AIRPROX REPORT No 2011010



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PUMA PILOT reports flying a camouflage green helicopter with no TCAS fitted but with strobes and nav lights switched on, on a GH sortie, in receipt of a BS from Benson APP, squawking as directed with Modes C and S. While he (the LHS QHI) was positioning the ac for a PFL near Stokenchurch, in straight and level flight at 2000ft on the RPS, heading 170° (he reported out of sun) at 120kt, the RHS pilot called 'break left' for a light ac that was a possible confliction. The ac was a white, high-wing, single-engine Cessna type, 100-200ft above them, also in a straight and level flight and was crossing them from the 11 o'clock to the 4 o'clock position. He started the break but quickly acquired the light ac visually and determined that there was no direct confliction and so he remained straight and level and allowed the light ac to pass overhead.

He saw no evasive action by the other ac which continued its track away from them. An airborne Airprox report was not filed, but RAF Benson ATC was informed immediately on landing, assessing the risk as being medium.

THE C172 PILOT reports flying a white ac with all lights switched on, on a local training flight from Wycombe Air Park. They were in receipt of a BS from Benson ZONE for a MATZ crossing and squawking as directed with Mode C. While in a level cruise near Stokenchurch, heading 305° at 110kt he first saw a Puma helicopter 5nm away which closed and passed below them. They were also advised of the traffic by Benson ZONE and no potential for collision existed at any time. Both fixed wing pilots had the helicopter in sight at all times until it passed underneath them, maintaining its track. No concern was raised at any time by either of them and he assessed the risk as none.

THE BENSON APP CONTROLLER reported that the Puma crew called ATC via landline to report an Airprox which happened whilst they were on the APP frequency under a BS. They were operating about 2nm W of Stokenchurch mast and the ac faded in and out of radar cover due to it carrying out PFLs.

At the time of the incident she was initiating the handover of an ac 15nm S of Benson to Odiham. When the handover was complete she noticed that the Puma was back on radar and that there was an ac in its vicinity. The unknown contact had already passed the Puma and was tracking away from it; therefore she decided it was not significant so she did not pass TI.

HQ 1GP BM SM reports that the Airprox occurred between a Puma in receipt of a BS from Benson APP, flying a training sortie in the vicinity of Chalgrove and a C172 in receipt of a BS from Benson ZONE.

At the time, APP was working mixed BS/TS traffic and although work load was not mentioned in the Controller's report, examination of the RT transcript suggests that it was low.

Both ac were operating under a BS in Class G airspace and although the controller reports that she was conducting a handover at the time of the incident, the radar replay shows that this was later. The RT transcript shows that APP last spoke to the Puma at 1037:37 when the pilot reported that he had completed his GH and was climbing to 1000ft. APP was called by a Merlin at 1047:11 on climbout for a radar service and APP's focus would have been on that ac. At that point the ac involved in the Airprox were about 3nm apart. It is difficult to ascertain the last time that APP would have focused her attention on the Puma; however, there were no landline or transmissions recorded between 1042:50 and 1047:11.

At 1047:35 the Puma commenced a right turn putting it on a conflicting flightpath with the C172. At that point, the C172 was 0.7nm SE of the Puma and was indicating 300ft below it.

Given that APP was expecting the climb-out ac as a pre-noted departure, it is reasonable to assume that she would have been scanning the climb-out lane for a period of about 30sec before the ac came on frequency; at the time the C172 would have been over 4nm from the Puma. Moreover, it would be unlikely that the controller consciously watched the Puma and C172 converge without passing TI; therefore, it is assessed that the controller was not scanning in the area of the conflict due to perceived higher priority activity and was therefore unable to assess the possible confliction. Furthermore, comparison of the RT transcript with the radar recording showed that at the point where the confliction becomes apparent, APP was engaged in the identification of and passing of TI to the Merlin.

The C172 pilot was visual with the Puma in reasonable time and considered no avoidance was required.

When operating under a BS, the controller is a last safety net and not the primary means by which safe separation is assured. Regardless of experience and work load, controllers should always seek to provide TI that enables pilots to carry out conflict resolution; however, if the controller is busy or scanning away from the point of confliction they cannot be responsible for any lack of TI.

UKAB Note (1): The recording of the Heathrow radar shows the incident. The Puma squawking 3620 with Mode C approaches the CPA tracking about 170° at an alt of 2000ft as the C172 tracks about 330° towards it from its 1 o'clock at an alt of 2400ft. The C172 passes 400ft above the Puma at 1047:47.

HQ JHC comments that the high workload in the Puma cockpit resulted in the late sighting of possible conflicting traffic. Whilst a timely call from Benson APP would have altered the Puma crew to the conflicting traffic and thus avoided this incident, it is recognised that a BS will only provide TI when the controller is able, therefore crews must always remain vigilant. HQ JHC is also actively pursuing a CAS system, which would have given the Puma crew vital SA. This Airprox will be used to remind Puma crews of the necessity to maintain a good lookout in high workload environments and of the importance of reporting their intention to file an Airprox whilst airborne.

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 photographs/video recordings, reports from the air traffic controller involved and reports from the appropriate ATC and operating authorities.

The Board noted that both ac were operating legitimately in Class G airspace and in receipt of an ATS appropriate to the type of flight. The Puma crew were engaged in high workload GH activity and they did not see the C172 approach from their 12 o'clock high as they turned right to position the ac for a PFL. However, the C172 pilot saw the Puma throughout, was warned of its presence by Benson ZONE and considered there to be no collision risk. A GA Member observed that notwithstanding any vertical separation it is generally good practice to turn to avoid overflying a conflicting ac; this allows better visibility and indicates to the other ac that it has been seen (and avoided).

The Board agreed that although the Puma crew saw the C172 late, they reacted appropriately; the C172 pilot saw the Puma throughout, ensuring that there was no risk of a collision.

PART C: ASSESSMENT OF CAUSE AND RISK

C.

<u>Cause</u>: A late sighting by the Puma crew.

Degree of Risk: