AIRPROX REPORT No 2011148



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE MD902 PILOT reports routeing from a field site near Edenbridge to a private site in near Marden, Kent, not in receipt of an ATS but squawking a discrete conspicuity code with Modes S and C. The visibility was >10km flying clear below cloud in VMC and the helicopter was coloured blue/white with nav lights, red strobes and white HISL all switched on. In level cruise at 1000ft QNH 1009mb heading 100° at 120kt returning to base after a medical call-out, his LH seat crewman alerted him to a helicopter, a dark blue or black R44, approaching from his 10-11 o'clock direction at close range (200m) on a S'ly and closing heading, slightly lower. He immediately cyclic-climbed the MD902 to allow the other helicopter to pass underneath, which it did by 100ft and 50m away at the CPA. Once clear he checked behind and could see the R44 continuing on its heading and height. Previously he had been talking to Gatwick Radar and had changed to Headcorn frequency some 2min earlier. No Airprox report was made on either frequency. He assessed the risk as medium.

THE R44 PILOT reports he was unaware of the Airprox until after being contacted by RAC Mil. His flight was from a private site near Wormingford, Essex, routeing to a private site in West Sussex, VFR and he was listening-out on the Farnborough E frequency squawking 7000 with Mode C. The Wx was VMC and he tracked to the E of Gatwick, flying into sun heading 185° at 115kt and at 800ft QNH. He did not see the reporting ac.

UKAB Note (1): The Gatwick 10cm radar clearly captures the incident. The MD902 is seen at 1000:02 squawking a discrete conspicuity code 3.75nm W of Tonbridge, tracking 100° indicating altitude 900ft LON QNH 1007mb. At the same time a 7000 squawk is seen, believed to be the R44, 1.6nm NNW of Tonbridge tracking 210° also maintaining altitude 900ft. Thereafter the ac continue to converge on a line of constant bearing and by 1000:48 lateral separation has reduced to 1.7nm with the R44 having turned L 15° and descended to altitude 800ft. At 1001:22 lateral separation has reduced to 0.1nm with vertical separation still 100ft. The CPA occurs on the next sweep at 1001:26; the radar returns merge, the R44 still showing 800ft whilst the MD902 is indicating 1000ft QNH, 200ft above.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac and radar video recordings.

As the incident occurred in Class G airspace there was equal responsibility on both crews to maintain their own separation from other traffic through see and avoid. With the ac approaching each other on a line of constant bearing it would have been more difficult for both crews to detect each other owing to lack of relative movement within their field of view. Although the R44 pilot reported flying into sun, the MD902 was converging from his R and there was ample opportunity for him to detect its approach. The MD902 flight had right of way under the RoA Regulations; however, these rules require pilots to see the other aircraft at the appropriate time. As it was the R44 pilot did not see the MD902 at all while the MD902 pilot only saw the R44 200m away, when it was brought to his attention by the LH seated crewmember, a late sighting.

Turning to risk, although the MD902 flight had right of way, the pilot took positive action to avoid a collision by initiating a climb before the R44 passed an estimated 100ft below and 50m ahead; the radar recording shows the ac merging at the CPA with the MD902 climbing 100ft as they cross with vertical Mode C separation showing 200ft. These factors combined with the MD902 passing unsighted to the R44 pilot led the Board to conclude that the ac had passed in close proximity with margins reduced below normal such that safety had not been assured.

DRAFT PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: A non-sighting by the R44 pilot and a late sighting by the MD902 pilot.

Degree of Risk: B.