



AIRPROX *Insight*

DIRECTOR UKAB'S MONTHLY UPDATE

October 2020



AIRPROX OF THE MONTH

Dusting off 'feathers' issues

Photo credit: Alan Wilson (Support your local Air Museum / HawkeyeUK) Creative Commons (Picture for illustrative purposes only)

There have been a number of airproxes around instrument approach feathers for a variety of reasons, and planning and communication is right up there

A Bombardier Challenger was conducting the ILS procedure for Runway 21 at Cranfield, which involved flying a northerly heading outbound from the NDB and then a right-hand descending turn to capture the localiser when it came into close proximity with a Mooney.

The minimum descent altitude in the portion of the procedure where this Airprox (2020017) occurred is 2500ft (and the Challenger pilot did not descend below this altitude). Meanwhile, the Mooney M20J was transiting through the area, its pilot having taken account of the procedure in his pre-flight planning and selecting a track and transit altitude which, he believed, would keep him clear of any traffic on the procedure. However, the pilot

didn't call Cranfield as he flew towards the 'feathers', so the controller knew nothing of his presence and couldn't therefore inform the Mooney pilot of the Challenger, nor the Challenger pilot of the Mooney.

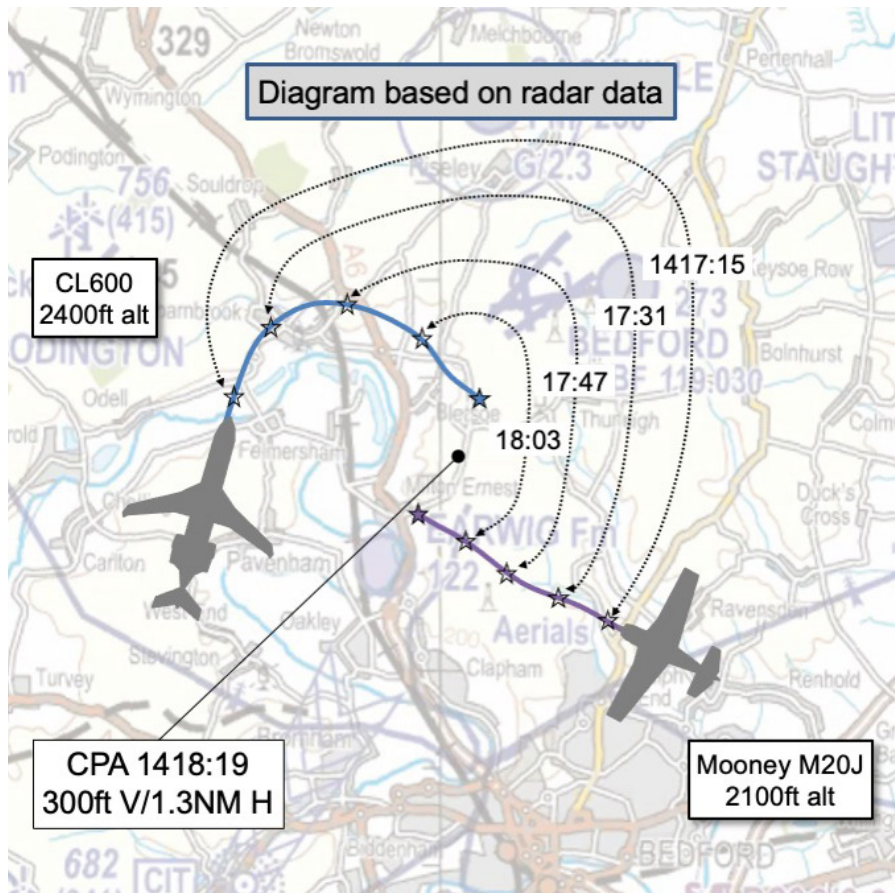
The weather was poor at their altitude and both pilots found themselves in intermittent IMC. The Challenger pilot received a TCAS indication of the Mooney during the right-hand descending turn, and took the autopilot out of NAV and into HEADING HOLD mode to steer around the contact. Neither pilot actually saw the other.

Many GA pilots have probably flown close to the 'feathers' of an instrument approach procedure and wondered whether or not they were 'close enough' to need to call the airfield. In this case

the Mooney pilot likely thought he had taken enough account of the procedure so didn't need to call; in conversations with the pilot after the Board meeting it also transpired that he thought Cranfield ATC was unmanned at the time.

There's no doubt that time spent in preparation is never time wasted, but perhaps the lesson here is to think about contingencies. What if the weather at the planned transit altitude is unfit? What if a track deviation is necessary which might take the aircraft closer to the procedure or airfield than intended? What if an Air Traffic Service is needed?

Usefully, the frequencies of these airfields are all printed on the VFR charts, so making a note during pre-flight planning of those that might be needed



could well prove beneficial. Letting ATC know you are there not only improves the controller’s situational awareness, but it may also improve yours as, even at those airfields without the benefit of a radar picture, information on traffic known to the controller can be passed. I underline known to the controller because, for those controllers without access to radar, this clearly depends on pilots contacting the controller and passing accurate information.

Finally, the Board has seen a number of Airprox over recent years where pilots perhaps did not fully understand what a particular Air Traffic Service does and, just as importantly, does not provide. In this case, the Mooney pilot thought that having a listening squawk on his transponder meant that the controller would alert him to any traffic in his vicinity. This isn’t the case; listening squawks are designed to help pilots not to infringe controlled airspace (CAS) and controllers will not normally provide any Traffic Information on traffic outside CAS.

More information on UK Flight Information Services is available in [CAP 774](#) or, in a slightly more ‘digestible’ format, in [CAP 1434](#) (which also briefly describes the purpose of frequency

monitoring codes). A useful leaflet with more information on frequency monitoring codes is also available on the [Airspace & Safety Initiative website](#) at the link [here](#).

Full details of the incident (2020017) can be found at the link in 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

In October we reviewed 25 Airprox, including ten SUAS incidents, five of which were considered to be risk bearing – four were Category A and one was Category B¹. Of the remaining 15 aircraft-to-aircraft Airprox, five were risk bearing in category B. The details of October’s Airprox will be available soon on our website so do dip in and have a read.

At every board meeting we comprehensively assess each Airprox to evaluate the performance of Safety Barriers. There are nine of these, four for the Ground elements and five for the Flight elements.

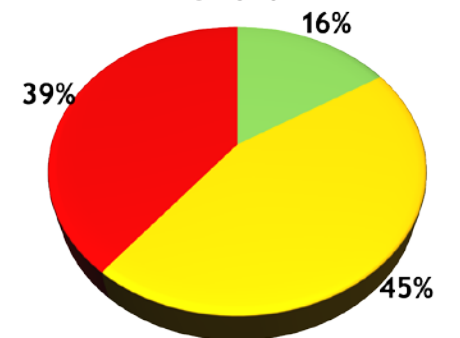
The ‘strength’ of these barriers helps us to understand what is going on in any given situation and helps us identify frequent themes and identify lessons.

Each barrier is further broken down into what we call Contributory Factors – and there are up to 24 of these in some Safety Barriers.

The Contributory factors are really important and help us to identify the specifics – for example ‘*Ineffective communication of intentions*’ or ‘*Understanding/comprehension – Pilot did not assimilate conflict information*’.

The first one applies to the Tactical Planning Barrier, the second one applies to the Situational Awareness Barrier. Both of these are incredibly important as these particular barriers are either partially effective or ineffective in the majority of Airprox. This is a pie chart of the Situational Awareness barrier for the Flight Elements for all 2020 Airprox:

FLIGHT ELEMENTS - SITUATIONAL AWARENESS OF CONFLICTING AIRCRAFT AND ACTION



● EFFECTIVE ● PARTIALLY EFFECTIVE ● INEFFECTIVE
○ NOT USED ● NOT PRESENT/ASSESSABLE

It tells a really grim story – namely that 84% of the time, pilots are not aware of the others around them. Sometimes this is down to their own actions, and sometimes because of the actions of others. The good news is that you can easily improve your situational awareness, by planning, communicating and having appropriate electronic conspicuity devices fitted in the aircraft.

This month’s Airprox of the Month demonstrates the importance of planning and communication – remember, your radio call is somebody else’s Situational Awareness.

¹ 2020073,2020079 were categorised A and 2020072, 2020075 were categorised B.

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