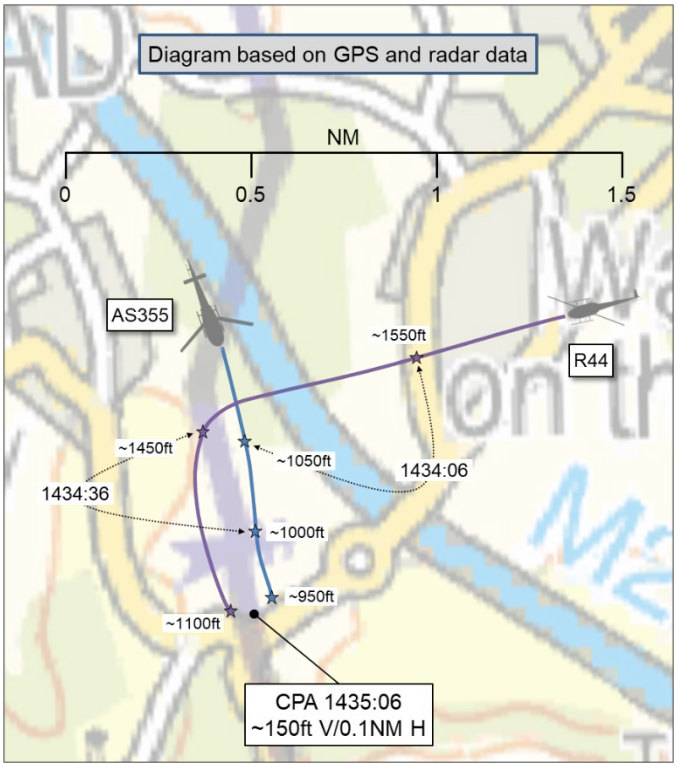
AIRPROX REPORT No 2026024

Date: 19 Mar 2026 Time: 1435Z Position: 5116N 00016W Location: 3.5NM NE Dorking

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	AS355	R44
Operator	Civ Comm	Civ Helo
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Listening Out
Provider	Farnboro' LARS W	Farnboro' LARS W
Altitude/FL	~950ft	~1100ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Blue	Grey
Lighting	Strobe, Anti-col, Nav	Nav
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	150ft	1050ft
Altimeter	QNH (1024hPa)	QNH
Heading	180°	180°
Speed	"*hovering*"	40kt
ACAS/TAS	TCAS I	Not fitted
Alert	None	N/A
	Separation at CPA	
Reported	0ft V/30m H	200ft V/200m H
Recorded	~150ft V/0.1NM H	



THE AS355 PILOT reports that it was a routine powerline inspection flight. They were south of Epsom, routeing towards the Buckland VRP, and turning west to Dorking. They were hovering next to a powerline tower, using a thermal camera to assess the asset. They became aware of a black R44 as it came alongside them to starboard, it hovered a short while, then transitioned forwards and flew a climbing right turn northbound. The nearest location was Pebble Coombe and Papillon House School, north-east of Box Hill village. They moved [the AS355] to port, away from the tower and the R44. They checked with their crew that they were okay and resumed the tasking after the R44 had departed.

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

THE R44 PILOT reports that they were conducting a standard training sortie within their area of training between the Heathrow and Gatwick zones. An everyday flight performed with a number of students. On this flight, their student was completing advanced training to attain a yearly proficiency check. On this occasion, it was noted that an AS355 (registration not seen at the time) was conducting low-level flights within the area. The student pilot recognised the aircraft and who the probable pilot was (having flown regularly with them). [The R44 pilot] also knows them.

During their training, [the R44 pilot] had briefed their student on the site [to be assessed] and had passed over [it] and had then orbited to then return, noting that they had seen the other aircraft, [the AS355]. It was clear what [the AS355 pilot] was doing, and they then flew round the rear and to the right of the [AS355], high, then descended to the right and clear of the [AS355] towards the site. It was deemed unnecessary to orbit the site, [so they] just made a straight in approach from north-to-south with a go around. The site was south-west of the AS355, but in no way endangering or encroaching on the AS355's position. [The R44] was at least 100m away and the approach was made in conjunction with the position of the AS355 (at standstill, not moving), to make sure that they were seen. [The AS355] was in a hover at very low level, whereas [the R44] was moving (from the right-rear at a higher altitude)

to the site on the hill near Pebble Coombe, and they had always made sure that [the R44] was visible. Once [they had] completed the approach, they broke-off back to the airfield. Having landed back at the airfield, the AS355 also landed there later [but], at no point, [did the AS355 pilot] make any attempt to contact or speak with them.

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

THE FARNBOROUGH LARS WEST CONTROLLER reports that they have no recollection of the aircraft or the events that took place.

Factual Background

The operator of the AS355 provided the UKAB Secretariat with evidence of permission, as issued by the CAA, for their helicopter to be flown closer than 150m (500ft) from any person, vessel, vehicle or structure for the purpose of inspecting, repairing or maintaining overhead electricity transmission lines.

The weather at Gatwick Airport was recorded as follows:

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METAR EGKK 191420Z 06010KT CAVOK 16/03 Q1024
METAR EGKK 191450Z 07010KT 040V100 CAVOK 16/05 Q1024
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Analysis and Investigation

Farnborough Unit Investigation

Farnborough LARS West was band-boxed with Farnborough Zone in light traffic. Heathrow Assigned was the primary radar source in use with the Pease PSR/SSR available on a second screen. There was no relevant equipment unserviceability reported.

[The pilots of the AS355] and [the R44] were operating at the eastern edge of the LARS West service area with two other aircraft in the immediate vicinity at the time of the reported Airprox. Whilst traffic loading was light on the sector, the RT loading for the minute either side of the reported Airprox was medium, due to aircraft leaving and joining the frequency.

There was no mention of an Airprox on the frequency at the time of the event and the controller had no recollection of the event when they were advised of the details.

Description of event:

[The pilot of the AS355], [from take-off airfield] to [destination], at 500ft, called on frequency at 1429:43 requesting Basic Service and was advised of the QNH 1025hPa and a Basic Service was agreed. The controller had asked the pilot if they were operating on the special purpose conspicuity squawk of 0036 and had checked the Mode S data label of the aircraft.

[The R44], indicating the LARS West Frequency Monitoring Code 4572, indicating 1400ft, could be seen manoeuvring 1.92NM south-east of [the AS355], on an easterly track.

Timeline:

1432:13 The controller highlighted the radar return label for [the AS355].

1433:01 [The R44 pilot], at 1300ft, took up a westerly track towards [the AS355], which was on task and indicating 800ft. Distance 1.81NM.

1434:09 The highlight function, as selected by the controller, disappeared from radar as [the AS355 pilot] manoeuvred. Distance 0.51NM. [The AS355] was at 600ft and [the R44] at 1500ft.

1434:44 [The R44 pilot], at 1300ft, routed behind [the AS355] maintaining 800ft. Distance 0.25NM.

1434:49 [The R44 pilot], at 1200ft, tracked south towards [the AS355] maintaining 800ft. Distance 0.2NM.

1434:55 [The AS355 was at] 800ft. [The R44 was at] 1200ft, distance 0.17NM.

1434:59 [The AS355 was at] 800ft. [The R44 was at] 1200ft, distance 0.14NM.

1435:05 [The AS355 was at] 800ft. [The R44 was at] 1100ft, distance 0.16NM.

1435:09 [The AS355 was at] 800ft. [The R44 was at] 1000ft, distance 0.13NM.

1435:14 The radar returns merged, [The AS355 was at] 700ft. [The R44 was at] 1000ft, distance 0.1NM. The closest vertical point [on radar].

1435:16 [The AS355 was at] 700ft. [The R44 at] 1000ft, distance 0.09NM. The closest lateral point [on radar].

1435:20 [The AS355 was at] 700ft. [The R44 at] 1000ft, distance 0.11NM.

1435:23 The radar returns began to separate as [the R44 pilot], at 1000ft, tracked south and [the AS355 pilot] maintained position and level at 700ft. Distance 0.16NM.

1435:36 [The R44 pilot] took up a south-westerly track and indicated climbing to 1100ft. [The AS355 pilot] maintained position and level at 700ft. Distance 0.23NM.

1435:40 [The R44 pilot] turned on to a north-westerly track and the distance continued to increase.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft could be positively identified from Mode S data (Figure 1). Neither aircraft could be observed by reference to ADS-B data sources. Both pilots kindly supplied GPS track data for their flights. It was by combining the data sources that the diagram was constructed. The vertical separation at CPA was determined from the GPS track data, and has been shown in the diagram as an approximate value due to rounding.

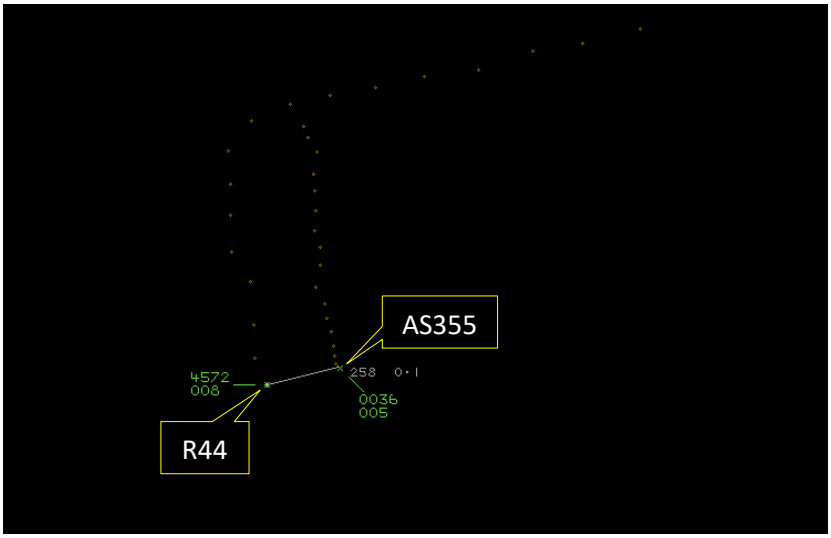


Figure 1 – CPA at 1435:06

At the moment of CPA, the R44 had been at approximately 530ft AGL (1100ft AMSL over terrain with an elevation of 570ft) and had a lateral separation of approximately 230ft from the electricity transmission lines (which are at an estimated height of 100-150ft AGL) (Figure 2).

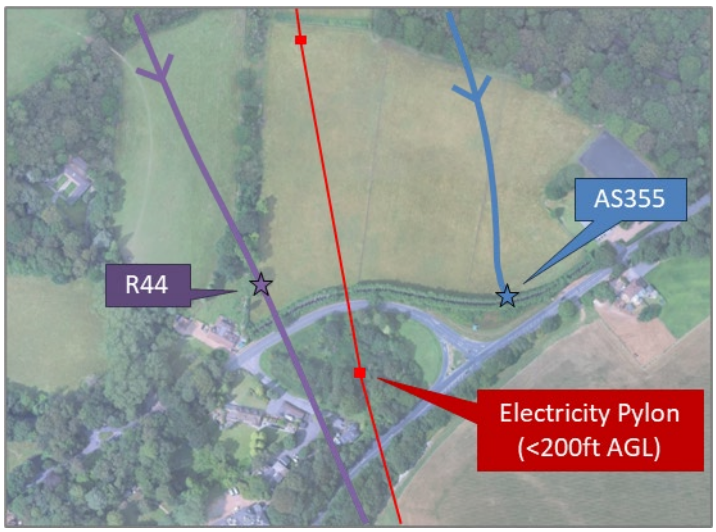


Figure 2 – The tracks of the AS355 and R44. The stars mark the moment of CPA.

The AS355 and R44 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 AS355 pilot had right of way and the R44 pilot was required to keep out of the way of the other aircraft by altering course to the right.[2]

Summary

An Airprox was reported when an AS355 and an R44 flew into proximity 3.5NM north-east of Dorking at 1435Z on Thursday 19th March 2026. Both pilots were operating under VFR in VMC, the AS355 pilot in receipt of a Basic Service from Farnborough LARS West and the R44 pilot listening out on the Farnborough LARS West frequency.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, a report from the air traffic controller involved, radar photographs/video recordings 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 AS355, and a member with particular knowledge of helicopter operations explained that, by necessity, the pilot would have been quite 'task-focussed'. It was explained that the operation had carried a comparatively high degree of risk due to the low flight height and their proximity to the powerline infrastructure that they had been surveying.

It was noted that the pilot of the AS355 had been in receipt of a Basic Service from the Farnborough LARS West controller. As such, members agreed that they would not have expected to have received any information pertaining to traffic in their vicinity, especially as they had operated under the base of radar cover for portions of their flight. Members agreed that the TCAS fitted to the AS355 would have been expected to have detected the presence of the R44, but no alert was reported (**CF6**). Consequently, it was agreed that the pilot of the AS355 had not had situational awareness of the R44 until it had been visually acquired (**CF5**). Members appreciated that to have sighted the R44 adjacent to their area of operation may have been startling, and agreed that they had been concerned by the proximity of the other helicopter (**CF8**).

Members next considered the actions of the pilot of the R44, and it was noted that they had not been in receipt of a FIS. It was appreciated by members that a 'training sortie' requires a certain amount of conversation in the cockpit and that transmissions from a controller may be seen as 'interrupting the

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

flow'. Nevertheless, members were keen to point out that the R44 pilot had placed a particularly large reliance on maintaining a thorough and effective lookout, whilst conducting a training session, and whilst navigating through busy Class G airspace. Indeed, they had placed an acute reliance on their lookout as the R44 had not been fitted with an additional EC device. Members agreed that it may have been prudent to have requested an appropriate service from the Farnborough controller (**CF3**).

It was noted that the R44 pilot had been conducting an annual proficiency check for their student. Members understood that an element of such training had involved practicing an approach to a landing area away from the relative safety of an airfield, and may also have involved performing an approach to a 'confined area'. Whilst the particular area chosen for a practice approach and go-around may have been familiar to the R44 pilot, members noted that they had visually acquired the AS355 in the vicinity and had elected to continue the exercise. Members agreed that the R44 pilot had not adapted their dynamic plan upon visual acquisition of the AS355 (**CF4**) and had continued the exercise with their student when it may have been far more prudent to have selected a different area entirely.

Members were satisfied that there had not been any intention to have interfered with the powerline inspection operation, nor to have intimidated the pilot of the AS355. Nevertheless, it was clear to members that their decision to approach the AS355 from behind and 'suddenly appear' in the pilot's sightline had caused an unnecessary distraction. Members agreed that the R44 pilot had not appreciated the risk of their course of action and had flown close enough to the AS355 to have caused concern (**CF7**).

Turning their attention to the actions of the Farnborough LARS controller, members agreed that they had not been required to have monitored the flight of the AS355 under the terms of a Basic Service (**CF1**). It was also agreed that the transponder codes in use by the pilots had fallen outside the select frame of the STCA in use (**CF2**). Agreeing that there had been little else that the controller could have done to have assisted matters, members concluded their discussion.

The risk of collision was considered. It was acknowledged that the R44 pilot had made an approach to an area on the opposite side of the powerline infrastructure to where the AS355 pilot had been operating. Nevertheless, members agreed that the R44 pilot had not chosen the most prudent, or safest course of action and had potentially distracted the pilot of the AS355 during a high risk operation. Members were in agreement that safety standards had been degraded but 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:

	2026024			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Ground Elements			
	• Situational Awareness and Action			
1	Contextual	• ANS Flight Information Provision	Provision of ANS flight information	The ATCO/FISO was not required to monitor the flight under a Basic Service
	• Electronic Warning System Operation and Compliance			
2	Technical	• Conflict Alert System Failure	Conflict Alert System did not function as expected	The Conflict Alert system did not function or was not utilised in this situation
	Flight Elements			
	• Tactical Planning and Execution			
3	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
4	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			

5	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
	• Electronic Warning System Operation and Compliance			
6	Human Factors	• Response to Warning System	An event involving the incorrect response of flight crew following the operation of an aircraft warning system	CWS misinterpreted, not optimally actioned or CWS alert expected but none reported
	• See and Avoid			
7	Human Factors	• Lack of Individual Risk Perception	Events involving flight crew not fully appreciating the risk of a particular 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 **not used** because the Farnborough LARS West controller had not been required to have monitored the flight of the AS355 under the terms of a Basic Service.

Electronic Warning System Operation and Compliance were assessed as **not used** because the transponder codes utilised were outside the select frame of the STCA in use at the Farnborough LARS West position.

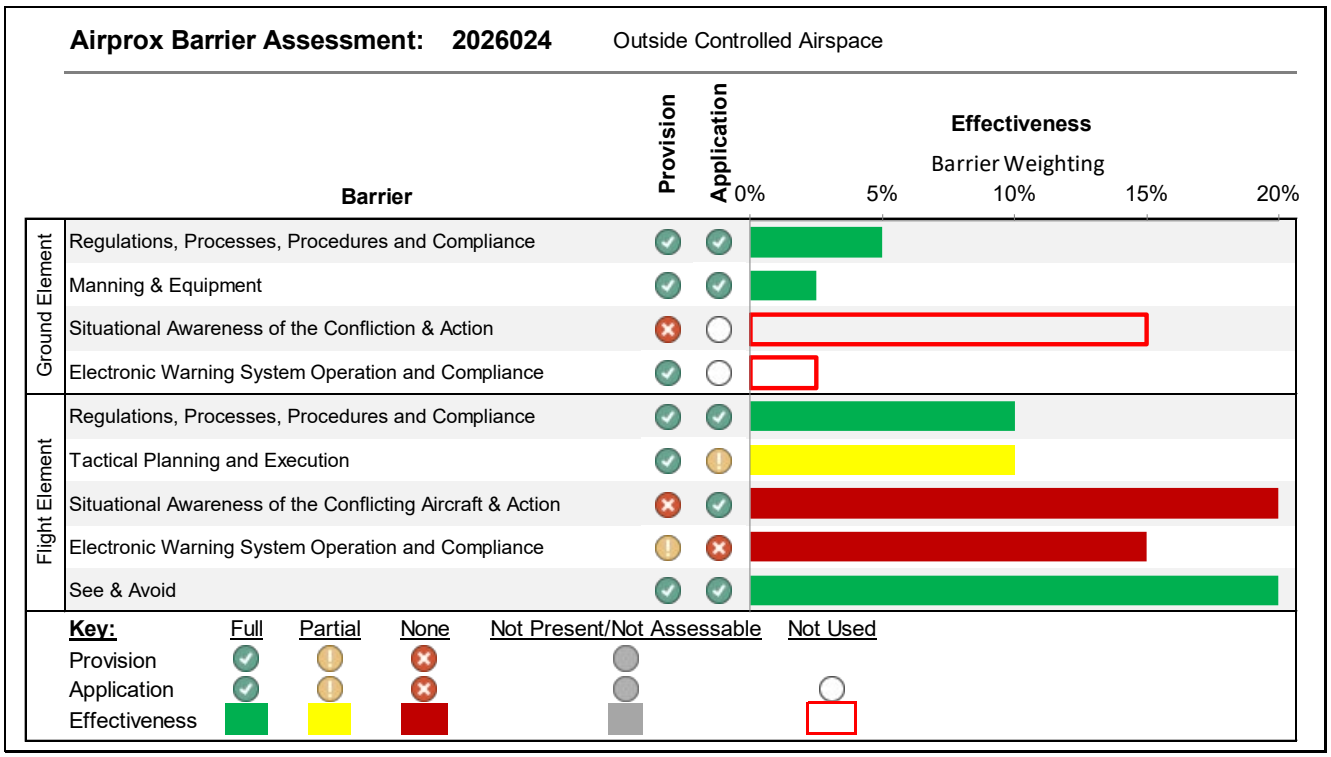
Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because it may have been prudent for the pilot of the R44 to have adapted their training plan to have avoided the AS355 pilot's area of operation.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the pilot of the AS355 had not had situational awareness of the presence of the R44 until visually acquired.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the TCAS fitted to the AS355 would have been expected to have detected the presence of the R44 but no alert was reported.

[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: 2026024
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