

PRO Insight

DIRECTOR UKAB'S MONTHLY UPDATE

June 2022



There are all sorts of reasons why transponders might not be transmitting, but their value is stand-out

here's generally a lot of chit-chat at safety events, fly-ins and in the 'crewroom' about the use of transponders. This small talk tends to be a mixed bag of anecdotes, ranging from people not switching them on in case they fly into controlled airspace and attract the attention of the CAA's Infringement team, to individuals who had upgraded equipment without ensuring it was fully functional, to the understanding of the purpose of a frequency monitoring code, to times of pure forgetfulness where it inadvertently remains in its useless state of OFF for the flight's duration.

So I thought that Airprox 2022009

would highlight a few lessons on the value of having a fully serviceable transponder, and to gently remind everyone of the legal requirement to have it switched ON when fitted.

This Airprox occurred when a PA-28 and an SR22 came into proximity below controlled airspace in good weather. The SR22 was receiving a Basic Service from Farnborough LARS and was carrying a transponder with modes A, C and S, plus it was fitted with additional electronic conspicuity equipment. Despite all of this the pilot had to carry out an immediate steep climb to avoid a conflicting PA-28 and believed they wouldn't have seen it if they hadn't been warned by Farnborough. Under a Basic Service Farnborough wasn't required to give Traffic Information, but on this occasion they noticed an unidentified primary radar contact closing quite quickly on the SR22, which they had identified and verified so, thankfully, they were able to pass the information about the oncoming contact.

The PA-28 reported having a transponder transmitting modes A and C, but the NATS radar did not detect the signals from the aircraft until well after the Airprox, when it was displaying a frequency monitoring code. Whether the transponder was on and functioning correctly or not is

not the point to consider here, it's the fact that, at the time, the aircraft was visible only as a primary contact. Furthermore, the PA-28 did not have any additional electronic conspicuity equipment fitted so there was no way that the pilot of the SR22 could have had any situational awareness apart from that passed (fortuitously) by the Farnborough controller.

Transponders augment the situational awareness of Air Traffic Controllers, they also play a part in the activation of electronic warning systems, so without a transponder and/or any additional electronic conspicuity equipment, the SR22 was entirely reliant on the See & Avoid barrier until they received information from the Farnborough controller. The message here is get the best transponder you can, make sure it is maintained properly, have it switched ON and ideally talk to someone.

It is, of course, for pilots to decide on their own requirements for additional equipment according to their needs, but the Board wants to highlight to pilots that additional funding has been made available for electronic conspicuity devices through the CAA's Electronic Conspicuity Rebate Scheme, which has been extended until March 31, 2023.

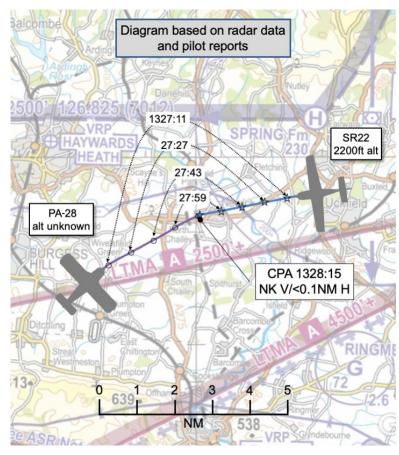
https://www.caa.co.uk/generalaviation/aircraft-ownership-andmaintenance/electronic-conspicuitydevices/

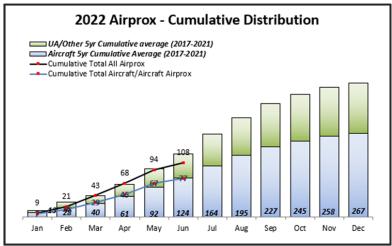
UKAB MONTHLY ROUND-UP

We evaluated 21 Airprox this month, including six Unmanned Aircraft/Other events; four of these were reported by the piloted aircraft with two reported by the UA operator. Of the 17 full evaluations, eight were classified as risk-bearing – one was category A and seven were category B. The Board also decided to raise a recommendation following the consideration of an Airprox between a military training aircraft at low level and a drone conducting research work.

There is a growing concern about the risk picture with drones, specifically below 400ft and the inherent conflict with low-flying military and others, such as emergency services' aircraft, who have exemptions to fly below 500ft.

But these are not the only potential conflictions; clearly, taking off and landing requires a descent to below 500ft so it's pretty obvious there's likely to be aircraft below 500ft at an airfield, however it could





be more tricky if there's a private airstrip or helicopter landing pad nearby – an airstrip could easily be hidden from view and a drone could cause a bit of startle if it happens to be in the vicinity when the strip or a landing pad is being used (**Airprox 2021156**).

I say this because there is potentially a misunderstanding in the Remotely Piloted Aircraft System (RPAS) community that aircraft do not operate below 500ft (more importantly 400ft which is the cap for routine recreational RPAS flying).

Equally, there is a potential area of misunderstanding by communities who do routinely operate below 500ft (according to their applicable exemptions) that RPAS flyers are obliged to NOTAM their activity – for the majority of RPAS operators, as I hope we all know, that is simply not the case.

