

AIRPROX REPORT No 2011099

Date/Time: 5 Aug 2011 1510Z

Position: 5322N 00142W (9nm W Sheffield)

Airspace: LFIR (Class: G)

Reporting Ac Reported Ac

Type: A109 C150

Operator: Civ Comm Civ Pte

Alt/FL: 1700ft↓ 700-1000ft
QNH (1010mb) RPS

Weather: VMC CLBC VMC CLNC

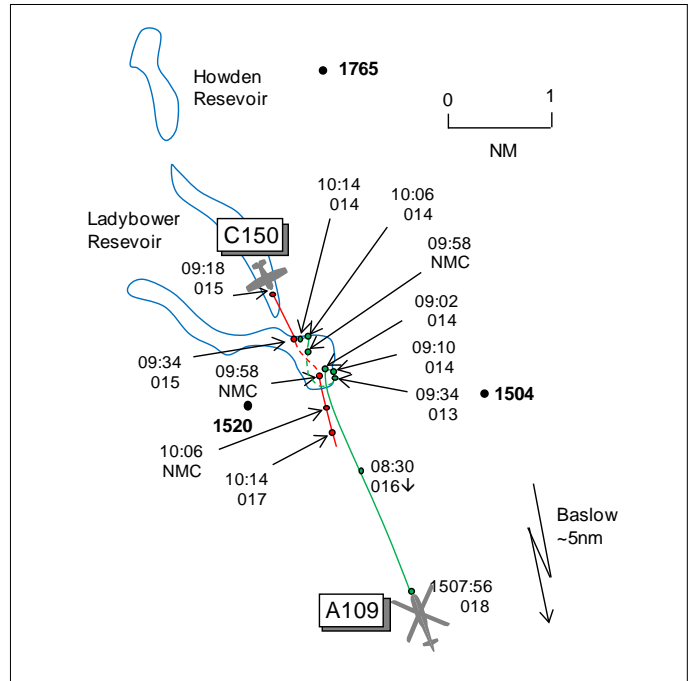
Visibility: 40nm >10km

Reported Separation:

75ft V/100m H NR

Recorded Separation:

NR



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE A109 PILOT reports flying a HEMS mission VFR and in communication with East Midlands on 134.175MHz, squawking 0020 [Medivac] with Modes S and C. The visibility was 40nm flying 1000ft below cloud in VMC and the helicopter was coloured yellow/grey with nav, 2 anti-collision and 2 HISLs all switched on. Heading 360° at 150kt leaving 1700ft QNH 1010mb and while trying to identify the intended landing site, a pop-up TCAS TA appeared on his TAS display. Nothing was visual so after a few seconds he entered a tight RH orbit in an attempt to locate the other ac. The TAS is not highly sophisticated and targets appear in the wrong location on the display, disappear and reappear at random. Three orbits were executed while scanning above, below and level. No crew member saw anything until he spotted an ac, a red coloured M/Light, he thought, in his 1 o'clock. A descending LH turn was executed to put some distance between them and its registration was noted [incorrectly] as it passed 75ft above and 100m clear on his R. Although he had reported leaving the East Midlands frequency to the Ambulance Control moments earlier, he reported the Airprox to East Midlands as soon as he could. He assessed the risk as high.

THE C150 PILOT reports flying a local sortie from Scampton, VFR and listening out with Doncaster/Sheffield on 126.225Mhz, squawking 6160 with Mode C. The visibility was >10km in VMC and the ac was coloured white/maroon with anti-collision light switched on. His route incorporated a 13nm part at low-level from Howden Reservoir to Baslow following the Upper Derwent Valley before climbing out for recovery to Scampton (copy of route/map supplied). Earlier he had transited the Doncaster/Sheffield Class D airspace and continued on a BS until the descent point at Howden Reservoir. He advised Doncaster of his intentions to follow the valley at low-level and recall Radar on climbout at Baslow whilst retaining the squawk. Heading 170° at 85kt and 700-1000ft RPS his pax spotted a helicopter ahead at very low-level manoeuvring. They maintained visual contact and noted the helicopter turning port and pass well clear on his starboard side although slight rotor wash was felt as his ac crossed the path of the helicopter. A photograph was taken by his pax [included with his report] showing the helicopter passing on their starboard side before he initiated a climb to 2000ft and recalling Doncaster/Sheffield to continue with a BS. He assessed the risk as low.

UKAB Note (1): The Manchester METAR shows EGCC 051450Z 28010G22KT 230V330 9999 FEW042 20/09 Q1012 NOSIG=. The Barnsley RPS 1500-1600 was 1006mb.

ATSI comments that the subject A109 flight established communication with East Midlands Approach at 1456. The pilot reported leaving the CTR, requesting a BS, which was agreed. The next transmission from the A109 was at 1507:30, when the pilot reported landing in 1min. He added he would call when airborne. The A109's destination was Ladybower Reservoir, situated about 36nm NW of East Midlands Airport. Apparently, the A109 pilot tried to contact Approach at 1511 but nothing was heard on the ground. A relay from another helicopter was unsuccessful. At 1518, the pilot of the A109 reported he would be filing an Airprox report, commenting that it occurred at 1609 (local) directly overhead Ladybower Reservoir at 1300ft QNH 1011 when he was heading N and a small fixed wing was heading S straight towards them. They came quite close to each other and he had to take avoiding action. A report would be filed on returning to the airport.

The other flight involved, the C150, reported being in contact with Doncaster and receiving a BS. At the time of the Airprox the pilot reported he was not receiving an ATC service but was listening out only. He had reported to Doncaster that he was descending to low-level in the Upper Derwent Valley from Howden Reservoir. His intention was to recall Radar on climbing out at Baslow, whilst retaining the squawk. Ladybower Reservoir is about 26nm WSW of Doncaster Airport.

CAP 774 (Flight Information Services), Chapter 2 defines a Basic Service:

'A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot's responsibility. Basic Service relies on the pilot avoiding other traffic, unaided by controllers/FISOs. It is essential that a pilot receiving this service remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight. 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.'

UKAB Note (2): The radar recording does not capture the CPA. At 1507:56 the A109 is seen squawking 0020 approaching Ladybower Reservoir from the SSE tracking 340° level at FL018 (~1700ft QNH 1010mb). Just over 30sec later the A109 is seen descending through FL016 (1500ft QNH) before commencing a R turn at 1509:02 on reaching the S edge of the reservoir and descending through FL014 (1300ft QNH). The A109 disappears after the next sweep at 1509:10, turning through a SE'y heading still level at FL014 (1300ft QNH). The next sweep 8sec later at 1509:18 reveals the C150 squawking 6160 tracking 160° towards the position where the A109 faded with just under 1nm to run, level at FL015 (1400ft QNH). The C150 disappears after the radar sweep at 1509:34 indicating FL015 (1400ft QNH) whilst the A109 reappears as a pop-up return, very close to the position of its previous radar return, in its 11 o'clock range 0.5nm indicating FL013 (1200ft QNH). This lack of movement by the A109 is probably owing to it entering a tight RH orbit, as reported by its pilot. The next time the subject ac are seen is at 1509:58 after they have passed, the C150 tracking 170° showing NMC 0.2nm SSE of the A109 which is also displaying NMC and tracking N'y. The A109 shows FL014 (1300ft QNH) on the next sweep turning L before the next sweep at 1510:14 shows the C150 climbing through FL017 (1600ft QNH).

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar video recordings and reports from the appropriate ATC authorities.

With both flights descending under VFR to low-level the only means of collision avoidance was through see and avoid. The A109 pilot was unaware of the approaching C150 until commencing descent and then receiving a TCAS TA. Being unable to acquire the C150 visually he elected to enter a RH orbit, which Members believed had not assisted the pilot with assimilating the relative bearing of the approaching Cessna since the limitations of TCAS in azimuth are exacerbated while manoeuvring. Owing to the nature of the area, with both flights confined within a valley, the A109 pilot had limited options to manoeuvre out of the way. Some Members thought that the actions taken by the A109 pilot had led him to visually acquiring the C150 late but this view was not shared by the majority of Members. Members agreed that the orbits flown had probably made the helicopter more conspicuous thereby attracting the attention of the C150 pax and then the pilot. Given all of these circumstances, it was felt that both crews had seen each other as soon as practicable and that this had been a conflict in Class G airspace.

Members noted that there were discrepancies in the reporting of the relative heights by both pilots. The A109 pilot was undoubtedly concerned with the situation, which occurred at a critical stage while on task and while trying to establish a suitable landing site. He saw the C150, probably later than ideal and turned L and descended, estimating it passed 75ft above and 100m clear. The C150 pilot appeared to be unconcerned with the scenario, having seen the A109 orbiting ahead and below him at low-level and maintained visual contact with it before watching it turn L to pass clear on his RHS. The recorded radar only shows the ac approaching the incident area and then intermittently thereafter, the A109 descending and entering the RH orbit at about altitude 1400ft before fading and then appearing as a pop-up contact at 1200ft whilst the C150 disappears at 1400ft with the A109 0.5nm ahead. The photograph supplied by the C150 pilot shows the A109 in the C150's 1-2 o'clock tracking to pass well clear on its RHS at about the same level. From the information available Members believed that the C150 pilot was always in a position to take action, if necessary, to avoid a collision but the ac had passed closer than ideal, given the surrounding landscape. This, when combined with the action taken by the A109 pilot was enough to persuade the Board that any risk of collision had been effectively removed.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Conflict in Class G airspace.

Degree of Risk: C.