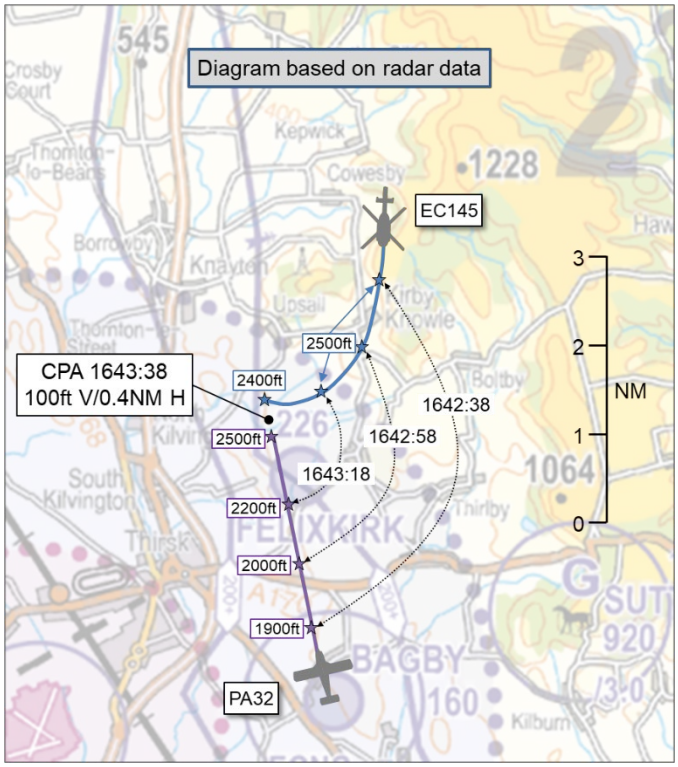
AIRPROX REPORT No 2025073

Date: 02 May 2025 Time: 1644Z Position: 5416N 00118W Location: 0.5NM NNW of Felixkirk

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	EC145	PA32
Operator	HEMS	Civ FW
Airspace	Leeming CMATZ	Leeming CMATZ
Class	G	G
Rules	VFR	VFR
Service	Listening Out	Establishing contact
Provider	Bagby Radio	Teesside App
Altitude/FL	2400ft	2500ft
Transponder	A, C, S	A, C, S
Reported		
Colours	Yellow	White and blue
Lighting	Nav, anti-colls, ldg	Strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	2500ft	NK
Altimeter	QNH	QNH
Heading	190°	350°
Speed	120kt	120kt
ACAS/TAS	TAS	TAS & PilotAware
Alert	Alert	Alert
Separation at CPA		
Reported	50ft V/0.5NM H	100ft V/1NM H
Recorded	100ft V/0.4NM H	



THE EC145 PILOT reports they had departed [a helipad] at 1634 on completion of a HEMS tasking. This was the last task for the early shift prior to handing over to the late shift at [base]. The usual handover time for this shift change was 1500 (1600L), and the pilot had cited fatigue as a contributory factor in this Airprox event.

Initial contact was with Teesside Radar who provided radar control until exiting the Teesside control zone, a Basic Service was provided thereafter. On leaving the Teesside zone, they climbed to 2500ft on the reported QNH from Teesside Radar and took up a direct track to [base]. This track passed between Sutton Bank (which was reported as active) and Leeming. The track passed through the overhead of Bagby airfield and through the Topcliffe MATZ. Approximately at the point of passing Cod Beck Reservoir they requested to change frequency en-route, the intention being to speak directly to Sutton Bank and Topcliffe to deconflict with traffic at both airfields.

The pilot reported that, on leaving Teesside frequency, they called Leeming with no response. They then tuned the Sutton Bank frequency on Box 1, as Teesside had advised them that Sutton Bank was active. They tuned Topcliffe frequency on Box 2 and were aware of company traffic departing there to the east.

Shortly after this change of frequency, a TAS contact was noted overhead Bagby; at this point it was reported as being 1200ft below them. The contact was monitored by the flight crew as it continued to climb and a call to look out for traffic was made to the rear crew. At approximately 1640, an initial avoiding turn was made to the right of track (westerly) in an attempt to avoid the traffic of concern but also to avoid potential traffic at Sutton Bank. At this point, a broadcast was made on the Bagby frequency stating *"*[C/S and type]*, helicopter, north of Felixkirk at 2500ft",* but there was no response. At 1643 the contact was visually identified at the same level and on an intersecting track with a relative bearing of approximately 330°. The Automatic Flight Control System (AFCS) upper modes were

disengaged and a sharp turn to the right was initiated and the collective lowered. This had resulted in a turn onto approximately 270° and a descent to 2000ft. The other aircraft was seen to raise its left wing before passing behind them.

When clear of conflict they resumed course to [base] and changed frequency to Leeds Radar. It was worth noting that, due to a recent greenfly spawn, the canopy was contaminated with numerous insects. After each tasking during the preceding 4 days, the aircraft canopy had needed cleaning.

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

THE PA32 PILOT reports that they were climbing out of Bagby heading north. They called Teesside for a Traffic Service and zone transit. They passed their message and were given a squawk. Teesside immediately warned them of the traffic, and their TAS in the aircraft plus their [portable electronic conspicuity equipment] also alerted them, almost at the same time. They saw the traffic and assessed it was slightly below and descending. They were climbing, therefore they continued the climb and were happy no other action was required to avoid. They did not believe the helicopter was on a service with Teesside as they did not hear them. At that time on a Friday, they assumed Leeming was closed so potentially the helicopter was not on a service with anyone.

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

THE TEESSIDE CONTROLLER reports that they received no notification of an Airprox until after the event. They provided the following timeline,

At 1633 [the EC145 pilot] requested a crossing clearance from [departure helipad] to [base].

They believe at the time that they were using Claxby SSR which gives poor coverage to low level tracks in their area.

At 1635 [the EC145 pilot] was told that they were leaving controlled airspace (CAS) and would be provided with a Basic Service.

At 1638 they advised [the EC145 pilot] of Sutton Bank and Dishforth being active.

At 1641 [the EC145 pilot] advised that they were north of the Topcliffe MATZ and that they wished to [change to en-route frequency] to call both Topcliffe and Sutton Bank as they transited the area. Nothing was observed to affect the [EC145 pilot] as they left the frequency.

At 1643 [the PA32 pilot] called for a Traffic Service and was asked to pass their message. The message was only partially passed and the pilot had stuttered.

At 1643:15 they could see a contact, believed to be [the PA32], was in close proximity to [the EC145] (that had previously gone en-route). They interrupted the passing of details and [at 1643:19] advised [the PA32 pilot] that traffic, believed to be them, had traffic, [the EC145], in front at 1/2 mile and similar level. [The PA32 pilot] immediately responded saying they were visual. The EC145 had already taken up a westerly heading at this point.

At 1644 [the PA32 pilot] finished passing their details and was then identified and given crossing clearance by Teesside Radar.

Factual Background

The weather at RAF Leeming was recorded as follows:

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METAR EGXE 021650Z AUTO 19006KT 9999 BKN050/// 18/06 Q1016
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Analysis and Investigation

Teesside ATC Investigation

The report included the Teesside controller's initial report and timeline, and the investigation findings were as follows:

[The EC145 pilot] had left [their departure point] and was returning to base.The pilot elected to continue en-route whilst approximately 12NM south of Teesside and approximately 9NM north of Bagby, where a contact had just got airborne by the end of the transmission with what initially looked to be a south easterly track (Figure 1).

Figure 1 – Time1641:17 EC145 changed frequency from Teesside.

[The PA32], believed to be the primary [sic] contact out of Bagby, then turned north and [the pilot] called [Teesside Approach] with details of their flight. Traffic Information was passed to the pilot as "believed to be" as it was prior to identification, whereupon the pilot reported visual and continued northbound (Figure 2).

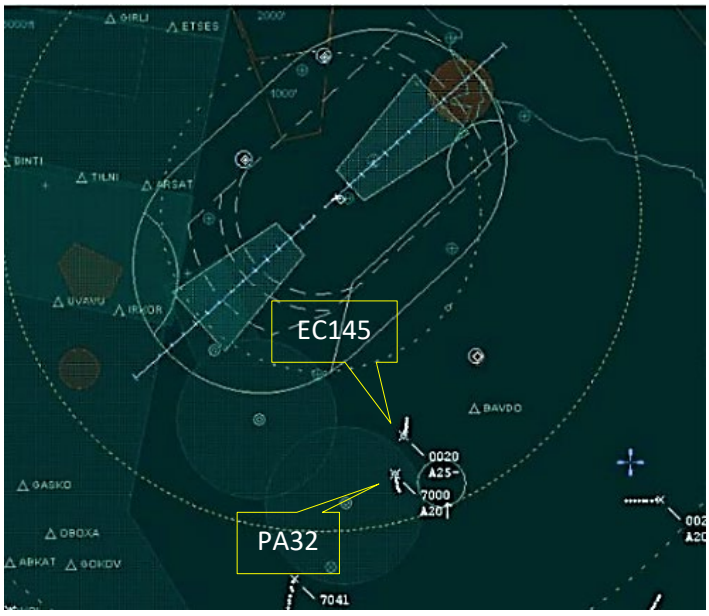


Figure 2 – Time 1642:56 PA32 pilot requested Traffic Service and transit.

The root cause was noted as 2 VFR aircraft in Class G airspace. The investigation details were stored, and information forwarded with the transcript to the UK Airprox Board. The investigation was closed with Teesside.

CAA ATSI

Appropriate Traffic Information was passed by the Teesside controller enabling the pilot of the PA32 to visually acquire the EC145.

UKAB Secretariat

An analysis of the NATS radar replay was undertaken and both aircraft were positively identified using Mode S data. The EC145 track was coincident with the GPS navigation data provided by the EC145 pilot.

CPA was assessed to have occurred at 1643:38 with 100ft vertical and 0.4NM lateral separation (Figure 3).

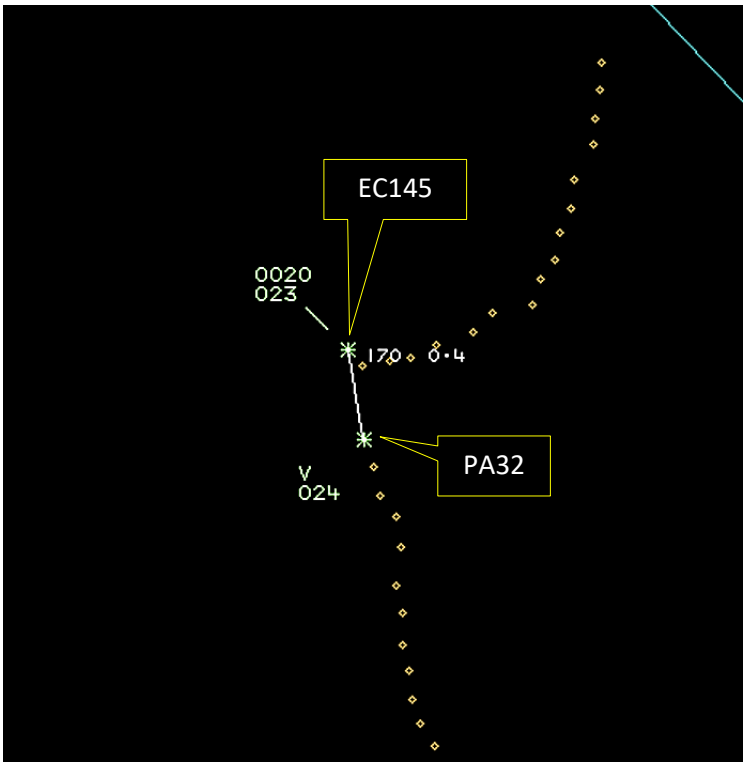


Figure 3 - Time 1643:38

The EC145 and PA32 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] If the incident geometry is considered as converging then the PA32 pilot was required to give way to the EC145.[2]

Summary

An Airprox was reported when an EC145 and a PA32 flew into proximity 0.5NM north-northwest of Felixkirk at 1644Z on Friday 2nd May 2025. The EC145 pilot was operating under VFR in VMC and listening out on the Bagby Radio frequency, and the PA32 pilot was operating under VFR in VMC and was in the process of establishing a Traffic Service from Teesside.

[1] (UK) SERA.3205 Proximity.
[2] (UK) SERA.3210 Right-of-way (c)(2) Converging.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data from the EC145, 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 first considered the actions of the EC145 pilot and noted that the pilot had left the Teesside Radar frequency to contact their en-route frequency, the first of which had been Leeming. Given the time of the flight, on a Friday afternoon, and knowing that Leeming would likely have been closed, the Board felt that the pilot may have been better served to have remained with Teesside Radar, ideally maintaining a Traffic Service. Members discussed that, had the pilot remained with Teesside Radar, the pilot could have called Leeming on their second radio to determine whether a FIS would have been available at that time, prior to having committed to changing frequency. The Board noted that, apart from Leeming, subsequent frequency selections could not have provided Traffic Information to the EC145 pilot and members agreed, therefore, that the pilot's radio frequency selections had contributed to the Airprox (**CF1**). The Board agreed that this had been most unfortunate given that the pilot had taken into consideration other frequency options for the complexities of the airspace that they had been operating in, and that the difference between the pilot's actions on this occasion and any other was merely a matter of timing. Members agreed, nonetheless, that despite the issues of non-responsive frequencies experienced by the pilot, the pilot's situational awareness had been enhanced by the alert received from their TAS (**CF2**) and that this alert had led to the subsequent sighting of the PA32 departing from Bagby. The Board noted that the EC145 pilot had immediately manoeuvred away from the PA32 by performing a descending turn to the right, and members agreed that the EC145 pilot had been concerned by the proximity of the PA32 (**CF3**).

Moving their attention to the actions of the PA32 pilot, the Board noted that the pilot had selected Teesside Approach for a Traffic Service on their climb-out from Bagby. Members felt that the pilot had been fortunate to have received Traffic Information prior to establishing a service from Teesside and the Board acknowledged that, in addition to the Traffic Information passed on the R/T, the PA32 pilot had received alerts from two separate EC devices almost simultaneously (**CF2**) providing the pilot with situational awareness of the EC145 traffic ahead. The Board noted that, as a result, the PA32 pilot had been able to assimilate the situation and continue their climb to increase separation between themself and the EC145.

Considering the actions of the Teesside controller, the Board was heartened to note that the controller had been quick to react to the PA32 pilot's initial call by providing them with Traffic Information on the EC145 before the specific FIS had been established.

Finalising their discussion, the Board agreed that the EC145 pilot had been justified in their concerns and reporting of an Airprox event with a nearby departing PA32 and that, although the two aircraft had been operating on different frequencies at the time, both pilots had been alerted to the other aircraft's presence by virtue of the electronic conspicuity equipment fitted in each of those aircraft. Members agreed that, as a result, normal procedures, safety standards and parameters had pertained. As such, the Board assigned Risk Category E to this event and the following Contributory Factors were assigned:

CF1. The EC145 pilot had not communicated with the appropriate FIS provider at the time of the Airprox.

CF2. Both the EC145 and PA32 aircraft received a TAS alert.

CF3. The EC145 pilot had been concerned by the proximity of the PA32.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2025073			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Flight Elements			
	• Tactical Planning and Execution			
1	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
	• 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	• 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

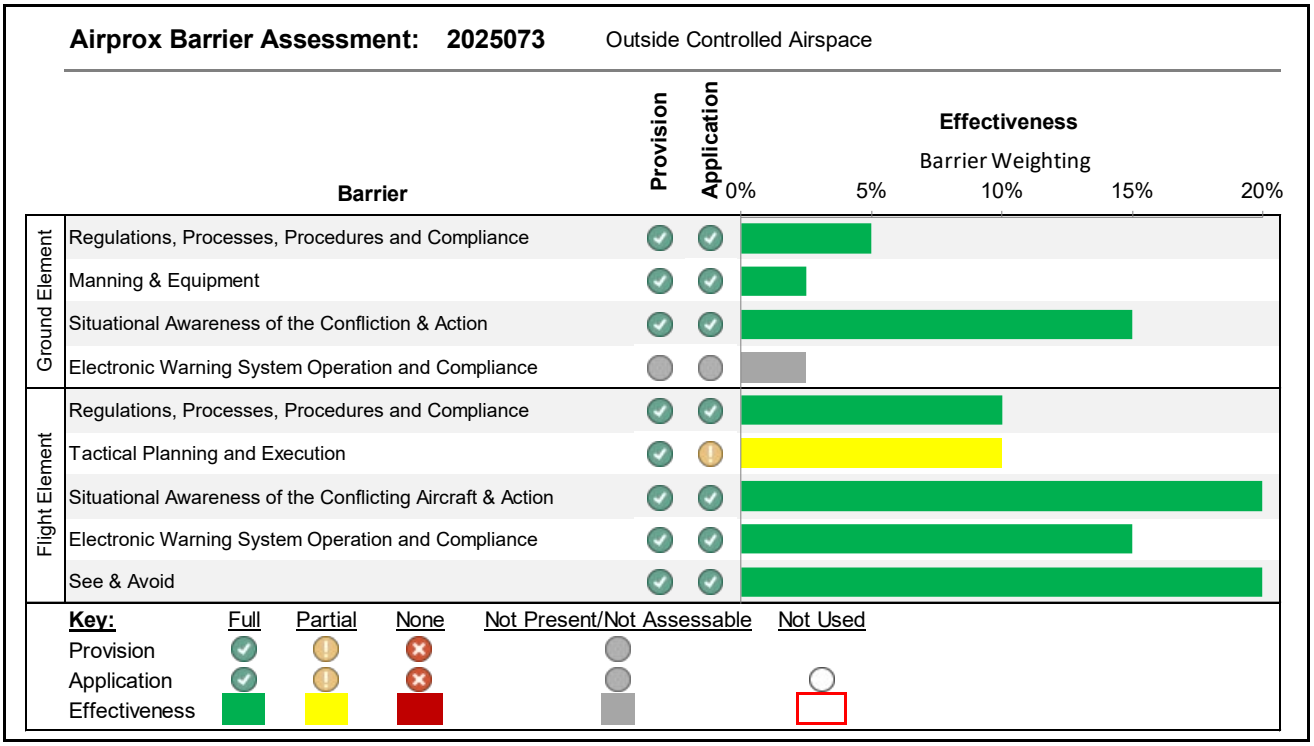
Degree of Risk: E.

Safety Barrier Assessment[3]

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 EC145 pilot was not in receipt of a FIS at the time of the Airprox.



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