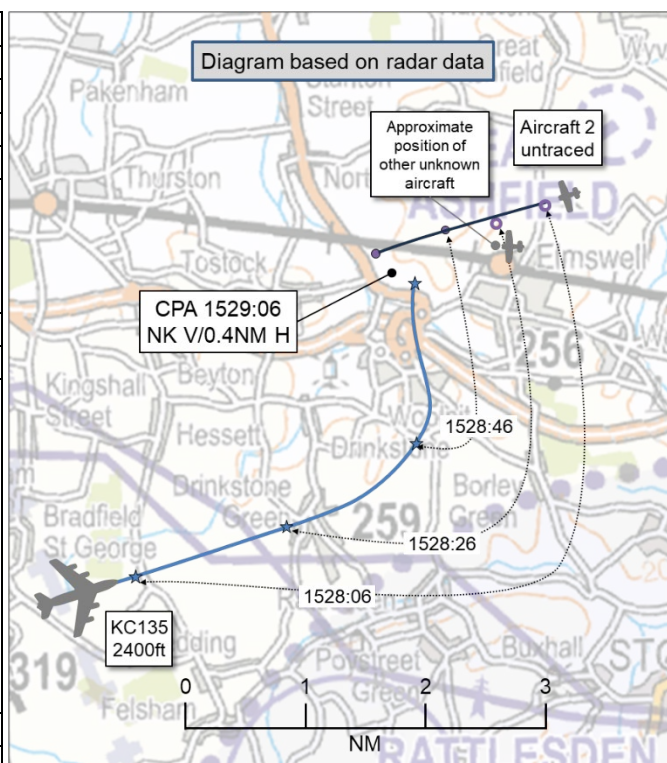


AIRPROX REPORT No 2026061

Date: 25 Apr 2026 Time: 1529Z Position: 5214N 00053E Location: ivo Great Ashfield Airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	KC135	Unknown aircraft
Operator	Foreign Mil	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	IFR	NK
Service	Traffic	
Provider	Lakenheath App	
Altitude	2400ft	
Transponder	A, C, S	None
Reported		
Colours	Grey	NK
Lighting	Nav, anti-colls	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	2800ft	
Altimeter	QNH	
Heading	050°	
Speed	240kt	
ACAS/TAS	TCAS II	
Alert	None	
	Separation at CPA	
Reported	300ft V/0.5NM H	NK
Recorded	NK V/ 0.4NM H	



THE KC135 PILOT reports that they were under vectors to RW28 ILS following a missed approach at Mildenhall. While positioning and setting up the aircraft for the approach, the crew received multiple traffic calls from the Approach controller, noting multiple unknown aircraft displayed on TCAS. ATC was also issuing non-standard, extended vectors to avoid the called traffic. During this period they passed over a light aircraft that was not displaying a squawk (on TCAS) or communicating to ATC. To maintain visual separation, the crew deviated from the vectors to avoid the traffic. At the same time as avoiding the traffic below, a second unknown aircraft (not squawking or speaking to ATC) was seen by the crew to pass overhead the aircraft. This left the crew in a very uncomfortable position, without the option to climb or descend. The crew completed a full, steep, 360° turn during the avoidance before resuming vectors to the ILS. Prior to establishing on the ILS, further traffic was called by ATC passing through the ILS 'unverified'. It is not advisable for crews of light aircraft passing through the approaches of these airfields to do so without situational awareness of the heavy military traffic operating in the area.

The pilot verified that they believed the aircraft that went below them was an SEP and they were less certain about the aircraft that had passed above them previously.

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

THE PILOT OF THE UNKNOWN AIRCRAFT could not be traced.

THE LAKENHEATH CONTROLLER reports that [the pilot of the KC135] was vectored south of RAF Mildenhall, arriving from the west to set up for the ILS to RW28 at RAF Mildenhall at 2600ft AMSL under a Traffic Service, and was issued Traffic [Information] on a general aviation aircraft on the ILS final approach course and subsequently issued a 070° heading to avoid. [The pilot of the KC135] was then issued a 360° heading, and the controller confirmed that the previously issued traffic was no longer a factor. The controller then identified "pop-up" traffic (a primary-only radar return) and issued [Traffic Information] to [the pilot of the KC135] one mile north of their position, type and altitude unknown. [The

pilot] then requested a right turn heading 180°, to avoid, and shortly thereafter reported two aircraft, one above and one below, that were close and asked the controller to “*run the tapes*”. [The KC135 pilot] was subsequently vectored back to the final approach course with no issue.

Factual Background

The weather at RAF Lakenheath was recorded as follows:

EGUN - 251455Z 01004KT 9999 CLR 21/M02 A3012 RMK A02A LTG DSNT S SLP203 T02061019 57005
EGUN - 251555Z 01007KT 9999 CLR 21/M01 A3012 RMK A02A SLP203 T02051014

Analysis and Investigation

USAFE RAF Lakenheath

An investigation was completed by the RAF Lakenheath Radar Chief Controller (CCTLR) on an incident that occurred involving a KC135 arriving to RAF Mildenhall and multiple general aviation gliders [sic]. The CCTLR interviewed the Watch Supervisor and line controllers that were working during the times noted on the daily events log.

In reviewing the radar playback, the [Lakenheath Approach] controller's workload was light with light complexity. The controller provided a traffic call to [the pilot of the KC135] under a Traffic Service for the general aviation glider aircraft that was not on frequency. [The KC135 pilot] reported traffic after initiating an avoidance turn with the controller. The controller also issued [Traffic Information] and control instructions to another aircraft inbound to RAF Mildenhall reference the gliders reported by [the KC135 pilot].¹ The weather was not deemed to be a factor.

The Chief Controller's investigation was closed, with a determination that the controller issued [Traffic Information] in accordance with traffic as agreed upon [in the level of] service provided. The area that this Hazardous Air Traffic Report (HATR) occurred in is prone to a lot of glider activity and the season for glider activity had started. Issuing a vector to avoid primary targets is not always feasible under a Traffic Service due to the volume of intermittent targets. The glider activity is something that is briefed continuously at meetings involving the local flying community across both bases, as well as trained within the Radar Approach Control (RAPCON). The RAPCON has also begun a dedicated outreach to the glider flying community to raise awareness. This scenario will be debriefed and used as a teachable moment to ensure the RAPCON continues to provide safe and expeditious service highlighting the importance of caution especially during glider season of pop-up traffic. No further administrative action will be taken [regarding] controllers in position that day.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and neither aircraft was identified using Mode S data, although the KC135 was detected using Modes A and C. The unknown aircraft displayed a primary track only, which had been intermittent. Two primary returns were detected nearby, the main primary target (AC2) was ahead and approaching from the right of the KC135 (AC1) with no altitude information, a second primary return was seen to have passed the KC135 earlier, at a range of 1.4NM, between 1528:06 and 1528:22 with their relative positions changing. (Figure 1).

¹ The KC135 pilot had not referred to a glider in their RT to the Lakenheath Approach controller. The controller had, however, reported glider activity in the area after the Airprox.

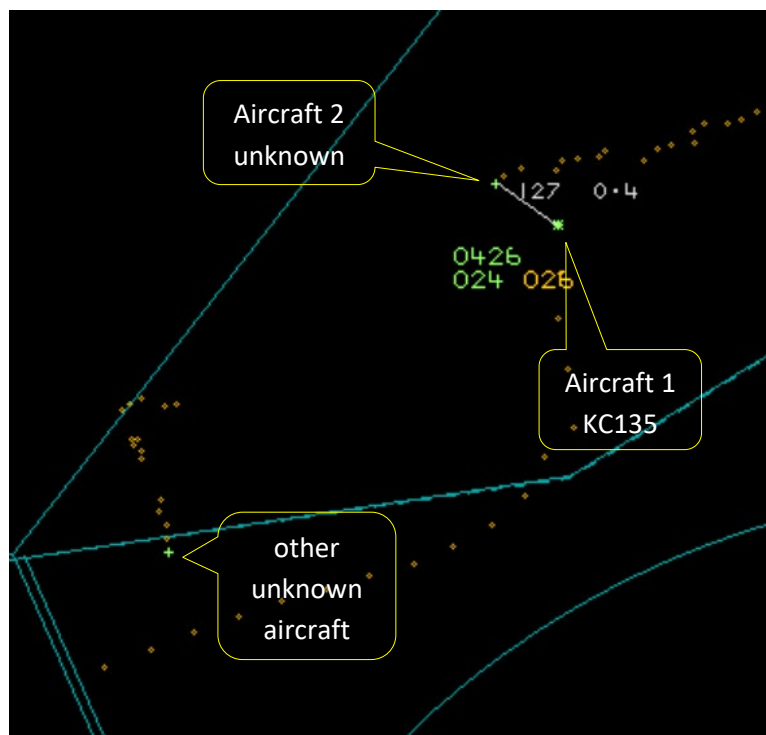


Figure 1 – Time 1529:06

Further analysis of third party aircraft tracking software was undertaken, and neither the KC135 nor the unknown aircraft (AC2) were detected using ADS-B data sources.

USAFE supplied a screenshot of the Lakenheath radar replay which included a further primary return of the second aircraft that had been seen by the Lakenheath controller and KC135 pilot (Figure 2). This primary return had not been detected on the NATS radar replay.

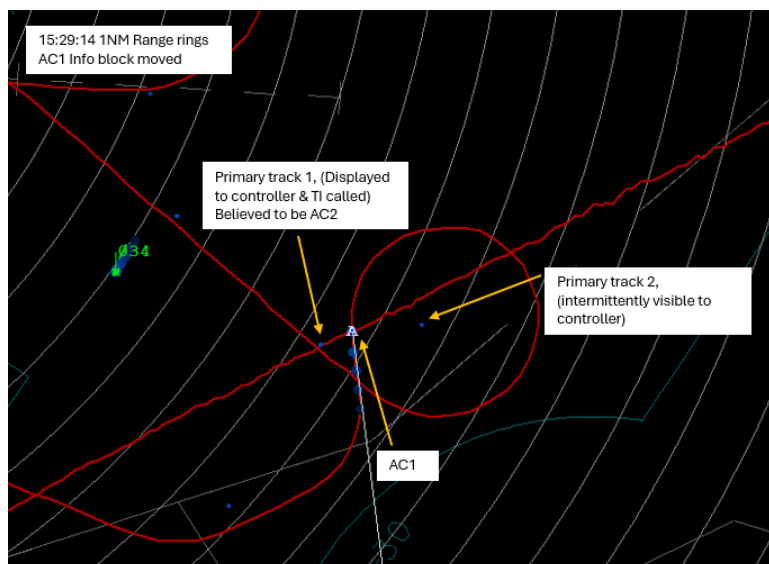


Figure 2 – Lakenheath radar screenshot

CPA was assessed to have occurred at 1529:06 with 0.4NM lateral and unknown vertical separation.

The KC135 and unknown aircraft 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 If the incident

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

geometry is considered as converging then the KC135 pilot was required to give way to the unknown aircraft.³

Comments

USAFE

Aircraft operating without transponders or other electronic conspicuity (EC) devices in a busy terminal environment are very difficult to detect by ground radar or other aircraft systems. Use of EC or selection of an appropriate ATC service will provide additional barriers to a mid-air collision (MAC). It was fortunate, in this occurrence, that the controller observed the intermittent radar return for [the unknown aircraft], and called the Traffic Information, which undoubtedly cued the pilot of [the KC135] to spot it and take action to avoid.

During this event there were several aircraft shown on radar in the approach corridor not communicating with ATC. The control team and the pilots were working hard to make decisions to avoid traffic that was unpredictable and in some cases undetected.

Pilots are advised to contact Lakenheath Approach when they are passing in the vicinity to improve the situational awareness barriers for pilots and controllers.

AOPA

This incident, in Class G airspace, yet again shows the value of fitting transponders and talking to Air Traffic Control (ATC). If the untraceable pilot had been communicating with ATC then this event would not have occurred, as all traffic would have known about each other. As alluded to in the report, this is the beginning of good weather and glider flying, and it is understood that the BGA is highlighting to its members to fly with transponders on and communicate if they have a FRTOL, which will hopefully reduce these events. AOPA has, in the past, facilitated airspace user meetings in this area and is more than willing to work with USAFE to organise more events. The BGA is currently working with the USAFE which will hopefully result in a reduction of these events in this area.

Summary

An Airprox was reported when a KC135 and an unknown aircraft flew into proximity in the vicinity of Great Ashfield airfield at 1529Z on Saturday 25th April 2026. The KC135 pilot was operating under IFR in VMC in receipt of a Traffic Service from Lakenheath Approach. Unfortunately, the pilot of the unknown aircraft could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the KC135 pilot, radar photographs/video recordings, a report from the air traffic controller involved and a report from the appropriate operating authority. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

The Board first considered the actions of the Lakenheath controller who had been providing vectors to the KC135 pilot for the approach into Mildenhall. The Board noted that the controller had been providing Traffic Information on a number of primary targets prior to the Airprox event, which had likely prompted the KC135 pilot to have sighted traffic and then request a right turn. Members agreed that the Traffic Information on the unknown aircraft had been passed at a late stage (**CF1**), but only inasmuch as the conflict had not been detected any earlier due to the nature of the unknown aircraft's intermittent returns. (**CF2**). The Board also agreed that the Lakenheath controller had only had limited information available to them on the primary-only radar contact (i.e. no altitude information) (**CF3**).

³ (UK) SERA.3210 Right-of-way (c)(2) Converging. MAA RA 2307 paragraph 12.

Although the Board was assured that, on this occasion, there had been no gliders involved, a BGA member noted that the Lakenheath Chief Controller had assumed that the unknown aircraft involved this Airprox event, and other surrounding primary contacts, had been gliders. It had been clear to glider pilot members that this had not been the case, as the conditions on the day had been confirmed as unsuitable for soaring. Members mentioned that the area around Great Ashfield Airfield forms a choke-point for civilian traffic transiting into and out of southern East Anglia at low level, avoiding the nearby MATZs at RAF Lakenheath and Mildenhall (6NM to the northwest) and Wattisham Flying Station (2NM to the southeast). GA members were concerned that the hold for the instrument approaches for RAF Mildenhall RW28 (see Airprox report 2025147) also precisely occupies the gap between the two MATZs and only exacerbates the situation; non-FRTOL-holding pilots of non-transponder-equipped aircraft are obliged to choose between flying through an area where Mildenhall RW28 traffic sometimes holds at similar altitudes to General Aviation (GA) aircraft for long periods, or entering one or other MATZ, in either case without the ability to contact the relevant ATSU. The Board continued by discussing the overall volume of GA traffic operating in the vicinity of RAF Lakenheath, and emphasised the importance of pilots recognising that military aircraft may be operating – 7 days a week – within shared Class G airspace before entering the Military Aerodrome Traffic Zone (MATZ). Members agreed that the MATZ ‘stub’ should be regarded in a similar manner to the Instrument Approach Procedure (IAP) ‘feathers’ at other aerodromes, with aircraft likely to be established on an approach profile prior to reaching that point. Consequently, members would like to encourage pilots to contact the appropriate ATSU where able or practicable, as is strongly recommended in the notes on CAA 1:500,000 and 1:250,000 VFR charts. The USAFE representative on the Board confirmed that controllers at RAF Lakenheath would welcome such calls from GA pilots.

The Board moved on to consider the actions of the KC135 pilot, and noted that the pilot had been following controller-issued vectors to Mildenhall’s RW28 ILS and receiving Traffic Information from the controller on various radar contacts. Members noted that the pilot had received Traffic Information from the Lakenheath controller on a primary return which, they agreed (for the reasons given above), had been late and lacking in any altitude information (**CF5**). The Board also noted that, although the KC135 pilot had seen occasional contacts displaying on their TCAS equipment, the unknown aircraft, as non-transponding traffic, had not been transmitting any signals that could have been detected by it (**CF6**). Members agreed that, on sighting the unknown aircraft, the pilot of the KC135 had been concerned by its proximity and had called Lakenheath to inform the controller that they were executing an avoiding turn (**CF7**).

The Board then considered the actions of the pilot of the unknown aircraft, using the information available to them, and noted that the pilot had not been in communication with the Lakenheath Approach controller. Members agreed that it may have been prudent for the pilot of the unknown aircraft to have contacted Lakenheath Approach for a surveillance-based service (**CF4**), which would have considerably enhanced the situational awareness of the controller and any other traffic operating on that frequency. The Board discussed the advantages of transponders and other electronic conspicuity devices, noting that the unknown aircraft was neither transponding nor detectable using ADS-B and other aircraft tracking software. However, it was also noted that the KC135 had not been detected on ADS-B either, leaving members to wonder if USAFE pilots had inhibited that functionality on their equipment*. However, concentrating on GA, members were concerned that some aircraft continued to fly non-transponder-equipped and expressed that a lack of transponder or other electronic conspicuity (EC) equipment in busy airspace should be considered a significant risk. Some members felt that it was perhaps time to make the carriage and operation of transponders mandatory, and were looking forward to seeing the results of the CAA’s recently announced Consultation on a Proposed Electronic Conspicuity Mandate in the UK.⁴

In bringing their discussion to a conclusion, the Board noted that the KC135 pilot had been placed in a difficult position with unknown traffic above and below them and, despite Traffic Information provided by the Lakenheath controller, this had likely caused a significant lack of confidence in the traffic pattern due to non-communicative and non-cooperating traffic operating in the vicinity of the extended approach

⁴ <http://www.caa.co.uk/CAP3268>

to Mildenhall. Members noted that the KC135 pilot had executed a timely avoidance manoeuvre away from the unknown aircraft and agreed that, although safety had been degraded, there had been no risk of collision. As such, Risk Category C was assigned to this event.

*A post-meeting comment was provided in response to the question posed by members regarding the use of ADS-B by USAF pilots. It was noted that military aircraft may be unable to transmit ADS-B Out due to either equipment or US and UK military regulations. The unit operating the KC135 (and other military units) does mitigate in other ways, by operating under an ATS, use of aircraft radar, TCAS and ADS-B In. If the other aircraft pilot had chosen to speak to a controller, carry a transponder, or carry ADS-B out, then they would have been conspicuous to the crew and ATC. It was further noted that the majority of military training aircraft make greater use of EC because they are not operational or carrying out sensitive tactical training, and that military will be exempt from standard EC requirements but will equip appropriately to the environment.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2026061			
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
	Ground Elements			
	• Situational Awareness and Action			
1	Human Factors	• ANS Traffic Information Provision	Provision of ANS traffic information	TI not provided, inaccurate, inadequate, or late
2	Human Factors	• Conflict Detection - Detected Late	An event involving the late detection of a conflict between aircraft	
3	Contextual	• Traffic Management Information Action	An event involving traffic management information actions	The ground element had only generic, late, no or inaccurate Situational Awareness
	Flight Elements			
	• Tactical Planning and Execution			
4	Human Factors	• Communications by Flight Crew with ANS	An event related to the communications between the flight crew and the air navigation service.	Pilot did not request appropriate ATS service or communicate with appropriate provider
	• Situational Awareness of the Conflicting Aircraft and Action			
5	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness
	• Electronic Warning System Operation and Compliance			
6	Technical	• ACAS/TCAS System Failure	An event involving the system which provides information to determine aircraft position and is primarily independent of ground installations	Incompatible CWS equipment
	• See and Avoid			
7	Human Factors	• Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft

Degree of Risk: C.

Safety Barrier Assessment⁵

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

Flight Elements:

Tactical Planning and Execution was assessed as **partially effective** because the pilot of the unknown aircraft could have requested a surveillance-based air traffic service from Lakenheath.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the KC135 pilot had only late and generic situational awareness of the unknown aircraft in the immediate vicinity of the KC135.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the TCAS in the KC135 was unable to detect the non-transponding unknown aircraft.

Airprox Barrier Assessment: 2026061		Outside Controlled Airspace							
	Barrier	Provision	Application	Effectiveness					
				0%	5%	10%	15%	20%	Barrier Weighting
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		■	■	■	■		□		

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