



AIRPROX *Insight*

DIRECTOR UKAB'S MONTHLY UPDATE

January 2020

AIRPROX OF THE MONTH



Dropping in to conflict

Do you know how the different types of aircraft integrate at your airfield and what their particular manoeuvres might be?

This month's highlighted Airprox came about when a PA-28 was established downwind in Halfpenny Green's visual circuit as a Cavalon autogyro pilot rejoined and decided he would deconflict by conducting a PFL.

Those who have experience of autogyros will know that the glide performance is akin to a brick, and the Cavalon pilot, who was required to integrate with the PA-28, effectively lost situational awareness on the Piper (that was probably on base-leg) as he commenced his PFL.

The PA-28 pilot turned, called final (albeit a little late) and was somewhat shocked when the Cavalon appeared descending rapidly from above and flew in front by about 50 metres. The

Cavalon pilot had heard the Piper pilot's 'final' call and realised he hadn't made one. Thinking he was well ahead of the PA-28 he made a 'final' call and decided to continue the approach rather than go-around.

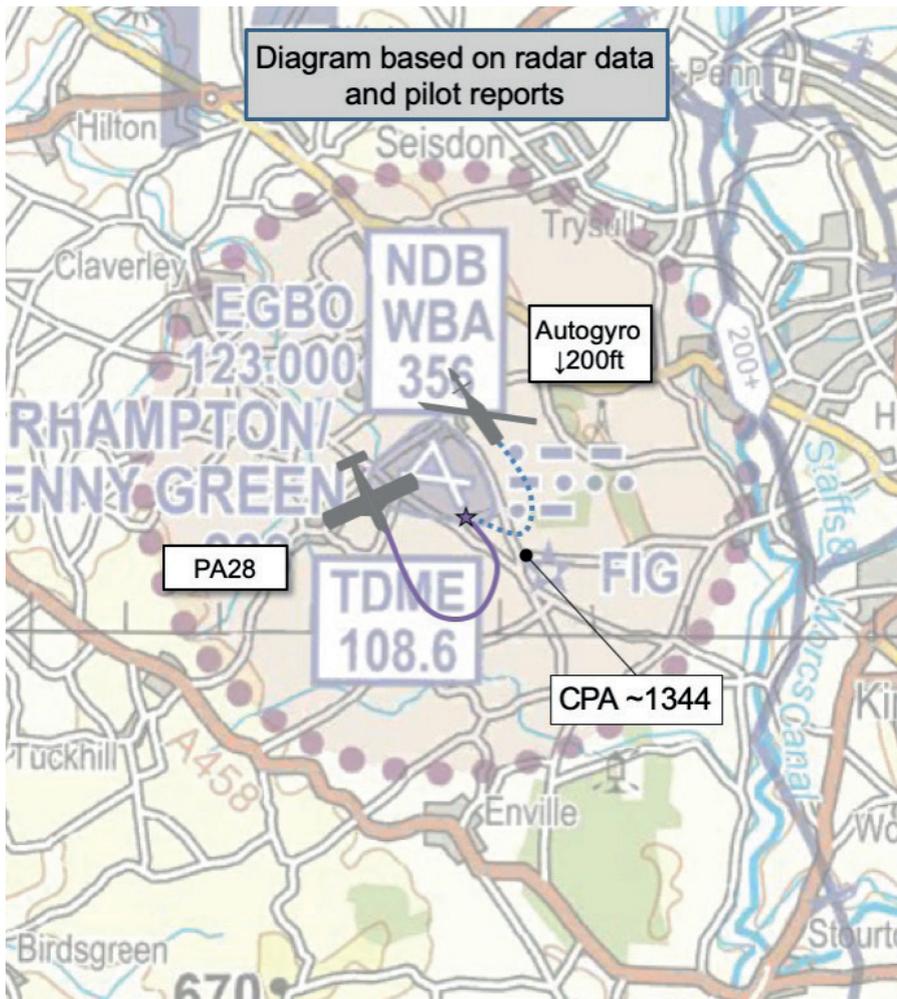
As with every Airprox a number of lessons can be identified from this incident (**Airprox 2019212**), not least of which being that if you hear another aircraft call 'final' and you don't know where it is when you are also 'final', the best action is probably to clear the airspace ahead of and around you as best you can and go-around rather than call 'final' yourself and continue on the assumption you are No1.

The more interesting point, though, is about knowing what's going on at your airfield. If multiple types (light-aircraft, microlights, helicopters, autogyros, gliders,

biz-jets etc) operate there do you fully understand what the others are doing and where they will be positioned for various manoeuvres in the circuit?

Although in this case the PA-28 pilot could reasonably expect the Cavalon pilot to integrate with him and not commence his PFL until he was sure he could fit in, on hearing that an autogyro is doing a PFL would you fully understand the highly-dynamic nature of that manoeuvre? Perhaps it's time to review who is flying at your airfield and chat about their operating procedures and any potential conflicts.

I'm told by my helicopter Board members that commencing an autogyro PFL is pretty much akin to being on final approach for the entire (short) duration of the manoeuvre and so it might be an



idea to make sure you absolutely know where autogyros (and helicopters) that are conducting such manoeuvres are before committing to final yourself. That's not to imply that the PA-28 pilot was required to give way or did anything wrong, just that 'defensive flying' would encourage a quick call on the radio to find out where the autogyro was before turning final oneself.

Full details of the incident can be found at the link within this note or at airproxboard.org.uk in the 'Airprox Reports and Analysis' section within the appropriate year and then in the 'Individual Airprox reports' tab.

UKAB MONTHLY ROUND-UP

During its December meeting the Airprox Board assessed 28 incidents, of which 16 were SUAS incidents. Of the 12 manned aircraft-to-aircraft incidents, five were risk-bearing; one was Category A (where separation was reduced to the bare minimum and only stopped short of an actual collision because providence played a major part), and four were Category B (where safety margins were much reduced

below the norm through either chance, misjudgement or inaction; or where emergency avoiding action was only taken at the last minute).

With 2020 dawning it's clear that, apart from 2014, 2019 was our busiest year for manned-aircraft-to-aircraft incidents in recent times (the 203 reported incidents at the time of writing are well above our expected five-year average of 179).

That's not necessarily a bad thing, though, because I hope it reflects a healthy culture of reporting Airprox that might not otherwise have been notified rather than there having been more incidents per se.

SUAS reporting has reduced compared to last year and, subject to any last-minute retrospective surge, we are on track to see about 125 or so SUAS reports in 2019 compared to 139 in 2018.

December's most frequent Airprox theme was non-/late-sightings (seven incidents), a number of which were associated with aircraft structures obscuring the view out.

This is a perennial problem and serves as a reminder to positively clear the airspace

ahead by dipping or raising a wing as appropriate and actively moving the head to look around cockpit structures etc, especially during turns and rapid descents.

Sub-optimal pilot planning, decision-making or execution of the plan was the next most prevalent theme, with six Airprox involving pilots who had either not fully thought through their flight, did not adapt their plan for changing circumstances, or did not effectively communicate their intentions to other pilots or controllers. Not following procedures or controller instructions in a timely manner accounted for four incidents, and sub-optimal controlling or ineffective controller coordination featured in five events.

The Board made one recommendation in December resulting from an R44 and a PA-28 coming into conflict in Gloucester's visual circuit where the rotary-wing and fixed-wing circuits follow the same approximate track and are only separated by 250ft.

In this incident, the PA-28 was conducting an overhead join when the student pilot inadvertently allowed the aircraft to dip about 160ft too low when crosswind. The R44 was also crosswind at the time and climbing to the promulgated helicopter circuit height of 750ft. As a result, the two aircraft came within about 100ft or so vertically.

This conflict point is apparently a well-known issue at Gloucester and so the Board recommended that Gloucester ATC review the separation of the two patterns either geographically or, probably more easily, by increasing the height of the fixed-wing pattern so that there is a greater margin to allow for any errors (noting that the 'allowable' margin of error for PPL pilots is +/-150ft in the circuit and so it would only take two pilots to be at each extreme for there to be a problem). Other airfields with simultaneous rotary-wing and fixed-wing circuits might also want to review their procedures to see if there are any similar potential conflict issues.

AIRPROX RECOMMENDATIONS 201912

Gloucester consider reviewing fixed wing and rotary wing circuit separation.

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