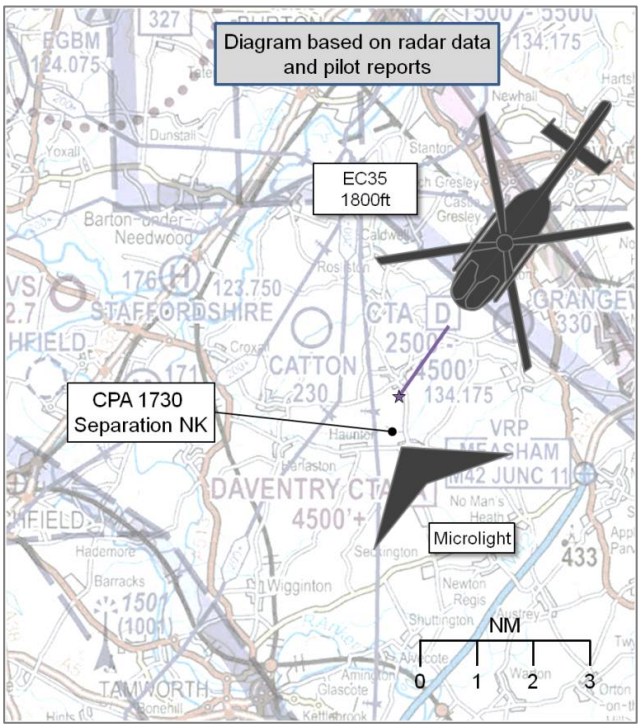
AIRPROX REPORT No 2014046

Date/Time:	15 Apr 2014 1730Z	
Position:	5241N 00137W (5nm W MEASHAM VRP)	
Airspace:	Lon FIR	(*Class*: G)
	Aircraft 1	*Aircraft 2*
Type:	EC135	Untraced Microlight
Operator:	HEMS	Unknown
Alt/FL:	1800ft QNH (1030hPa)	NK
Conditions:	VMC	NK
Visibility:	>10K	NK
Reported Separation:	0ft V/<0.5nm H	NK
Recorded Separation:	NK	



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE EC135 PILOT reports flying a red and yellow aircraft with all lights illuminated and transponder Modes 3A, C and S selected; the aircraft was not fitted with TCAS. He was on a Category A flight and had lifted with a critical patient from a HEMS Site in Swadlincote. The pilot requested a Basic Service from Birmingham ATC and negotiated a CTR crossing in order to enable him to reach a hospital in Birmingham. ATC gave Traffic Information on traffic to the right of the aircraft at a similar height; the pilot reports continuing his scan but paying particular attention to the right to try to see the reported traffic. He then spotted a microlight with a high red wing passing down his left-hand side at close range. The microlight's track was almost exactly perpendicular to the EC135, it passed within 0.5nm at the same height and there was no time for avoiding action. Because he was still negotiating the CTR crossing, and with a high workload consulting the hospital site landing guide, he didn't think to report the incident to ATC at the time.

He assessed the risk of collision as 'High'.

THE MICROLIGHT PILOT: Unfortunately the Airprox does not show on the NATS radar recordings and it has not been possible to trace the Microlight pilot.

Factual Background

The weather at East Midlands was reported as:

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METAR EGNX 151720Z 14009KT 9999 FEW035 13/03 Q1029=
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Analysis and Investigation

CAA ATSI

The EC135 was operating VFR on a flight to Queen Elizabeth Hospital in Birmingham, was displaying SSR code 0020, and was in communication with Birmingham Radar. ATSI had access to the report from the pilot of the EC135, recorded area surveillance, local Birmingham surveillance and transcription of the Birmingham Radar frequency. Screenshots in this report are obtained from the local surveillance recordings. The EC135 did not report the Airprox on the

Birmingham Radar frequency and the controller was not aware of an incident at the time. Consequently a report was not filed by the Birmingham Radar controller.

At 1727:45 the EC135 contacted the Birmingham Radar controller requesting a Basic Service and a direct track to the Queen Elizabeth hospital. The Birmingham Radar controller gave a clearance to the EC35 to transit Birmingham Controlled airspace not above altitude 2000ft VFR, and instructed the EC135 to remain east of the final approach track for RW15.

At 1729:43 the Birmingham Radar controller informed the pilot of the EC135 that there was traffic "*in your vicinity just to your right one o'clock range of half a mile same level as yourself northwestbound*" (Figure 1). The pilot replied that he was looking and then reported visual with the traffic. The radar recording also showed a faint primary return (circled) approximately 2.5nm south of the EC135.

Figure 1.

The EC135 tracked towards the unknown primary return and, at 1730:31, was 1nm north (Figure 2) before the two tracks converged (Figure 3).

Figure 2

Figure 3

The EC135 pilot's written report stated that while observing the position and track of the reported traffic a microlight was then spotted at close range passing down the left hand side of the EC135. The pilot of the EC135 estimated that the microlight and the EC135 were within half a nautical mile of each other at a similar height.

A Basic Service was requested by the EC135 and, although a Basic Service was not actually agreed by the Birmingham Radar controller, the written report from the EC135 indicated that he believed he was in receipt of a Basic Service. CAP774, Chapter 2, paragraph 5, the UK Flight Information Services states:

> 'Pilots should not expect any form of traffic information from a controller/FISO, as there is no such obligation placed on the controller/FISO under a Basic Service outside an Aerodrome Traffic Zone (ATZ), and the pilot remains responsible for collision avoidance at all times. However, on initial contact the controller/FISO may provide traffic information in general terms to assist with the pilot's

situational awareness. This will not normally be updated by the controller/FISO unless the situation has changed markedly, or the pilot requests an update. A controller with access to surveillance-derived information shall avoid the routine provision of traffic information on specific aircraft, and a pilot who considers that he requires such a regular flow of specific traffic information shall request a Traffic Service. However, if a controller/FISO considers that a definite risk of collision exists, a warning may be issued to the pilot.'

The Birmingham Radar controller passed traffic information on an aircraft with Mode C that indicated it was at the same level as the EC135. The microlight was not displaying any SSR information and the controller could not determine if a definite risk of collision existed. Traffic information was not passed. The pilot of the EC135 was in receipt of a Basic Service and was responsible for his own collision avoidance.

UKAB Secretariat

Both pilots shared an equal responsibility for collision avoidance and for not flying into such proximity as to create a danger of collision[1]. The geometry was a 'converging' situation and so, assuming it was under powered flight, the microlight pilot was required to give way[2].

Summary

An Airprox was reported between an EC135 and a microlight on 15th April 2014 at 1730z. The EC135 was on a heli-med task and receiving a Basic Service from Birmingham ATC, unfortunately it has not been possible to trace the microlight pilot.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilot, transcripts of the relevant RT frequencies and radar photographs/video recordings.

The Board first discussed the actions of the EC135 pilot. He was justifiably task-focused with a high cockpit workload as he negotiated his crossing of the Birmingham CTR and subsequent arrival at the Queen Elizabeth Hospital. It was understandable that his attention had been drawn to the traffic called by the Birmingham Controller to his right, and the Board recognised that, even had he requested a Traffic Service, there would have been no guarantee that the controller would have seen the microlight on radar anyway.

In discussing the microlight, the Board were unable to decide whether its pilot had seen the EC135 or not. Considering that the microlight pilot had not made his own autonomous report, in the end the Board agreed that it could be assumed that the microlight pilot had not seen the EC135.

Finally, the Board discussed the actions of the Birmingham controller and it was agreed that it was unfortunate that there was no report from which to analyse what he had experienced. The RT transcripts indicated that a Basic Service was not agreed on the radio; however, clearly the controller was discharging his duties as such, and had given Traffic Information on traffic thought to constitute a definite risk of collision. The Board noted the advantages of pilots declaring Airprox on the RTF they were using such that all involved would be prompted to record details and save relevant material.

In the end, the Board agreed that the cause was a late sighting by the EC135 pilot and an assumed non-sighting by the microlight pilot. The risk was assessed as B, safety margins were much reduced below the normal.

[1] Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).
[2] ibid., Rule 9 (Converging).

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A late sighting by the EC135 pilot and an assumed non-sighting by the Microlight pilot.

Degree of Risk: B.

ERC Score[3]: 100.

[3] Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.