

## AIRPROX REPORT No 2015146

Date: 4 Sep 2015 Time: 1627Z Position: 5331N 00222W Location: Swinton VRP

### PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	EC135	PA28
Operator	HEMS	Civ Trg
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Information
Provider	Manchester Radar / Barton	Barton
Altitude/FL	1500ft	↓1600ft
Transponder	A, C, S	A, C
Reported		
Colours	Yellow	White / Yellow
Lighting	White Strobes, Position Lights, Landing lights	Strobes
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	1500ft	1000ft
Altimeter	QNH (1018hPa)	QFE (1016hPa)
Heading	124°	090°
Speed	125kt	95kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	30ft V/10m H	NK
Recorded	100ft V/<0.1nm H	



Diagram based on radar data and pilot reports

**THE EC135 PILOT** reports he was routing to a site between Romily and Marple within the Manchester CTR; he had received clearance to enter CAS. After Reebok VRP, he requested local traffic from Barton Information; they passed 2 aircraft in the circuit, one of which was downwind. He was looking for the downwind traffic in the northerly circuit as he was passing 3nm north of Barton. The Air Ambulance radio was particularly busy, so the pilot informed the crew that he was deselecting it and directed the crewman to assist by also monitoring Manchester's frequency. He had just visually acquired the Barton downwind traffic when the crewman, in the co-pilots [left-hand] seat, called traffic slightly high in the 11 o'clock very close and descending. The pilot spotted the traffic, quickly turned left and climbed.

**THE PA28 PILOT** reports he was at the Swinton Interchange VRP inbound to Barton for a visual recovery, he was in communication with the AFISO at Barton. He did not see the other aircraft.

### **Factual Background**

The weather at Manchester was recorded as follows:

METAR EGCC 041620Z 28011KT 9999 FEW028 14/08 Q1018 NOSIG

## Analysis and Investigation

### CAA ATSI

At 1624:10, the EC135 was on a south-easterly track 12nm north-west of Manchester Airport en-route to a HEMS site whilst receiving a Basic Service from Manchester Radar. The pilot advised Manchester that he would contact Barton Information on his second radio as he was aware the circuit at Manchester Barton was active to the north of their airfield, and their track was taking them towards that area.

At 1625:45 the EC135 contacted Barton Information, 5.3nm north-west of Manchester Barton airfield (Figure 1).



Figure 1: 1625:45

At 1626:35 traffic information was passed by the Aerodrome Flight Information Service Officer (AFISO)<sup>1</sup> at Barton to the EC135 on both the circuit traffic at Barton, and on another aircraft, (the PA28) joining from Bury. At this time the aircraft were tracking towards each other, 1.7nm and 300ft apart. No specific information on type, position or level of the PA28, was passed to the EC135 pilot by the AFISO (Figure 2).



Figure 2: 1626:35

<sup>1</sup> An AFISO provides an AFIS (Aerodrome Flight Information Service) to traffic operating within and in the vicinity of the Aerodrome Traffic Zone (ATZ). Additionally an AFISO may provide a Basic Service to other aircraft upon request (CAP797 Section 2, Chapter 8, Para 8.2).

CPA took place at 1627:08, with the PA28 passing 0.1nm ahead of the EC135, and 100ft above (Figure 3).

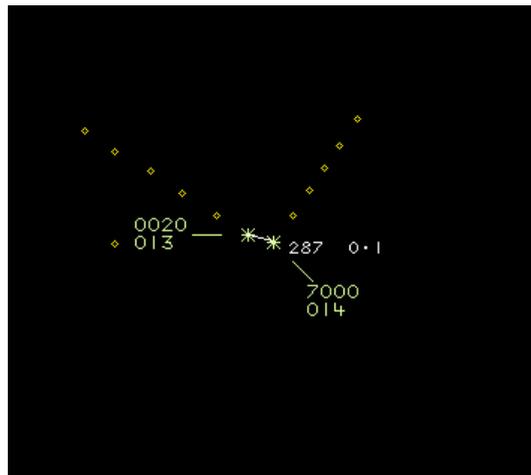


Figure 3: 1627:08

Although receiving a Basic Service from Manchester Radar, the pilot of the EC135 had “directed HEMS1 (in the co-pilot’s seat) to assist in monitoring Manchester ATC frequency” whilst they communicated with Barton Information.

No service was requested from Barton Information by the pilot of the EC135.

Flight Information Service Officers (FISOs) may issue advice and shall issue information to aircraft in their area of responsibility, useful for the safe and efficient conduct of flights. FISOs are not permitted to issue instructions; Pilots therefore are wholly responsible for collision avoidance in conformity with the Rules of the Air (CAP797 Section 1, Chapter 1, Para 1.1-1.2).

### UKAB Secretariat

The EC135 and PA28 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard<sup>2</sup>. The incident geometry was converging and the PA28 pilot was required to give way to the EC135<sup>3</sup>.

### Summary

An Airprox was reported when an EC135 and a PA28 flew into proximity at 1627 on Friday 4<sup>th</sup> September 2015. Both pilots were operating under VFR in VMC, the EC135 pilot in receipt of a Basic Service from Manchester and an Aerodrome Flight Information Service from Barton. The PA28 pilot was in receipt of an Aerodrome Flight Information Service from Barton. The EC135 pilot was transiting just outside the Barton ATZ and Barton informed him of two aircraft in the visual circuit, which he identified, and an aircraft joining from Bury. On passing the Swinton Interchange VRP a member of the EC135 HEMS crew called traffic 11 o’clock high; the EC135 pilot turned left and climbed to avoid the traffic descending towards him. The PA28 was approaching the Swinton Interchange VRP from Bury, descending from 400ft above the EC135. At the point of confliction the aircraft were indicating within 100ft on the radar recording. The PA28 did not see the EC135.

### PART B: SUMMARY OF THE BOARD’S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies and radar photographs/video recordings from Swanwick.

<sup>2</sup> SERA.3205 Proximity.

<sup>3</sup> SERA.3210 Right-of-way (c) (2) Converging.

The Board first discussed the cockpit workload of the EC135 pilot and noted that the pilot was monitoring numerous frequencies, including both Manchester and Barton. They agreed that the decision to instruct the paramedic in the co-pilot's seat to monitor the Manchester frequency, thus reducing the information input, was a sensible precaution. They further agreed that the pilot did all that was possible to ensure communication with all relevant air traffic agencies was established. That being said, they thought that it may have been prudent to have requested a Traffic Service from Manchester, as opposed to a Basic Service, although they acknowledged that ATC workload may have precluded this.

The Board then moved on to the situational awareness of both pilots. Although the EC135 pilot had clearly assimilated the traffic information regarding the 2 aircraft in the Barton circuit, they wondered whether, in the complexity of frequencies being monitored, he had registered that there was another aircraft joining from Bury via the Swinton VRP. Similarly, members noted that the PA28 pilot was already on frequency with Barton when the EC135 pilot had called, and wondered whether he had assimilated the EC135 pilot's initial call, position or route. The Board also noted that the PA28 pilot had not made a position report at the Swinton VRP; had he done so, this may have alerted the EC135 pilot to his position, thus increasing the EC135 pilot's situational awareness and possibly prompting a reciprocal transmission to alert the PA28 pilot of the EC135 transiting through the area. The Board further noted that the EC135 did not have TCAS fitted; they strongly felt that all HEMS aircraft would benefit from having TCAS fitted to assist their pilots in collision avoidance during high-workload operational tasks. GA members also felt that it would be beneficial for aircraft approaching an aerodrome to illuminate their landing lights if possible in order to increase visibility to other airspace users when they themselves may be pre-occupied with the navigational task of finding the airfield that might draw their attention away from lookout.

The Board then discussed the cause of the Airprox and determined that it had been a late sighting by the EC135 pilot and a non-sighting by the PA28 pilot. The Board agreed that the aircraft had been in such proximity that a serious risk of collision had existed, and that luck had played a major part. Therefore, they assessed the risk as Category A.

### **PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: A late sighting by the HEMS pilot and a non-sighting by the PA28 pilot.

Degree of Risk: A.