

AIRPROX REPORT No 2010169

Date/Time: 8 Nov 2010 1512Z

Position: 5231N 00214W (0.7nm
ESE Wolverhampton A/D
- elev 283ft)

Airspace: Wolverhampton ATZ (Class: G)

Reporting Ac Reported Ac

Type: EC135 H369E

Operator: Civ Comm Civ Pte

Alt/FL: 600ft 600ft
QFE (955mb) QNH

Weather: VMC VMC

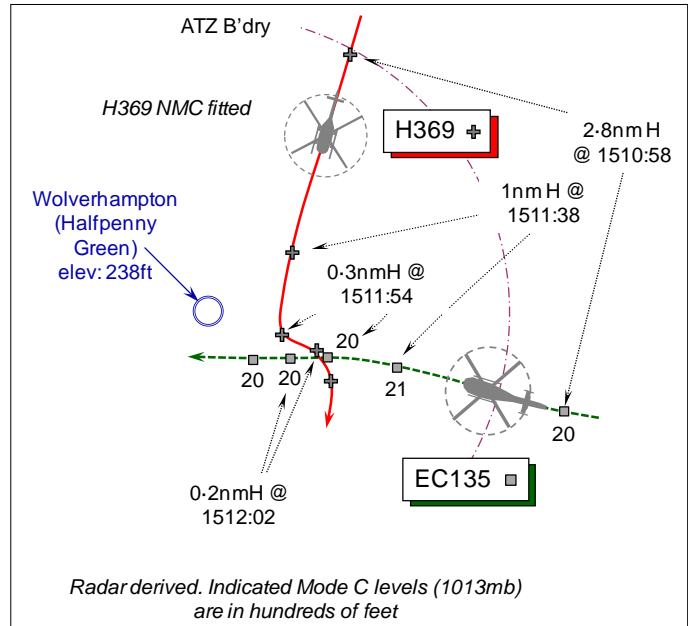
Visibility: 5km 5nm

Reported Separation:

Nil V/500m H 100ft V/1nm H

Recorded Separation:

0.2nm H (~370m)



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE EUROCOPTER EC135 HELICOPTER PILOT reports he was returning to base at Wolverhampton/Halfpenny Green from Cradley Heath (7nm SE of the aerodrome) VFR and in receipt of a BS from Halfpenny Green INFORMATION on 123.00MHz, he thought, but actually an A/G Service at the time of the Airprox. A squawk of A0032 was selected with Mode C; Mode S and TCAS I is fitted.

Advising Halfpenny Green RADIO that he was inbound from Merry Hill the A/G Operator replied with the runway in use – RW10 - and the QFE. Flying in VMC some 100ft below cloud with an in-flight visibility of 5000m, a contact was seen displayed on TCAS 6nm to the N but with no height information, which he informed his crew about. Once established on the RH downwind leg for RW10, at a range of 1.5nm DME, level at 600ft QFE (955mb) heading 270° at 100kt he called 'Downwind', to which the A/G Operator promptly replied 'no reported traffic'. As he read-back the message his LH seat observer pointed across to their 3 o'clock position and said, 'apart from that helicopter!' As he looked to his R he saw a black Hughes 500 type helicopter with a very distinctive 'T' type tail - the Hughes H369 - heading straight towards him which suddenly and abruptly made a turn to the L to pass behind him. He felt the best course of action was to maintain his height, heading and speed and let the H369 pilot take the avoiding action. Minimum horizontal separation was 500m at the same height and he assessed the Risk as 'high'.

After landing back at base, he contacted the FISO to discuss the incident whereupon it emerged the H369 pilot had not been in contact with Halfpenny Green. He then called Birmingham ATC who advised that they had a radar recording of the incident and that the H369 had indeed made a turn to the L before turning back on his original course soon afterwards at an approximate speed of 125kt. Details of the helicopter trace from Birmingham were then passed to Bristol Airport ATC who later advised that they had spoken to the H369 pilot during flight and confirmed the identity of the Hughes helicopter.

UKAB Note (1): The UK AIP at AD2 EGBO AD 2.17 notifies the Wolverhampton ATZ as a circle radius 2nm centred on RW16/34, extending from the surface to 2000ft above the aerodrome elevation of 283ft. The ATZ hours are coincident with the aerodrome Flight Information Service. An A/G Service - Halfpenny Green RADIO - may operate for short periods.

THE MCDONNELL DOUGLAS HUGHES 369E HELICOPTER (H369) PILOT reports that he had departed from a private helicopter landing site near Sutton-in-Ashfield Nottinghamshire, VFR, bound for a private site at Wellington Somerset. After tracking W to avoid the congested airspace around Birmingham whilst in communication with East Midlands ATC, he turned onto a southerly heading towards Gloucester/Bristol. Switching from East Midlands, squawking A7000 - NMC fitted - he called some aerodromes en-route that he thought were in range including Wolverhampton/Halfpenny Green from whom he received no response, but he continued to listen out on their frequency as he was being forced towards their ATZ by weather. Heading 180° at 120kt, flying in a level cruise at an altitude of 600ft QNH, both he and his passenger had seen the EC135 in their 10 o'clock about 2nm away, at approximately the same height before the other pilot called, he thought, 'finals', but because of the poor visibility he could not ascertain its direction of flight instantly. After indicating that it was on 'final' for the active runway, Wolverhampton/Halfpenny Green cleared the other pilot to land and reported no traffic in the area. At this point, he thought 3nm E abeam of Halfpenny Green, the route of the other helicopter became clear and he turned away from the aerodrome so as not to conflict with the traffic. He also made a radio call indicating that he was visual with the helicopter. He passed some distance behind the helicopter and continued en route; minimum separation was estimated at 100ft vertically, 1nm horizontally and the assessed Risk as 'none'.

He had been listening out on the Wolverhampton/Halfpenny Green frequency for about 5min before arriving in the vicinity of the aerodrome but this was the first communication he had heard from the other helicopter, or indeed any ac on the frequency.

ATSI reports that the Airprox occurred at 1512:02, in Class G airspace, 0.7nm ESE of Wolverhampton/Halfpenny Green, between a Eurocopter (EC135) and a Hughes 369E helicopter (H369). At the time of the Airprox Halfpenny Green was providing an A/G Service. The QFE was reported as 955mb.

The EC135, based at Wolverhampton, was returning VFR after the completion of a task at Cradley Hill, which lies to the E. The H369 was operating on a VFR flight from Sutton in Ashfield (Nottinghamshire) to Wellington (Somerset).

The Birmingham 1450Z METAR was:

10008KT 6000 -RA BKN007 BKN010 04/03 Q0965=

ATSI had access to radar recordings provided by NATS Swanwick and RTF recordings provided by Wolverhampton. The timing of the RTF recordings is estimated to have a timing error of approximately +1.5min, compared with the radar recording. A correction has been applied, with the incorrect time in brackets.

The EC135 reported inbound and at 1508:55 [1510:25], A/G passed the EC135 pilot information, "*(EC135)c/s Halfpenny Green RADIO Runway 1-0 QFE 9-5-5 millibars.*" This was acknowledged, "*1-0 9-5-5 and we're er just overhead er Merry Hill this time.*" At 1510:23 the radar recording shows both helicopters tracking toward the aerodrome. The EC135 is shown 3.9nm E of the aerodrome, displaying a squawk of A0032, with Mode C indicating FL20. The H369, is shown 3.3nm NNE of the aerodrome, displaying the conspicuity squawk A7000 without Mode C. At 1510:58 the radar recording shows the H369 entering the ATZ, 2nm NNE of the aerodrome and the EC135 approaching the ATZ from the E, with horizontal separation of 2.8nm. The RTF recording indicates that no RT call was received by A/G, prior to the H369 entering the ATZ. At 1511:54 the radar recording shows both helicopters on a converging course. The EC135 is 0.9nm ESE of the aerodrome and the H369 is shown in the EC135's half past 12 position at a range of 0.3nm, crossing from R to L. At about 1512:03 [1513:33], the EC135 pilot reports, "*Er (EC135)c/s is er downwind for 1-0*" and A/G replied, "*(EC135)c/s roger no other reported traffic.*" The EC135 pilot responded, "*No reported traffic (EC135)c/s*" and shortly afterwards, "*er apart from the er Hughes 5 hundred.*" At 1512:02, the radar recording shows the two helicopters in close proximity at a position 0.7nm ESE of

the aerodrome. The H369 is shown after turning L to pass 0.2nm behind the EC135, which is indicating FL20 (converts to a height of 434ft QFE (955mb) at 1mb equal to 27ft). A call is then received, *“we’re visual with the helicopter”* and this was believed by ATSI, to be from the H369 helicopter pilot. The A/G operator may have believed that this call was from the EC135 pilot. A/G responded to the EC135 pilot’s call, *“my apologies er (EC135)c/s.”*

The H369 pilot’s written report indicated that a call was made to A/G without a response and also that he reported listening out on the frequency 5min prior to arriving in the vicinity of the aerodrome, without hearing any other ac on frequency. The RTF exchange between A/G and the EC135 pilot, occurred 3min prior to the Airprox.

The H369 pilot’s written report also indicated that the EC135 helicopter had been sighted before the EC135 pilot reported on ‘final’. This is considered by CAA ATSI to be the ‘downwind’ call made by the EC135 pilot at 1512:03.

At 1515:30 [1517.00], another helicopter called A/G, requesting information on traffic 5nm S of the aerodrome. A/G responded and indicated that this may have been the H369 that had passed to the E of the aerodrome without calling.

Halfpenny Green RADIO provided an A/G Service and was not aware of the H369 until it passed very close to the aerodrome and was sighted by the EC135 pilot.

UKAB Note (2): The applicable UK AIP entry at ENR 1-4-10 dated 17 Dec 09, extant when the Airprox occurred, states that:

2.7.2.1

‘ ... An ATZ assumes the conditions associated with the Class of Airspace in which it is situated. As a minimum, when flying within an ATZ, the requirements of Rule 45 of the Rules of the Air Regulations 2007 must be complied with.

2.7.2.3

Pilots should be aware that in order to comply with the provisions of Rule 45 they must adopt the following procedures:

a. Before taking off or landing at an aerodrome within an ATZ or transiting through the associated airspace.....obtain information from the flight information service unit or air/ground radio station to enable the flight to be conducted with safety.

b. Radio equipped aircraft must maintain a continuous watch on the appropriate radio frequency and advise the.....flight information unit or air/ground radio station of their position and height on entering the zone and immediately prior to leaving it.

2.7.2.4

Failure to establish two-way radio communications with the.....flight information unit or air/ground radio station during their notified hours of operation must not be taken as an indication that the ATZ is inactive. In that event, except where the aircraft is in a state of emergency or is being operated in accordance with radio failure procedures, pilots should remain clear of the ATZ.’

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

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

Although the H369 pilot reports that he encountered the EC135 some 3nm E of Wolverhampton aerodrome, the radar recording shows that the CPA occurred 0.7nm ESE with both ac well inside the Wolverhampton ATZ. The Board perceived that the H369 pilot had probably not persisted with his calls to Halfpenny Green RADIO to establish two-way RT contact because he believed that his track was further to the E and clear of the ATZ. Importantly, the RT transcript shows that the H369 pilot had not established two-way RT contact with either the Halfpenny Green FISO or the A/G Operator before 1510:58 when the H369 had entered the ATZ. The A/G operator was clearly unaware of the presence of the H369 at this point. The Board accepted that the A/G operator could only relay information to the EC135 pilot about other traffic that he was aware of and, without the RT call from the H369 pilot, the A/G operator would not have been expecting to see any other traffic crossing through the cct area. It was feasible that the Halfpenny Green RT receivers had not picked up the H369 pilot's call at range. Nevertheless, without a reply, pilots must not enter the ATZ and the H369 pilot should not have flown through it before he had obtained information about their traffic from Halfpenny Green RADIO to enable the flight to be conducted with safety.

The EC135's TCAS had reportedly shown traffic to the N, but without a height read-out from the H369 it did not provide the whole picture and the EC135 pilot was thus unaware of the developing conflict before his alert observer saw the H369 helicopter closing on them from their 3 o'clock. Members agreed that the EC135 pilot could do little else when he first spotted the H369 himself, as it turned to pass astern of his helicopter, so maintaining his course was the wisest option. Fortunately, the H369 pilot was aware of another ac in the area whilst listening out on the Halfpenny Green frequency and had seen the EC135 from a range of about 2nm he reports, probably just as he crossed the ATZ boundary. The Board concurred with ATSI's view that the subsequent call "*we're visual with the helicopter*" was from the H369 pilot after he had turned to pass astern, with 0.2nm separation the radar recording shows. Taking all these factors into consideration the Board concluded the Cause of this Airprox was that the Hughes 369 pilot did not comply with Rule 45 of the Rules of the Air and flew into conflict with the EC135. Nevertheless, the H369 pilot had seen the EC135 and had turned to pass clear behind it which, the Board agreed unanimously, had removed any Risk of a collision.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The H369 pilot did not comply with Rule 45 of the Rules of the Air and flew into conflict with the EC135.

Degree of Risk: C.