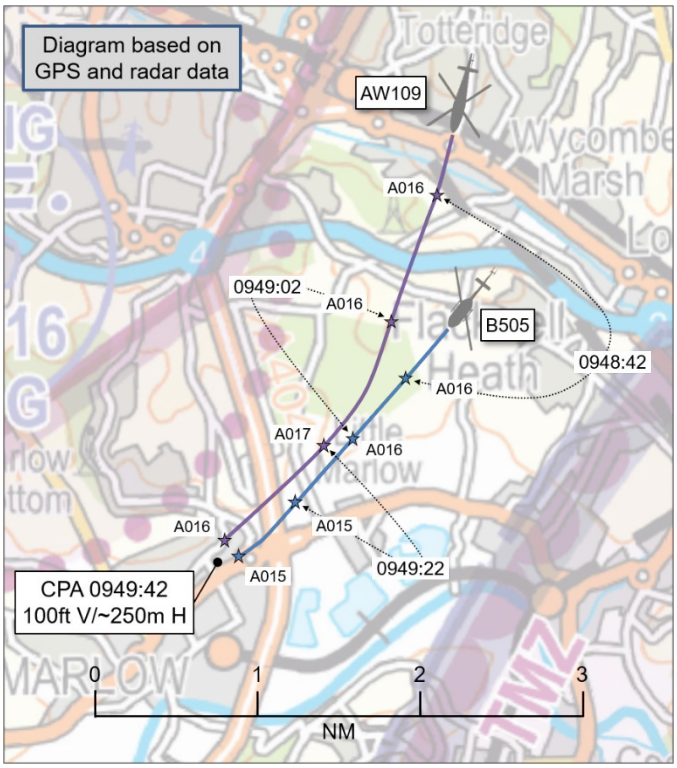
AIRPROX REPORT No 2026115

Date: 20 Jun 2026 Time: 0950Z Position: 5135N 00046W Location: Marlow

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	B505	AW109
Operator	Civ Helo	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Listening Out
Provider	F'borough LARS N	Ascot Tower
Altitude/FL	1500ft	1600ft
Transponder	A, C, S	A, C, S
ADS-B Out	Observed	Observed
Reported		
Colours	Grey	White, blue
Lighting	Anti-col, position	Strobes, beacon, nav, landing
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1500ft	1700ft
Altimeter	QNH	QNH (1019hPa)
Heading	215°	190°
Speed	100kt	160kt
ACAS/TAS	TAS, PilotAware	FLARM, SkyEcho, TAS
Alert	Alert	Alert
	Separation at CPA	
Reported	0ft V/ "*a few hundred feet*" H	0ft V/500m H
Recorded	100ft V/~250m H	



THE B505 PILOT reports that they were heading on an approximate 233° track, with a Basic Service from Farnborough, when they noticed an amber contact on their TAS approaching from behind, same level. Also, there was a red ring on their SkyDemon with [EC device]. Since it was at the same level and approaching from the rear, they were not sure what avoiding action to take. They did not want to turn or climb/descend into them.

[The pilot of the B505 opined that they were] not sure whether [the other aircraft] was going to come underneath, over the top, or either side. On the TAS, it appeared to be right on top of them at the same level. [The B505 pilot] ended up descending slightly. They were very nervous since there was obviously no visual [contact] because they could not see behind.

About 15sec later, [the other aircraft] came past on their right, same level (approximately 1500ft) very quickly, and then started descending [towards their destination]. They were obviously in a big hurry. [The B505 pilot's] groundspeed was about 90kt, [the other aircraft's groundspeed] was about 140kt. [The other pilot] must have had very clear visibility of [the B505] but, in their opinion, they should have left a much larger margin on either the left or right. They were both quite close to the cloudbase, approximately 1800ft.

Farnborough Radar alerted them as [the other aircraft] was passing them (late) and, when they complained about [the other pilot's] actions, [the Farnborough controller] said that they were not [in receipt of a] service from them. They presume it had been Heathrow Radar instead. The controller asked if they wished to report an Airprox and they said they would think about it.

[The pilot of the B505 opined that] they think the pilot's actions were very dangerous, and they were made to feel extremely unsafe.

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

THE AW109 PILOT reports that, at approximately 1700ft and 160kt, while approaching High Wycombe to route between the Heathrow CTR and [Wycombe Air Park], a B505 helicopter was observed on TAS, and SkyDemon (using an EC device) and [other traffic awareness system] on a 1/3 and 2/3 split screen iPad display mounted in the AW109. Visual contact with the helicopter was then established [at a reported range of 2NM]. Their initial assessment was to pass safely behind the B505, based on the projected tracks of both aircraft at the time and the B505's significantly lower airspeed. However, the B505 pilot subsequently altered course to the left, [and was] crossing the [AW109 pilot's] intended track. This change in track, combined with the proximity of Heathrow controlled airspace and the White Waltham ATZ, meant that continuing the original assessment to pass behind could no longer be achieved safely while maintaining appropriate margins from controlled airspace. As their aircraft was then approaching the slower B505 from behind, they reassessed the situation in accordance with the Rules of the Air. They altered course to establish a parallel track to the west of the B505 and descend to approximately 1500ft, matching its altitude to maintain continuous visual contact and ensure both aircraft remained in sight throughout the overtaking manoeuvre. This positioning provided an unobstructed view from the cockpit, enabling effective application of the see-and-avoid principle.

The AW109 passed approximately 500m west of the B505 on a parallel track, with a relative overtaking speed of approximately 70kt. Their passengers were briefed on the presence of the helicopter throughout the manoeuvre. Once established approximately 1NM ahead of, and clear from, the B505, as confirmed by TAS, SkyDemon [and passive traffic awareness system], they descended to 1200ft to provide additional vertical separation before turning [towards a waypoint approximately 4NM south of White Waltham]. Throughout the event, they maintained continuous visual contact with the B505, complied with the Rules of the Air, and adjusted their flightpath in response to the changing geometry of the encounter to maintain safe separation and margins from controlled airspace.

[The pilot of the AW109 commented that they had] engaged the Autopilot to allow more outside reference for see-and-avoid in a very busy environment with multiple helicopters flying towards the Ascot event. They were monitoring Ascot Tower frequency […] for situational awareness and were monitoring Wycombe Radio on box 2.

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

THE FARNBOROUGH LARS CONTROLLER reports that they were working North and East and had the [pilot of the] B505 on their frequency squawking 5021 at 1600ft. They noticed another aircraft squawking 4316, indicating 1700ft, coming very close behind [the B505] so they passed Traffic Information. It appeared that the 4316 squawk would pass down the left-hand side of [the B505], but it was hard to tell as the returns were so close. They believe the 4316 squawk actually ended up passing very close down the right-hand side of [the B505]. [The pilot of the B505] indicated to them that they were very unhappy with how close the other helicopter passed and said that they may file an Airprox.

Factual Background

The weather at Heathrow Airport was recorded as follows:

```
METAR EGLL 200950Z AUTO 23009KT 170V260 9999 BKN022 22/17 Q1019
```

Analysis and Investigation

CAA ATSI

ATSI has nothing to add to the [NATS] Farnborough investigation.

NATS Operations Safety Performance and Investigations

The pilot of [the B505], from […] to […], called onto the Farnborough LARS North frequency at 0937:44 and requested a Basic Service. A Basic Service was agreed, and squawk 5021 was assigned to the aircraft. [The AW109] was initially displaying the Luton Frequency Monitoring Code 0013 and, at 0946:39, the squawk changed to 4316 […].

[The pilot of the B505] passed the western edge of the responsibility of the LARS North controller, however, being under a Basic Service, the controller elected to retain the aircraft on the LARS North frequency.

At 0949:09, the Farnborough LARS North controller advised the pilot of [the B505] (5021), "*There's traffic just behind you looks to be trying to overtake you on your left-hand side indicating similar altitude*". (Figure 1)

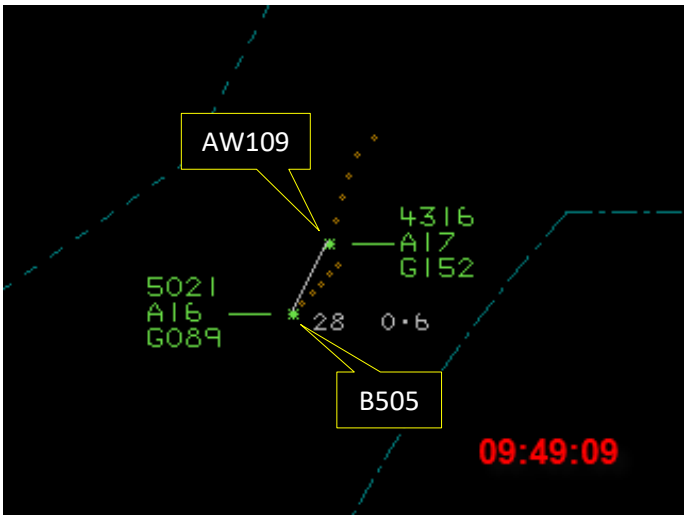


Figure 1 - Aircraft positions at 0949:09

The Traffic Information was acknowledged by the pilot of [the B505]. Further Traffic Information was provided at 0949:34, which stated, "*There's traffic just overtaking on your right-hand side similar altitude*".

The Closest Point of Approach between [the B505] (5021) and [the AW109] (4316) occurred at 0949:39, measured on the NODE Multi-Track radar as 0.2NM and 100ft. Both aircraft were operating in Class G airspace and there were no separation requirements between the aircraft. (Figure .)

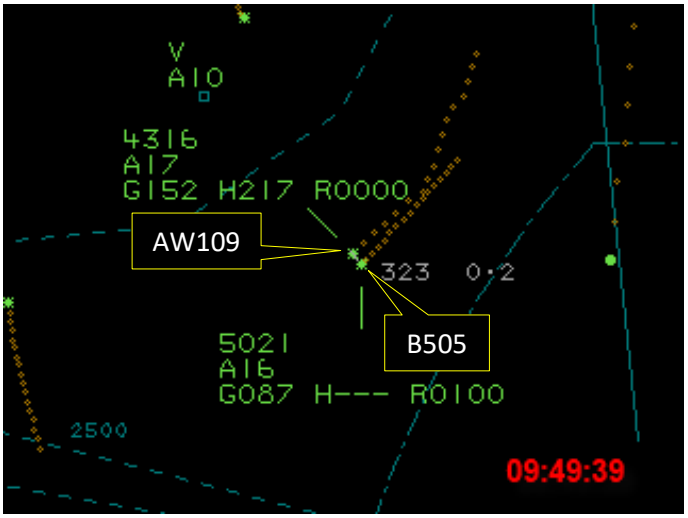


Figure 2 - Aircraft positions at 0949:39

The pilot of [the B505] reported at 0950:30, "*He was very close, he came right behind me, is that, is that normal?*". The LARS controller advised the pilot of [the B505] that they were not speaking to

the [pilot of the] other aircraft, to which the pilot of [the B505] indicated that they would consider filing an Airprox relating to the event.

Investigation

Information available to the investigation included: CA4114 from the Farnborough LARS North and East controller; NATS4118 Initial Watch Management Investigation Report; [redacted copy of the B505 pilot's] Airprox report; CAP 774 Flight Information Services; AICs Y059/2026 and M050/2026; and [Temporary Operating Instructions] TOI008/26 EGLF and TOI028.26 SWN.

The Farnborough LARS North and East sectors were being operated in a bandboxed configuration. Workload was noted to be low at the time of the event.

[The pilot of the B505] was under a Basic Service with the LARS controller, which had been requested by the pilot.

CAP774 Ch.2, 2.1 states:

> '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.'

CAP774 Ch.2, 2.7 further states:

> 'A controller with access to surveillance-derived information shall avoid the routine provision of traffic information on specific aircraft but may use that information to provide a more detailed warning to the pilot. If a controller/ FISO considers that a definite risk of collision exists, a warning shall be issued to the pilot ((UK) SERA.9005(b)(2) and GM1 (UK) SERA.9005(b)(2)). Whether traffic information has been provided or not, the pilot remains responsible for collision avoidance without assistance from the controller'.

[The pilot of the AW109] was operating [to a particular destination] […] and not expected to call onto the London SVFR frequency, but to be in communication with [the controller at their destination]. By displaying the correct squawk, this indicated that the [pilot of the AW109] was in compliance with those procedures.

Given the nature of the confliction between [the AW109] and [the B505], the LARS controller passed Traffic Information to the pilot of [the B505], which was updated as the aircraft flew closer. There was no separation requirement between the two aircraft in Class G airspace.

The Closest Point of Approach between [the AW109] and [the B505] occurred at 0949:39 and was recorded on Multi-Track radar as 0.2NM and 100ft where there were no separation requirements. The Airprox was caused when [the pilot of the AW109] overtook [the B505] in a manner which the pilot of [the B505] reported as unsafe.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data. Both aircraft were observed by reference to ADS-B data sources (Figure 3). The pilot of the B505 kindly supplied GPS track data for their flight. The diagram was constructed and the separation at CPA determined by combining the data sources.

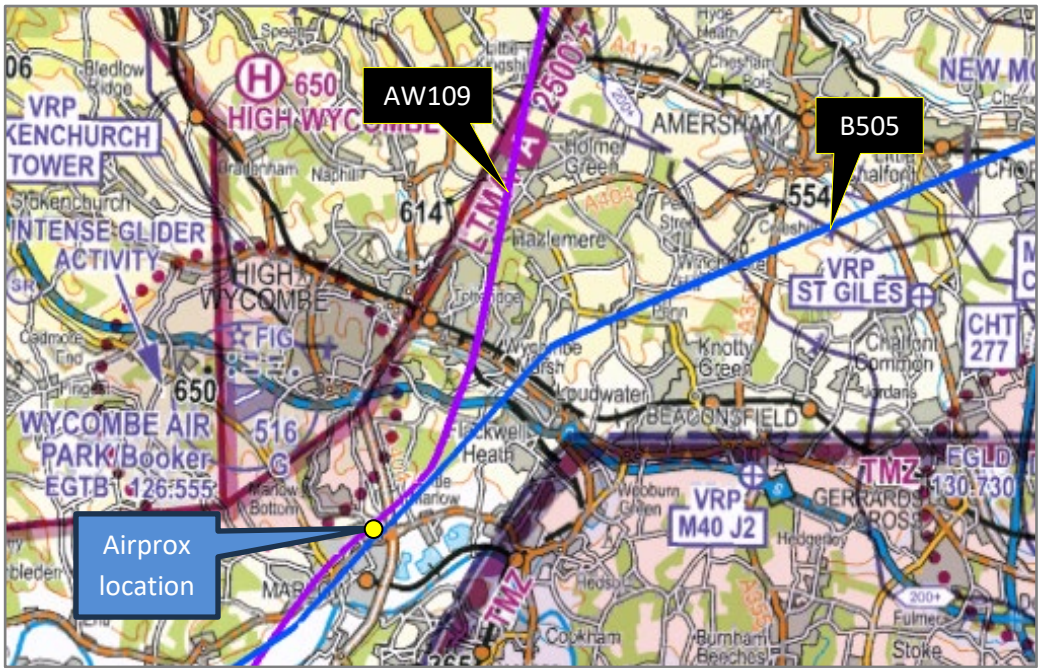


Figure 3 - Aircraft tracks (ADS-B data)

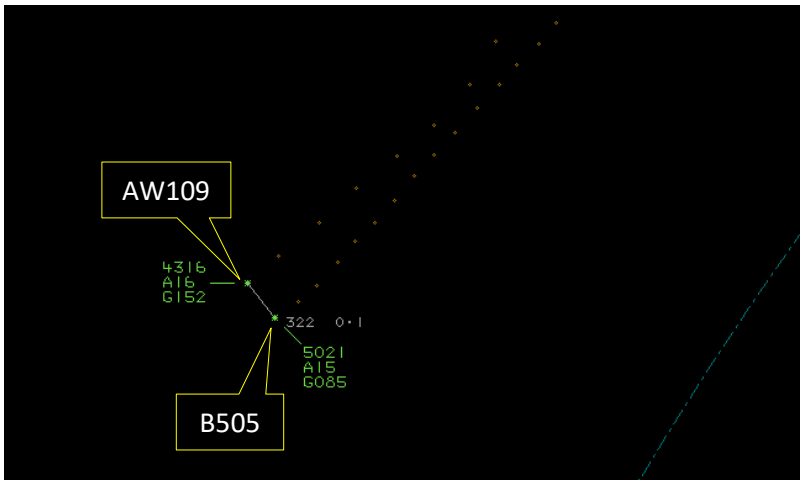


Figure 4 - CPA at 0949:42

The B505 and AW109 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 overtaking then the B505 pilot had right of way and the AW109 pilot was required to keep out of the way of the other aircraft by altering heading to the right. No subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from this obligation until it is entirely past and clear.[2] An aircraft that is obliged by the rules to keep out of the way of another shall avoid passing over, under or in front of the other, unless it passes well clear and takes into account the effect of aircraft wake turbulence.[3]

Summary

An Airprox was reported when a B505 and an AW109 flew into proximity at Marlow at 0950Z on Saturday 20th June 2026. The B505 pilot was operating under VFR in VMC, in receipt of a Basic Service from Farnborough LARS North. The AW109 pilot was operating under VFR in VMC, listening out on the Ascot Tower frequency.

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3210 Right-of-way (c)(3) Overtaking.
[3] (UK) SERA.3210 Right-of-way (c).

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, GPS track data for the flight of the B505, radar photographs/video recordings, 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 B505, and members noted that they had been in receipt of a Basic Service from the Farnborough LARS North controller. As such, members agreed that they would not have expected to have received any Traffic information along their route and that they had the responsibility for collision avoidance without assistance from the controller. It was noted that the EC devices fitted to the B505 had alerted them to a contact at the same level (**CF5**). Members agreed that the B505 pilot had been concerned by the proximity of the contact (the AW109) (**CF4**) and that it had been obscured from their view (**CF9**) as it had approached from behind.

Members noted that, approximately 30sec before CPA, the Farnborough controller had advised the pilot of the B505 that there had been traffic that had appeared "*...to be trying to overtake you on your left-hand side indicating similar altitude*". That information had been subsequently updated, 8sec before CPA, to "*…traffic just overtaking on your right-hand side similar altitude*". Members noted that the pilot of the B505 had not visually acquired the AW109 until at or around the moment of CPA, and agreed that that effectively constituted a non-sighting (**CF7**). It was further agreed that the proximity of the AW109, once sighted, had caused them concern (**CF8**).

Members next turned their attention to the actions of the pilot of the AW109, and it was noted that they had had the use of two radios, one tuned to the frequency for Ascot Tower, and the other tuned to the frequency for Wycombe Air Park. The selection of frequencies was pondered, and members agreed that, whilst the pilot of the AW109 may have gleaned some situational awareness of traffic entering or leaving the Wycombe ATZ, it would have been far more prudent to have requested a surveillance-based service from the Farnborough controller whilst en-route to their intended destination (**CF2**). Reviewing the route that the pilot of the AW109 had selected, some members suggested that it may have been advisable to have tracked to the west of Wycombe Air Park, a similar distance to their chosen route but one that may have provided more options for the avoidance of any traffic that they may have encountered.

Members next noted that the TAS fitted to the AW109 had alerted the pilot to the presence of the B505 (**CF5**) and that the B505 had been subsequently sighted at a reported range of 2NM. It was also noted by members that the AW109 pilot had been conscious of how close they had been to the Wycombe Air Park ATZ and the London CTR. In consideration of the high groundspeed of the AW109 relative to that of the B505, members calculated that there had been little time for the pilot of the AW109 to have adapted their dynamic plan once they had assimilated that the track of the B505 had changed by approximately 20°. Members reviewed the tracks of the helicopters, the formulation of the plan to overtake the B505, and the separation at CPA. Members concluded that the AW109 pilot's dynamic plan had not been adapted sufficiently to have met the needs of the situation (**CF3**) and that their overtake manoeuvre had not been executed correctly (**CF1**). It was further agreed that the AW109 pilot had flown close enough to the B505 to have caused its pilot concern (**CF6**).

Turning their attention to the actions of the Farnborough LARS North controller, members agreed that they had not been required to have monitored the flight of the B505 under the terms of a Basic Service. Nevertheless, members noted that they had observed a contact, the AW109, that had been 'very close behind' the B505 and that they had subsequently passed Traffic Information to the pilot of the B505. Noting that updated Traffic Information had also been passed, members indicated that there had been little else that the controller could have done to have assisted matters.

Concluding their discussion, members summarised their thoughts. It was agreed that both pilots had had situational awareness of the presence of the other helicopter. It was also agreed that the pilot of the B505 had not sighted the AW109 until the moment of CPA. However, although the AW109 pilot had sighted the B505 at a reported range of 2NM, members agreed that their dynamic plan, and adaptation

thereof, had been insufficiently detailed as the encounter unfolded. Consequently, the manoeuvre to overtake the B505 had not been conducted correctly.

Members next considered the matter of the risk of collision. Some members pointed out that the pilot of the AW109 had remained in visual contact with the B505 throughout the overtake manoeuvre and, despite the proximity, proffered that they could have reacted swiftly if the geometry had altered. Other members suggested that, throughout the planning and execution of the manoeuvre, safety margins had reduced so considerably that there had been a risk of collision. A vote was conducted and an equal number of votes were cast in favour of each view. The Chair cast a deciding vote, and the former view prevailed. The Board agreed that there had not been a risk of collision and assigned Risk Category C to this event.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2026115			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Tactical Planning and Execution			
1	Human Factors	• Action Performed Incorrectly	Events involving flight crew performing the selected action incorrectly	Incorrect or ineffective 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
3	Human Factors	• Insufficient Decision/Plan	Events involving flight crew not making a sufficiently detailed decision or plan to meet the needs of the situation	Inadequate plan adaption
	• Situational Awareness of the Conflicting Aircraft and Action			
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.	
	• See and Avoid			
6	Human Factors	• Incorrect Action Selection	Events involving flight crew performing or choosing the wrong course of action	Pilot flew close enough to cause concern
7	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
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
9	Contextual	• Visual Impairment	Events involving impairment due to an inability to see properly	One or both aircraft were obscured from the other

Degree of Risk: C.

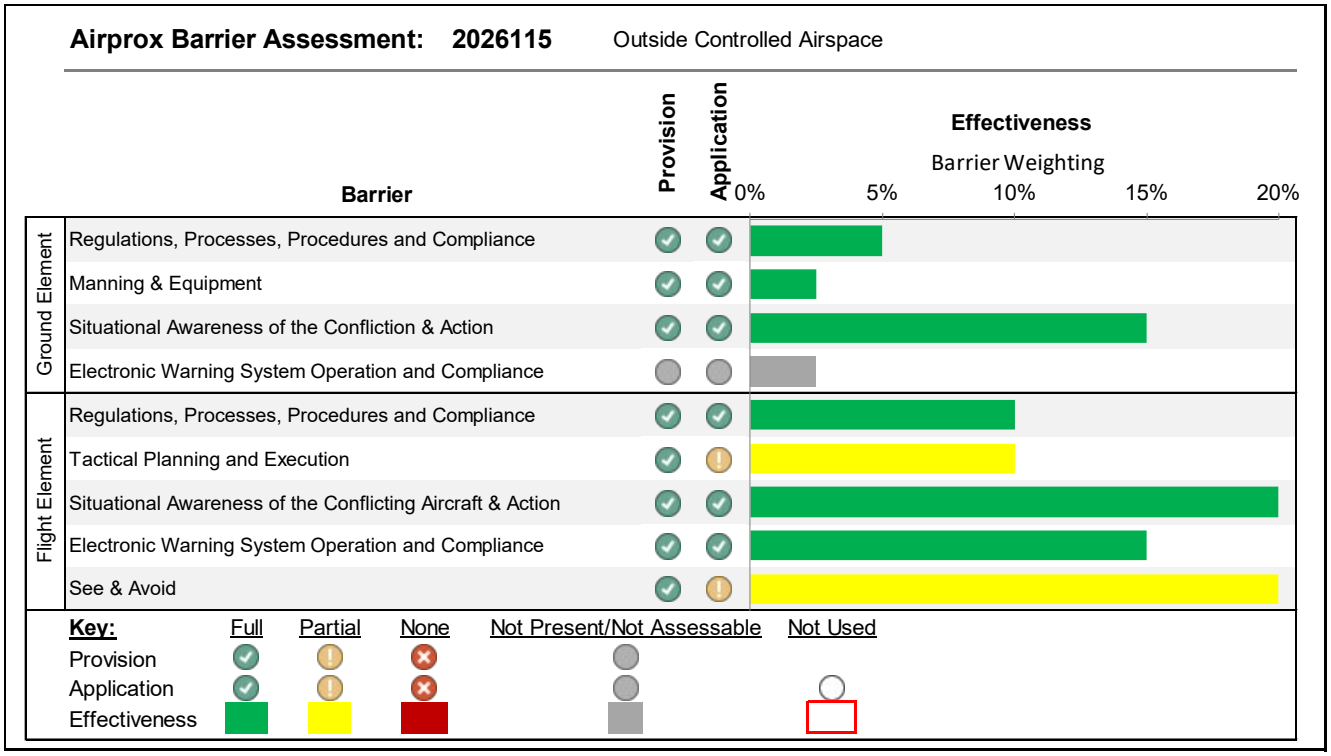
Safety Barrier Assessment[4]

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

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the pilot of the A109 had not adapted their dynamic plan sufficiently to have met the needs of the situation and had not executed the overtake manoeuvre correctly.

See and Avoid were assessed as **partially effective** because the pilot of the AW109 had flown close enough to the B505 to have caused its pilot concern. The pilot of the B505 had not sighted the AW109 until at or around the moment of CPA.



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