

AIRPROX REPORT No 2013055

Date/Time: 27 Jun 2013 1124Z

Position: 5053N 00316W
(2nm NW Dunkeswell)

Airspace: Dunkeswell ATZ (Class: G)

Reporting Ac Reported Ac

Type: EC135 R44

Operator: Civ Comm Civ Comm

Alt/FL: 1500ft 1200ft
 QNH (1029hPa) NK

Weather: VMC CLBC VMC NK

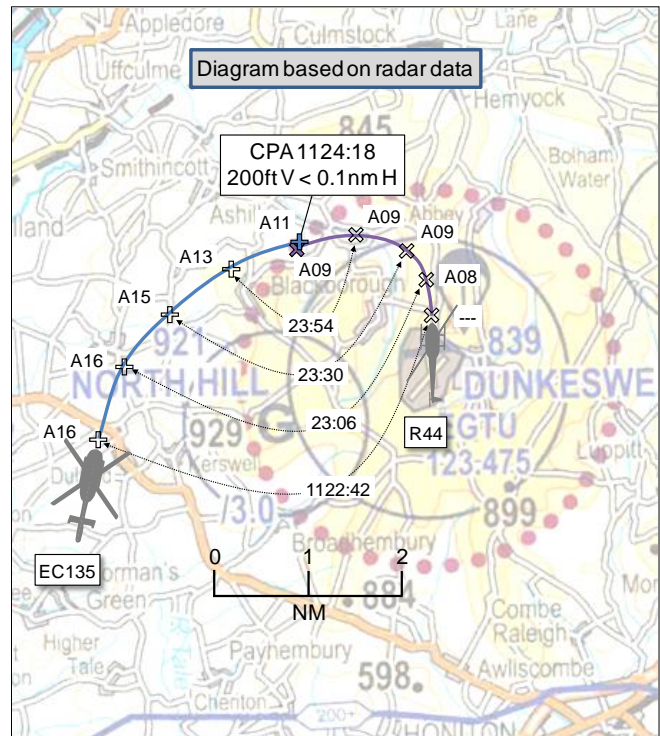
Visibility: >10km 6km

Reported Separation:

150ft V/0.1nm H 200ft V/0.5nm H

Recorded Separation:

200ft V/<0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE EC135 PILOT reports positioning to Dunkeswell for fuel. He was operating under VFR in VMC with an A/G service from Dunkeswell Radio [123.475MHz]. The yellow helicopter had HISLs selected on, as was the SSR transponder with Modes A, C and S. The ac was fitted with a Traffic Avoidance System (TAS). He called Dunkeswell 'for joining' and was cleared in from the N. On entering the ATZ at 1500ft he heard a C/S changing to an Exeter RTF. Routing to position from the N, heading E at 115kt, he saw a dark coloured R44 helicopter through the R chin window, 100-200ft below in level flight, heading W in the opposite direction and which passed before he had time to react. He did not recall observing the other ac on the TAS and reported the Airprox to the Dunkeswell A/G Operator on landing.



He assessed the risk of collision as 'Very High'.

THE R44 PILOT reports departing Dunkeswell. He was operating under VFR in VMC with an A/G service from Dunkeswell Radio. The black helicopter's landing light was selected on, as was the SSR transponder with Modes A and C. An ACAS was not fitted. He departed the A/D on a N'y track and then turned W. Whilst straight and level at 1200ft, heading 260° at 100kt, he saw a yellow helicopter on a reciprocal heading at a range of 2nm which passed down his RH side, about 200ft above and displaced by 0.5nm laterally. He did not observe any lights illuminated on the other ac. He noted that the other helicopter pilot had stated on RT that he was tracking in to the A/D from the N but that the other helicopter was not tracking as he expected, given the radio call, and that he had seen it tracking in from the 'W quadrant' of Dunkeswell A/D. He also noted that this was a 'see and be seen event' in VFR conditions.

He assessed the risk of collision as 'Low'.

Factual Background

The Exeter weather was reported as follows:

METAR EGTE 271120Z 31012KT 280V340 9999 FEW030 19/11 Q1028

The Dunkeswell Local Traffic Regulations¹, paragraph 5 (Helicopter Operations), state:

- (a) Helicopter pilots wishing to land at Dunkeswell should be aware of the designated area on the grass triangle in line with Runway 22 numbers.
- (b) Pilots to call on RTF before starting rotors.
- (c) No rotors are to be turning in the ATZ when parachuting is in progress.

The Dunkeswell Flight Procedures¹, paragraph 1 (Circuits), state (verbatim):

- (a) Circuit directions: Runway 04 - RH; Runway 22 - LH. Circuit height; 800 ft.
- (b) No overhead joins as parachuting is in operation seven days a week between daylight hours.
- (c) Subject to parachuting pilots may request an overhead join only when two way communication is established with the A/G radio station, otherwise the pilot is to join on the downwind or base leg for the runway in use.
- (d) Helicopter Entry/Exit Routes from the north at 500 ft.
 - (i) No straight in approaches, pilots may request subject to circuit traffic.
 - (ii) No orbits in the circuit or on final approach, i.e extend downwind or go around.

UKAB Secretariat Analysis

Both pilots had an equal responsibility for collision avoidance² and were required to alter course to the R if there was a danger of collision³. The R44 pilot reported that he was visual with the EC135 at a range of 2nm, just over 33sec before they passed each other at the reported speeds. His description of the other helicopter being on a reciprocal track, along with examination of the radar recording, indicates visual acquisition probably at a range slightly less than 2nm and hence slightly less than 33sec to CPA. The EC135 pilot reported seeing the R44 through his R chin window but did not have time to react before it passed.

A CAA ATSI interview with the Dunkeswell A/G Operator established that he had no recollection of the Airprox and that the incident was not recorded in his log. The radar recording was clear, using the Burrington radar head with 8sec rotation period; the EC135 displayed Modes A, C and S and the R44 Modes A and C.

Summary

An EC135 and R44 flew into proximity at 1124 on 27 Jun 13, 2nm NW of Dunkeswell A/D on the ATZ boundary. Both pilots were operating under VFR in VMC, the EC135 pilot positioning to land at Dunkeswell and the R44 pilot departing the A/D. The Burrington radar recording established that the separation at CPA was 200ft V and <0.1nm H.

¹ UK AIP AD 2.EGTU-5, dated 13 Dec 2012

² The Rules of the Air Regulations 2007, Rule 8 (Avoiding Aerial Collisions)

³ The Rules of the Air Regulations 2007, Rule 10 (Approaching head-on)

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar video recordings and a report from the appropriate ATC authority.

The Board first considered the pilot's actions. Both pilots were operating under VFR and, it appeared, in view of their understanding of the Dunkeswell Flight Procedures pertaining to 'helicopter entry/exit routes'. It was clear that the R44 pilot had seen the EC135 well before the EC135 pilot saw the R44, and that the R44 pilot was surprised by the EC135 pilot's routing. A helicopter pilot Member opined that it would have been challenging for the EC135 pilot to see the lower, dark coloured, R44 against the background terrain. The pilots gave somewhat differing estimates of the lateral separation at CPA but, given the radar recording and the fact that the EC135 pilot saw the R44 late and through his R chin window, the Board were satisfied that the actual separation was of the order of <0.1nm. In summary, Members opined that the R44 pilot could have chosen to give the EC135 a wider berth given that he had seen it at about 2nm range. Notwithstanding, the Board also opined that both pilots could reasonably be considered to have complied with local procedures but noted that those procedures pertaining to 'helicopter entry/exit routes' were somewhat sparse and called for co-altitude departures and recoveries. Members recognised that there were local noise abatement considerations, and the need to take account of an adjacent G/S at Dunkeswell, but opined that more explicit and deconflicted helicopter flight procedures could enhance safety without compromising operations.

The Board considered that the Airprox was caused by the R44 routing into close proximity with the EC135, but that safety margins had not been much reduced below the normal.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u>	The R44 pilot flew close enough to the EC135 to cause concern.
<u>Degree of Risk:</u>	C.
<u>ERC Score:</u>	4 ⁴ .
<u>Recommendation:</u>	Dunkeswell review their helicopter entry/exit procedures.

⁴ 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.