AIRPROX REPORT No 2025103

Date: 31 May 2025 Time: 1008Z Position: 5227N 00053E Location: 1NM N Bridgham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	
Aircraft	Beagle Pup	RV7	
Operator	Civ FW	Civ FW	
Airspace	London FIR	London FIR	
Class	G	G	
Rules	VFR	VFR	
Service	Basic	Basic	
Provider	Lakenheath	Lakenheath	
Altitude/FL	3200ft	2940ft	
Transponder	A, C, S	A, C, S	
Reported			
Colours	Blue/white	Black/Silver	
Lighting	Nav, beacon	Nav, strobe	
Conditions	VMC	VMC	
Visibility	>10km	>10km	
Altitude/FL	3100ft	2825ft	
Altimeter	QNH (1017hPa)	QNH (NK hPa)	
Heading	220°	NK	
Speed	108kt	NK	
ACAS/TAS	SkyEcho/FLARM	Not fitted	
Alert	NR	N/A	
Separation at CPA			
Reported	300ft V/5m H	500ft V/500ft H	
Recorded	Recorded 260ft V/<0.1NM H		

THE BEAGLE PUP PILOT reports they called Lakenheath Radar for MATZ penetration and were given a transponder code and Basic Service. Shortly afterwards, the controller advised them of several aircraft, one of which was 2 miles in the 6 o'clock, [co-altitude], also southwest bound. They advised they would climb to 3100ft. Shortly afterwards, the rear seat passenger advised that there was an aircraft directly below and very close. As the passenger was sitting on the right side, and the pilot could not see the other aircraft, they made a climbing left turn away from the other aircraft. Half way around the 360° turn they asked the controller where the conflicting traffic was because they didn't want to turn into it again. The controller advised that it was 2 miles ahead, so the turn was completed and they resumed course. They believed the [other pilot] did not see them at any point and that it was only due to the timely Traffic Information from the Lakenheath controller that they did not come closer.

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

THE RV7 PILOT reports the Beagle Pup took off from [departure aerodrome] immediately before them. Following their departure, they maintained a lookout for the other aircraft. As soon as they saw it, ahead to the left and more than 500ft above, they stopped climbing and maintained a safe separation below and to the right of the other aircraft. They were able to maintain visual contact with the other aircraft as they passed below and to the right. It was clear that their cruising speed was significantly higher than that of the Beagle Pup. At the time they passed the other aircraft, they had changed frequency to Lakenheath Radar but had not yet obtained a service [they recalled]. They heard the other pilot on the radio comment that they considered they were close. They did not respond as they were yet to contact Lakenheath [they recalled]. As soon as they passed the other aircraft they obtained a Basic Service¹. They were fully visual with the other aircraft at all times and there was no risk of collision.

¹ The RV7 pilot had established a Basic Service with Lakenheath prior to the Airprox event.

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

THE LAKENHEATH CONTROLLER reports that, at about 1005, in quick succession and within one minute, 3 GA [pilots] called Lakenheath Approach for MATZ [crossings] in the same vicinity, about 5NM southwest of [a local] airfield. The [pilots] called in the order: [other uninvolved aircraft], [RV7], [Beagle Pup]. As soon as [the RV7] was identified and placed on a Basic Service the controller issued Traffic Information on an unidentified track (later known to be [the Beagle Pup]). The Traffic Information issued was, "traffic 12 o'clock, 2 miles, southwest bound, altitude indicates 2600ft". As the Traffic Information was issued, the STCA alerted on the radar indicating conflict between all three tracks. The [RV7 pilot] reported "traffic not sighted, looking". Immediately following this transmission, the controller identified [the Beagle Pup] and in quick succession reported to them that they had "traffic at your 6, just behind you, 2700ft, southwest bound". The controller identified that [the RV7] was travelling faster and, as they had not reported in sight, considered that they should report the traffic to [the Beagle Pup pilot]. [The Beagle Pup pilot reported that they would climb to 3100ft, in an apparent attempt to break the conflict. The controller re-transmitted this information to [the RV7 pilot], which was acknowledged. As the transmission ended the radar tracks began to merge. As the tracks merged, Mode C indicated 300ft separation. The controller then issued information to [the other uninvolved pilot] who was operating close to the boundary of an active Danger Area, which prompted a coordination call to the danger area operator to warn them of the traffic. Shortly after the tracks merged, [the Beagle Pup pilot] asked Lakenheath whether the overtaking traffic was clear because they thought "he came quite close to us". No report of an Airprox was made. Although the controller had identified the conflict, both [pilots] had had specific situational awareness on each other and the controller assessed the risk of collision as low.

Factual Background

The weather at Lakenheath was recorded as follows:

METAR EGUL 310955Z AUTO 23007KT 9999 FEW029 23/14 A3000 RMK AO2 SLP162 T02330135 FZRANO \$=

A transcript of the Lakenheath R/T frequency was provided, as follows:

- 1004:35 [uninvolved aircraft] Lakenheath approach, [uninvolved aircraft C/S] requesting MATZ penetration and Basic Service.
 - :49 [Lakenheath]: Roger, uh, aircraft calling Lakenheath approach, uh, can you say position?
 - :22 [uninvolved aircraft] Uh, position is [redacted], [uninvolved aircraft C/S].
- 10:05:05 [Lakenheath]: Roger that, squawk zero four five one, zero four five one.
 - :11 [uninvolved aircraft] Squawk zero four five one, [uninvolved aircraft C/S].
 - :21 [Lakenheath]: [uninvolved aircraft C/S] you're radar contact uh one two miles northeast of Lakenheath under basic service, Q-N-H one zero one six.
 - :31 [Lakenheath]: And correction, Q-N-H one zero one five, one zero one five.
 - :36 [uninvolved aircraft] One zero one five, [uninvolved aircraft C/S].
 - :42 [RV7]: Lakenheath radar, [RV7 C/S] request Basic Service.
 - :51 [Lakenheath]: [incorrect C/S], correction, [RV7 C/S], Lakenheath approach, squawk zero four five four.
 - :56 [RV7]: Squawk zero four five four, [RV7 C/S].

- 1006:00 [Beagle Pup]: Uh, Lakenheath hello, [Beagle Pup C/S] for MATZ penetration.
 - :08 [Lakenheath]: [Beagle Pup C/S] Lakenheath approach, squawk zero four five three.
 - :12 [Beagle Pup]: Zero four five three, [Beagle Pup C/S].
 - :19 [Lakenheath]: [RV7 C/S] you're radar contact uh one five miles east of Lakenheath under Basic Service, Q-N-H one zero one five.
 - :26 [RV7]: Uh Basic Service, Q-N-H one zero one five and request MATZ penetration.
 - :31 [Lakenheath]: [RV7 C/S], MATZ penetration approved. You have traffic at your uh, twelve o'clock, two miles, southwest bound, altitude indicates two thousand six hundred feet.
 - :40 [RV7]: Uh, MATZ penetration approved, uh traffic not sighted, looking, [RV7 C/S].
 - :45 [Lakenheath]: [Beagle Pup C/S], you're radar contact one five miles east of Lakenheath under Basic Service, Q-N-H one zero one five.
 - :51 [Beagle Pup]: Q-N-H one zero one five, Basic Service, [Beagle Pup C/S].
- 1007:01 [Lakenheath]: And uh, [Beagle Pup C/S], traffic at your six o'clock, just behind you, uh, two thousand seven hundred feet, southwest bound.
 - :08 [Beagle Pup]: [Beagle Pup C/S], roger, we're climbing to, uh three thousand one hundred.
 - :12 [Lakenheath]: Roger. And [RV7 C/S] that traffic is climbing to three thousand one hundred feet.
 - :17 [RV7]: Uh copy, [RV7 C/S].
 - :21 [Lakenheath]: Attention all aircraft, Honington A T Z is active today with gliders.
 - :33 [Lakenheath]: And [uninvolved aircraft C/S], be advised, STANTA active surface to two thousand five hundred feet.
 - :39 [uninvolved aircraft] Roger, [uninvolved aircraft C/S].
 - :56 [uninvolved aircraft] Lakenheath **, is my MATZ penetration approved? [uninvolved aircraft C/S].
- 1008:13 [Lakenheath]: And [C/S fragment] uh, verify it was [Beagle Pup C/S]?
 - :27 [Beagle Pup]: And uh, Lakenheath, [Beagle Pup C/S].
 - :31 [Lakenheath]: [Beagle Pup C/S] if you need uh MATZ penetration that's approved.
 - :34 [Beagle Pup]: Yep, we do. Uh is that, that traffic was overtaking us, is he past us now? I think he came guite close to us, I believe.
 - :41 [Lakenheath]: [Beagle Pup C/S], uh Roger, they are now about two, three miles to your west, tracking southwest bound.

Analysis and Investigation

UKAB Secretariat

The Beagle Pup and RV7 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard². If the incident geometry is considered as overtaking then the Beagle Pup pilot had right of way and the RV7 pilot was required to keep out of the way of the other aircraft by altering course to the right³.

Summary

An Airprox was reported when a Beagle Pup and an RV7 flew into proximity 1NM north of Bridgham at 1008Z on Saturday 31st May 2025. Both pilots were operating under VFR in VMC, both in receipt of a Basic Service from Lakenheath.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data and a report from the air traffic controller involved. 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 degree of information available with which each pilot could have built their situational awareness of the other pilot's intentions. They had departed from the same airfield, had both been in receipt of a Basic Service from the Lakenheath controller and had each received Traffic Information on the other. Members wondered whether the RV7 pilot had heard the Beagle Pup pilot state that they would climb to 3100ft but, in any case, they had acknowledged the Lakenheath controller informing them of the Beagle Pup pilot's intentions. Given that, the Board considered that the RV7 pilot's climb to a reported altitude of 2825ft and measured altitude of 2940ft may not have afforded a sufficient degree of separation whilst overtaking in close lateral proximity (CF4). As the overtaking aircraft, it had been for the RV7 pilot to pass 'well clear' which, without specific parameters, had been a question of individual perception, although Board members agreed that, in their opinion, the RV7 pilot had passed too close to the Beagle Pup (CF2). The Beagle Pup pilot had been concerned by the proximity of the RV7 (CF6), a concern no doubt heightened by the fact that they had not seen the RV7 (CF7) but had been told by their passenger that 'there was an aircraft directly below and very close' and their belief that the RV7 pilot had not seen them. This had, in fact, not been the case although, from the geometry of the crossing aircraft tracks and the RV7 pilot's first sighting of the Beagle Pup on their left, it had been apparent that they had not seen the Beagle Pup until at most 24sec before CPA. However, members felt that this had been sufficient time in which to alter course to the right in order to pass 'well clear' of the Beagle Pup rather than into the proximity seen on radar (CF3).

Both pilots had been in receipt of a Basic Service from Lakenheath and the Board commended the Lakenheath controller for having provided Traffic Information to the pilots when, in accordance with the provisions of a Basic Service, they had perceived a risk of collision, reinforced by their STCA activation (**CF1**). Members also noted that the RV7 had not been fitted with a TAS (**CF5**) and that installation of an EC device may have both assisted the RV7 pilot in obtaining earlier visual sighting of the Beagle Pup, and thence more time in which to make an alternative plan of action, and afforded the Beagle Pup pilot more situational awareness on the RV7.

Turning to risk, members agreed unanimously that, although the RV7 pilot had overtaken in closer proximity than desirable, they had been visual with the Beagle Pup in sufficient time that any risk of collision had been averted, Risk C.

² (UK) SERA.3205 Proximity.

³ (UK) SERA.3210 Right-of-way (c)(3) Overtaking.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025103						
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification			
	Ground Elements						
	• Electronic Warning System Operation and Compliance						
1	Technical	STCA Warning	An event involving the triggering of a Short Term Conflict Alert (STCA) Warning				
	Flight Elements						
	• Tactical Planning and Execution						
2	Human Factors	Action Performed Incorrectly	Events involving flight crew performing the selected action incorrectly	Incorrect or ineffective execution			
3	Human Factors	No Decision/Plan	Events involving flight crew not making any decision at all				
	Situational Awareness of the Conflicting Aircraft and Action						
4	Human Factors	• Lack of Action	Events involving flight crew not taking any action at all when they should have done so	Pilot flew close enough to cause concern despite Situational Awareness			
	Electronic Warning System Operation and Compliance						
5	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						
6	Human Factors	• Incorrect Action Selection	Events involving flight crew performing or choosing the wrong course of action	Pilot flew close enough to cause concern			
7	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 Assessment⁴

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 RV7 pilot overtook the Beagle Pup in closer proximity than was desirable.

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the RV7 pilot flew close enough to the Beagle Pup to cause its pilot concern despite having situational awareness from the Traffic Information passed by the Lakenheath controller.

Electronic Warning System Operation and Compliance were assessed as **ineffective** because the Beagle Pup TAS was incompatible with the RV7 and could not detect it.

See and Avoid were assessed as **partially effective** because the Beagle Pup passenger reported sighting the RV7 at about CPA, effectively a non-sighting, and the RV7 pilot flew close enough to cause the Beagle Pup pilot concern.

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⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.

