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DIRECTOR UKAB'S MONTHLY UPDATE

March 2024



So, what else can we do?

Navigating in Class G airspace - is it all just about see and avoid?

hile it's true that a lot of Class G airspace activity relies heavily on pilots looking out for other aircraft to keep a safe distance from them, that's just a part of the whole picture of the defence against mid-air collision. As I have highlighted in other Insight newsletters, decisions taken both before take-off and while airborne can influence our likelihood of an encounter with another aircraft and, potentially, increase our chances of avoiding an Airprox.

The Airprox I have chosen this month is Airprox 2023167, which involved an AgustaWestland AW109 and a Diamond DA40 in the vicinity of the Compton (CPT) VOR/DME beacon. The AW109 pilot was conducting instrument flying (IF) training (under IFR) and had just passed the CPT beacon. They were flying at an altitude of around 3000ft heading away from the beacon on a track of about 200°. The AW109 instructor was conducting the lookout because the student was wearing IF goggles, restricting the ability to use visual references.

The DA40 pilot was flying under VFR, tracking towards the same beacon but in the opposite direction to the AW109 and at a similar altitude to the helicopter. Both pilots were in the process of getting an Air Traffic Service at the time of the Airprox – the AW109 pilot had called Farnborough LARS but, unfortunately, had not yet agreed a level of service; the DA40 pilot was in exactly the same position with Oxford Radar. This meant that neither pilot had any clue that the other aircraft was there and so were relying entirely on their respective lookout scans.

In the event, the DA40 pilot spotted the helicopter just in time to take avoiding action; the AW109 instructor only saw the DA40 as it passed them, too late to have done anything to increase the separation between the two aircraft.

It's often the case that at least one of the pilots involved in an Airprox either sees the other aircraft late and just manages to take avoiding action, or doesn't see it in time to do anything at all. We all know that looking out is no guarantee that we will see all the

other aircraft close to us, for reasons too numerous to mention here, so how can we mitigate the inherent weaknesses of lookout?

Well, what about considering the altitude we are flying at? Clearly, there are a number of factors to consider when selecting a cruising altitude - the proximity of controlled airspace above or below (think about the GASCo'Take2' advice), and the prevailing weather and terrain clearance to name but a few.

However, after considering these other factors, if there is still a bit of room to play with then it's worth asking ourselves whether we can build-in some vertical separation from traffic coming the other way. The semicircular rule (used by aircraft flying under IFR above transition altitude) is a good example of a procedure whereby vertical separation is incorporated into the plan.

In a nutshell, pilots flying in an easterly direction (headings of 360° to 179°) select an odd altitude (3000ft, 5000ft etc) and pilots flying westerly (headings of 180°

Airprox 2023167

to 359°) select an even altitude (4000ft, 6000ft etc). Of course, this isn't a sure-fire way of ensuring vertical separation because the semicircular rule doesn't apply to aircraft flying under VFR below 3000ft, and it would need every pilot to fly like this which will probably never be the case, but it is certainly worth considering.

Another possibility is to select a cruising altitude that's a little bit random, for example 2350ft, 2650ft etc. We all like the altimeter to look 'neat' while flying but, as in the example above, if both pilots have selected the same altitude then there won't be any vertical separation to mitigate the weaknesses in the lookout barrier.

Again, there's no guarantee that the 'random altitude' we have selected won't be the same as the 'random altitude' another pilot has selected, and I'm sure somebody much more clever than I can work out the odds of those two numbers being the same(!), but it does seem logical that a technique such as this would enhance the chances of having at least some vertical separation from other aircraft in the vicinity.

Finally, a quick thought about getting an Air Traffic Service. In this example, both pilots were in the process of contacting different units for such a service. As part of your communications plan, do you consider 'when' as well as 'who? We know that pilots often fly towards or away from navigation aids, so try to plan your frequency changes for a phase of flight where going 'eyes in' to change a squawk and/or a frequency is not going to be in an area of likely increased traffic.

UKAB MONTHLY ROUND-UP

This month the Board evaluated 23 Airprox, including five UA/Other events, three of which were reported by the piloted aircraft and two by the drone operator. Of the 20 full evaluations, seven were classified as risk-bearing – two as category A and five as category B. The Board did not make any Safety Recommendations, although there was much discussion regarding overhead joins at airfields.

The Board noted that the description and graphic in The Skyway Code only suggest performing an orbit in the overhead when arriving from the deadside, and members thought that this doesn't really maximise the chances of a pilot gaining a complete picture of the traffic in and around the circuit. Board members would much prefer pilots to conduct an orbit in the overhead *regardless of their arrival direction*. Taking



2024 Airprox - Cumulative Distribution

UA/Other 5yr Cumulative average (2019-2023) Aircraft 5yr Cumulative Average (2019-2023) Cumulative Total All Airprox



time in the overhead to assess what's below can often pay dividends and help to integrate into the existing pattern.

The graphic above shows that it has been a steady start to 2024 in terms of reporting, with the number sitting around the average for this time of year. With the weather improving, I expect to see that number creeping up (as it does every year) as more and more of us take to the skies.

I hope the commentary on Airprox 2023167 above has given some food for

thought on how you can minimise the likelihood of your having an Airprox by planning ahead, both before you get airborne and once you are in flight.

