



AIRPROX *Insight*

DIRECTOR UKAB'S MONTHLY UPDATE

December 2018



AIRPROX OF THE MONTH

Down the line

You might think it's okay to fly right along the boundary of busy airspace, but wise people don't and here's why

A Boeing 737 had to be re-routed after a Cessna 172 pilot using a GPS-based navigation application flew right along the boundary of Stansted CTA.

Stansted radar indicated that the 172 had infringed the zone and flashed an alert to the controller who had no option but to vector the 737 away from the 'infringing' threat with the consequent loss of separation and disruption to the 737 at a critical stage of flight as its pilot reacted to the controller's avoiding-action call.

Not only was there a potential extra cost to the jet's operator if it had had to go-around, the subsequent re-routing of other aircraft in the radar pattern to

accommodate the deviating B737 also caused extra workload to the controller.

This incident was very disappointing and wholly avoidable. Although the Cessna was technically probably outside controlled airspace, pilots should be aware that specified radar accuracy is only +/- 0.1nm (+/- 185m) and so, although a GPS (which has +/- 30m accuracy) might confirm that you are outside controlled airspace, the radar may well show you as being inside if you are very close to the line. That's what happened in this case.

The message is clear, don't be tempted to fly close to controlled airspace just because you have a GPS – I doubt very much that the 172 pilot would have flown the same

route if he was using a traditional map and stopwatch: even with GPS, the risk of an infringement and a potential interview 'with no coffee' at the CAA should have encouraged a greater margin.

GASCo has been highlighting the need to give controlled airspace as wide a berth as possible this year. They have adopted the 'Take 2' strategy (gasco.org.uk/flight-safety-information/take-two) which advocates ensuring a 2nm/200ft buffer whenever possible. Not only does this serve to help preserve your licence, but it's also a simple courtesy to controllers and pilots operating in controlled airspace.

Full details of the incident can be found via this link [Airprox 2018178](#) 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

Thirty-seven Airprox were reviewed at the Board's November meeting, 18 of which were drone/SUAS incidents. Of the 19 aircraft-to-aircraft incidents, nine were thought to have a definite risk of collision (all Category B, where the aircraft avoided collision by serendipity or safety was assessed as having been much reduced through misjudgement, inaction, or late/non-sighting).

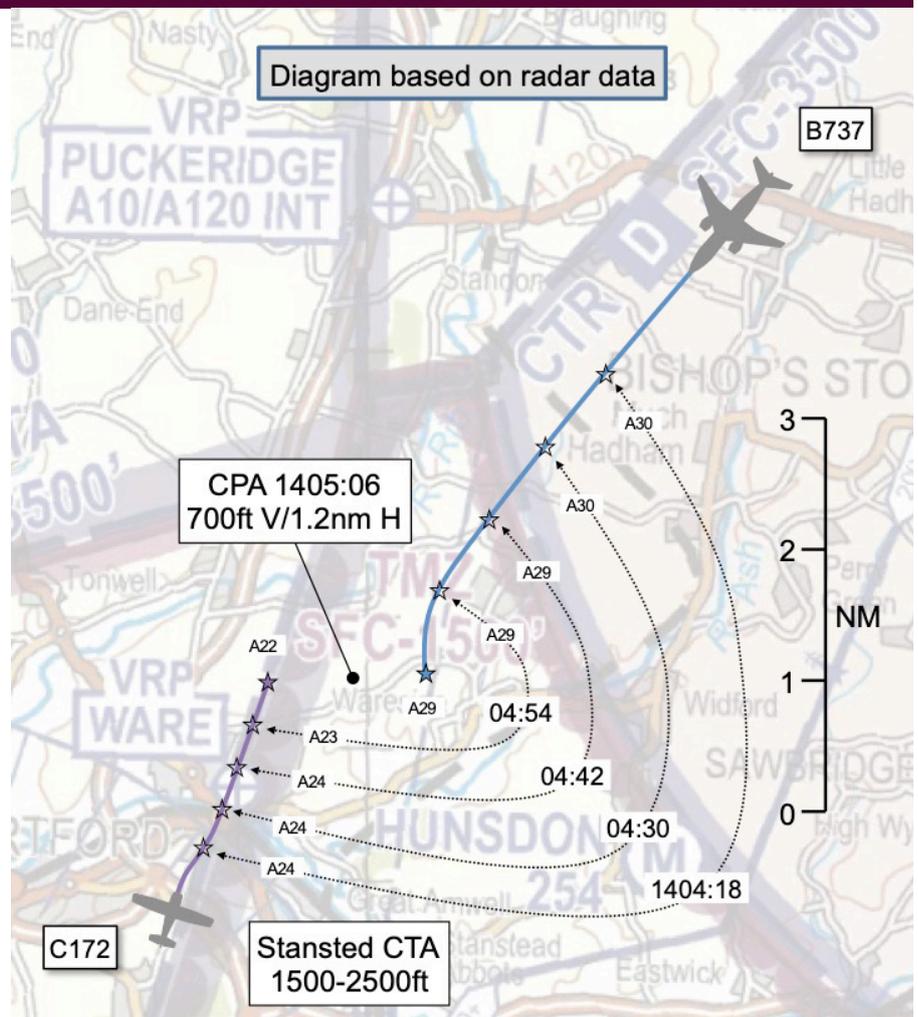
The overall number of reported aircraft-to-aircraft Airprox incidents this year is just above the expected five-year average of 168. In contrast, there have now been 128 reported drone/SUAS incidents, already exceeding 2017's levels (113).

This month's predominant themes were late-/non-sightings (12 incidents) and sub-optimal tactical planning (11 incidents). It might sound obvious, but many of the late-/non-sighting incidents would have been avoided by better situational awareness in one or both aircraft.

The point is, though, that in many of these Airprox the pilots either chose not to use, were not able to use, or did not assimilate information that was available to them from external sources (air traffic control or a collision warning system, for example).

Although they aren't a panacea for all Airprox, fitting a compatible electronic conspicuity and collision warning system would have brought such information directly into the cockpit to great effect. It's no coincidence that in the Airprox safety barrier assessment for 2018 so far, 69% of incidents this year have involved aircraft where collision warning systems were either not installed or not compatible with the equipment in the other aircraft; in contrast, when such systems were installed and compatible, they provided a fully effective barrier for the remaining 30% of Airprox.

With regard to the tactical planning theme (which includes airborne execution of the plan), associated incidents ranged from seeming failure to properly review NOTAMs or take them into account, lack of familiarity with procedures, poor pre-flight planning and in-flight execution, and not flying with appropriate consideration for others. Sub-optimal ATS selection, not



calling ATC, or ambiguous calls to ATC accounted for 4 incidents; inaction was evident in five events; and distraction or task-focus to the detriment of lookout was discernible in three incidents.

The Board made four recommendations, the first two stemmed from **Airprox 2018151** where a PA-31 leaving Lasham climbed through a stack of gliders thermalling nearby. Lasham has a procedure for departing powered-aircraft that involves them keeping below 1000ft until 5nm from the airfield but this is not widely promulgated and the PA-31 pilot did not know about it.

The third recommendation came out of an incident where a pair of low-level Tornados encountered a drone conducting a survey at 300-400ft (**Airprox 2018160**). The height band 250-400ft is an overlapping segment of airspace for drone and military fast-jet low-flying and the Board felt it would be beneficial if the military could look at introducing some way for at least commercial drone operators to be able to notify their operations to military pilots intending to low-fly.

The final recommendation involved a co-ordination error between two formations at the Fairford airshow when a formation of

nine Typhoons ran in for their flypast before the previous display had ended (**Airprox 2018182**).

AIRPROX RECOMMENDATIONS 2018151

1. That Lasham Gliding Society ensure that their powered aircraft departure procedures are promulgated to all pilots using the airfield.
2. The PA31 operating company ensure that their pilots are aware of the Lasham powered aircraft departure procedures.

2018160

HQ Air Command pursue the use of a system for notification of commercial drone operations to pilots operating in the UK Low Flying System.

2018182

The CAA and MAA remind FDDs of their responsibility to proactively direct activities in the display to ensure deconfliction. ■

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