radar instructed [the pilot of the C172] to track to the 'OX' at 3000ft, and leave the 'OX' heading 340°, which was correctly read back.

1411 Radar requested the intentions of [the pilot of the C172] after the approach. The pilot responded 'CPT'. Radar enquired as to the flight rules, and the pilot responded 'VFR.' Radar instructed [the pilot of the C172], 'after low approach, left turn to CPT, remain outside (Brize) controlled airspace, no turns until south of the runway, climb not above 2000ft.' The pilot correctly read this back.

[The pilot of the C172] was then vectored from the 'OX' towards an appropriate length final for the ILS approach for RW19 at Oxford, and descended to 1800ft prior to establishing on the localizer.

1415 Radar co-ordinated the arrival of [the C172] with the Tower controller, and accurately passed on the missed-approach instructions that were given to the pilot.

1417 [The pilot of the C172] was cleared for the ILS approach to RW19 in the same instruction as the final heading to close with the localizer.

1419 [The pilot of the C172] was instructed to contact Oxford Tower.

1420 [The pilot of the C172] checked in with Oxford Tower ('Tower') on an approximately 4NM final and was cleared for a low approach to RW19.

1422 [The pilot of the P2008], joining VFR, checked in with Tower in the vicinity of Beckley, a TV mast 6NM ESE of Oxford Airport.

Tower instructed [the pilot of the P2008] to join downwind left-hand for RW19, and issued a cautionary note about gliding activity at Weston-on-the-Green, an airfield northeast of the visual circuit. This was acknowledged by [the pilot of the P2008].

1423 [The pilot of the C172] reported going around. Tower relayed this information to Radar. Tower passed Traffic Information to [the pilot of the P2008] on [the C172]: "traffic going around from the threshold, a C172 routeing southeast." This was acknowledged by [the pilot of the P2008].

1424 [The pilot of the C172] was passed Traffic Information on [the P2008]: "traffic joining from Beckley is a Tecnam joining downwind". There was no acknowledgement.

Tower repeated: "traffic from the east joining downwind is a Tecnam." [The pilot of the C172] acknowledged this. At that moment, the aircraft was on an approximately southerly routeing.

1425 [The pilot of the C172] turned approximately 180° to the left, roughly coincident with the downwind leg of the left-hand circuit to RW19 and approximately 1NM north of [the P2008]. Tower requested [the C172 pilot]'s intentions. The pilot responded, "Heading back to Compton," though the aircraft was still tracking north.

Tower passed Traffic Information to [the pilot of the C172] on an aircraft joining "right base" for RW19, and repeated their earlier caution about gliding activity at Weston-on-the-Green, which [the pilot of the C172] was then heading towards. The pilot acknowledged, but by then the aircraft had begun turning right, reversing course to an approximately south-south-easterly routeing.

A brief liaison call then occurred between Tower and Radar and both controllers expressed confusion about the manoeuvres and intentions of [the pilot of the C172].

1426 [The pilot of the P2008] reported downwind, stating, "visual with the aircraft ahead of us… above us."

Tower then sequenced them behind other traffic in the left-hand visual circuit, and the pilot acknowledged, stating, "that was a close call." Tower responded, "that wasn't an anticipated manoeuvre from the other aircraft but I was visual, and happy."

Figure 1 – 1424:37

Figure 2 - 1426

Both controllers were interviewed to record their recollections of the event. Due to a combination of the delayed notification of the Airprox, and various parties being on annual leave, these interviews did not take place until 30th April for the Tower controller, and 2nd May for the Radar controller.

The Tower controller relayed a sequence of events roughly coincident with the timeline, summarising the initial scenario as a C172 that was supposed to be departing VFR to CPT after a low approach to RW19, with a P2008 joining the visual circuit from the east. The controller stated that the P2008 was instructed to join "left base" as the C172 pilot commenced a go-around, and that they passed Traffic Information to both aircraft on each other. Their initial monitoring showed the C172 pilot to be behaving as expected, but they then unexpectedly turned north.

The controller initially considered enquiring with the Radar controller to confirm the missed approach instructions for the C172, as they were concerned that they may have misunderstood the missed approach instructions passed by the Radar controller. They were twice diverted from doing so by the unexpected manoeuvres of the C172. The controller recalled the eventual conversation with the Radar controller, which did not evince any misunderstanding about the missed approach instructions given to the C172 pilot.

The Tower controller recalled the ATM showing a Mode C altitude difference between the two aircraft of approximately 400ft, that they were visual with both aircraft throughout, and were content that avoiding action was not required. The controller expressed uncertainty as to why the P2008 pilot joined downwind instead of left base (the actual joining instruction given was for downwind left). The controller stated that overall workload was low. ADC was operating in a combined state, and the controller did not believe there was any reason to split the position into AIR and GMC at the time. They were not aware of any background issues that may have been contributory, and stated that from a safety standpoint they were content with their own actions based on the information they had at the time.

The Radar controller was not able to recall the event in detail, recalling it only as a flight which was VFR, perhaps departing to CPT or the southeast. When asked if there were any issues that may have been relevant, such as RT problems, equipment failure, a language barrier which may have caused misunderstanding of the missed approach instructions, workload or distraction, they stated not.

The Radar controller could not recall any difficulty in making themselves understood to the pilot of [the C172]. They recalled the workload as being "low to medium," observing that it was quiet enough for them to notice the unusual manoeuvres by [the pilot of the C172] while they were in the ATZ, and to monitor the exchange between the Tower controller and the two pilots. Nonetheless, this did not prompt the Radar controller to be concerned about the proximity of the two aircraft to each other. The controller concluded the discussion stating that nothing about the approach as a whole stood out, and that nothing about their recollections prompted them to be concerned about their own actions with respect to [the pilot of the C172].

Analysis: This analysis purely concerns the actions of the controllers, as the pilots were not interviewed. The recordings show that the pilot of [the C172] received clear and consistent instructions throughout the approach. The delivery rate and clarity was appropriate for a student pilot, and instructions were given at appropriate times for a stabilised approach.

The missed approach instructions passed to [the pilot of the C172] by the Radar controller, though containing several parts, were delivered in a steady fashion, and the pilot correctly read them back. The instructions were passed while the aircraft was still downwind, giving sufficient time to correct any errors or misunderstanding, though none were evident.

The Radar controller accurately passed the missed approach instructions to the Tower controller during the inbound co-ordination, so the two controllers had consistent and reasonable expectations about [the C172 pilot]'s actions following the go-around. While the two aircraft were in the ATZ,

appropriate Traffic Information was passed by the Tower controller to allow the pilot of [the P2008] to become visual with [the C172] ahead of them in the visual circuit.

The Traffic Information given to [the pilot of the C172] contained an error: it stated that [the pilot of the P2008] was joining left base, when in fact they were instructed to join downwind left. The Tower controller also repeated this error during the interview. While this inaccurate information may have caused the pilot of [the C172] to decide to turn south if they thought that [the P2008] was ahead of them, it could not be determined why [the pilot of the C172] initially turned north after the go-around from RW19.

Although the Traffic Information given to [the pilot of the C172] was positionally inaccurate, the statement that [the P2008] was inbound from the east to join left base, a visual circuit position north of [the C172], is not considered likely to have caused the [C172] pilot concern that [the P2008] would be in a hazardous position. It is also not considered likely to have induced the pilot of [the C172] to turn north.

Finally, [the P2008 pilot]'s actual joining instructions, 'downwind left', would not have induced a conflict with [the C172], had the latter departed the circuit in compliance with the missed approach instructions. The pilot of [the C172] did not ask about the position of [the P2008] at any time.

It is not known whether the pilot of [the C172] was visual with [the P2008] during the Airprox, though SSR information indicates that [the C172] was the higher of the two aircraft, with a difference of 400ft between the Mode C returns. Forward and downward visibility in the C172 is likely to be restricted at close range by the aircraft nose.

The meteorological conditions were sufficient, with a cloud base of 2700ft, visibility of greater than 10km, and no precipitation present or in the vicinity, for both aircraft to be clearly visible from the control tower. This is consistent with the Tower controller's statement, both on the RT and during interview, that they were continuously visual with both aircraft, meeting the CAP493 standard of reduced separation in the vicinity of aerodromes.

The reason for the initial reversal of course by [the pilot of the C172] after the low approach to RW19 could not be determined. However, this manoeuvre positioned the aircraft such that the subsequent reversal of course brought it into proximity with [the P2008], which was joining the circuit from an east-south-easterly direction. Although the Traffic Information passed to [the pilot of the C172] was inaccurate, the Traffic Information passed to [the pilot of the P2008] allowed its pilot to sight [the C172].

The Tower controller had continuous visual contact with both aircraft, meeting their responsibility of preventing collisions between aircraft flying in and in the vicinity of the ATZ by utilising reduced separation in the vicinity of the aerodrome.

Conclusion: Two aircraft in the Oxford ATZ, one joining the visual circuit and another departing VFR after an IFR training approach, came into sufficient proximity that safety may have been compromised. The pilot of [the C172], following a go-around from their training approach, made an unannounced turn to the north contrary to their missed approach instructions. This positioned [the C172] such that the subsequent, and unannounced, reversal of course turned them towards [the P2008] and caused the Airprox. Inaccurate Traffic Information passed by the Tower controller to [the pilot of the C172] may have influenced the pilot's decision-making during or prior to their manoeuvres. The pilot of [the C172] did not comply with their missed approach instructions.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data. The separation was determined and the diagram constructed from the radar data.

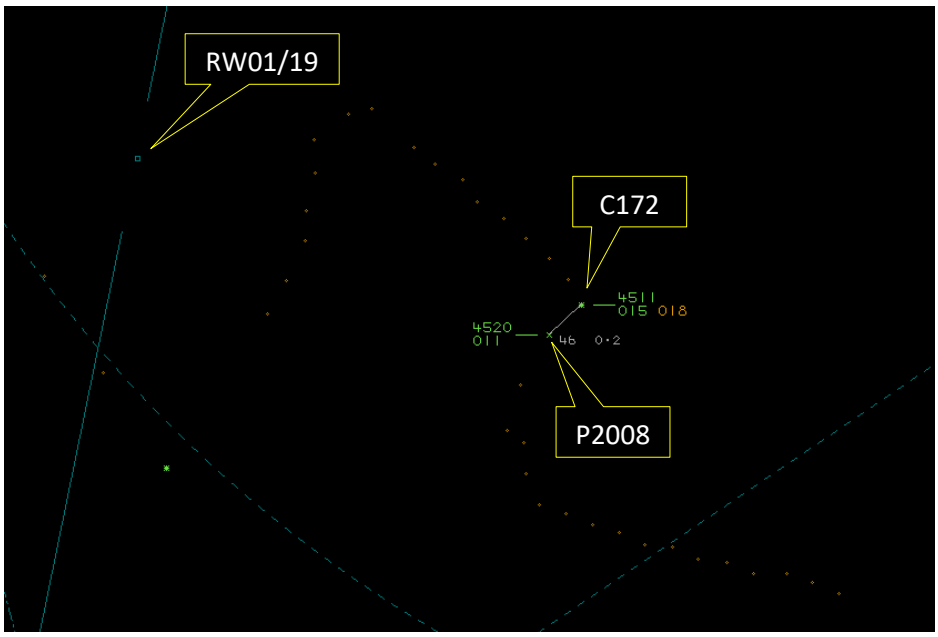


Figure 3 – CPA at 1425:38

The P2008 and C172 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]

Summary

An Airprox was reported when a P2008 and a C172 flew into proximity in the Oxford ATZ at 1426Z on Sunday 16th April 2023. Both pilots were operating under VFR in VMC, in receipt of an ACS from Oxford Tower.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate operating authorities. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

The Board first considered the actions of the pilot of the C172. Members pondered the clearance provided by the Oxford Radar controller, viz "*after low approach, left turn to CPT, remain outside Brize controlled airspace, no turns until south of the runway, climb not above 2000ft*", which was read back correctly, and wondered whether that could have been misinterpreted. One member proffered that the 'low approach' part of the clearance may have been misconstrued to have meant that the missed approach procedure (and, by implication, a left-turn onto the downwind leg of RW19) was to be completed before turning for CPT. Another member suggested that the pilot of the C172 may have been distracted, perhaps by tuning to the CPT VOR, and had inadvertently maintained their left-turn well beyond the intended heading for CPT. Notwithstanding how it had been caused, members were in agreement that the phrasing of the clearance provided by the Oxford Radar controller had been clear, that the pilot of the C172 had deviated from the clearance (**CF1**) and that they had not executed the clearance correctly (**CF2**). Members noted that the Oxford Tower controller had noticed that the pilot of the C172 had not turned for CPT as expected but had turned to the north. Members agreed that, when the Oxford Tower controller had requested that the pilot of the C172 confirm their intentions, and had

[2] (UK) SERA.3205 Proximity.
[3] (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

subsequently passed a caution regarding traffic to the northeast of Oxford, that it had apparently had the effect of alerting the pilot to their error who had then turned to the southeast as previously expected.

The Oxford Tower controller had passed Traffic Information to the pilot of the C172 on the P2008 that had been joining downwind. The information had been passed again and the C172 pilot had acknowledged the traffic. Members considered that the pilot of the C172, given that they had been contending with a correction to their heading, may not have held an accurate mental-model of their position relative to the left-hand circuit for RW19. Members surmised that, as a consequence, the pilot of the C172 had not assimilated that their position, now further east than previously anticipated, would have placed them in a potential conflict with traffic joining into the downwind leg (**CF3**). Nevertheless, members noted that the pilot of the C172 had subsequently visually acquired the P2008 below them.

The discussion moved on to consider the actions of the Oxford Tower controller. Members noted that they had not re-iterated the low-approach and go-around clearance issued to the pilot of the C172 by the Oxford Radar controller earlier but, having noticed that the C172 pilot had unexpectedly turned to the north had, understandably, questioned their intentions. Upon receiving the transmission that the C172 pilot had still intended to head towards CPT, the Oxford Tower controller had issued a caution regarding traffic operating at Weston on the Green to the northeast and information on traffic joining right-base for RW19. Whilst some members praised the controller for recognising that the pilot of the C172 may have been confused, and for having proactively passed information to assist with their current northerly heading, other members wondered whether it may have helped the situation to have emphasised the clearance to head to the southeast, given that the pilot of the C172 had consistently transmitted that their intention had been to route to CPT. Although the C172 had already passed ahead, and above, the P2008 shortly after it had joined the downwind leg, it was wondered whether the Oxford Tower controller had had time to fully assess that the C172 had not posed a collision risk to the pilot of the P2008.

Members noted that the Oxford Airport Unit investigation had revealed that the Oxford Radar controller observed that it had been quiet enough for them to have noticed the unusual manoeuvres by the pilot of the C172 while they were in the ATZ, but that they had not been concerned by the proximity to the P2008. Members agreed that there may not have been much that the Oxford Radar controller could have done to have assisted the Oxford Tower controller further and the conversation turned to consider the actions of the pilot of the P2008. Noting that they had been tuned to the Oxford Tower frequency when the pilot of the C172 had transmitted that they had been 'going around', and that the Oxford Tower controller had passed Traffic Information to them regarding the C172, members were in agreement that the pilot of the P2008 had had specific Situational Awareness of the C172 and would have expected it to have tracked southeast well clear to the west of their position. Nevertheless, some members wondered whether the pilot of the P2008, given that they would have subsequently heard the unfolding situation regarding the C172 pilot's intentions, may have elected to join the downwind leg a little further to the east. Nevertheless, members noted that the pilot of the P2008 had visually acquired the C172 as it had been turning to the southeast and it had crossed from left-to-right ahead and above them. Members appreciated that the pilot of the P2008 had been concerned by the proximity of the encounter (**CF5**) but that the separation between the aircraft had been such that there had not been a need for emergency avoiding action.

Members noted that neither aircraft had been fitted with any additional electronic conspicuity equipment, which on this occasion may have provided some additional information to the pilots to aid visual acquisition. It was for pilots to decide on their own requirements for additional equipment according to their needs and the Board wished to highlight to pilots that additional funding has been made available for electronic conspicuity devices through the CAA's Electronic Conspicuity Rebate Scheme, which has been extended until 31st March 2024.[4]

Concluding their deliberations, members were in agreement that the Oxford Tower controller had passed sufficient Traffic Information to both pilots to enable them to have visually acquired each other. Members were satisfied that the separation between the aircraft had been sufficient and that there had

[4] https://www.caa.co.uk/general-aviation/aircraft-ownership-and-maintenance/electronic-conspicuity-devices/

not been a risk of collision. It was agreed that it had been the unexpected manoeuvres by the pilot of the C172 that had introduced confusion to the situation such that safety margins had been degraded, and that they had flown close enough to the P2008 to have caused concern (**CF5**). As such, the Board assigned Risk Category C to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2023051			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Regulations, Processes, Procedures and Compliance			
1	Human Factors	• Flight Crew ATC Clearance Deviation	An event involving a deviation from an air traffic control clearance.	
	• Tactical Planning and Execution			
2	Human Factors	• Action Performed Incorrectly	Events involving flight crew performing the selected action incorrectly	Incorrect or ineffective execution
	• Situational Awareness of the Conflicting Aircraft and Action			
3	Human Factors	• Understanding/ Comprehension	Events involving flight crew that did not understand or comprehend a situation or instruction	Pilot did not assimilate conflict information
	• See and Avoid			
4	Human Factors	• Incorrect Action Selection	Events involving flight crew performing or choosing the wrong course of action	Pilot flew close enough to cause concern
5	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[5]

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

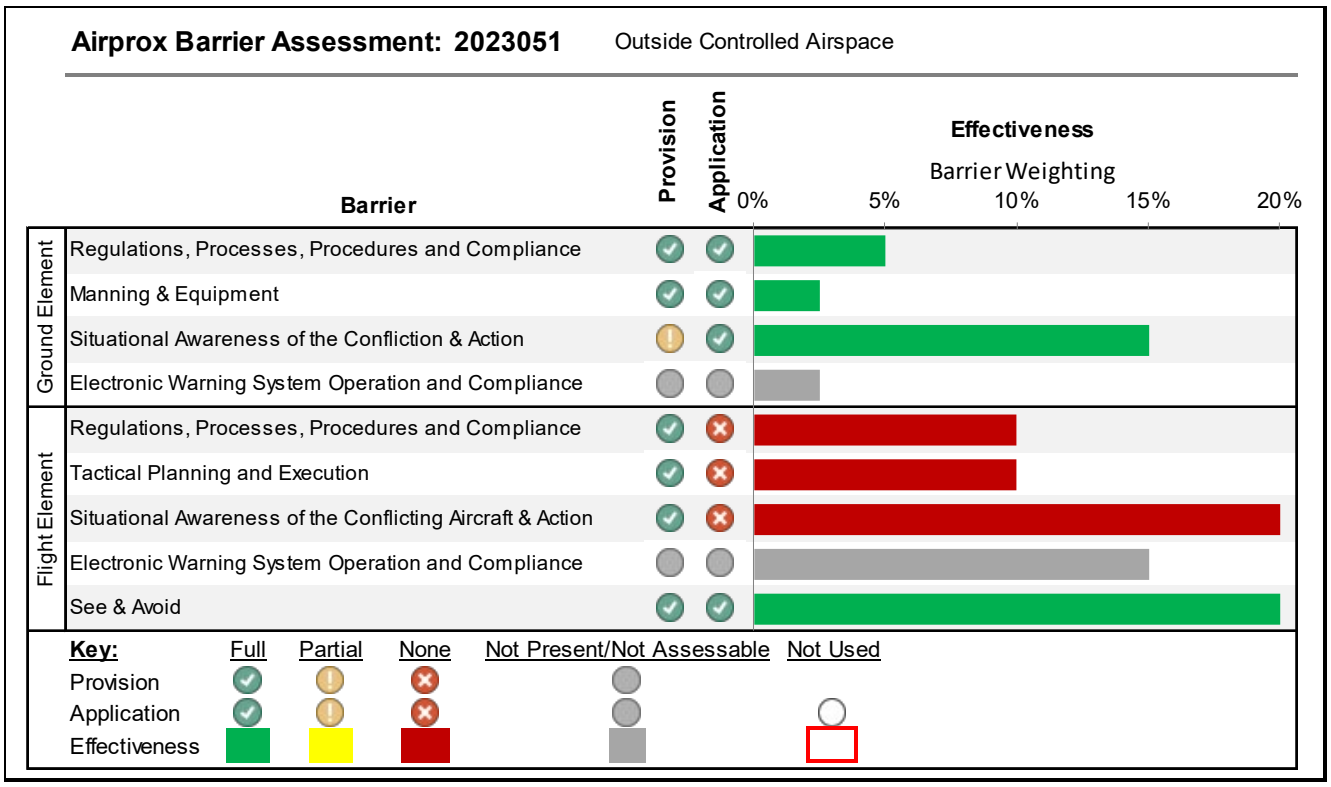
Flight Elements:

Regulations, Processes, Procedures and Compliance were assessed as **ineffective** because the pilot of the C172 did not follow the provided clearance for the missed-approach.

Tactical Planning and Execution was assessed as **ineffective** because the pilot of the C172 did not execute the missed-approach clearance correctly.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of the C172 had not assimilated the Traffic Information passed to them by the Oxford controller.

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


Airprox Barrier Assessment: 2023051
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