

KEEP YOUR LOOKOUT!

By Steve Forward, UK Airprox Board

Each spring, there's a noticeable increase in Airprox incidents, as the better weather arrives. It's probably no coincidence, as those who aren't hardy winter flyers get back into the cockpit, perhaps a little rusty after a bit of a layoff. As a result, there's a great temptation to focus inside the cockpit while they're getting hands and minds recalibrated. So, if you're about to go flying after the winter layoff, please pay attention to all those things that go into avoiding mid-air near-misses or collisions.

There's been quite a correlation between numbers of Airprox and mid-air collisions over the years – on average, we've seen something like one mid-air per 60 Airprox.

TIMELY REMINDERS

To help address this, the UK Airprox Board (UKAB) will be focusing on six themes that, over the coming weeks, will be expanded upon with posters, articles and a short animated video:

- **Eyes** – lookout and develop a robust scan technique.
- **Ears** – communicate by talking/listening

on the radio, to make your intentions clear and maintain situational awareness of others.

- **Foresight** – fly defensively, with vigilance, courtesy and consideration for others at all times (aka airmanship).
- **Insight** – diligently review your understanding of ATC services, rules of the air, circuit patterns and procedures.
- **Advertise** – make your presence known through conspicuity measures (electronic and visual).
- **Prioritise** – time-share cockpit tasks and avoid distractions compromising your lookout.

Lookout for the UK Airprox Board's new material at flying clubs or your local airfield. You can also view them on the UKAB website (www.airproxboard.org.uk), in the 'Director UKAB's Topical Issues and Themes' section, where you'll also find much other useful material.

AWARENESS & AIRMANSHIP

The bottom-line is that, in 'see-and-avoid' Class G airspace, if you don't 'see' then you can't 'avoid', so the time you spend honing lookout skills is rarely wasted.

Maintaining situational awareness also comes high on the list. Use the radio to make your intentions clear, listen out (especially at A/G airfields) and don't be

afraid to ask questions if you don't know or aren't sure about what's going on.

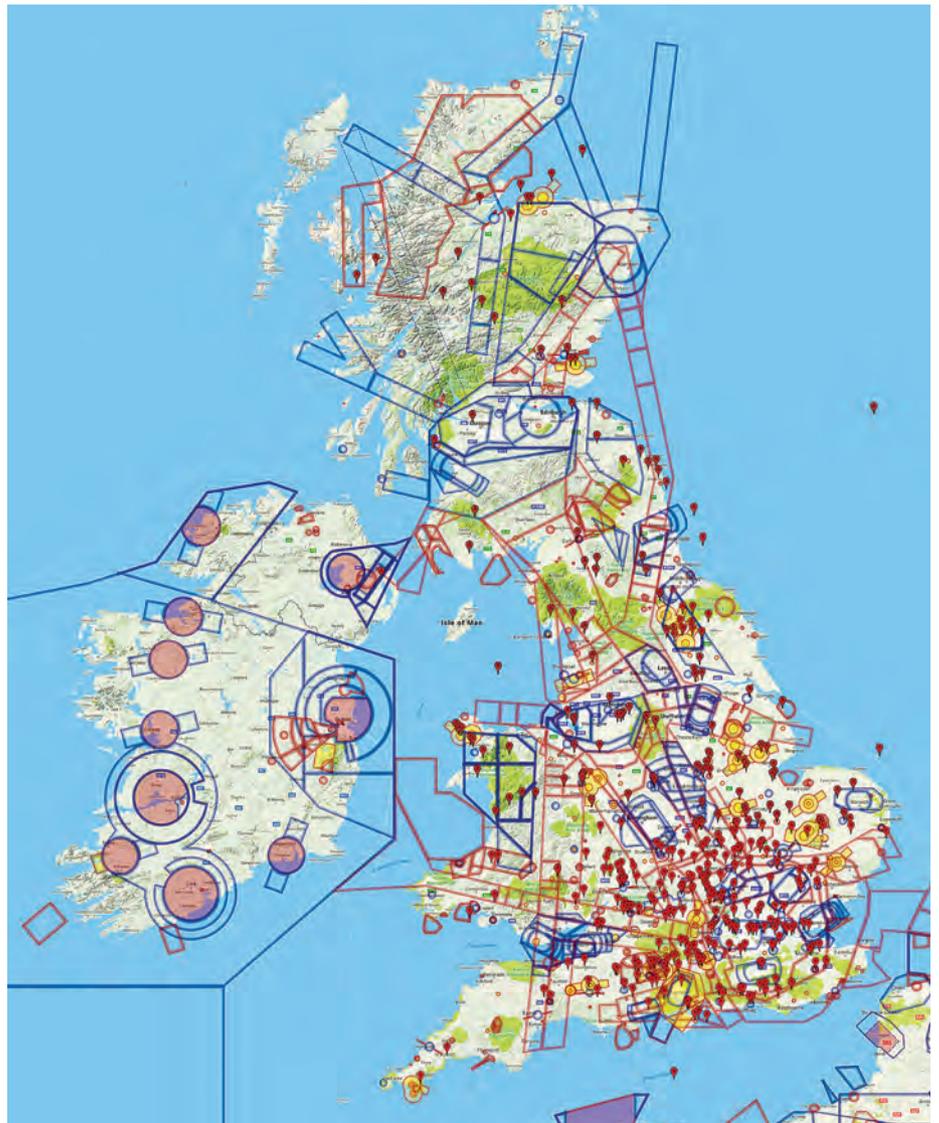
The rest largely comes down to 'airmanship', which encompasses thinking ahead, flying with consideration for others, being diligent in sticking to rules and procedures, using all systems available and prioritising tasks.

All of the above can be summed up by the old cliché: 'Truly superior pilots are those who use their superior judgment to avoid those situations where they might have to use their superior skills.'

So may I suggest you take a couple of minutes to remind yourself about the risks and causes of Airprox before flight, and keep your eyes *out* of the cockpit as much as possible, rather than focusing too much on nailing that airspeed or altitude on the first flights of the year. Please, help yourself to avoid becoming a statistic.

EMERGENCY SERVICES

Also on this theme, a circling helicopter often denotes either ambulance/rescue or police activity, where their pilots may be focused on



The 'Interactive Map of UK Airprox Locations' on the UKAB website which, in this example, is set to show all Category A incidents that have taken place in the UK since 1 February, 2000.



tracking activity on the ground or preparing to land or winch casualties. Do give them a wide berth because they may unexpectedly change their flight path and may not necessarily be aware of you in the vicinity.

Most police and ambulance or rescue helicopters are fitted with TCAS/TAS equipment these days, so please also fly with your transponder on and with ModeC/Alt selected, as this will give them – and others – valuable situational awareness of traffic in their vicinity during their tasks.

AIRPROX OF THE MONTH

My Airprox of the month reflects the situation outlined above. Airprox 2016160 was a Category C incident, involving a police EC135 helicopter and an EV97 Eurostar that came into proximity near Weston-super-Mare.

The EC135 was on task and orbiting at about 1,000ft, under a Basic Service from Bristol. The Eurostar was listening out on Bristol's frequency and squawking their listening-out transponder code. The Eurostar pilot saw the EC135 and was monitoring it to assess its motion but didn't expect it to turn towards him.

For his part, the EC135 pilot received a late TCAS alert and initiated a rapid descending turn, during which the crewman saw the Eurostar. The Board focused on the fact that the EV97 pilot had continued pretty much on-track and commented that, depending on how his orbit unfolded, the police helicopter may well have been required to give way to the EV97 but the police pilot had not seen it.

They said that the Eurostar pilot would have been better served by avoiding the orbiting EC135 by a good margin, on the assumption that its flight path would be unpredictable, as its crew might be task-focused in looking at the ground area and responding to the unfolding incident below.

The full report can be found on the UKAB website (www.airproxboard.org.uk), in the 'Airprox Reports and Analysis' section, within the 'Individual Airprox Reports' tab, under the appropriate year. ■



This graphic depicts Airprox 2016160, described at left, which was a Category C incident involving a police EC135 helicopter and an EV97 Eurostar near Weston-super-Mare.

AVOIDING COLLISIONS

A monthly update from the Director UK Airprox Board, giving learning themes for recreational pilots

In December 2016, the Airprox Board assessed eleven drone/JAV reports and ten aircraft-to-aircraft incidents. Of these, ten were assessed as risk bearing (four in Category A and six in Category B), although six of these risk-bearing incidents involved drones.

The main themes discussed this month were: late-sightings/non-sightings in five events, poor airmanship decisions in four incidents, and two Airprox involving pilot inaction on detecting or being informed of a conflict situation.

Both of these latter incidents could have been avoided by a little proactive defensive flying, rather than relying on seeing the other aircraft or assuming that the other pilot would give way – they can only do this if they've seen you, so relying on that is a flawed plan.

HOW AIRPROXES ARE CATEGORISED...

AIRPROX CAUSAL FACTORS

For every Airprox incident assessed, the Board determines one or more causal factors. These tell us why events started in each instance and signpost the lessons to emerge. Attention paid to 'cause' is worthwhile because it's likely to deliver and promote better prevention.

RISK RATINGS

Risk level assessments are made on the basis of what actually took place, not on what may or may not have happened. There are four categories, A-D are agreed at international level, and one UK-only category, E, is described as follows:

- A** Risk of Collision: aircraft proximity in which serious risk of collision has existed
- B** Safety not assured: aircraft proximity in which the safety of the aircraft may have been compromised
- C** No risk of collision: aircraft proximity in which no risk of collision has existed or risk was averted.
- D** Risk not determined: aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination
- E** Met the criteria for reporting but, by analysis, it was determined that normal procedures, safety standards and parameters pertained.