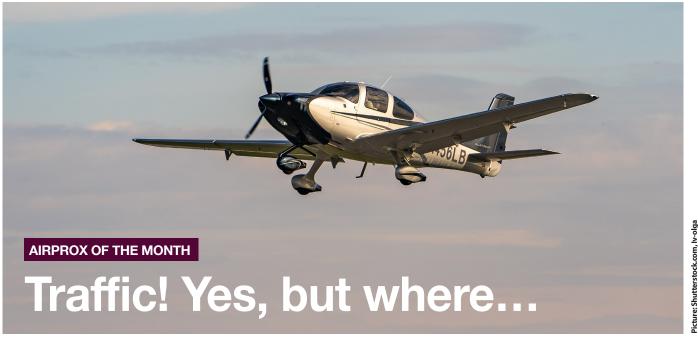


K()XInsight

DIRECTOR UKAB'S MONTHLY UPDATE

May 2023



Information – how accurate is it and what am I going to do with it when I get it?

often talk about how crucial situational awareness is in assisting with decision making, but how do we know if the information we're receiving is accurate? Well, as with many things, much depends on not only the source of the information, but also its timeliness. For example, when receiving Traffic Information from a controller or a FISO, do you tend to look exactly towards where the traffic has been announced in relation to you, or do you project 'forward' from the last reported position?

Remember, the moment the Traffic Information is passed, it is historic. In addition, more and more of us are carrying electronic conspicuity (EC) equipment these days, including a means of displaying the information that the unit is receiving (either through the EC unit itself or via a third-party software provider). So, how do we form an accurate mental model of the aircraft around us with these various inputs?

I have chosen Airprox 2022254 to illustrate the importance of this point. A Partenavia P68 and an SR20 were flying near Scunthorpe at a similar level with

both pilots in contact with Humberside Radar - the P68 pilot having only arrived on frequency a moment before the Airprox and the SR20 pilot having been receiving a Traffic Service from the controller for a little while.

Although the P68 was equipped with a traffic warning system it didn't alert the pilot to the presence of the SR20, but as the pilot had just contacted Humberside Radar the controller immediately passed Traffic Information on the SR20 to the P68 pilot. The SR20 was also equipped with a traffic warning system which showed the presence of the P68, and the SR20 pilot had previously received Traffic Information from the Humberside controller on that traffic.

What's interesting, though, is each pilot's reactions to the information that they had. The SR20 pilot, having been informed of the presence of the P68 about two minutes prior to the Airprox and at a range of about five miles, used that information – and the information from their TAS - to try to sight the P68; there was no change in heading or level of the SR20 from the time the pilot received

the Traffic Information to the moment the aircraft paths crossed. The P68 pilot, however, reacted immediately to the information they received by climbing, thus introducing a degree of vertical separation.

This raises the question of when and how to react to information received, and just how accurate it is? The first point I'd like to make is that, on the whole, azimuth information from on-board EC equipment is potentially less accurate than height information.

For those of us with experience operating with TCAS II, we should know that normal procedure is to wait for a Resolution Advisory (RA) from the equipment and not to manoeuvre until an RA is received (in case we make the condition worse). We will also know that an RA only ever instructs us to manoeuvre in the vertical plane. However, for those of us flying – in Class G airspace – with a different type of EC equipment, what should we do?

Well, remembering that the azimuth information might be inaccurate, we should continue our lookout scan of

that area on our general level and then concentrate a bit more attention towards the 'threat's' relative altitude. Undoubtedly, once we have spotted the other aircraft assessing the situation then becomes a whole lot easier.

However, we should also consider what we're going to do if we don't manage to sight the aircraft that our EC equipment is telling us is out there. Should we turn? What if we are on the right-hand side in a converging situation? Clearly, each encounter needs to be judged on its own merits but do remember that if the other pilot is required to give way under (UK) SERA.3210, they will also need to know that your aircraft is there – they might not have EC equipment, nor have received Traffic Information, nor have sighted you.

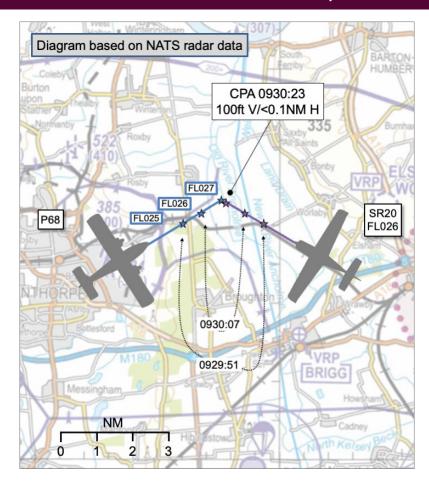
Always be prepared to do something to break a potential confliction and remember that vertical separation is just as useful as lateral separation. In this case, both pilots did what was sensible given the information that they had, but it certainly provides food for thought concerning what to do with all the information that we receive and when to act.

UKAB MONTHLY ROUND-UP

This month the Board evaluated 26 Airprox, including 11 UA/Other events, eight of which were reported by the piloted aircraft and three by the drone operator. Of the 18 full evaluations, seven were classified as risk-bearing - all category B. The last of the 2022 Airprox should be discussed at the June Board meeting. The Board made one Safety Recommendation at the May meeting: that 'The CAA includes a means on VFR charts to highlight the military airfields that operate Instrument Approach Procedures outside controlled airspace, and that pilots are strongly recommended to contact the ATSU before flying within 10NM'.

What was noticeable in the majority of this month's risk-bearing Airprox was that there was often information available to the pilots which meant that they could have perhaps acted sooner than was the case. While there are clear rules regarding which pilot is required to give way in most situations, these rules are predicated on each pilot being aware of the presence of the other.

The lesson is to always fly defensively and consider your own options for increasing separation should 'Plan A' not be working.

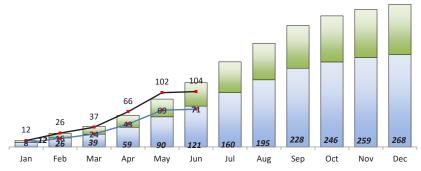


2023 Airprox - Cumulative Distribution

UA/Other 5yr Cumulative average (2018-2022)
Aircraft 5yr Cumulative Average (2018-2022)

Cumulative Total All Airprox

Cumulative Total Aircraft/Aircraft Airprox



Risk-bearing summary table for May 2023				
Airprox	Aircraft 1 (Type)	Aircraft 2 (Type)	Airspace (Class)	ICAO Risk
2022247	A109 (Civ Helo)	Harvard (Civ FW)	London FIR (G)	В
2022254	P68 (Civ Comm)	SR20 (Civ FW)	London FIR (G)	В
2022256	Skyranger Swift (Civ FW)	C152 (Civ FW)	London FIR (G)	В
2022258	Prefect (HQ Air Trg)	Phenom (HQ Air Trg)	Cranwell CMATZ (G)	В
2022264	PA28 (Civ FW)	C42 (Civ FW)	Compton Abbas ATZ (G)	В
2022265	P149 (Civ FW)	AC11 (Civ FW)	London FIR (G)	В
2022269	C152 (Civ FW)	PA28 (Civ FW)	Coventry ATZ (G)	В

