AIRPROX REPORT No 2015008

Date: 8 Feb 2015 Time: 1105Z Position: 5220N 00055W Location: 5nm NW Sywell (Sunday)

Recorded Aircraft 1 Aircraft 2 Diagram based on EC135 Aircraft Rans S6 pilot reports Civ Pte Operator NPAS Lon FIR Airspace Lon FIR prooke Class G G Old VFR CPA 1105 Rules VFR Service None Basic Scaldwell Walgrave N/A London Provider Information Brixwor 1105:37 NK Altitude/FL 1500ft Hannington 1800ft ACAS/TAS Not fitted TCAS I Alert N/A Nil NDB Spratton Transponder Not fitted A, C, S NN Reported EC135 8.5 1500ft alt Blue and Yellow Colours Blue Lighting Strobes Strobes, HISLs. RANS S6 1800ft alt sford nav lights. NOR Conditions VMC VMC Visibility 30km >10km Boughton Altitude/FL 1800ft 1500ft Altimeter NK QNH 358[°] Heading 330° Speed 42kt 120kt Separation Reported OftV/60ft H 0ftV/1nm H Recorded NK

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE RANS S6 PILOT reports flying straight-and-level at 1800ft when, to the starboard side, a police helicopter descended and proceeded to cross the nose of his aircraft from starboard to port. He recalled being "in shock" and did not take any avoiding action.

He assessed the risk of collision as 'High'.

THE EC135 PILOT reports that whilst en-route from a task at Milton Keynes to a further task at Leicester he became visual with a microlight aircraft in his 12 o'clock approximately 5nm away and 100ft above. The microlight was relatively slow, and so he conducted an overtaking manoeuvre in accordance with SERA 3210 section (C3). Throughout the manoeuvre, he kept out of the way of the other aircraft keeping to its right and avoiding passing over or under it until he was entirely past and clear. He did not perceive there to be a flight safety issue at any stage.

He assessed the risk of collision as 'None'.

Factual Background

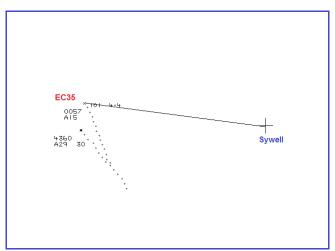
The weather at Birmingham was reported as :

METAR EGBB 081050Z 30007KT 9000 NSC 04/01 1040

Analysis and Investigation

CAA ATSI

The Microlight pilot was not in receipt of an Air Traffic Service. The EC135 pilot reported being in receipt of a Basic Service from London Information. CAA ATSI did not receive the EC135 pilot's report until 30 March 2015 and therefore no RTF recording was available for the occurrence. At 1105:05, area radar recording showed the EC135 in the approximate reported position of the occurrence, 4.4nm west-northwest of Sywell airfield at an altitude of 1500ft. Another aircraft, not involved in the occurrence, is shown displaying the Coventry conspicuity squawk 4360 indicating 2900ft. However the radar did not show the Microlight or any intermittent contacts in the vicinity.



Swanwick MRT at 1105:05

It was not therefore possible to show the geometry of the encounter and it is likely that the London Information FISO was not aware of the Microlight.

UKAB Secretariat

Both pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. An aircraft that is being overtaken has right of way, and the overtaking aircraft shall keep out of the way until entirely past or clear, therefore the EC135 pilot was required to keep clear of the Rans S6².

Comments

NPAS

Although the geometry and closest point of approach of this encounter were not able to be determined, it can be alarming for another aircraft to appear without warning from behind, at twice your speed, and with noise cues initially masked by the sound of your own engine.

The 'without warning' is worth further comment. This Airprox occurred in Class G airspace with no obligation to talk to anyone and for some this is part of the joy of flying. To do so, however, denies the opportunity for the greater situational awareness afforded by listening out on local frequencies let alone taking a formal service. NPAS operating procedures require crews to establish contact with the most appropriate air traffic unit - in this case London Information. There is no guarantee that two aircraft in the same vicinity will opt for the same provider but more often than not they will and, together with collision avoidance systems, they all shift the odds in favour of picking up other traffic early and avoiding surprises.

¹ SERA.3205 Proximity.

² SERA 3210 Right of way.

Summary

An Airprox was reported on 8th February at 1105 between a Rans S6 microlight and an EC135. The Rans S6 pilot was not receiving an ATS and did not have a TCAS, therefore did not receive any Traffic Information. The EC135 was under a Basic Service with London Information. He saw the mircrolight from 5nm away and reports that he manoeuvred to keep clear as he overtook it. The incident does not show on radar so the exact separation is not known.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, radar photographs/video recordings, and a report from the appropriate operating authority.

The Board opined that this Airprox appeared to be largely a matter of perception, and that the differing estimated separation by the two pilots was hard to reconcile. They wondered whether the Rans pilot's estimation of 60ft was due to startle factor, in that he was surprised by the appearance of the EC135 and this may have caused him to estimate that it was closer than it actually was. Ultimately, the Board thought that 60ft separation was not likely, not least because such a distance was only twice the length of an EC135 and, at such separations; downwash from the rotor blades would have caused the microlight a significant problem. Therefore, the Board concluded that it was probable that the EC135 had indeed crossed at a safe distance ahead of the microlight. Equally, they thought that, had the separation been 1nm as reported by the EC135 pilot, the Rans pilot would have had little concern or reason to be startled. The true picture probably lay between the two, but the absence of any corroborating information meant that a definitive assessment was not possible.

The Board noted that the EC135 pilot had seen the Microlight from some distance away and, being faster, had crossed ahead at what he considered to be a safe distance. Under the new SERA rules, the geometry of this encounter (which might previously have been considered as converging), was now classed as overtaking. As such the EC135 pilot was simply required to keep clear, which he did. That being said, given the likely lack of awareness in the slower aircraft that an overtake was about to happen, the Board urged all such overtaking pilots to keep clear of the other aircraft by a good margin; a margin that they might themselves wish to be avoided by if the roles were reversed.

In discussing the cause, the Board quickly agreed that the Rans S6 pilot was concerned by the proximity of the EC135, but they determined that timely and effective actions had been taken by the EC135 pilot; they assessed the Risk Category as C.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: The Rans S6 pilot was concerned by the proximity of the EC135.

Degree of Risk: C.