# JK AIRPROX BOARD

# PROX Insight DIRECTOR UKAB'S MONTHLY UPDATE

April 2025



## Circuit patterns – one of the most likely places to have an Airprox...

his might — or might not surprise you, but every month Airprox Board members always discuss at least one Airprox in the visual circuit and April was no different.

Which is why I've chosen Airprox 2024275 between a Cessna 152 and a Robin DR400 at Stapleford to, hopefully, illustrate a few points that we can all think about (nearly all of us fly, or will have flown, in the visual circuit, after all...).

The Cessna pilot had joined for RW03 from the deadside, crossed the upwind end of the runway at circuit height and turned onto the downwind leg as per the depiction of the circuit pattern published on Stapleford Flight Centre's website (and in other popular flight guides).

Meanwhile, the Robin pilot had joined from the West at 2000ft, descended on the deadside of RW03, crossed the climbout lane over the M25 (about half-a-mile from the upwind threshold) at about 1200ft and then turned downwind, tracking closer to the runway than the Cessna.

When the Robin pilot was about halfway downwind, they spotted the Cessna tracking from right-to-left in front of them and were uncertain whether the Cessna was on base leg or just transiting the ATZ; the Cessna was, indeed, on base leg and

flying pretty much the base leg track as depicted in the circuit diagrams previously mentioned.

As the aircraft closed, the Cessna pilot turned onto final at which point the Robin pilot realised that the Cessna was in the circuit, so they turned to pass behind it, extended downwind and out of the Stapleford ATZ before turning inbound to land from an extended final.

The Cessna pilot, having completed a standard overhead join, had heard the Robin pilot joining and, justifiably, had expected them to have been behind them on the downwind leg. They first saw the Robin as they turned on to final and assessed it to have been almost head-on, so they rolled to the right to avoid it. The aircraft passed each other with no vertical separation and about 0.1nm horizontal separation.

In my December 2024 INSIGHT article I discussed considerations for the visual circuit. That particular incident, although occurring at a different airfield, has many similarities with this one - the two aircraft involved flew dissimilar circuit patterns, the circuit traffic was not always contained within the ATZ, the pilot assumed the other aircraft was not circuit traffic and did not seek clarification of the other pilot's intentions.

Returning to this month's Airprox, during their discussions the UK Airprox Board members felt that the Robin pilot, by conducting a somewhat 'loose' overhead join, had not helped themselves from the outset. They had flown a wider than usual crosswind leg which may have led them to turning downwind far earlier than would have been expected.

Of course, the published circuit patterns are not exact tracks to be flown but, as we saw in the December article, if the pilot of an aircraft in the visual circuit flies a shorter ground track than the pilot of the preceding aircraft then, at some point, the aircraft are going to come closer to each other than would normally be the case. By flying a downwind leg closer to the runway than that flown by the Cessna, it was almost inevitable that the Robin pilot would get close to the preceding aircraft.

The second lesson here is all about communication. It's essential that pilots make accurate calls when joining and once in the circuit - it is how, primarily, other pilots build their situational awareness.

So, not only is it paramount to be as accurate as possible with position calls and to announce if flying a pattern different to that expected (such as flying a tighter downwind leg than would normally be

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flown at that particular airfield), it is also really important to listen to the radio to gain an understanding of where other aircraft are in the circuit. If calls from other pilots are missed (it will happen) then don't be afraid to get on the radio and ask for clarification.

In this case, the Robin pilot wondered if the Cessna was in fact circuit traffic, perhaps because they assessed that the Cessna had been outside the Stapleford ATZ at the beginning of the base turn.

The published circuit pattern at Stapleford is flown near to the limits of the ATZ (due to noise abatement requirements) and does exit the ATZ at the end of the downwind leg/beginning of the base leg for RW03, so aircraft in the circuit pattern will look as if they are quite far from the airfield itself.

So if you are unsure whether an aircraft you have seen is circuit traffic or not, a simple call to ask the intentions of the pilot, or to confirm whether or not they are in the circuit, could save an awful lot of heartache.

The final thought I'd like to leave you with is the question of 'when' to manoeuvre to increase separation from another aircraft in the circuit that might be a potential conflict.

The answer to that question is actually quite simple – as early as possible. Given that the visual circuit at an airfield is flown visually, and that we are required to 'conform with or avoid the pattern of traffic formed....' ((UK)SERA.3225(b)), if we aren't following the aircraft ahead and conforming with its pattern then we need to avoid it, and don't forget that leaving the circuit and re-joining with better situational awareness is always an option.

#### BOARD SUMMARY

The Board evaluated 28 Airprox this month, including eight UA/Other events, seven of which were reported by the piloted aircraft and one by the drone operator. Of the 22 full evaluations, six were classified as risk-bearing – one as category A and five as category B. The Board did not make any Safety Recommendations this month.

The graphic above shows that it continues to be a pretty 'normal' start to the year in terms of numbers of Airprox reports received. However, in recent weeks we've seen a distinct increase in the number of reports coming through, no doubt largely due to some exceptional



#### 2025 Airprox - Cumulative Distribution



weather conditions leading to more of us taking to the skies during April.

With increased activity it follows that there's likely to be increased reporting, and I'd be delighted if this turned out not to be the case!

Of course, as the new season finally gets underway, we can all be a little 'rusty' from not having flown much, if at all, over the winter. We should all be mindful that we will probably be a bit slower at everything, including recognising and processing potential conflicts while airborne. So do take some time to look back at a few of these Insight articles and ask yourself what you can do to be better prepared to deal with (or avoid) an Airprox situation.

