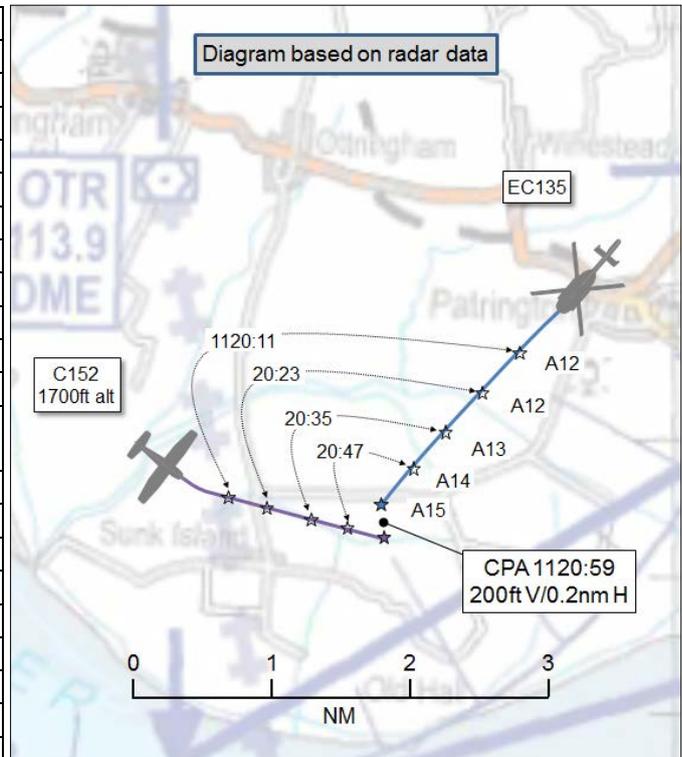


**AIRPROX REPORT No 2017244**

Date: 08 Oct 2017 Time: 1121Z Position: 5339N 00003W Location: 3nm SE Ottringham

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

| Recorded          | Aircraft 1            | Aircraft 2   |
|-------------------|-----------------------|--------------|
| Aircraft          | EC135                 | C152         |
| Operator          | Civ Comm              | Civ Club     |
| Airspace          | London FIR            | London FIR   |
| Class             | G                     | G            |
| Rules             | VFR                   | VFR          |
| Service           | Basic                 | Basic        |
| Provider          | Humberside            | Humberside   |
| Altitude/FL       | 1500ft                | 1700ft       |
| Transponder       | A, C, S               | A, C, S      |
| <b>Reported</b>   |                       |              |
| Colours           | Red                   | White, blue  |
| Lighting          | Anti-col, nav, strobe | Nav, strobe  |
| Conditions        | VMC                   | VMC          |
| Visibility        | >10km                 | 10km         |
| Altitude/FL       | 1450ft                | 1500ft       |
| Altimeter         | QNH (1019hPa)         | QNH (NK hPa) |
| Heading           | 260°                  | NK           |
| Speed             | 110kt                 | 80kt         |
| ACAS/TAS          | Not fitted            | Not fitted   |
| <b>Separation</b> |                       |              |
| Reported          | 50ft V/<0.5nm H       | Not seen     |
| Recorded          | 200ft V/0.2nm H       |              |



**THE EC135 PILOT** reports being in transit to Humberside airport. He had spoken to Humberside Radar and was cleared to route towards left-base for RW20. The pilot initially routed towards the reporting point LAGER [075°/7.7nm from Humberside] and, just before reaching cruise altitude, saw a Cessna 150 on his right at about 0.5nm, crossing from right to left. The pilot altered course about 20° to the right to cross behind. The EC135 pilot noted that he had had no warning of the other aircraft from the Humberside Radar controller before seeing it, most likely, he thought, because the other pilot had not told ATC what he was doing. After the avoidance manoeuvre, the pilot told Humberside Radar about the Cessna and asked whether the controller had been aware of it. The controller did not reply to that call but contacted him 30 secs later, asking him to change to Humberside Tower.

He assessed the risk of collision as 'Medium'.

**THE C152 PILOT** reports that he had been airborne in the area for about 3hrs, cruising between 1300ft and 2000ft. He heard several R/T transmissions from helicopters but did not see any.

**THE HUMBERSIDE RADAR CONTROLLER** reports that an Airprox was not declared on frequency and that he had no recollection of the event.

**Factual Background**

The weather at Humberside was recorded as follows:

METAR EGNJ 081120Z 28007KT 250V310 9999 FEW025 14/11 Q1019=

## Analysis and Investigation

### CAA ATSI

Humberside Radar had been operating split positions, with Director handling inbounds and outbounds, and Radar handling all other traffic. The EC135 pilot had departed Humberside earlier, routing to the northeast to an offshore windfarm. On departure, he had been provided with a Traffic Service by Humberside Director. At 1102:40 the pilot reported that he was about to cross the coastline and requested a descent, which was approved by the controller. It is not known if the controller lost radar contact with the EC135 at any time following the aircraft's descent, but the Traffic Service was not formally terminated.

The EC135 pilot did not call again until 1115:38, Figure 1, when he advised Director that he 'was complete', was routing back to Humberside, and requested a climb to 1500ft.

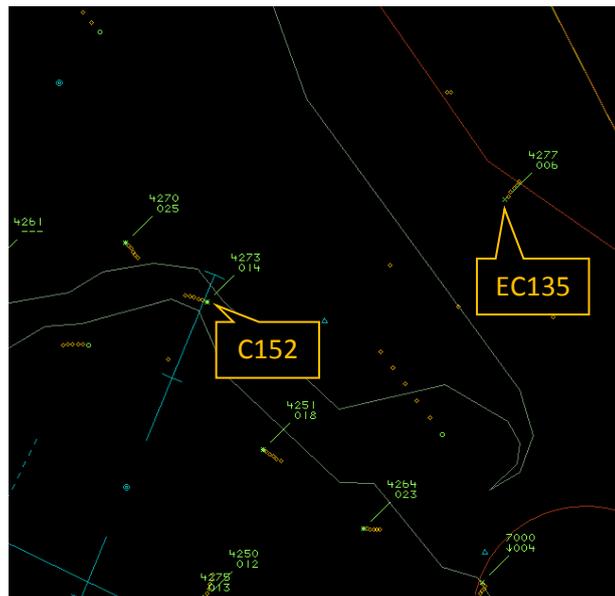


Figure 1 – 1115:38. Note levels indicated are FL (system QNH 1020)

The controller approved the climb and advised that it would be a left-base join for RW20. The controller did not advise or remind the pilot as to what FIS he was providing, but the written reports from both controller and pilot stated that they both assumed that it was a Basic Service.

The C152 pilot had first called the Humberside Radar controller at 1103:20, advised that he was routing to Scarborough via Ottringham, and requested a Basic Service. The controller passed the regional pressure setting, a Basic Service was agreed, and the pilot reported being at 1800ft in response to a request by the controller. At 1110:48, the Humberside Radar controller requested the C152 pilot set the Humberside QNH and, for coordination against inbound traffic, remain not above 2000ft, to which the pilot agreed. The Humberside Radar controller was also dealing with a number of other pilots in the area, some of whom had requested to transit through the Humberside final approach area, on both easterly and westerly tracks. Others were holding, waiting to rejoin the Humberside circuit, pending the arrival of an inbound Jetstream JS41, operating under IFR and in receipt of a Deconfliction Service and being provided with vectors for an ILS approach to RW20 from the Humberside Director. The Humberside Radar controller had been dealing with other aircraft throughout this period, with nearly continuous R/T between 1117:30 and 1126:00.

CPA between the EC135 and the C152 took place at 1120:57, with the aircraft separated by 0.2nm laterally and 200ft vertically, Figure 2.



Figure 2 – 1120:57

At 1121:30, the EC135 pilot asked Director if he had been aware of the C152, which he said had crossed ahead of him at the same level, but received no reply. Both Humberside controllers were unaware that an Airprox had been reported until 9 days after the event. Neither could recall the incident and so no formal report was filed. A unit investigation was conducted however. The report concluded that as the Director had been focussed on vectoring the JS41 and no Traffic Information was passed to the EC135 pilot on the C152. It also concluded that the Radar controller did not pass Traffic Information to the C152 pilot on the EC135 due to his workload. When the EC135 pilot had asked about the C152, he had not received a reply because the Director was taking a handover of an aircraft from another unit by telephone.

The Humberside Director appeared to be concentrating on the deconfliction and sequencing of the JS41 which may have contributed to his focus continuing to be away from the EC135. With the C152 pilot under a Basic Service, the Radar controller was not required to monitor other aircraft tracks. Humberside does not operate within controlled airspace. As both aircraft were operating in Class G airspace the pilots were responsible for their own collision avoidance.

### UKAB Secretariat

The EC135 and C152 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>1</sup>. If the incident geometry is considered as converging then the EC135 pilot was required to give way to the C152<sup>2</sup>.

### Humberside Occurrence Investigation

The [Radar] controller was providing a Basic Service to [the C152 pilot], routing from the Humber Bridge along the north bank of the river towards Spurn Point and indicating altitude 1800ft. The [Director] controller was working [the EC135 pilot] who was routing back to Humberside from a nearby windfarm and climbing to altitude 1500ft. No type of service had been agreed, but the EC135 pilot believed he was under a Basic Service. Both controllers had a high workload with [Radar] working multiple aircraft, including 4 aircraft being held off, waiting to land at Humberside. [Director] was vectoring a JS41 on a Deconfliction Service that had to be de-conflicted from multiple transiting aircraft. As a result, no Traffic Information was passed by either controller to [the C152 and EC135 pilots]. As [the EC135 pilot] approached LAGER he reported 'We have just flew past a C150 at the same altitude did you see anything?'. The [Director] controller was busy on the landline in the middle of accepting a handover and did not acknowledge the call. The

<sup>1</sup> SERA.3205 Proximity.

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

EC135 pilot was transferred to the Tower frequency at point LAGER as normal and [the C152 pilot] continued on his Navex. Having been notified of the Airprox 8 days after its occurrence, the Humberside Air Traffic Services Manager then invited the [EC135 pilot] to visit the tower to view the tapes and review the incident. The pilot was under the impression that he had declared an Airprox on frequency and confirmed that he thought he was on a Basic Service. No report of a TCAS alert or Airprox was made to Humberside at the time so Humberside ATSU did not file a report.

## **Summary**

An Airprox was reported when an EC135 and a C152 flew into proximity at 1121hrs on Sunday 8<sup>th</sup> October 2017. Both pilots were in receipt of a Basic Service from Humberside, operating under VFR in VMC.

## **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available consisted of reports from both pilots, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authorities.

Members first discussed the service obtained by the EC135 pilot and noted that although he had been in receipt of a Traffic Service for his outbound leg, he had been out of radio contact with Humberside and neither pilot nor controller had re-established a service on the inbound leg of the EC135 pilot's sortie. It was apparent that the EC135 pilot had in effect been in receipt of a Basic Service but this had not been correctly established and so the level of service expected by the EC135 pilot was therefore unclear. A regional airport ATSU member from a different location (that also deals with North Sea helicopters) noted that a Traffic Service was applied by default to such helicopter traffic outbound and inbound to his airfield. Although the EC135 pilot had stated afterwards that he understood that he was under a Basic Service, members wondered whether he had to some degree assumed that he was operating under a Traffic Service and therefore was expecting Traffic Information on the C152.

For his part, the C152 pilot had been operating in the area for some time and some members wondered whether sortie duration may have adversely affected his arousal level (noting that the EC135 passed within 200ft vertically and 0.2nm laterally and the C152 pilot reported that he did not see it). In this respect, members commented that a robust and effective lookout was required at all stages of a sortie, and that the C152 pilot may have been better placed by cruising at an altitude which took him away from busy lower level departures and arrivals. Director UKAB noted that, historically, there were substantially fewer Airprox incidents above 3000ft agl.

In considering the cause, members agreed that it was for the EC135 pilot to give way to the C152, which he did, and that, although he saw it later than was desirable, separation was such that he was able to turn and pass well behind. Some members thought that, even though this turn had been timely and effective, and that there had been no risk of collision as a result, safety had been reduced. However, after further discussion, the Board agreed that, in this case, normal safety standards and procedures had pertained.

## **PART C: ASSESSMENT OF CAUSE, RISK AND SAFETY BARRIERS**

Cause: A conflict in Class G resolved by the EC135 pilot.

Degree of Risk: E.

Safety Barrier Assessment<sup>3</sup>

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

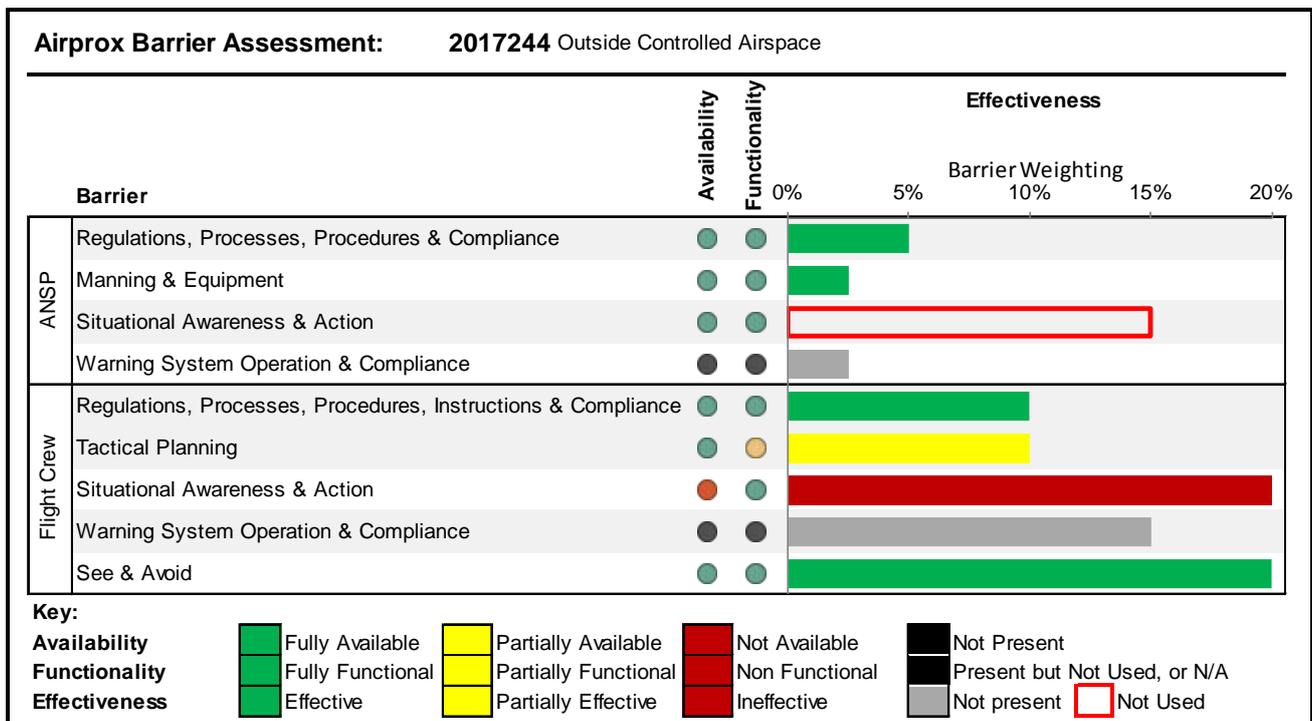
**ANSP:**

**Situational Awareness and Action** were assessed as **not used** because the Humberside controller was not required to monitor the aircrafts' positions under a Basic Service.

**Flight Crew:**

**Tactical Planning** was assessed as **partially effective** because the EC135 pilot appeared not to have a robust plan for his selection of ATS; he appeared to have expected a higher degree of service on recovery, had been in receipt of a Traffic Service on his outbound flight but had not terminated it when going en-route, and had accepted the unrequested provision of a Basic Service for his inbound flight.

**Situational Awareness and Action** were assessed as **ineffective** because neither pilot was aware of the other's position until shortly before CPA, when the EC135 pilot saw the C152.



<sup>3</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).