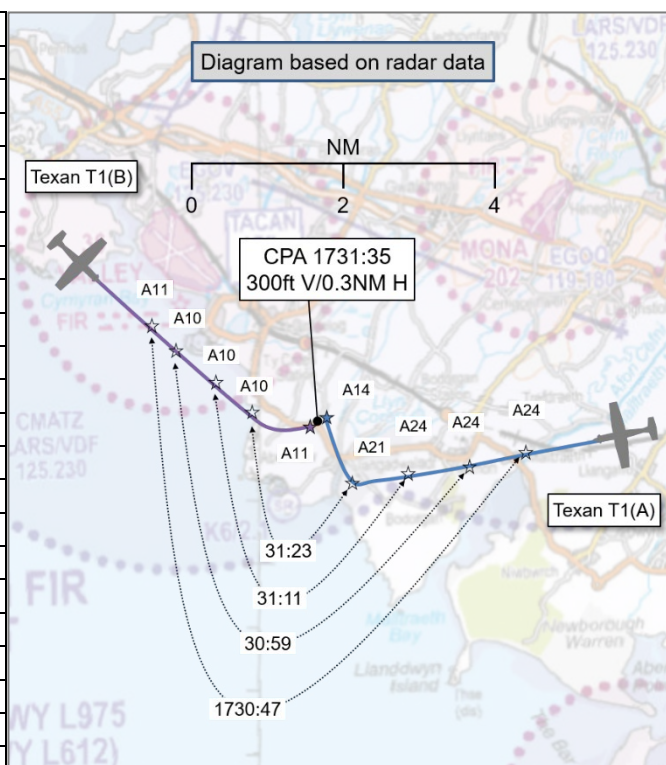


AIRPROX REPORT No 2026026

Date: 19 Mar 2026 Time: 1732Z Position: 5312N 00423W Location: 4NM SE RAF Valley

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Texan T1(A)	Texan T1(B)
Operator	HQ Air (Trg)	HQ Air (Trg)
Airspace	RAF Valley MATZ	RAF Valley MATZ
Class	G	G
Rules	VFR	VFR
Service	ACS	Traffic
Provider	Valley Tower	Valley Approach
Altitude/FL	1400ft	1100ft
Transponder	A, C, S+	A, C, S+
ADS-B Out	Observed	Observed
Reported		
Colours	Black/yellow	Black/yellow
Lighting	'as per FRCs'	'as per FRCs'
Conditions	VMC	VMC
Visibility	5-10km	5-10km
Altitude/FL	800ft	1100ft
Altimeter	QNH (1024hPa)	QNH (1024hPa)
Heading	341°	048°
Speed	NR	240kt
ACAS/TAS	TCAS I	TCAS I
Alert	TA	TA
	Separation at CPA	
Reported	300ft V/0m H ¹	300ft V/0m H
Recorded	300ft V/0.3NM H	



THE TEXAN T1(A) PILOT reports being a solo trainee with less than three hours solo on type, conducting a visual recovery to RAF Valley RW31RH from the southeast following completion of a local GH sortie. They were under a Traffic Service with Approach. Having been informed that [a local training area] was not active [1726:59], they commenced a shallow descent, whilst routing directly to the initial point. Throughout their recovery, they observed several intermittent non-threat TCAS contacts in the vicinity of RAF Valley and RAF Mona. They believed that these [contacts] were [aircraft whose pilots were] operating in the [respective] visual circuit[s], given their relative lower altitude and position. They also observed an intermittent contact above their altitude to the southwest of RAF Valley, which they believed to be [a pilot joining for a] PFL, positioning behind. They asked if there was any traffic to affect their recovery and were informed by [the Approach controller] that RAF Mona was active [1728:51]. They verbalised [in-cockpit] the [effect] that this traffic may have on their recovery if it were to conduct a Mona-to-Valley transit. They subsequently noted that an additional Texan [T1 pilot] was conducting a visual recovery via a PFL to RAF Valley, and that [the Approach controller] had instructed this [pilot] to position behind them [1729:42]. Having deemed neither to be a factor, they elected to change to [Tower frequency] to identify any other joining traffic [1730:14]. [The Tower controller] informed them that the Valley [visual circuit] was active with 2 aircraft in, and one joining at initial. They were not visual with the joining aircraft [and, having] recently held an intermittent TCAS contact 2000ft below, were therefore not content to descend further. They elected to remain not below 2400ft, noting their relative proximity to other potential [joining aircraft] for RAF Mona. They transmitted their intention to orbit at initial [1730:35], their plan being to turn left onto a southerly heading to remain clear of the RAF Mona approach lane and the other joining aircraft. [The Tower controller] instructed them to remain clear of the RAF Mona approach lane [1730:43]. Prior to commencing an orbit, they were informed by [the Tower controller] that the Texan [T1] joining through initial would be maintained clear by [the Approach

¹ Not seen, separation reported from TCAS indications.

controller] and they were invited to continue their run-in [1731:00]. At that point they observed a TCAS non-threat contact 1300ft below which they believed to be the joining aircraft. Content that ATC separation had been achieved, they commenced a descent to 800ft and turned right towards the airfield. In the turn, they were passed Traffic Information on the other joining aircraft [1731:11]; 3NM and 1200ft below, [which] seemed consistent with a [pilot] routeing to position behind so they acknowledged this [Traffic Information] and switched their attention to acquiring the other circuit traffic. In the turn, they received a TCAS Traffic Advisory [1731:19], which prompted them to continue looking for the other joining aircraft, however, they were unable to visually acquire it, looking left past the raised wing. They transmitted "Initial" [1731:23] and were given further Traffic Information on the other aircraft in the circuit. They verbalised [in-cockpit] that they were visual with these [aircraft], descended to 800ft and conducted a VRIAB. At no point did they visually acquire the conflicting traffic.

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

THE TEXAN T1(B) PILOT reports being a solo trainee with less than two hours solo on type, on their second solo flight [on type]. The sortie comprising a mixture of GH and circuits at RAF Mona (RW04RH) and RAF Valley (RW31RH). Following their third touch-and-go at RAF Valley they elected to route left-hand over the bay to rejoin via Initial, in line with solo student restrictions and the Flying Order Book. During their transit along the deadside leg [sic], they were transferred to [the Approach frequency] (1730:16) and later called (1730:44) with their position and intention to rejoin via Initial. [The Approach controller] advised [them] (1730:50) that a solo Texan T1 pilot [Texan T1(A)] was approaching Initial with the intention of joining the visual circuit. [The Approach controller] requested (1730:58) that they position behind [Texan T1(A)], which they acknowledged (1731:03) and declared their intention to look for the traffic. A few seconds later (1731:07), [the Approach controller] instead requested they position inbound to the circuit prior to reaching Initial, as [Texan T1(A)] would be orbiting at height overhead Initial. This was acknowledged (1731:16), and a turn to the left was flown to return to the visual circuit. This provided them the opportunity to visually acquire [Texan T1(A)], orbiting (1731:21) [at an estimated range of about 3NM]. At 1731:30, [Texan T1(A)] crossed above them from right-to-left with a vertical separation of approximately 300ft and no lateral separation [they assessed]. On seeing the proximity of the other aircraft, they rolled wings level and bunted to increase vertical separation. They turned away from the other aircraft to increase separation and relayed their position to [the Approach controller]. They requested to join the visual circuit, and the aircraft was landed [without further incident]. Upon review of the aircraft tapes for [both Texan T1s], it was established that they were in two-way communication with Approach, while [the Texan T1(A) pilot] was in two-way communication with [Tower].

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

THE RAF VALLEY TOWER CONTROLLER did not submit an Airprox report but took full part in the RAF Valley Investigation.

THE RAF VALLEY RADAR APPROACH CONTROLLER reports bandboxing Approach and Director for recoveries along with LARS and Radar, [which] at the time was occupied by [Texan T1(A) pilot] who was shortly to recover to Approach. [Texan T1(A) pilot] called for a visual recovery after operating in the [local exercise areas] with the Radar [controller]. On calling Approach they were issued the runway and QNH which was read back, the [pilot] was given their own navigation with descent approved whilst taking their own terrain clearance, informing them that RAF Mona was active with one other Texan. [Texan T1(A) pilot] remained higher than expected when within 10NM of RAF Valley, approximately 2000ft. When [Texan T1(A) pilot] was visual with the aerodrome at about 8NM, they changed to Tower. The Supervisor, to their left in the Supervisor position, was aware of [Texan T1(B) pilot] departing the circuit to reposition over the bay to rejoin through Initial. They passed this information on to the controller, on which they requested Tower to send the [Texan T1(B) pilot] to Approach as this would allow them to call Traffic Information on [Texan T1(A) pilot] who was approaching 7NM. About 1-2NM later [Texan T1(B) pilot] came on to Approach, to which they applied a Traffic Service. At the same time, the Supervisor informed them that [Texan T1(A) pilot] was conducting an orbit in their present position, this [corresponded] with the profile of the radar return of the aircraft (conducting a right-hand orbit at about 7NM). They informed [Texan T1(B) pilot] that the [Texan T1(A)] was conducting an orbit

and, if they turned in now, they would be ahead of the [the Texan T1(A)]. As [Texan T1(B) pilot] turned in, they had noticed the other Texan (Texan T1(A) pilot) turned out of their orbit and repositioned to continue with a standard join heading towards Valley. They updated [Texan T1(B) pilot] who had a SSR Mode C read-out of 008 with the other traffic who had Mode-C read out of 015 and descending. During the above occurrence, the two aircraft (Texan T1(A)) and [Texan T1(B)] were witnessed with Mode C readouts of 009 and 011 within 0.25NM

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

THE RAF VALLEY SUPERVISOR reports they were situated in the Approach Room at the time of the incident. They had stood down the Radar controller as they had been in work all day and there was only one aircraft left to recover. The Approach controller was bandboxing [Approach and Director] (as there was no instrument traffic at the time, which is SOP). They had a Director [controller] available if required. The Approach controller was also bandboxing LARS [and Radar] with just the one pilot on Radar, who was due to come to Approach imminently. A student Texan [T1 pilot ([Texan T1(A)])] was already on Approach, recovering from the east/northeast for a visual join to RAF Valley, about 9NM away. The visual circuit at RAF Mona was active with a couple of Texan [T1 aircraft]. The visual circuit at RAF Valley was active with another student Texan [T1 pilot ([Texan T1(B)])] along with a pair of Texan [T1 pilot]'s joining. The Tower controller used the Radar Clearance Line² (RCL) to inform Approach that [Texan T1(B) pilot] was repositioning over the bay to Initial. At the same time as this call, another Texan [T1 pilot] free-called Approach for a visual recovery to RAF Valley from about 10NM south. The Approach controller asked them to answer the RCL and request [Texan T1(B) pilot] to be free called to Approach and then went on to identify [the other Texan T1]. They assessed the situation quickly and thought that, as there were 2 other Texan [T1 pilot]'s joining from different locations, it would be wise to get [Texan T1(B) pilot] onto Approach to pass Traffic Information if required. They opened the RCL and instructed the Tower controller to send [Texan T1(B) pilot] to Approach. As they were doing this, [Texan T1(A) pilot] switched to Tower, which [resulted in] the 2 [pilots] changing onto [the] frequency [previously used by the other]. They were expecting that [Texan T1(A) pilot] would be kept on Approach so that all [the pilots] were on the same frequency to aid Traffic Information. As [Texan T1(B) pilot] was identified by the Approach controller, the Tower controller informed them that [Texan T1(A) pilot] was now [flying] an orbit in their current position for sequencing. Their mental model was expecting [Texan T1(A) pilot] to turn anticlockwise for their orbit with [Texan T1(B) pilot] heading toward them. They thought there may be a danger of collision if that was allowed to continue so instructed the Tower controller to instruct [Texan T1(A) pilot] to join normally through initial and the Approach controller could then vector [Texan T1(B) pilot] behind them for initial. As they were doing this, the Approach controller heard that [Texan T1(A) pilot] was going to orbit in their current position, so therefore instructed [Texan T1(B) pilot] to turn in early to Initial to avoid. Due to the miscommunication, both Texan [T1 pilot]'s turned in at the same time with about 500ft separation, with [Texan T1(A) pilot] descending toward [Texan T1(B)] to join through initial. As the 2 [pilots] turned toward each other, they were both 'belly up' to each other, so the chances of being visual with each other were very slim. They assessed that if they instructed either Texan [pilot] to stop their turn, they may roll out into each other. They instructed both the Approach and Tower controllers at the same time to call the ['their aircraft'] immediately which they did. The Tower controller had already called [Texan T1(B)] to [Texan T1(A) pilot] earlier. At the closest point of conflict there was about 200ft between the aircraft and the 2 tracks had merged on the radar screen. [Texan T1(B) pilot] reported that they were visual with [Texan T1(A)] and elected to re-position in a clockwise orbit to sequence behind.

Factual Background

The weather at RAF Valley was recorded as follows:

METAR EGOV 191750Z 33003KT CAVOK 13/07 Q1025 NOSIG RMK BLU BLU=
METAR EGOV 191720Z 30003KT CAVOK 13/07 Q1024 NOSIG=

² Selectable direct line between ATC console positions.

Analysis and Investigation

Military ATM

An Airprox occurred on 19 March 2026 between two Texan aircraft [near the initial point for] the circuit at RAF Valley.

Sequence of Events

At 1726:18 [Texan T1(A) pilot] called [Radar Approach controller] for visual recovery to RAF Valley. [Texan T1(A) pilot] asked [Radar Approach controller] if there was any traffic to affect, [Radar Approach controller] replied that there was no traffic to affect, with Mona active with one Texan.

At 1730:15 [Texan T1(A) pilot] requested to go to Tower [frequency].

At 1730:15 Approach instructed the Supervisor to have [Texan T1(B) pilot] transferred to the Approach frequency.

At 1730:26 [Texan T1(A) pilot] called [Aerodrome controller] to join the visual circuit. [Aerodrome controller] responded to [Texan T1(A) pilot] with a standard join call and informed them there were 2 aircraft established in the circuit with *'one Texan joining at Initial'*.

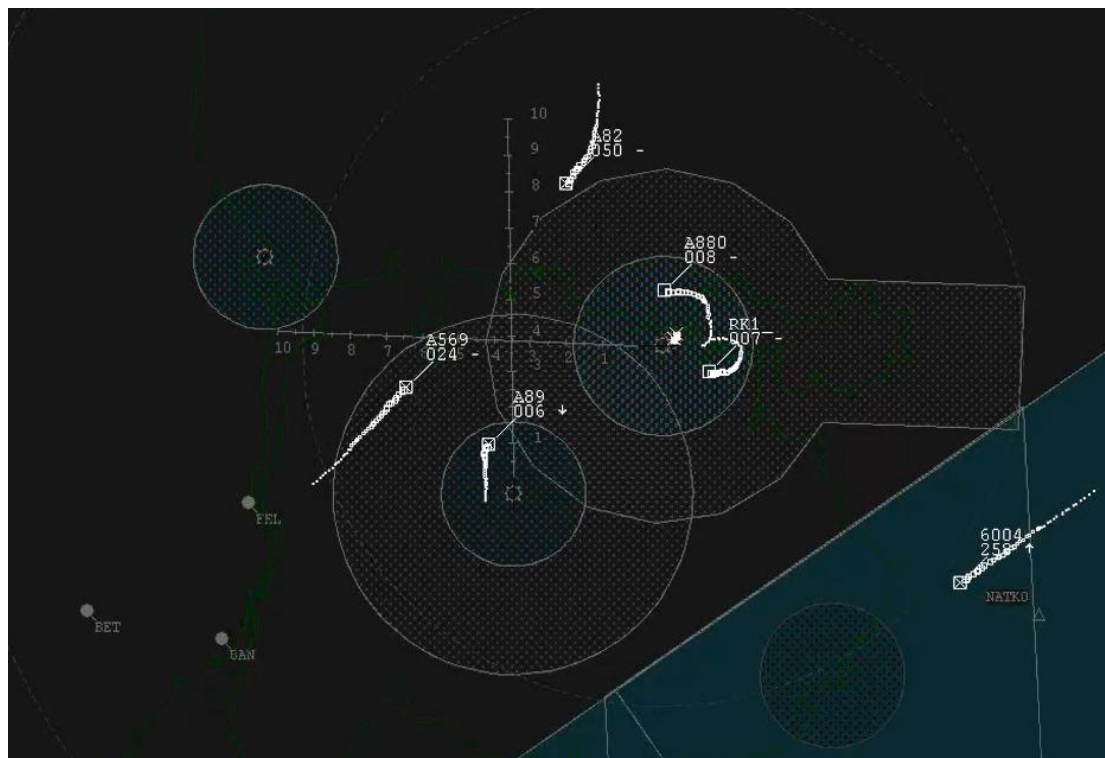


Figure 1 - 17:30:36

At 1730:36 [Texan T1(A) pilot] responded to [Aerodrome controller] and informed them they would *'orbit at Initial'*.

At 1730:46 [Radar Approach controller] replied informing [Texan T1(B) pilot] that there was a solo Texan joining through Initial who was southeast 4 miles, routeing inbound, indicating 1400ft above, descending, and requested [Texan T1(B) pilot] to position behind that traffic.

At 1730:49 [Aerodrome controller] transmitted over the RCL that [Texan T1(A) pilot] was orbiting current position and asked whether they should send them to the [Radar Approach] frequency to remain clear of Mona.

At 1730:54 [Supervisor] replied to [Aerodrome controller] on the RCL *'no you keep [Texan T1(A) C/S] we'll keep [Texan T1(B) C/S] out of the way'*.

At 1731:01 [Aerodrome controller] transmitted to [Texan T1(A) pilot] that *'the Texan joining via Initials is being maintained clear by Approach, if you want to do the run in now'*. [Texan T1(A) pilot] responded to [Aerodrome controller] that they would route in via Initial.

At 1731:08 [Radar Approach controller] transmitted to [Texan T1(B) pilot] to *'position inbound now'*, informing them that the solo Texan was orbiting in the current position.



Figure 2 - 17:31:08

At 1731:13 [Aerodrome controller] called [Texan T1(B)] to [Texan T1(A) pilot] as *'the traffic is in your right 2 o'clock 3 miles opposite direction indicating 1200ft below'*. [Texan T1(B) pilot] replied to [Radar Approach controller] that they were turning short final.

At 1731:21 The [Supervisor] used the RCL to broadcast to [Aerodrome controller] that *'[Texan T1(B) C/S] is now...did you say [Texan T1(A) C/S] is orbiting...call the traffic please'*. [Texan T1(A) pilot] called initial.

At 1731:32 [Radar Approach controller] transmitted to [Texan T1(B) pilot] requesting if they were visual with the previously called Texan.

At 1731:33 [Aerodrome controller] transmitted on the RCL that they had called the traffic to [Texan T1(A) pilot] and they were routeing in.

At 1731:35 [Texan T1(B) pilot] replied to [Radar Approach controller] that they were visual with [Texan T1(A)].

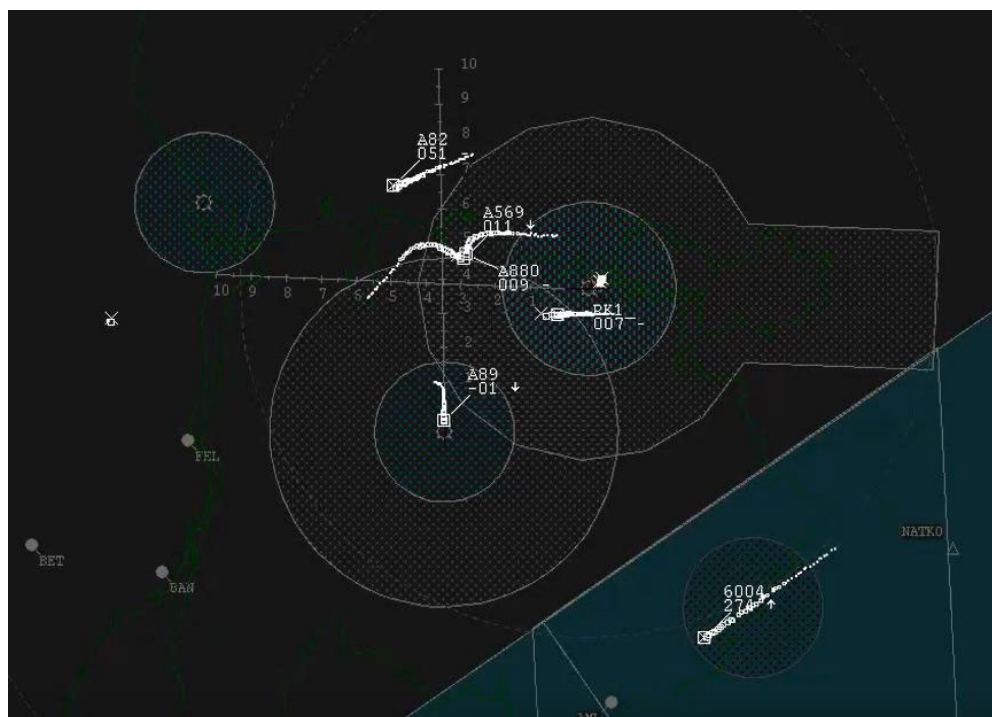


Figure 3 - 1731:35

CPA occurred at 1731:35 with 0.3NM lateral separation and 200ft vertical separation.

Occurrence Safety Investigation

An Occurrence Safety Investigation (OSI) was conducted at RAF Valley following the event to identify the related causal/aggravating factors. It highlighted the risks associated with mixed frequency visual recoveries where pilot and controller situational awareness is dependent on the timely exchange of accurate Traffic Information and sequencing information. Although multiple controllers believed they understood the intended recovery order, no clearly defined or shared plan existed between [Radar Approach controller], [Aerodrome controller] or Supervisor. This resulted in both Texan [pilots] routing towards initial at the same time.

The OSI identified communication, coordination and situational awareness challenges as key factors in the occurrence. Several decisions were based on assumptions derived from overheard/passing comments or indirectly communicated information, rather than positive coordination between controllers. The occurrence also demonstrated the potential for task fixation and confirmation bias to influence decision making when controllers were trying to expedite traffic or assist less experienced pilots.

From an ATC perspective, the occurrence reinforces the importance of establishing a well understood recovery plan if conducting mixed frequency operations within the same area and that information is positively coordinated between controllers.

The following recommendation was made: *The SATCO should review the procedures governing mixed-frequency visual recoveries at RAF Valley and seek to standardise the approach taken by ATCOs. The review should include educating ATCOs on pilot requirements and behaviours when transitioning into a visual environment, as well as the limitations of TAS [sic] in supporting visual acquisition, with the aim of improving pilots' situational awareness of other aircraft operating in the vicinity of the aerodrome.*

2 Gp BM Analysis

This occurrence demonstrates the importance of clearly defined recovery plans, robust controller-to-controller coordination, and unambiguous Traffic Information when managing aircraft within the

visual environment. Whilst local factors contributed to the event, the underlying challenges associated with situational awareness, task fixation and communication were not unique to RAF Valley and may be applicable across other units conducting mixed-frequency or complex visual recovery operations.

2 Gp supports the recommendation for SATCO Valley to review and standardise mixed-frequency recovery procedures. The resulting learning should be considered by other units conducting similar operations to ensure recovery responsibilities, sequencing decisions and coordination requirements were clearly understood by both pilots and controllers.

UKAB Secretariat

The Texan T1(A) and Texan T1(B) pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.³ 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.⁴ The diagram was derived from NATS (En Route) plc radar replay information.

RAF Valley Occurrence Safety Investigation

The RAF Valley Occurrence Safety Investigation (OSI) summary is as follows:

The investigation has established that the Top Event (Outcome) was Air Operations → Loss of Safe Separation → Airprox → Non Co-Operating. At their closest point of approach, as both aircraft turned towards the Initial Point at the same time, the aircraft were within 310ft of each other vertically with no horizontal displacement and a 90° crossing angle.

The incident resulted from a breakdown in shared understanding between pilots and controllers within a complex visual circuit environment. Both trainee pilots formed differing, but understandable, interpretations of the situation based on the information available to them, while the controllers adopted a more directive approach to sequencing without a clearly shared and communicated plan across all positions.

At the same time, the use of the Radar Clearance Line for liaison resulted in incomplete information flow between controllers, contributing to differing understandings of the intended sequence. The combination of abbreviated communication, absence of explicit agreement, and differing interpretations led to separate clearances being issued for both aircraft to proceed to the Initial Point (IP). Consequently, both crews understood themselves to be number one in sequence, resulting in their convergence at the same point.

The OSI established 6 Outcomes, each with Causal Factors (CFs), as follows:

Cause 1: [Texan T1(B) pilot] believed they were number one for recovery and turned towards Initial.

CF 1.1 [Texan T1(B) pilot] observed [Texan T1(A)]'s silhouette but perceived it to be manoeuvring away.

CF 1.2 [Radar Approach controller] informed [Texan T1(B) pilot] that [Texan T1(A) pilot] was conducting an orbit. [Recommendation 1]

CF 1.3 Mixed-frequency recoveries required [Texan T1(B) pilot] to rely on ATC information to build situational awareness. [Recommendation 1]

CF 1.4 [Radar Approach Controller] instructed [Texan T1(B) pilot] to turn inbound. [Recommendation 1]

CF 1.5 Sqn guidance on sequencing priorities for visual joins was conflicting. [Recommendation 2]

CF 1.6 Guidance on when aircraft remain in the visual circuit was ambiguous. [Recommendation 2]

Cause 2: [Texan T1(A) pilot] believed they were number one for recovery and turned towards Initial.

CF 2.1 [Texan T1(A) pilot] was unable to establish adequate situational awareness regarding the position of [Texan T1(B)]. [Recommendation 1]

CF 2.2 Mixed-frequency recoveries required [Texan T1(A) pilot] to rely on ATC information to build situational awareness. [Recommendation 1]

³ MAA RA 2307 paragraphs 1 and 2.

⁴ MAA RA 2307 paragraph 17.

CF 2.3 A TCAS contact at 4NM reinforced [Texan T1(A) pilot]'s belief that [Texan T1(B)] was being kept clear by ATC.

CF 2.4 [Aerodrome controller] informed [Texan T1(A) pilot] that [Texan T1(B)] was being kept clear and that they could route inbound. [Recommendation 1]

CF 2.5 The positional information provided by [Aerodrome controller] was insufficiently specific to support effective situational awareness building. [Recommendation 1] [Recommendation 3]

Cause 3 [Radar Approach Controller] believed [Texan T1(B)] was number one for recovery.

CF 3.1 [Radar Approach controller] heard via the [Radar Clearance Line] that [Texan T1(A)] was orbiting. [Recommendation 4]

CF 3.2 [Texan T1(A)] was observed indicating 2200ft and tracking south.

CF 3.3 [Radar Approach controller] was unaware of the conversation between [Supervisor] and [Aerodrome controller]. [Recommendation 4]

CF 3.4 [Radar Approach controller] sought to expedite recovery due to safety concerns associated with two solo students operating in close proximity. [Recommendations 1 and 4]

Cause 4 [Aerodrome controller] believed [Texan T1(A)] was number one for recovery.

CF 4.1 [Aerodrome controller] interpreted [Supervisor's] [Radar Clearance Line] transmission as confirmation [Texan T1(A)] was number one. [Recommendation 3 and 4]

CF 4.2 [Aerodrome controller] had no direct communication with [Radar Approach controller]. [Recommendation 4]

Cause 5 [Supervisor] relayed information to [Aerodrome controller] on [Radar Approach controller's] behalf via the [Radar Clearance Line] without a clearly defined plan being communicated. [Recommendations 3 and 4]

CF 5.1 [Aerodrome controller] transmitted on the [Radar Clearance Line] that [Texan T1(A) pilot] was orbiting and queried whether [Radar Approach controller] wanted the aircraft on their frequency.

CF 5.2 [Radar Approach controller] was dealing with other traffic during the [Radar Clearance Line] transmission.

CF 5.3 [Supervisor] believed they understood RA's intended recovery order.

CF 5.4 [Supervisor] attempted to confirm the plan with [Aerodrome controller]; however, [Aerodrome controller] had already suggested to [Texan T1(A)] to turn inbound to Initial.

Cause 6 [Radar Approach controller] instructed [Texan T1(B) pilot] to change frequency to [Approach] via the Supervisor and [Aerodrome controller].

CF 6.1 [Radar Approach controller] routinely instructs frequency changes when they believe traffic may affect sequencing. [Recommendation 1]

CF 6.2 [Radar Approach controller] was aware that [Texan T1(B)] was being flown by a solo student and sought to assist with sequencing. [Recommendation 5]

CF 6.3 ATC Orders permit [Radar Approach controller] discretion to instruct frequency changes for recovering aircraft when deemed necessary. [Recommendation 1]

The report contains 5 recommendations, as follows:

Recommendation 1: The SATCO should review the procedures governing mixed-frequency visual recoveries at RAF Valley and seek to standardise the approach taken by ATCOs. The review should include educating ATCOs on pilot requirements and behaviours when transitioning into a visual environment, as well as the limitations of TAS [sic] in supporting visual acquisition, with the aim of improving pilots' situational awareness of other aircraft operating in the vicinity of the aerodrome.

Recommendation 2: 4FTS should ensure that training provided to 4FTS pilots wrt joining the visual circuit includes sequencing priorities and decision-making options when situational awareness is degraded. When appropriate, training material should be incorporated into groundschool instruction to reinforce sound decision making and encourage confidence in challenging or reassessing mental models. Use of this occurrence may prove useful as a learning tool in similar fashion to the 3FTS 'Safe Circuits' brief.

Recommendation 3: Noting the weakness of Texan TAS [sic], the DT should investigate the feasibility of fitting ADSB-In/Out to the Texan aircraft to improve pilot situational awareness and reduce the potential for Loss of Safe Separation.

Recommendation 4: SATCO is to ensure that the [Radar Clearance Line] is primarily used for the transmission of essential, time-critical information such as clearances. Consideration should be given to encouraging the use of landline communications for non-time-critical information, enabling more comprehensive planning and clearer shared understanding between controllers.

Recommendation 5: 4FTS Standards and SATCO should jointly review and reinforce the understanding of responsibilities during VFR recoveries involving solo student pilots. This should emphasise the requirement for student pilots to maintain effective lookout and responsibility for visual separation when operating in the visual circuit, while ensuring ATC provides clear traffic information and sequencing. The aim is to promote a consistent and shared understanding of roles, whilst avoiding unnecessary over-control that may reduce pilot situational awareness.

The Investigation Chairman made the following comments:

Several human factors were evident; however, human performance could have been enhanced through more effective use of existing technology, such as clearly defined protocols for the employment of the RCL. It should be acknowledged that existing systems (TAS) have known limitations, which restricted their effectiveness in supporting pilot situational awareness during this incident. More advanced technology, such as ADS-B In, currently being pursued, may have improved pilot situational awareness sufficiently to allow the [Airprox] to [have been] avoided by the pilots themselves.

Whilst some [personnel] could have utilised available technology differently to improve overall team situational awareness, potentially enabling a more robust deconfliction plan, the [investigation] panel unanimously agreed that no individual's actions justified assigning a Behavioural Type.

The Texan T1 Duty Holder made the following comments:

This [investigation] has brilliantly analysed the age-old paradox of aviation: how do 2 aircraft end up in the same piece of sky when they should not have? I commend the superb [investigation] team, but also the Whole Force within 4 FTS and RAF Valley for their openness and willingness to engage. There is no place for pride in our business and humility is a key tenet of how we do our business, especially concerning single-seat fighter operations. If I distil the incident to its essence, 2 pilots came up with a plan for deconfliction and recovery that would have worked. Because they were trying to be helpful and proactive for 2 solo trainees, 2 ATC controllers and a Supervisor tried to make that plan more efficient but had differing mental models which negated the margins of safe separation. Because the pilots were trainees, they took the ATC plan at face value. And they arrived over the same point on the ground with ~300ft separation.

I am reassured that the principles of how 4FTS does business are fundamentally sound, although there is always room to be better and I welcome the opportunity and external scrutiny to develop further the teaching and mentoring we give to trainee fighter pilots, as well as help reinforce lessons to the instructor cadre; that recommendation is enacted as one would expect and we will continue to test/adjust. At its heart is situational awareness and the responsibilities of the pilot. I also welcome the recognition that electronic conspicuity (ADS-B IN) has been cited as a future mitigation; a capability that is currently being developed, the importance of which [is] reinforced by this incident.

I will leave [Officer Commanding] RAF Valley to talk to the areas pertinent to Valley ATC and the wider [Battlespace Management] community, but I am grateful as ever for his personal engagement and that of his team in addressing the out-turn of this investigation. But, as highlighted by the investigation, everyone involved came to work this day to do the best job they possibly could.

We came extremely close to MAC; that is a sobering thought in every respect. And I have reflected long and hard about how we train and the agile mindset we expect of our fighter pilots from the earliest stages of their training. Much is expected of our front-line junior fighter pilots, in a way that perhaps is not of other nations' air forces at the same stage. It is therefore, in my judgement, right that we (and I specifically as DDH) continue to test the boundaries of what risk can be transferred into the training environment from the front line command - and we must avoid the feeling of total comfort within the training environment when our front-line colleagues are not afforded that luxury. And the flexibility to manage and sequence in relation to other aircraft is not just for the visual circuit: it is [also] for [combat operations]. Therefore, I am satisfied that, on balance, what we expose our folks to at the stages we expose them to (crawl; walk; run) is appropriate vs the ever growing operational risk that these pilots will face and what front-line

[commanders] and CAWs will expect their people to have a grounding in, especially in light of our collective TtC thinking and application.

At the end of the day here, the situational awareness of well-intentioned professionals broke down and we are, thankfully, in the position to collectively learn and make ourselves better and safer. That, despite the circumstances that triggered this, is positive as is our ongoing engaged safety culture.

Comments

HQ Air Command

This incident occurred at the entry point to the Visual Circuit Pattern at RAF Valley, a busy point in the sky at one of our busiest training aerodromes, and involved 2 aircraft whose pilots were not visual with one another until at a late stage. Both were student pilots in the early stages of their training, and neither possessed many solo hours on type. As such, they would have been relying heavily on assistance from ATC to aid their sequencing in a safe and expeditious manner. The very thorough independent [Occurrence Safety] investigation has rightly focussed on the aspects of communication between the aircraft and ATC which led to this near miss; this investigation has identified a number of shortfalls in the communication between the various different ATC controllers and Supervisors which contributed to the loss of safe separation. Ultimately, two ATC controllers and the ATC Supervisor tried to make a deconfliction plan more efficient, but they had differing mental models which negated the margins of safe separation, and because the pilots were trainees, they took the plan at face value. As a result, a number of steps have been taken to change the Air Traffic Management processes at RAF Valley, which it is hoped will reduce the risk of recurrence, while the pilots involved will no doubt have been reminded of the need to remain especially vigilant when joining the visual circuit.

Summary

An Airprox was reported when 2 Texan T1 aircraft were flown into proximity 4NM southeast of RAF Valley at 1732Z on Thursday 19th March 2026. Both pilots were operating under VFR in VMC, the Texan T1(A) pilot in receipt of a military ACS from Valley Tower and the Texan T1(B) pilot in receipt of a Traffic Service from Valley Approach.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

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

Board members first discussed the role that communication between ATC controllers had played in the lead-up to the Airprox event. Whilst the Approach and Tower controllers had each had a plan for sequencing of the 2 Texan T1s, their respective plans had differed and had not been mutually communicated; consequently, they had had no opportunity to coordinate (**CF3**) in order to provide effective deconfliction (**CF4**). Members felt that this had been predominantly due to the nature of communication on the RCL, as identified in the RAF Valley OSI, and that the Supervisor, undoubtedly operating with the best of intentions, had used the RCL at a critical moment to direct the controllers (**CF7**) which had, in effect, removed the opportunity for the Approach and Tower controllers to communicate their intentions to one another (**CF1**). Consequently, the controllers had not shared the same recovery plan and had issued instructions and incorrect Traffic Information (**CF2**) to the Texan T1 pilots, based on their incorrect situational awareness (**CF5**, **CF6**). Unfortunately, the Texan T1 pilots had been instructed to change radio frequency at approximately the same time, which had removed the opportunity either to communicate a unified plan to both pilots or to detect the sequencing error. The Texan T1 pilots had both been inexperienced and only recently solo on type, and they had followed the instructions given by the ATC controllers, as military pilots are required to do when operating inside a MATZ, which both Texan T1 pilots had been, albeit not to the exclusion of collision avoidance. The Board was advised that STCA had not been used in the visual circuit traffic environment (**CF8**).

Turning to the Texan T1 pilots, each had been operating with incorrect situational awareness (**CF9**), as transmitted by their respective ATC controller, in the belief that they had been sequenced first. The Texan T1(A) pilot had not seen Texan T1(B) (**CF12**) but had used TCAS information to maintain situational awareness and had modified their approach to the Initial Point on that basis. The Texan T1(B) pilot had reported having seen Texan T1(A) at 'approximately 3NM'. The Texan T1(B) pilot had also reported having seen Texan T1(A) at 1731:21, approximately 14sec before CPA (at 1731:35) as measured from the radar replay. Board members noted that the Texan T1s could not have travelled 2.7NM in 14sec, which would have required a closing speed of approximately 700kt, but agreed that the figure of 3NM indicated that the Texan T1(B) pilot had seen Texan T1(A) 'at range', rather than in close proximity. Members questioned why separation at CPA had subsequently been so eroded and considered it likely that the Texan T1(B) pilot had continued to position for initial, as instructed by the Approach controller, and had flown into proximity with the Texan T1(A) while operating with the incorrect situational awareness (**CF11**) that the Texan T1(A) pilot had been sequenced behind them. Although the Texan T1(B) pilot had reported a lateral separation of 0m at CPA, both NATS (En Route) plc and RAF Valley radar replays had shown a lateral separation of approximately 0.3NM. Members felt that the reported lateral proximity might have been a function of the Texan T1(B) pilot's startle response on seeing Texan T1(A) in proximity. Although both pilots had reported receiving a TCAS TA (**CF10**), Board members noted that, given the Texan T1s' altitudes, speeds and closing bearing, this would have occurred at a lateral separation of approximately 2.5NM. After further discussion, Board members agreed that the Texan T1(B) pilot had seen the Texan T1(A) at sufficient range that, although they had subsequently flown into proximity, the risk of collision had been removed, and therefore the event was assessed as Risk Category C.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2026026			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Ground Elements			
	• Manning and Equipment			
1	Human Factors	• ATM Leadership and Supervision	An event related to the leadership and supervision of ATM activities.	
	• Situational Awareness and Action			
2	Human Factors	• ANS Traffic Information Provision	Provision of ANS traffic information	TI not provided, inaccurate, inadequate, or late
3	Human Factors	• ATM Coordination	Coordination related issues (external as well as internal)	
4	Human Factors	• Conflict Resolution-Inadequate	An event involving the inadequate provision of conflict resolution	
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			
	• Situational Awareness of the Conflicting Aircraft and Action			
9	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			

10	Contextual	• ACAS/TCAS TA	An event involving a genuine airborne collision avoidance system/traffic alert and collision avoidance system traffic advisory warning triggered	
• See and Avoid				
11	Human Factors	• Identification/Recognition	Events involving flight crew not fully identifying or recognising the reality of a situation	
12	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

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:

Manning and Equipment were assessed as **ineffective** because the Supervisor's use of the RCL had prevented the Approach and Tower controllers sharing the same situational awareness of the recovery plan for Texan T1(A) and Texan T1(B).

Situational Awareness of the Confliction and Action were assessed as **ineffective** because each controller had made their recovery plan based on incorrect situational awareness, i.e. that their aircraft had been sequenced for recovery first.

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

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **ineffective** because the Texan pilots had based their situational awareness on the incorrect situational awareness of the Approach and Tower controllers.

See and Avoid were assessed as **partially effective** because Texan T1(A) pilot had not seen Texan T1(B) and Texan T1(B) pilot, although they had seen Texan T1(A) reportedly at range, had based their subsequent actions on the belief that Texan T1(A) had been sequenced behind them.

⁵ 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: 2026026		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		■	■	■	■	□