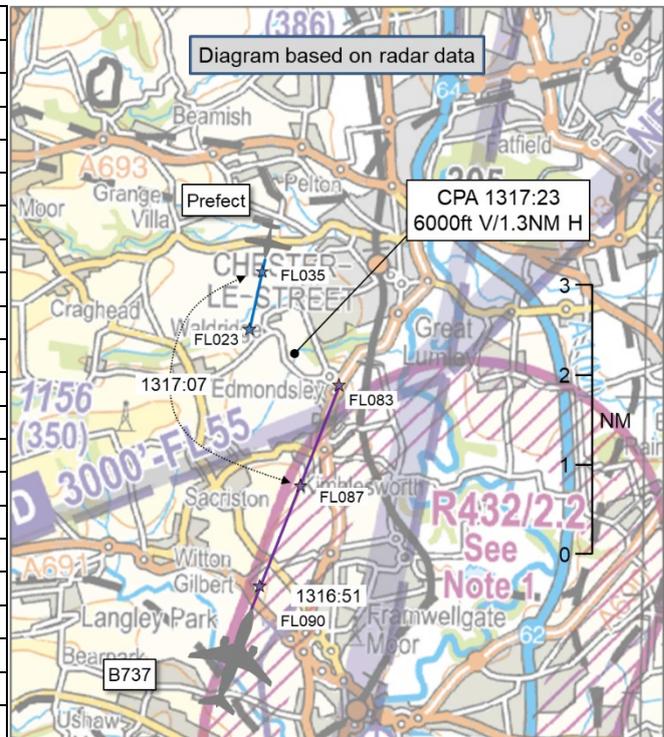


AIRPROX REPORT No 2025209

Date: 05 Sep 2025 Time: 1317Z Position: 5450N 00136W Location: Chester-Le-Street

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Prefect	B737
Operator	HQ Air (Trg)	CAT
Airspace	London FIR	Borders CTA
Class	G	D
Rules	VFR	IFR
Service	Traffic	Radar Control
Provider	Newcastle Radar	Newcastle Radar
Altitude/FL	FL023	FL083
Transponder	A, C, S	A, C, S
Reported		
Colours	White and blue	Company
Lighting	Strobes, nav	Anti-col, strobes, nav
Conditions	NR	VMC
Visibility	NR	>10km
Altitude/FL	NR	4500ft
Altimeter	NR	QNH
Heading	NR	035°
Speed	NR	250kt
ACAS/TAS	TCAS I	TCAS II
Alert	None	None
	Separation at CPA	
Reported	Not seen	Not seen
Recorded	6000ft V/1.3NM H	



THE NEWCASTLE CONTROLLER reports that the Prefect departed [...] to the south, initially below 2500ft. After multiple requests to report altitude, the pilot still did not respond correctly. The pilot eventually read back 3000ft, although Mode C indicated 2500ft. The controller confirmed the readback, and the pilot then advised climbing to 7000ft, entering controlled airspace contrary to ATC instructions. At the same time, the B737 was descending to 5000ft in the opposite direction. The controller instructed the Prefect pilot to descend immediately and remain outside controlled airspace and issued a right-turn avoiding action to the B737 twice; these instructions were initially not acknowledged. The Prefect pilot later confirmed descending and leaving CAS. The B737 pilot subsequently asked if the avoiding action was for them. Although separation did not reach a critical minimum, the lack of compliance and delayed responses increased the risk of conflict.

The controller perceived the severity of the incident as 'Medium'.

THE PREFECT PILOT reports that an incident on the ground at Teesside International (their planned destination airfield during an EFT landaway sortie) resulted in a diversion to Newcastle International [Airport]. Prior to departure from Newcastle, on their return leg to [destination airfield], they telephoned ATC to pass their departure details. The pilot confirmed with the controller over the phone that there were no airspace restrictions preventing a climb to FL70 when clear to the south of the Tyne Bridges VRP. During the departure, ATC passed a height restriction 'not above 2500ft (altitude)' and a routing 'via the Tyne Bridges'. Once [airborne and] clear to the south of the VRP and the Class D airspace segment 1500ft to FL105, they commenced their climb to FL70. ATC asked them to confirm the height that they were passing, and they pilot confirmed that they had been 'passing 2800ft altitude climbing to FL70'. At this point they were told that they had penetrated CAS, and the pilot immediately descended to 1900ft altitude. They [report that] they did not see any conflicting traffic but were aware that a civilian aircraft was given an immediate heading correction. The pilot did not climb above 1900ft altitude again until the River Humber. Newcastle ATC informed them that they would put in an MOR [for this incident],

and the pilot had subsequently been told that an Airprox had been generated against inbound civilian traffic.

The pilot perceived the severity of the incident as 'Medium'.

THE B737 PILOT reports that they were on a heading from Newcastle Radar of probably 035°, descending over Sunderland towards the coast, on vectors to the east for a base turn to an ILS approach for RW25 at Newcastle. They believe there was a joint training exercise between the RAF and the Qatari Air Force taking place. At about 4500ft in the descent, they heard a radio call from a Prefect pilot, saying something like they were passing 3000ft climbing to FL80. The Radar controller asked them to repeat their altitude, and then said something like *'he should not be at that altitude as he is violating controlled airspace, and to descend immediately'*, which the B737 pilot believed the Prefect pilot acknowledged. At that time, the controller gave the B737 pilot an instruction to turn right, onto something like 080°. Soon after they had turned back left again, the controller advised the Prefect pilot that they were going to file a report, as the Prefect had been in conflict with a B737. At no time did [the B737 pilot] have contact with the Prefect, either visually or as a TCAS traffic contact.

Factual Background

The weather at Newcastle Airport was recorded as follows:

METAR EGNT 051250Z 28013KT 250V310 9999 FEW035 18/10 Q1017=

Analysis and Investigation

Newcastle Safety Investigation

Investigation findings:

[The Prefect] pilot [acknowledged] via email that they had inadvertently climbed into controlled airspace following an assumption after booking out and asking about climbing to FL70 once south of the Tyne Bridges. This was compounded by an unscheduled arrival at Newcastle earlier in the day following a closure of Teesside's runway (the original intended destination [of the Prefect pilot]) which has less complex controlled airspace [constructs].

NARRATIVE

The book-out call [from the Prefect pilot] was taken at 1209 by the pilot asking to "coordinate their departure".

"[C/S Prefect 1] at 1330 and [C/S Prefect 2] at 1400 - can we ask for VFR southeast overflying Teesside at 5000ft". The pilot had been aware that it was a CTR from 1000ft to 6000ft, [and, had it not been] they said they could climb to 7000ft. The ATSO replied that they cannot give clearance through Teesside's zone, however, they took the book-out to 5000ft. The pilot asked if there were any restrictions (restricted airspace or areas) [to] which the ATSO reported that there were not.

The pilot re-stated that they were going to climb to 7000ft before asking what taxi route to expect, to which the ATSO replied depending on traffic it could be either F > B then D1 or backtrack from B, before then taking the number on board and fuel endurance/time enroute. [The Prefect pilot then reported] 2 POB on each aircraft, with 1hr 15min enroute and 2 hours fuel for both. The ATSO confirmed frequency 119.705MHz for startup when ready but no confirmation was passed that they could climb without restriction to 7000ft.

At 1254 the Prefect pilot requested start *"dual negative ATIS"*. Start was given with an instruction to *"standby for ATIS"*.

At 1258 information Mike was read via the frequency which was acknowledged by the pilot with *"ATIS Mike copied"*.

The Prefect pilot called for taxi at 1300, which was issued along with the QNH and a request to “*report at the holding point ready to copy clearance*”.

At 1303 the aircraft reported at the holding point [with the pilot] ready to copy clearance. This was issued as “[C/S Prefect 1] *hold position, after departure RW25 left turn out cleared to leave controlled airspace VFR via the Tyne Bridges VRP not above altitude 2500ft squawk 3731*”.

That clearance was read back as “*Hold at holding point Foxtrot, once cleared departure, depart VFR south to the visual reporting point Tyne Bridges not below 2500ft cleared to leave controlled airspace [C/S Prefect 1]*”. Tower confirmed “*Prefect 61 just confirming it's not above altitude 2500ft and squawking 3731*” which was then read back as “*3731, not above 2500ft [C/S Prefect 1]*”.

At 1306 [C/S Prefect 1] reported ready for departure and was told to hold position.

At 1309 [C/S Prefect 1] was given backtrack as required to line-up and wait before being issued with take-off clearance at 1311.

[C/S Prefect 1] was then transferred to Radar at 1314 whilst passing 2400ft about to leave controlled airspace 2NM southeast of Blaydon (approximately 2NM west of the Tyne Bridges VRP).

[C/S Prefect 1] checked in with Newcastle Radar at 1315 requesting a Traffic Service [...] to which the ATCO responded with “[C/S Prefect 1] *Newcastle Radar good day identified Traffic Service taking your own terrain clearance and report passing altitude*”. The pilot responded with “*Say again for the report pass*”. ATC replied with “*It's a Traffic service taking your own terrain clearance and report passing altitude (QNH) 1017*” which went unanswered initially so the controller used the silence to give a further descent clearance to the B737 (to 5000ft QNH 1017). Following this, [C/S Prefect 1] reported “*Traffic service responsible for own terrain deconfliction 1017*”.

Again, the Radar ATCO asked the Prefect pilot to “*report your passing altitude*” which was unanswered so a further call of “[C/S Prefect 1] *what is your present altitude?*” was asked. The crew responded “*passing altitude 3000ft*” (Mode C indicated 2500ft) so the ATCO asked “*confirm that altitude sorry?*”.

The crew again stated “*altitude 3000ft*” to which the Mode C now jumped to indicate 2700ft. The ATCO responded with “[C/S Prefect 1] *it shouldn't be altitude 3000ft that's the base of controlled airspace, remain outside of controlled airspace*” (during the transmission the Mode C jumped again to now show 3000ft with a climb arrow, shortly showing 3200ft (1316:56)).

Another voice [then] came onto the frequency from the aircraft (the same person who booked the aircraft out they believe) to say they were “*climbing to 7000ft*”. At this stage, the aircraft was indicating 3400ft, approximately 2.5NM north of the B737 which was indicating FL89 descending to 5000ft. ATC responded with “[C/S Prefect 1] *negative descend immediately*”, followed immediately with “[C/S B737] *avoiding action turn right immediately heading 090°*” which was unanswered. A further call to [C/S Prefect 1] was made to “*descend immediately*” which was acknowledged before the avoiding action was repeated to [C/S B737].

[C/S Prefect 1] was 1NM northwest of [C/S B737] indicating 2700ft descending and [C/S B737] [had been showing as] FL84 descending. Again, the avoiding action was not immediately acknowledged before “*was that for [C/S B737]?*” as the aircraft passed each other.

CONCLUSIONS

The root cause of this incident was a controlled airspace infringement by [C/S Prefect 1], having already left controlled airspace on their clearance of not above 2500ft by the Tyne Bridges, they subsequently climbed into Newcastle CTA 5 which has a base of 3000ft. The aircraft had earlier diverted into Newcastle which has a more complex controlled airspace structure than their originally planned airport of Teesside.

Whilst no specific phraseology examples exist in CAP413 for reporting of an altitude, the example given is for above transition level and given as "REPORT YOUR LEVEL". The use of "Report passing altitude" may have been misinterpreted by the crew as being a clearance to climb as it would normally be suffixed with an altitude to report passing, eg "REPORT PASSING ALTITUDE 3000ft". Avoiding action phraseology passed to [C/S B737] should also include Traffic Information on the conflicting traffic but given it was not heard/responded to by the B737 crew this would have likely been of little value.

Care should be exercised in instructing an aircraft to "descend immediately" which would take them below the ATSMAC altitude. With the commercial traffic descending to 5000ft, an amended clearance of "not above 4000ft" for the Prefect (or stopping the descent on the B737) could have also resolved the situation without needing to pass avoiding action or descend the Prefect.

Minimum estimated separation was 2NM and 4900ft (Prefect 1 was 3800ft on QNH1017, B737 was at FL86).

RECOVERY ACTIONS

The ATCO identified the potential confliction early and made several attempts to resolve, given how quickly it developed. The avoiding action plan to turn the B737 right onto heading 090° would have been sufficient to resolve any potential loss of separation due to the controlled airspace infringement, however, the crew did not respond to these calls resulting in a secondary plan being implemented.

CAA ATSI

Having reviewed the initial booking-out telephone call and the Tower and Radar recordings, ATSI notes that the Prefect pilot report suggested only one pilot had been involved in this occurrence, however, the booking-out call was made by a pilot in the Prefect with a distinctive voice, who was not the pilot who subsequently called for start, taxi, departure and initial call to Radar. The first pilot who had booked-out was subsequently the one who reported descending again after the instruction by the Radar controller. It has not been possible to determine the roles/responsibilities of either pilot in the aircraft.

Although the avoiding action issued to the Prefect pilot had been a bit rushed in its delivery, it was given in very good time although not [reportedly] received nor actioned by the pilot.

ATSI has nothing else to add to the Newcastle investigation.

UKAB Secretariat



Figure 1: CPA: 1317:23. 6000ft/1.3NM
Slant range 9919ft.

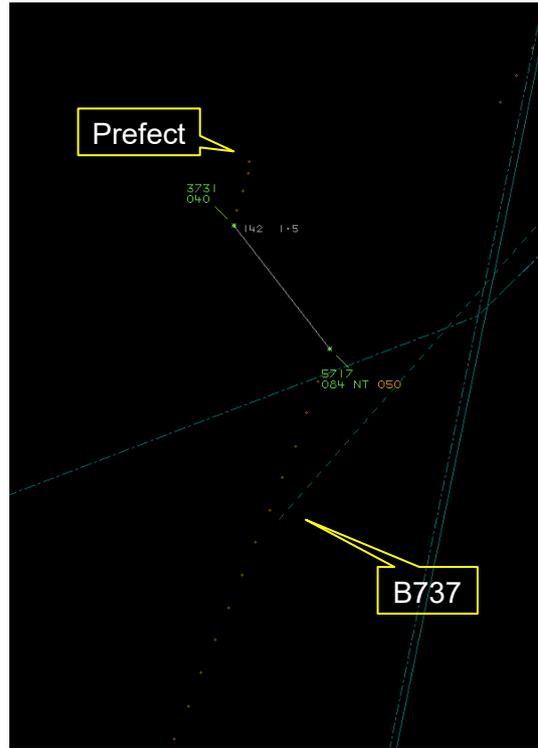


Figure 2: CPA-4 sec (1317:19). 4400ft/1.5NM
Slant range 10,120ft

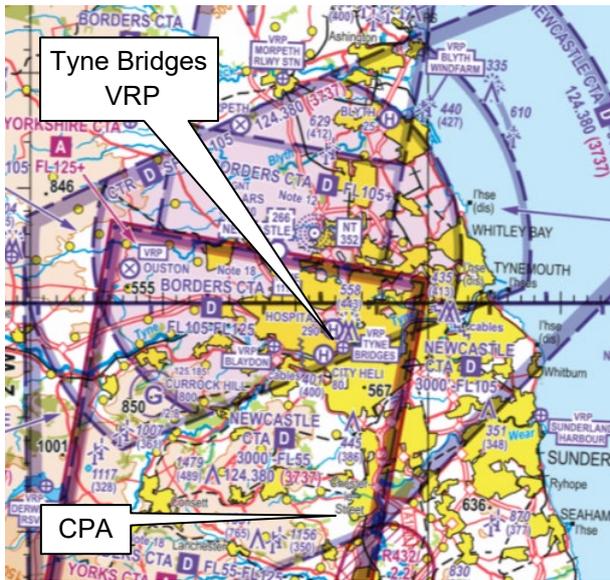


Figure 3: Civil charting of the event area.

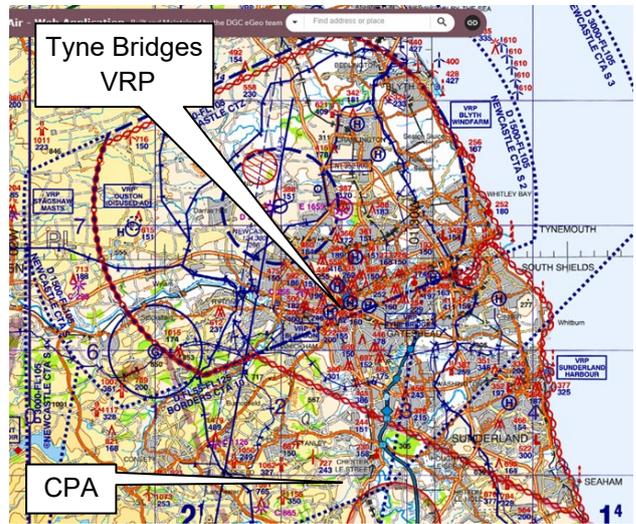


Figure 4: Military charting of the event area.

Both aircraft were tracked via radar and identified through Mode S data. Figures 1 and 2 show the individual closest points of approach both vertically and horizontally with the combined closest point of approach calculated as having occurred at 1317:23.

Figures 3 and 4 show the relevant parts of the charts available to civil and military operators. The Prefect pilot had carried that shown at Figure 4.

The Prefect and B737 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

A comprehensive local investigation at the Prefect's home unit has been conducted. The Prefect pilot recognised that the issued ATC departure clearance should have been complied with, irrespective of the information passed during the telephone conversation that took place as part of pre-flight planning, and that their climb above their cleared altitude reduced the separation between their aircraft and the B737, causing the Newcastle ATCO to become concerned. This occurrence has also highlighted the importance of using the correct Aeronautical Information when conducting pre-flight planning, as the charts that the Prefect pilot had used were not optimised for a transit of medium-level airspace. This incident was briefed at a Flt Safety Training day at the unit in October 2025 to highlight the pitfalls associated with operating from an unfamiliar airfield during unplanned circumstances. HQ Air Cmd also commends the Prefect crew for their honesty and candid attitude during the investigation process.

Summary

An Airprox was reported when a Prefect and a B737 flew into proximity at Chester-Le-Street at 1317Z on Friday 5th September 2025. The Prefect pilot was operating under VFR in VMC in receipt of a Traffic Service from Newcastle Radar, and the B737 pilot was operating under IFR in VMC in receipt of a Radar Control Service, also from Newcastle Radar.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, a report from the air traffic controller 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.

Board members firstly discussed the actions of the Prefect pilot. They noted that they had landed at Newcastle following an unforeseeable change to their pre-planned landaway at Teesside. On preparing for their return flight to home base, they had telephoned air traffic control at Newcastle and discussed their preference and obligations for their departure. Members acknowledged that English was not the first language of the Prefect Crew and that this may have led to some misunderstandings in what they could have expected once their departure had started (**CF2**). The Board felt that this potential for misunderstanding had been compounded by the planning documentation that the pilot had had at their disposal. Their original plan had been predicated on an arrival to and departure from Teesside but had been amended, due to circumstances beyond their control, to Newcastle. The charting and associated information they had used for pre-flight planning and briefing not been ideal for those on a first-time visit to Newcastle, a busier airport and more complex airspace structure than that at Teesside (**CF5**). On gaining their first contact with the Newcastle controller once airborne, they had misinterpreted the flight clearance they had received (**CF3**) and had inadvertently penetrated Class D airspace (**CF4**) causing the controller to issue corrective action to ensure separation parameters were maintained between the Prefect and the overhead B737 (**CF1**).

Members briefly considered the role played by the B737 pilot, acknowledging that they had been under Radar Control and had been aware of RT communication between the controller and the Prefect pilot. They had themselves received a turn-and-resume instruction, which may have been related to the event, but they had not received any indications from their onboard equipment that the Prefect had

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.

been a threat to their aircraft. The Board felt that the actions of the Prefect pilot had not materially impacted the flight of the B737.

In reviewing the actions of the Newcastle Radar controller, the Board considered the events as a whole. They noted that the initial telephone call between the Prefect pilot and air traffic control had been with an air traffic assistant and that, once the issue of language and intent clarity had been identified, it may have been prudent to have asked the controller to hold that conversation to ensure greater understanding of the clearance and limitations that would be imposed. Once the Prefect had been airborne, the controller had instructed the pilot to ‘...*report passing altitude*’ which had the potential for, and had been misinterpreted by, the Prefect pilot. Members acknowledged that the subsequent investigation by Newcastle Airport had acknowledged this point and that the airport has taken steps to ensure clarity. Members felt that the Prefect pilot’s misunderstanding of the instructions passed and subsequent infringement of Class D airspace had been compounded by inconsistent RT responses from those involved. The Board recognised the event had a number of combining factors that had led to the reported Airprox but felt that the controller had taken positive action to avoid a greater issue between the two aircraft.

On the matter of RT phraseology, an advisor to the Board with particular knowledge of CAP 413 noted that it is not possible for that document to provide examples of standard phraseology for every situation. However, both UK SERA Section 14 and CAP 413 Ch5, paragraph 5.8, Table 2 highlight appropriate terminology for verifying an aircraft’s altitude. The standard phrase would be “CONFIRM ALTITUDE [or FLIGHT LEVEL]” with “REPORT ALTITUDE [or FLIGHT LEVEL]” being an acceptable alternative. The advisor went on to add that, if an aircraft is climbing or descending, it could be appropriate to add the term “PASSING” after the phrase but it is not necessary.

Concluding their discussion, members acknowledged that that the Prefect pilot had penetrated class D airspace without approval and that both the Prefect and the B737 pilots had only generic situational awareness of the presence of the other aircraft (**CF6**) but recognised that there had been no risk of collision between the two aircraft and at no time had either pilot been concerned about the proximity of the other. Members were satisfied that the actions taken by the Newcastle air traffic controller had ensured that the separation between the aircraft had been adequate and that there had been no risk of collision. The Board assigned Risk Category E to this event and members agreed on the following contributory factors:

- CF1.** The Prefect pilot had deviated from their air traffic control clearance.
- CF2.** The Prefect pilot had been unclear in their intentions for departure during the pre-flight telephone conversation with air traffic control.
- CF3.** The Prefect pilot had incorrectly executed their departure clearance.
- CF4.** The Prefect pilot had penetrated controlled airspace without clearance from air traffic control.
- CF5.** The Prefect pilot had not been equipped with the correct suite of flight planning equipment for their departure from Newcastle airport.
- CF6.** Both the Prefect and the B737 pilots had only generic situational awareness of the presence of the other aircraft.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK**Contributory Factors:**

2025209				
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	• Accuracy of Communication	Events involving flight crew using inaccurate communication - wrong or incomplete information provided	Ineffective communication of intentions
3	Human Factors	• Action Performed Incorrectly	Events involving flight crew performing the selected action incorrectly	Incorrect or ineffective execution
4	Human Factors	• Airspace Infringement	An event involving an infringement / unauthorized penetration of a controlled or restricted airspace.	E.g. ATZ or Controlled Airspace
5	Human Factors	• Pre-flight briefing and flight preparation	An event involving incorrect, poor or insufficient pre-flight briefing	
• 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

Degree of Risk: E.

Safety Barrier Assessment³

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 Prefect pilot had deviated from the air traffic control clearance issued to them.

Tactical Planning and Execution was assessed as **ineffective** because the Prefect pilot, having communicated their intentions via telephone call before departure, had then incorrectly read back the departure instruction given to them by air traffic control and penetrated Class D airspace without clearance.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because both pilots had only generic situational awareness of the presence of the other aircraft.

See and Avoid were assessed as **not used** because it was not expected that the aircraft were to be separated visually.

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: 2025209		Within Controlled Airspace						
Barrier		Provision	Application	Effectiveness				
				Barrier Weighting				
				0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓					
	Manning & Equipment	✓	✓					
	Situational Awareness of the Confliction & Action	✓	✓					
	Electronic Warning System Operation and Compliance	✓	✓					
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✗					
	Tactical Planning and Execution	✓	✗					
	Situational Awareness of the Conflicting Aircraft & Action	⚠	✓					
	Electronic Warning System Operation and Compliance	✓	✓					
	See & Avoid	✗	○					
Key:		<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>		
Provision	✓	⚠	✗	●	○			
Application	✓	⚠	✗	●	○			
Effectiveness								