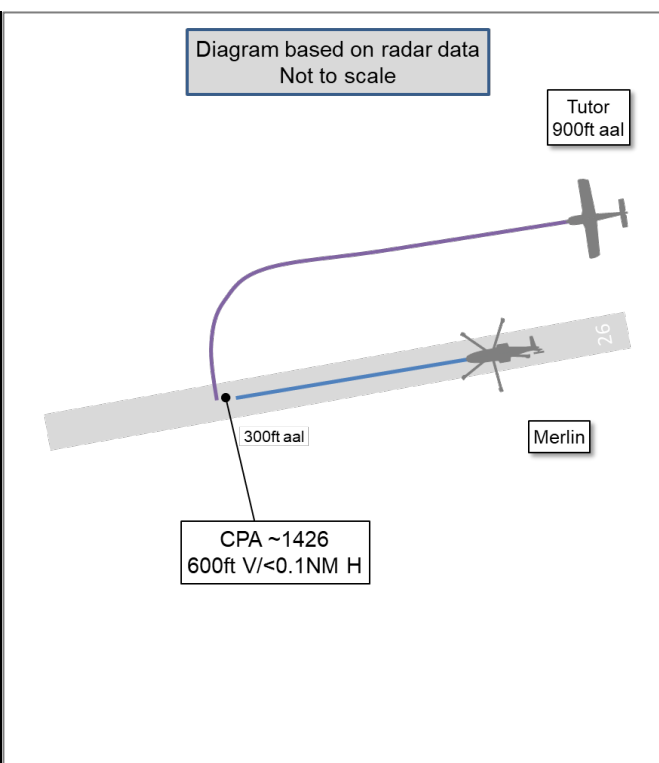


AIRPROX REPORT No 2026033

Date: 26 Mar 2026 Time: 1426Z Position: 5101N 00238W Location: RNAS Yeovilton

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Merlin	Grob Tutor(A)
Operator	RN	RN
Airspace	Yeovilton ATZ	Yeovilton ATZ
Class	G	G
Rules	VFR	VFR
Service	ACS	ACS
Provider	Yeovilton Tower	Yeovilton Tower
Altitude/FL	300ft aal	900ft aal
Transponder	A, C, S	A, C, S
Reported		
Colours	Grey	White
Lighting	NR	Nav, landing, HISL
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	250ft	800ft
Altimeter	QFE (1021hPa)	NR (NR hPa)
Heading	263°	263°
Speed	90kt	100kt
ACAS/TAS	'TCAS'	TAS
Alert	TA	NR
Separation at CPA		
Reported	150ft V/150m H	500ft V/500ft H
Recorded	600ft V/<0.1NM H	



THE MERLIN PILOT reports that, during take-off from the duty runway, in the climb at a height of 250ft, the crew received a Traffic Advisory (TA) audio alert from the TAS, "Traffic, high, 1 o'clock less than 1 mile". Initially they couldn't see anything, but [by] moving their head forward they saw a Tutor which had been obscured by the overhead console. [The] aircraft was approximately 150ft above at a range of about 150m. [The] climb was stopped, at which point the Tutor crossed ahead, and the Merlin pilot routed behind it and then continued the climb. They contacted [the] Tower [controller] and stated they were not happy with the separation from the Tutor, at which point the [Tutor pilot] stated they had been visual throughout. Despite this, the Merlin pilot genuinely believed, had they not received the TA and stopped the climb, a real risk of collision existed. After discussing the incident, they informed [the] Approach [controller] of their intention to submit an Airprox.

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

THE TUTOR PILOT reports conducting a visual recovery via initial. They were deadside at 800ft and 100kt, visual with another Tutor(B) on downwind and the Merlin on RW26. [They] remained visual with the Merlin transitioning from the runway, noted they remained well below and behind as procedurally expected [and] so conducted [the] turn onto downwind. The Merlin [pilot] then told [the Tower controller] that the Tutor was far too close and asked for a phone number to ring when they landed. The Tutor pilot informed them they were visual throughout, continued the circuit to land and explained the event to the duty authoriser during the in-brief.

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

THE YEOVILTON TOWER CONTROLLER reports that during mixed FW and RW circuits, Tutor(A) had joined the visual circuit, [the pilot] broadcasting their position of the initials point with a Merlin ready for departure on RW26. The Merlin [pilot] was issued a take-off clearance and, shortly after the departure, the Merlin crew stated they were not happy with the separation from the Tutor(A) flying

overhead. The Tutor(A) [pilot] stated that they were visual with the Merlin throughout their join from the initial point for RW26. The Merlin [pilot] departed the aerodrome and, on changing frequency to Approach, stated that they would file an Airprox.

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

THE YEOVILTON SUPERVISOR did not comment on the report.

Factual Background

The weather at Yeovilton was recorded as follows:

METAR EGDY 261420Z 30006KT 9999 FEW040 BKN120 10/02 Q1024 NOSIG RMK BLU BLU=

A transcript of the Yeovilton Tower frequency was provided, as follows:

Time	Callsign	Transcript
1421:28	Merlin	[Merlin C/S] er, downwind for running landing 26
1421:29	ADC	[Merlin C/S] wind 320 7
1421:32	Tutor(B)	Yeovil Tower [Tutor(B) C/S] request Join
1421:34	ADC	[Tutor(B) C/S] Yeovilton Tower join for runway 26 QFE 1021 one in Tutor apologies one in Merlin
1421:45	Tutor(B)	Runway 26 1021 [Tutor(B) C/S]
1422:21	Tutor(A)	[Tutor(A) C/S] request join
1422:24	ADC	[Tutor(A) C/S] Yeovil Tower Join Runway 26 QFE 1021 two in one Tutor
1422:26	Tutor(A)	Join Runway 26 QFE 1021 [Tutor(A) C/S]
1422:40	Tutor(B)	Yeovil Tower [Tutor(B) C/S], initial
1422:46	ADC	One Finals
1423:16	Merlin	[Merlin C/S] Finals gear down runway 26 running landing
1423:20	ADC	[Merlin C/S] Runway 26 Cleared to land
1423:22	Merlin	Cleared land [Merlin C/S]
1424:05	Tutor(A)	[Tutor(A) C/S] initial
Figure 1. Screenshot taken of radar replay – [Tutor(A) C/S] is 2.3NM from the end of Runway 26 indicating 022 descending.		
1424:10	ADC	[Tutor(A) C/S] one on finals, one upwind
1425:06	Tutor(B)	[Tutor(B) C/S] Downwind Land
1425:09	ADC	[Tutor(B) C/S] wind 310 10
1425:16	Merlin	[Merlin C/S] Ready for departure runway 26 out via Foul Weather Route for further test flight
Figure 2. Screenshot taken of radar replay screen – [Tutor(A) C/S] is 0.3NM from the end of runway 26. Indicating 006 and level. [Merlin C/S] is on the runway indicating -03 and level. The two contacts are approximately less than 1NM from each other.		
1425:22	ADC	[Merlin C/S] runway 26 cleared for take-off wind 310 10
1425:26	Merlin	Cleared Take-off [Merlin C/S]
Figure 3. Screenshot taken of radar replay screen – both contacts of [Tutor(A) C/S] and [Merlin C/S] have merged, with 1 pixel offsetting them, [Tutor (B)] is believed to be to the north still in the deadside. [Tutor(A) C/S] is indicating 006 and level. [Merlin C/S] is indicating -01 and climbing.		
Figure 4. Screenshot taken of radar replay screen shows [Tutor(A) C/S] ahead of [Merlin C/S] with the radar contacts only slightly overlapping. Following the radar tracking, [Tutor(A) C/S] appears to be crossing ahead of [Merlin C/S] to join the visual circuit. [Tutor(A) C/S] is indicating 006 and climbing, [Merlin C/S] is indicating 000 and descending.		
1426:20	Tutor(B)	[Tutor(B) C/S] Finals
1426:22	ADC	[Tutor(B) C/S] runway 26 Cleared to land
1426:24	Tutor(B)	Runway 26 Cleared to land [Tutor(B) C/S]
1426:30		

Figure 5. Screenshot taken where the radar screen now shows a strong primary and secondary track of the [Tutor(A) C/S] in the circuit in the crosswind section of the visual circuit and diverging from [Merlin C/S]. [Tutor(A) C/S] is indicating 006 and descending. [Merlin C/S] is indicating 001 and climbing.

1426:44	Merlin	Tower [Merlin C/S]
1426:46	ADC	[Merlin C/S]
1426:47	Merlin	The Tutor turning downwind was far too close to us as we were departing off 26
1427:56	Tutor(A)	[Tutor(A) C/S] was visual and is er downwind to land.
1427:01	ADC	[Tutor(A) C/S] wind 310, 7.
1427:07	Merlin	Tower [Merlin C/S] We're taking this aircraft to Westlands, I will call you when on the ground. What's the best number to call on please?
1427:22	ADC	[Merlin C/S] if you give us a call on the DATCO line 5263.
1427:28	Merlin	5263 copied.

Radar replay pictures were provided, as follows:



Figure 1

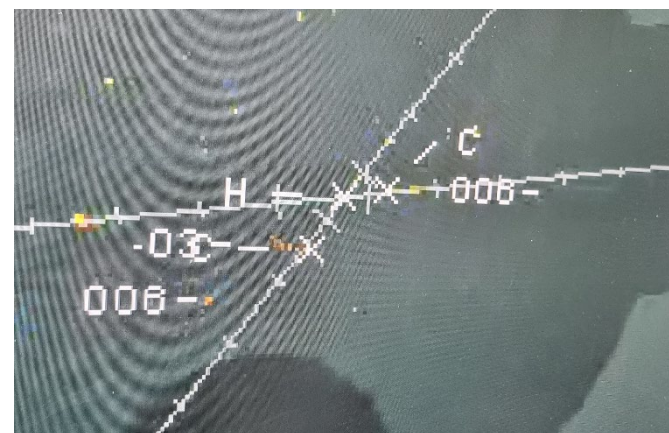


Figure 2

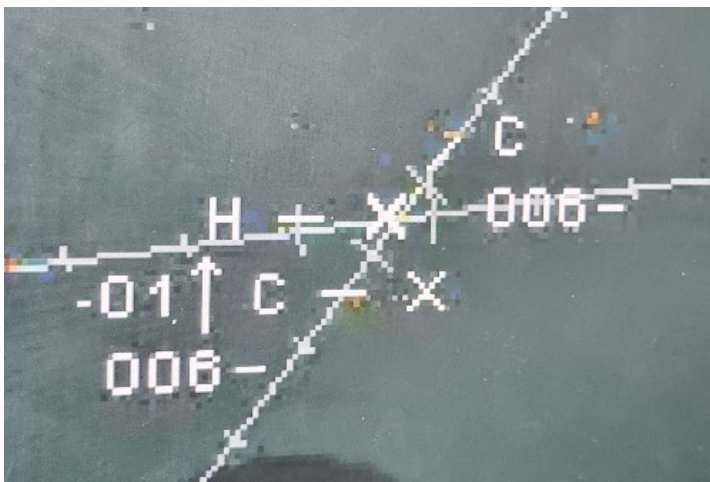


Figure 3

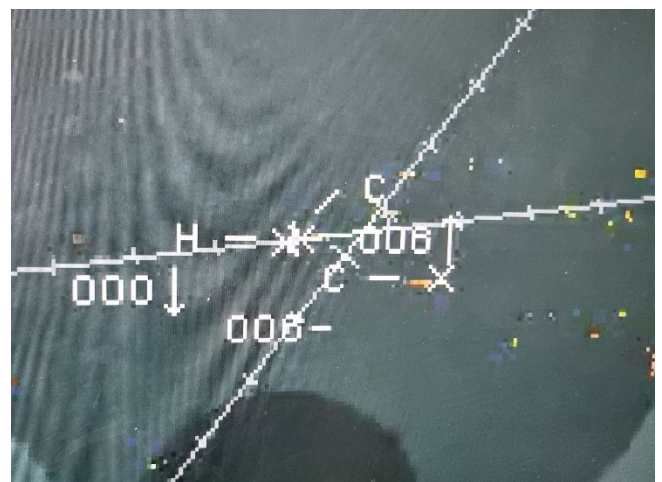


Figure 4



Analysis and Investigation

UKAB Secretariat

The Merlin and Tutor 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 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.²

Yeovilton Local Investigation

Sequence of Events

At 1421:28 [Merlin pilot] called downwind for a running landing to RW26.

At 1421:32 [Tutor(B) pilot] requested to join and was informed of [Merlin C/S] within the circuit.

At 1422:21 [Tutor(A) pilot] also requested a visual join. All aircraft were operating on RNAS Yeovilton QFE 1021hPa.

At 1422:40 [Tutor(B) pilot] called 'initial', followed by [Merlin C/S] call 'final' for running landing at 1423:16 with a subsequent clearance to land.

At 1424:05, [Tutor(A) pilot] called 'initial', at 2.3NM from the end of RW26 at 022 descending.

At 1425:16 [Merlin C/S] called 'ready for departure' followed by a clearance, with [Tutor(A) pilot] now 0.3NM from the end of RW26 indicating 006 level. [Merlin C/S] was indicating -003 and level with both aircraft approximately less than 1NM [apart].

At 1425:26 [Merlin C/S] confirmed they are cleared for take-off.

From [Figure 3] both aircraft have now merged with 1 pixel offsetting, [Tutor(A) pilot] is believed to be north deadside indicating 006 level. [Merlin C/S] is -001 and climbing.

[Figure 4] shows [Tutor(A) pilot] now ahead of [Merlin C/S] joining the visual circuit at 006 climbing and [Merlin C/S] 000 descending.

¹ MAA RA 2307 paragraphs 1 and 2.

² MAA RA 2307 paragraph 17.

At 1426:30 both contacts were now diverging with [Tutor(A) pilot] descending and [Merlin C/S] climbing.

At 1426:47 [Merlin C/S] informed ATC of their discomfort and arranged a phone call on their landing.

Between, 1425:26 and 1426:30 [Merlin C/S] received a Traffic Advisory (TA) audio alert from the TAS "Traffic, high, 1 o'clock less than 1 mile", at a height of 250ft.

Following interviews with both crews, [Merlin C/S] felt the Tutor(A) was only 150ft above and 150m clear, whilst [Tutor(A) pilot] was visual throughout and operating IAW RNAS Yeovilton DAM as detailed below.

RNAS Yeovilton DAM, Annex O.

3.1. Rotary Wing departing and arriving VFR, unless prior permission to do so has been obtained from ATC, or the aircraft is following an alternative approved procedure, are not to fly above 500ft QFE until clear of visual circuit traffic.

3.25. Initial calls for recovery are to be made at least 25 miles from Yeovilton by jets and at 10nm by propeller driven aircraft.

3.30. Fixed Wing aircraft should normally join the circuit through the initial point (IP), 3 miles on the approach to the Runway in Use and displaced deadside at 1500ft QFE.

3.30.1. At the IP aircraft will make one of the following R/T calls; "initial" or "initial for the break". This aircraft is now formally part of the visual circuit.

3.30.2. The 'Initials' call alone indicates the joining aircraft will begin the turn downwind at the upwind threshold of the Runway in Use, unless the aircraft needs to modify this to ensure correct circuit spacing.

3.30.4.1. All overtaking aircraft (e.g., Fast Jet overtaking Tutor inside initials) have responsibility for collision avoidance and are to manoeuvre to the outside (i.e., on the side away from the active runway) of the aircraft ahead. Overtaking aircraft are not to turn or break until well clear ahead.

3.30.4.2. Once the pilot is content with the position of all circuit traffic, aircraft are to descend to circuit height of 1000ft QFE (or 800ft for Light Fixed Wing).

The Yeovilton Local Investigation found the following Outcome, Cause and Causal Factor:

Outcome: [The Merlin pilot] felt aircraft positioning was too close and was only aware of the [Tutor(A)] following a TA.

Cause: [The Merlin pilot was] not aware of the exact location of [Tutor(A)] within the circuit until the TA alert advised them of the location of the aircraft.

Causal Factor: ATC did not inform [the Merlin pilot] of the location of [Tutor(A)] when they called for departure. Whilst this may not be a mandated radio call, it may have provided additional SA to [the Merlin pilot].

Comments

RN Comment

The available data indicates that this event was conducted within the bounds of normal Yeovilton visual circuit procedures and did not constitute an unsafe situation. Both aircraft were being operated under VFR in VMC within the ATZ under an Aerodrome Control Service and, importantly, the recorded separation at CPA was approximately 600ft vertically with less than 0.1NM horizontally, which is materially greater than that perceived by the Merlin crew and not indicative of an immediate collision hazard in the visual circuit environment.

The Tutor was operating in accordance with standard fixed-wing visual circuit procedures. The report shows the aircraft at approximately 900ft QFE (recorded), consistent with the expected light fixed-wing circuit height (nominally 800–1000ft QFE) and conducting a standard initial join and dead side transition before turning downwind. Concurrently, the Merlin departed in accordance with established rotary-wing procedures, which require it to remain not above 500ft QFE until clear of circuit traffic, explaining its recorded height of approximately 250–300ft during the climb. The vertical profile between the two aircraft therefore reflected deliberate procedural deconfliction rather than an unplanned convergence.

From an ATC perspective, the circuit was being managed as a mixed FW/RW pattern with multiple aircraft, all pilots making appropriate R/T calls and integrating visually. The Tutor pilot maintained visual contact with the Merlin throughout and sequenced appropriately ahead in the pattern, while the Merlin crew's late acquisition, partly due to cockpit obscuration and reliance on TAS, appears to have driven a heightened perception of risk rather than an actual loss of separation. Overall, this event is best characterised as a perception-based concern within a procedurally compliant and appropriately segregated visual circuit, rather than evidence of a breakdown in aviation or ATC standards.

JAC Comment

Both aircraft were operated in accordance with established Yeovilton visual circuit procedures with appropriate mixed traffic integration; recorded separation (approximately 600ft vertically and <0.1NM laterally) confirms that separation was maintained throughout. The Merlin crew perceived the Tutor to be too close; this was assessed to be driven by late SA following a TAS alert during a critical phase of flight. Contributory factors included internal cockpit workload and reduced traffic awareness at the point of departure. Although ATC was not required to pass TI, this may have aided crew awareness on the joining Tutor and its relative position. TAS acted as an effective barrier to aid SA and overall, this reflects a perception-based concern rather than any deviation from normal ATC procedures.

Summary

An Airprox was reported when a Merlin and a Tutor flew into proximity in the visual circuit at RNAS Yeovilton at about 1426Z on Thursday 26th March 2026. Both pilots were operating under VFR in VMC, both in receipt of a Military ACS from Yeovilton Tower.

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.

The Board members first discussed the Merlin pilot's perception of the proximity of the Tutor(A), and agreed that a combination of lack of timely situational awareness of the Tutor(A) position (**CF1**) with a TAS alert (**CF2**) and a late sighting (**CF3**), no doubt in part because of the direction of approach of the Tutor(A) from behind (**CF5**), had combined to cause a degree of startle and concern (**CF4**) that had resulted in an underestimation of separation, the true separation being shown by radar replay. The Board agreed that the Merlin pilot had quite correctly submitted an Airprox because they had been concerned that safety may have been compromised; the subsequent investigation by RNAS Yeovilton had established that the correct circuit procedures had been followed and the Board agreed that normal safety standards had pertained, Risk E. Members discussed whether the Merlin pilot had simply been startled or whether there were any systemic contributors to the situation and hence risk of re-occurrence. It was agreed that the circuit procedure achieved the desired degree of safety by building-in vertical separation between departing helicopters and arriving fixed-wing aircraft. Some members felt that a useful addition to the situational awareness of pilots on the runway would be a call from the Tower controller to notify them of fixed-wing traffic positioning on the deadside to break into the visual circuit. A counter-argument was that if the pilot had not formed an appropriate level of situational awareness

from the existing R/T calls, then they may be equally unlikely to assimilate an additional traffic call from the Tower controller. All members agreed that the existing procedures were adequate and that human factors would always play an important role in aviation.

CF1: The Merlin pilot gained late situational awareness of the Tutor's presence.

CF2: The Merlin's TAS provided an alert to the presence of the Tutor.

CF3: The Merlin pilot sighted the Tutor at a late stage.

CF4: The Merlin pilot was concerned by the proximity of the Tutor.

CF5: The Tutor was obscured from the Merlin pilot's view as it joined through initials.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2026033			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
Flight Elements				
• Situational Awareness of the Conflicting Aircraft and Action				
1	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				
2	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
• See and Avoid				
3	Human Factors	• Identification/ Recognition	Events involving flight crew not fully identifying or recognising the reality of a situation	Late sighting by one or both pilots
4	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
5	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: 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:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the Merlin pilot had had no early situational awareness of the approaching Tutor(A) and had been concerned by the proximity of Tutor(A) given their TAS warning and late sighting.

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: 2026033		Outside Controlled Airspace				
Barrier		Provision	Application	Effectiveness		
				0%	5%	Barrier Weighting
						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		■	■	■	■	■