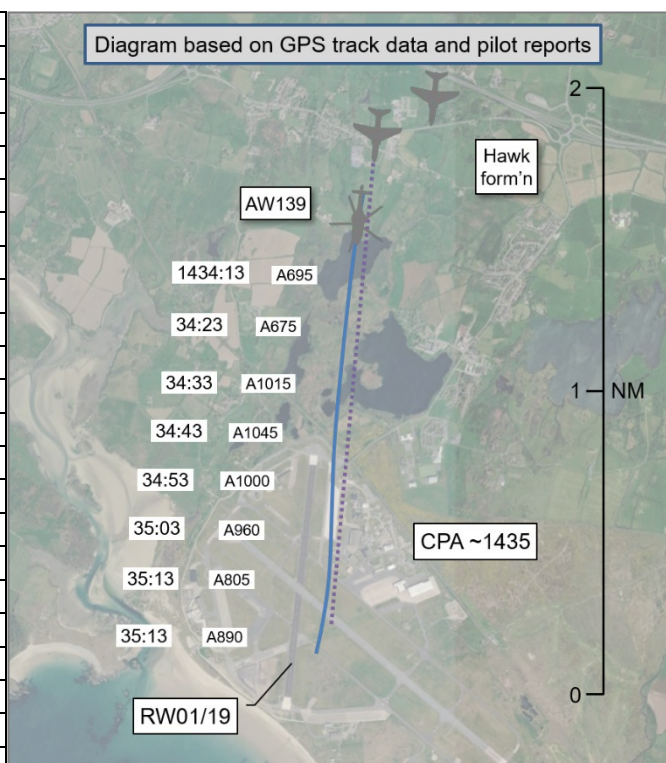


AIRPROX REPORT No 2026044

Date: 15 Apr 2026 Time: ~1435Z Position: 5315N 00432W Location: RAF Valley

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	AW139	Hawk formation
Operator	Coast Guard	HQ Air (Trg)
Airspace	Valley ATZ	Valley ATZ
Class	G	G
Rules	VFR	VFR
Service	Traffic	ACS
Provider	Valley Director	Valley Tower
Altitude/FL	NK	NK
Transponder	A, C, S+	A, C, S
ADS-B Out	Observed	Not observed
Reported		
Colours	White/red	NR
Lighting	Nav, anti-col, HISL	NR
Conditions	VMC	NR
Visibility	>10km	NR
Altitude/FL	900ft ↓	500ft
Altimeter	QNH (1006hPa)	QNH (NR hPa)
Heading	190°	NR
Speed	100kt	NR
ACAS/TAS	TCAS II	TCAS I
Alert	None	Information
Separation at CPA		
Reported	400ft V/0m H	500ft V/NR H
Recorded	NK	



THE AW139 PILOT reports they had conducted two training Surveillance Radar Approaches (SRA) at RAF Valley. During the second SRA they were conducting a go-around and had been cleared for a VFR departure to return to [destination]. The aircraft was climbed to approximately 1000ft before levelling to maintain VMC [whilst maintaining] the previously assigned track, which placed them parallel but to the left of RW19. Whilst in the overhead of the airfield they were requested to maintain not above 500ft (whilst at 1000ft). The request was confirmed with Talkdown and a gentle descent initiated. Immediately after the descent was initiated, two Hawk T2 aircraft flew approximately 400ft underneath. The descent was postponed. The Hawks were joining deadside for RW19, the same side as the AW139. [The AW139 pilot] was unaware of the [Hawk] traffic. Post the event, they declared an Airprox to Valley Talkdown at 1435 and continued without further incident. On return, the Captain spoke to the ATC Supervisor and confirmed that they were not given a climb-out restriction. The crew suggested to the Supervisor that a report of the inbound traffic would have aided their situational awareness. Approximately 2min before the event, two TAs were received for aircraft manoeuvring for take-off. During the Airprox no TCAS event was heard by the crew.

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

THE HAWK PILOT reports [leading a] Hawk pair for a Visual Run-in-and-break (VRIAB), [resulting in] 500ft vertical separation with [a] Coast Guard helicopter [on the] deadside [at] RAF Valley RW19 with situational awareness, [with] no safety of flight risk from [the] Hawk perspective.

[They had completed a training sortie in a local training area and were aware of [a] Coast Guard helicopter at 8NM [on an] IFR approach to RW19 on initial contact with Approach, [a] timely piece of information from [the] Approach controller. They requested an update on the helicopter range from [the] threshold [when] abeam the airfield, [given as] 5NM. They checked [the wingman's] fuel [state] and

elected to position well behind, remaining with Approach as there was no chance of cutting inside and they didn't need to call 'minimum fuel' and get the helicopter to break off. [The formation] positioned 8NM downwind approaching Wylfa avoid, [and] confirmed [the] helicopter [was] at 2NM [on] final. [They] called turning-in to Tower. [The weather] had deteriorated due to the extension for separation, now SCT012 vs FEW020 when abeam the airfield. [They were then] committed to a VFR recovery, arrow to initials, visual with [the helicopter] approaching 3.3NM initials. [They] called this to [the Tower controller] and put [the formation] into echelon for the VRIAB. Inside 2NM it was apparent they didn't have lateral separation and [the] helicopter was on [the] deadside, The Tower [controller] confirmed [the helicopter was] drifting deadside. They elected to keep the formation low (500ft QNH) with the helicopter visually assessed at 1000ft. They asked ATC to confirm what height the helicopter was going to as this was their only deconfliction option for the formation. They updated the wingman on the helicopter position, briefed the plan and blew through deadside underneath [the] helicopter, calling for a level 500ft break once well past the helicopter. [The Hawk pilot commented that,] having watched the tape, there may have been an opportunity to do things differently: 1. Give [the Approach controller] ownership of when to turn in. This would have required a climb above 2100ft [for the] nuclear power station avoid and potentially driven an IFR recovery on minimum fuel. 2. Immediately [the Tower controller] gave the 'drifting deadside' [call], take the formation back outbound. This would have required a turn [onto the] live side at 2NM to keep the wingman on the outside of the turn below 1000ft. 3. Conduct an IFR approach rather than build separation. They had very briefly considered these options and discounted them as worse options, with 6NM per minute closure, a lower cloudbase than anticipated, a trainee on the wing, limited fuel and a helicopter with unknown intentions 2NM ahead. Instead, they elected to maintain visual situational awareness and blow through, accepting a safe execution albeit anticipating an Airprox.

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

THE VALLEY DIRECTOR CONTROLLER reports the AW139 [pilot] was conducting an SRA to RW19RH on VHF frequency. The pilot requested a low approach and to depart VFR south back to [destination]. The controller reiterated these details, instructing after the low approach, depart VFR south and remain this frequency. They vectored the helicopter accordingly for an SRA to RW19RH and, on identification from the Talkdown controller, they instructed the [pilot] to "*listen out this frequency for Valley Talkdown*". The SRA was completed and the Talkdown controller requested the [pilot] "*listen out this frequency for Valley Director*". Before they had spoken to the [pilot], they received a call from the Supervisor asking who was working [the] AW139. The Director controller stated that [the helicopter pilot] had just completed their approach and they would be controlling them. They were instructed to 'get the rotary' not above 500ft QNH. They instructed [the] AW139 [pilot] to be not above altitude 500ft QNH. The [pilot] acknowledged and began descent from above 1000ft in altitude at that time. The pilot then informed them that as [they] began the descent, a pair of Hawk T2s had just passed underneath their aircraft and questioned whether this was expected and if there was any further traffic. The controller responded, informing the pilot that there would be no further traffic to affect. The pilot then informed them on frequency that they wanted to raise an Airprox. They acknowledged the request and the pilot confirmed that they would call Valley ATC upon landing. The aircraft maintained the altitude that it levelled off at upon sighting the Hawk T2s and [the pilot] asked when it would be clear for a further descent. Once clear of all traffic, they informed the [pilot] to take [their] own terrain clearance and approved further descent.

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

THE VALLEY TOWER CONTROLLER reports they were 'warned-in' for instrument traffic, 1xAW139 to low approach and depart, by Talkdown/Director at around 8 miles. From monitoring Approach frequency they were aware that 2 Hawks were with Approach and inbound to the airfield to recover visually. They were concerned about the Hawks interacting with the slow-moving rotary. They acquired the Hawks on the air traffic monitor, called downstairs to Approach to query their intentions vs the rotary [traffic] and were informed they would be made visual and join behind.

Shortly after, they cleared the rotary on Talkdown to low-approach with the circuit clear. The Hawk [pilot] came onto their frequency for the join and they informed them of the rotary traffic. They further informed

them of the rotary traffic when it was at 1 mile and asked them to report visual. Shortly after, [the] Supervisor was in the tower also and informed them they had spotted the rotary had turned deadside. The Tower controller noticed on the monitor that [the AW139 pilot] had begun to climb and they informed the Hawk [pilot]. The Hawk [pilot] reported visual at initial and queried what altitude the rotary was climbing to. The Tower controller didn't have that information at hand and transmitted as such to the Hawk [pilot]. The Hawk [pilot] transmitted their intention, [words to the effect of] to "*break below and beyond*". They didn't understand their first transmission which they then repeated and was received. The Hawks and rotary were in the immediate vertical of the tower and out of sight at closest interaction. They were informed [the Hawk formation] broke into the circuit beneath the rotary. The Hawks continued downwind to land with nothing further to report.

THE VALLEY SUPERVISOR reports they were positioned in the Visual Control Room (VCR) at the time [of the Airprox]. The controllers had a low/medium workload with a single AW139 SRA inbound to RW19 and a pair of [Hawks] on a visual recovery via initial. The unit workload and wider picture was more complex, with a high-profile Spitfire flight out of RAF Valley attracting large crowds of spotters around the camp. From their Supervisor shift on Mon 13 Apr [2 days before the Airprox event] they were acutely aware that this had the ability to affect approaches to RW19. On the previous day, the crowds had parked vehicles and were attempting to see over the fenceline between the RW19 public road traffic lights. This made RW19 unsafe for use on Monday, with little actual impact due to being on RW13 that day. They had made their way to the VCR to ensure that the same had not happened again and watched the AW139 make its approach to RW19. Upon executing the go-around, the helicopter appeared to be climbing slowly and drifting onto the deadside. They informed the Tower controller who provided excellent Traffic Information to the joining [Hawk pilots], enabling them to get visual with the AW139. They heard the [Hawk pilot] report that they were going to break beyond the helicopter. The Supervisor's mental model at that point was that the AW139 was at around 800ft and climbing slowly, with the Hawk [formation] joining at what they expected to be 1000ft QNH, as per a normal join. They did not hear the [Hawk pilot] report that they were joining beneath the AW139. They called the Director to find out what the AW139 [pilot] was doing and were told that they did not know as the AW139 [pilot had] not spoken to them yet. At this point they instructed the Director to get the AW139 [pilot] to descend to 500ft in anticipation of the [Hawk formation] joining above. As they passed the instruction, the AW139 flew out of sight directly above the VCR. Seconds after, they saw the [Hawk formation] briefly, appearing low before rapidly disappearing above the VCR. They then saw the [Hawk formation] appear on the other side of the VCR before breaking beyond the AW139. The AW139 was still out of sight, above the VCR but appeared shortly after. Personnel in the VCR at the time reported that they thought the [Hawk formation] had broken beneath the AW139. This was met with responses something to the effect of "*surely not*".

After watching the AW139 safely depart and the [Hawks] land, they organised relief for all controllers involved and were informed by the oncoming Tower controller that the AW139 [pilot] had declared an Airprox. They requested that the involved controllers write their thoughts on the situation whilst it was still fresh in their minds, with the exception of themselves as the only Supervisor on shift and the Tower controller whose actions they had personally witnessed and assessed that they had done a very good job considering the situation. They immediately informed the SATCO.

Factual Background

The weather at RAF Valley was recorded as follows:

METAR EGOV 151450Z 19021KT 9999 FEW010 SCT060 13/11 Q1006 TEMPO SCT014 RMK BLU TEMPO GRN=
 METAR EGOV 151420Z 20023KT 9999 FEW012 SCT060 13/10 Q1006 TEMPO SCT014 RMK BLU TEMPO GRN=

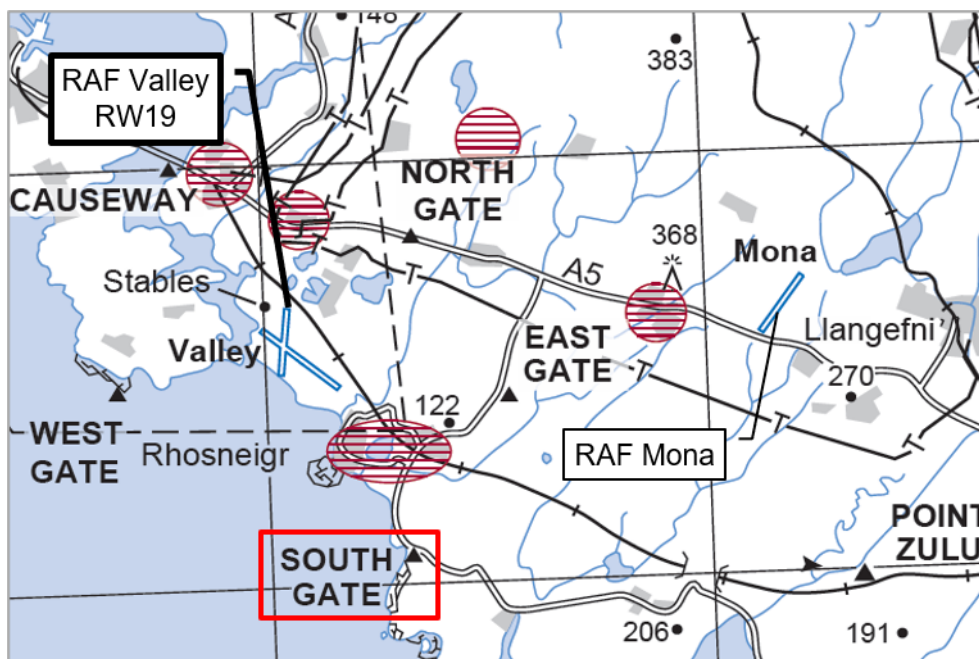
TAF EGOV 151344Z 1515/1519 20024G34KT 9999 FEW017 PROB40 TEMPO 1515/1518 SCT017 PROB30 TEMPO 1515/1516 7000 SHRA SCT014=

The RAF Valley 'Special Procedures (2) Copter'¹ states as follows:

5. Unless approved by ATC, flight NOT ABOVE 600ft QNH in the CMATZ and NOT ABOVE 300ft QNH in the ATZ. Joining and departing aircraft should remain outside of the MONA ATZ.

6. Visiting helis should join or depart VALLEY via SOUTH or WEST gates. [...]

An excerpt from the RAF Valley 'Special Procedures (2) Copter' TAP is shown below:



Analysis and Investigation

Military ATM

An Airprox occurred on 15 Apr 26 between an AW139 and a Hawk T2.

Background

The AW139 was conducting an SRA to RW19RH, with the intentions to Low Approach and depart VFR South. The Hawk was part of a formation conducting a VFR recovery.

Sequence of Events

At 1428:20, the AW139 commenced the SRA.

At 1428:57, the Hawk formation was informed that *"there is the Coastguard helicopter conducting an approach to runway one nine, currently at two thousand feet at eight miles, I'll keep you advised"*.

At 1430:55, Valley Aerodrome controller (ADC) contacted Valley Approach *"Tower, copy [Hawk formation C/S] recovering, are you going to hold them off for Coastguard?"* Valley Approach responded *'Errr he's going to go and come in behind him, going to get visual and then do what they do'*.

At 1433:08, the Hawk formation was transferred to Valley ADC.

¹ UK Mil AIP AD 2 - EGOV - 1 - 10

At 1433:23, Valley ADC informed the Hawk formation *"one in rotary, eh, Agusta one three nine, at err one and a half miles to low approach depart.....report visual"*.

At 1434:22, the Hawk [pilot] reported visual with the AW139.

At 1434:38, the VCR Supervisor contacted Valley Director *"Sup, what altitude have you got that rotary climbing to cause they're deadside"*. Valley Director had not made contact with the AW139 from SRA yet. The VCR Sup then informed Valley Director *"Ok, can you get him to be not above 500 feet"*.

At 1434:54, Valley Director passed this instruction to the AW139 [pilot], however it was not acknowledged.

At 1434:58, the Hawk [pilot] informed Valley ADC *"[Formation C/S] visual with the traffic, we will be underneath and then breaking beyond"*. Valley ADC asked the Hawk [pilot] to say again. The Hawk [pilot] responded, *"Visual with the traffic, we are extending upwind and then break beyond"*.

CPA could not be determined as the event was not seen on any [surveillance] source.

Local BM Investigation

A local investigation was conducted by Valley following the event to identify the ATS-related causal and aggravating factors. The investigation found that no Traffic Information was passed to the AW139 [pilot] regarding the Hawk formation from the Director or Talkdown controller. As the Supervisor was positioned in the VCR, there was no opportunity for them to intervene. The Supervisor's perception was that the Hawk formation was joining at 1000ft QNH.

2 Gp BM Analysis

The Hawk formation reported visual contact with the AW139 and intended to maintain visual separation. However, from an ATM perspective this occurrence developed following ineffective ATS application, which resulted in the AW139 not receiving Traffic Information about the Hawk formation. Contributory factors included ambiguous language and assumptions about how the aircraft would sequence and a late appreciation of the developing situation.

UKAB Secretariat

The NATS radar replay/CAA Airspace Analyser Tool was reviewed and the AW139 was identified. The Hawk formation was observed some minutes before CPA but faded from radar contact before CPA. Only the AW139 was observed at the Airprox location.

The AW139 and Hawk 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

RAF Valley Occurrence Investigation

The RAF Valley Occurrence Investigation found the following Outcome, Cause and Causal Factors:

Outcome: Loss of safe separation between a formation of Hawk T2s joining visually and a Coastguard AW139 on an SRA. [The] Hawks passed underneath the AW139 at 500ft QNH. The AW139 was approximately 1000ft QNH.

² (UK) SERA.3205 Proximity. MAA RA 2307 paragraphs 1 and 2.

³ (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome. MAA RA 2307 paragraph 17.

Cause: The Director and Talkdown controllers did not inform [the] AW139 [pilot] of [the] joining Hawks. [The AW139 crew] were not aware of [the Hawks'] presence until they passed beneath on the deadside. The AW139 [pilot's] intentions were to go around and depart VFR to [destination].

Mitigations: SATCO/UFSO should ensure all ATC personnel should be reminded of the importance of SA building communications at the next FS meeting.

Causal Factor: To ensure Traffic Information had been passed from [Director] or [Talkdown] to the AW139 [pilot], there may have been an opportunity for the [Approach] controller or the [Supervisor], if they had been in the radar room (although there was no requirement for them to be) to intervene and ensure Traffic information had been passed.

Mitigations: SATCO/UFSO should ensure that ATC personnel are reminded of the importance of intervening where necessary or cross-checking between positions as an added safety net.

Causal Factor: The [Supervisor] was positioned in the VCR at the time and noticed the AW139 beginning to drift deadside and climb as they began the go-around. The [Supervisor]'s perception was that the Hawks were joining at 1000ft QNH and that the AW139 would conflict [in] height. They decided to intervene with the Hawks [then] inside Initial. The intervention was a call to [Director] to ask what the AW139 [pilot was] doing. The response was unknown as they were in the process of handing back to [Director] from [Talkdown]. [Supervisor] asked [Director] to descend the AW139. The Hawk [pilot's] were visual with the AW139 so resulted in an established picture changing as the AW139 began to descend. The Hawk pair passed underneath and extended before the VRIAB.

There is a potential for ambiguity as the FOB states in Order 5:

3. The join. Normal joins should be made from the dead-side of the circuit at 1000 ft QNH. Aircraft that have initiated a go around and positioned on the dead-side are considered to be re-joining the circuit. The minimum altitude for a break into the circuit for 4 FTS aircraft should be 600 ft QNH (for Valley rwy 31 the minimum break altitude is 800 ft QNH). Visual joining aircraft shall be responsible for sequencing into the visual circuit and shall be responsible for ensuring sufficient and safe separation from all other traffic. Overtaking aircraft should do so laterally iaw RA2307⁴ and on the side opposite to the circuit direction. In particular, as radar traffic is under a DS whilst on approach, they should be afforded plenty of separation in order to prevent avoidance action being given by the ATC Approach / Talkdown Controller.

The [Supervisor] was under the impression that the Hawks would join at 1000ft QNH and not at 600ft QNH, which is the normal VRIAB profile, resulting in a climb to circuit height downwind.

The RAF Valley Occurrence Investigation made the following recommendation:

OC Ops Wg, OC Fg and SATCO discuss if there is an existing ambiguity in the 'Normal Join' altitude for FW when positioning for a VRIAB. If so, an amendment to the FOB may be a solution.

The RAF Valley Occurrence Investigation made the following observations:

AW139 uses VHF as the primary radio. They are UHF capable, but that radio takes time to setup, so a pre-note to expect a UHF frequency may be required. This may be a useful consideration if the intention is to push to Tower. This may be SA building for other local traffic already on UHF.

The AW139 did not have any TCAS notifications of the joining Hawks. This is possibly due to tail-rotor boom blanking in the 6 o'clock. The lead Hawk [had] TCAS contact [sic] at all times.

⁴ RA2307 (Aircraft Overtaking) states as follows: An Aircraft that is being overtaken in the air has the right of way, and the handling pilot of the overtaking Aircraft, whether climbing, descending or in horizontal flight, should keep out of the way of the other Aircraft by altering course to the right. The handling pilot of the overtaking Aircraft should keep out of the way of the other Aircraft until that other Aircraft has been passed and is clear, notwithstanding any change in relative positions of the two Aircraft.

If [a pilot] has called visual, changing an established picture may cause complications.

There could have been [rotary wing] operating on the golf course up to 300ft QNH without any requirement for information to be passed.

DDH Comments: I wish to thank [the lead investigator] for his comprehensive Local Investigation into this Airprox incident. I am content the Hawk formation were visual with the rotary traffic throughout this occurrence, minimising MAC risk and concur that this incidence has provided ATC the opportunity to reflect on procedures and a review of the FOB Section 5 Para 3.

Comments

HQ Air Command

The Local Investigation carried out by RAF Valley personnel has been thorough and should be commended for its tenacity in determining the root cause of this incident. Ultimately, there was little risk of collision as the Hawk pilots were visual with the Coastguard helicopter from the Initial Point. The plan the Hawk formation lead had formulated was pragmatic given the worsening weather and the lack of fuel of the wingman. It must have been disconcerting to see the helicopter drift to the 'deadside' and then descend towards them as they tried to pass safely under it; this occurred because the ATC Supervisor asked for the helicopter to be instructed to descend as the result of their incorrect mental model; the Supervisor expected the Hawks to be at 1000ft AGL whereas the Hawks were lower, at around 600ft AGL, but they had not communicated this detail to the Tower controller. This is another example where poor communication and differing mental models at RAF Valley caused an Airprox to develop and it reinforces the need for clear, unambiguous situational awareness-building comms from both ATC and aircrew in order to minimise the risk of conflict in the visual circuit.

Summary

An Airprox was reported when an AW139 and a Hawk formation flew into proximity at RAF Valley at about 1435Z on Wednesday 15th April 2026. All the pilots were operating under VFR in VMC, the AW139 pilot in receipt of a Traffic Service from Valley Director and the Hawk pilots in receipt of a military Aerodrome Control Service from Valley Tower.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data, 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.

Members first discussed the AW139 pilot's go-around from their practice SRA and subsequent manoeuvre to the deadside. Some members felt that they should have maintained runway track in accordance with the SRA missed-approach procedure, whilst others felt that the go-around clearance of 'VFR South' had changed the onus from maintaining a procedural track to conducting 'own navigation' in order to depart via the South Gate. The lack of track specification had allowed the AW139 pilot to manoeuvre to the deadside and into conflict with the arriving Hawk formation (**CF9**). Members noted that the bandboxed Approach/Director controller had not specified an altitude, or altitude restriction, for the VFR South departure and felt that this had contributed to the lack of ATM deconfliction between the departing AW139 and the arriving Hawk formation. Additionally, the ATC team had not been concerned by the AW139 pilot's climb to 1000ft, other than the Supervisor's, as it transpired, misplaced concern that the arriving Hawk formation would conflict during its break from 1000ft, which indicated to the Board that they had not expected the AW139 pilot to conform to paragraph 5 of the 'Special Procedures (2) Copter' TAP:

5. Unless approved by ATC, flight NOT ABOVE 600ft QNH in the CMATZ and NOT ABOVE 300ft QNH in the ATZ. [...]

Members therefore considered that this paragraph had been intended for helicopter arrivals to and departures from the airfield surface. In summary, the Board members felt that the instructions for helicopter arrival and departure, both printed and as had been relayed by R/T, had not been sufficiently robust to afford the required degree of procedural separation between a slow-moving helicopter departing under VFR and significantly faster fast-jet traffic arriving at the airfield (CF1), as had occurred in the circumstances of this Airprox. The Board members considered making a recommendation, but noted that the RAF Valley OSI had recommended that:

OC Ops Wg, OC Fg and SATCO discuss if there is an existing ambiguity in the 'Normal Join' altitude for FW when positioning for a VRIAB. If so, an amendment to the FOB may be a solution.

Members were satisfied that this, at least in part, addressed the Board's concerns in this regard. An ATC member noted that ATM involvement had been characterised to some degree by ambiguous and procedurally incorrect R/T transmissions. The Supervisor had formed the incorrect mental model (CF2, CF6) that the Hawk formation leader had intended to break into the visual circuit from 1000ft, whereas the Hawk formation leader's intention had been to break from ~500ft. The Supervisor had instructed the Approach/Director controller to direct the AW139 pilot to descend to 500ft (CF5), which had exacerbated the conflict between the AW139 and Hawk formation (CF7). Some members considered that the Approach/Director controller had had an opportunity to pass situational awareness to the Supervisor in the form of the Hawk formation's altitude as displayed on the radar screen (CF4), which may have corrected the Supervisor's incorrect mental model, or at least prompted a question over R/T as to the Hawk formation's intended break altitude. A pilot member questioned whether the Hawk formation leader had had an opportunity to pass their intended break altitude, having seen the AW139 above them. In terms of ground-based EC, the Board noted that the STCA had not been utilised in the visual pattern (CF8). It was also noted that Traffic Information had not been passed to the AW139 pilot at any time (CF3) and that their TCAS had not indicated the approaching Hawks at all (CF11), for which the Board had been unable to identify a definitive explanation. The AW139 pilot had therefore had no situational awareness of the approaching Hawk formation (CF10) and, with the Hawk formation astern and therefore obscured by the helicopter itself (CF15), had only seen the Hawk formation as it had passed below them, from behind, effectively a non-sighting (CF13). The AW139 pilot had been understandably concerned by the proximity of the unannounced Hawk formation (CF14) and Board members also expressed their unease regarding the circumstances of the Airprox; namely, a directed descent to the same altitude as aircraft arriving in the visual circuit with an approximate 250kt overtake speed. The Hawk formation leader had sighted the helicopter at least from the Initial Point and had maintained visual contact throughout. However, with limited fuel, an inexperienced wingman and uncertainty regarding the helicopter pilot's rate of descent, separation could easily have reduced further. In the event, the Hawk formation leader had considered the available options and, despite passing underneath the AW139 and causing concern to its pilot (CF12), had maintained adequate separation from the helicopter. The Board members agreed that the circumstances of this Airprox were best categorised as Risk Category C, in that the risk of collision had been effectively avoided.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2026044			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Ground Elements			
	• Regulations, Processes, Procedures and Compliance			
1	Organisational	• Aeronautical Information Services	An event involving the provision of Aeronautical Information	The Ground entity's regulations or procedures were inadequate
	• Manning and Equipment			
2	Human Factors	• ATM Leadership and Supervision	An event related to the leadership and supervision of ATM activities.	
	• Situational Awareness and Action			
3	Human Factors	• ANS Traffic Information Provision	Provision of ANS traffic information	TI not provided, inaccurate, inadequate, or late

4	Human Factors	• ATM Coordination	Coordination related issues (external as well as internal)	
5	Human Factors	• Expectation/ Assumption	Events involving an individual or a crew/ team acting on the basis of expectation or assumptions of a situation that is different from the reality	
6	Contextual	• Traffic Management Information Action	An event involving traffic management information actions	The ground element had only generic, late, no or inaccurate Situational Awareness
7	Human Factors	• Traffic Management Information Provision	An event involving traffic management information provision	The ANS instructions contributed to the Airprox
• Electronic Warning System Operation and Compliance				
8	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				
9	Organisational	• Flight Planning Information Sources	An event involving incorrect flight planning sources during the preparation for a flight.	
• Situational Awareness of the Conflicting Aircraft and Action				
10	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				
11	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				
12	Human Factors	• Incorrect Action Selection	~~Events involving flight crew performing or choosing the wrong course of action~~	Pilot flew close enough to cause concern
13	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
14	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
15	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 Assessment⁵

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

Ground Elements:

Regulations, Processes, Procedures and Compliance were assessed as **partially effective** because the VFR South departure clearance for the AW139 had not sufficiently constrained its flightpath to allow effective deconfliction from the joining Hawk formation.

Manning and Equipment were assessed as **partially effective** because the Supervisor had had an incorrect mental model of the Hawk formation's joining altitude.

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

Situational Awareness of the Confliction and Action were assessed as **ineffective** because the Supervisor's incorrect mental model of the Hawk formation's joining altitude had resulted in them instructing that the AW139 pilot be told to descend to the same altitude as the Hawk formation.

Electronic Warning System Operation and Compliance were assessed as **not used** because STCA had not been utilised in the visual circuit.

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the VFR South departure clearance for the AW139 had not sufficiently constrained its flightpath to allow effective deconfliction from the joining Hawk formation.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the AW139 pilot had been unaware of the joining Hawk formation until they had sighted the Hawks as they had passed beneath from behind.

