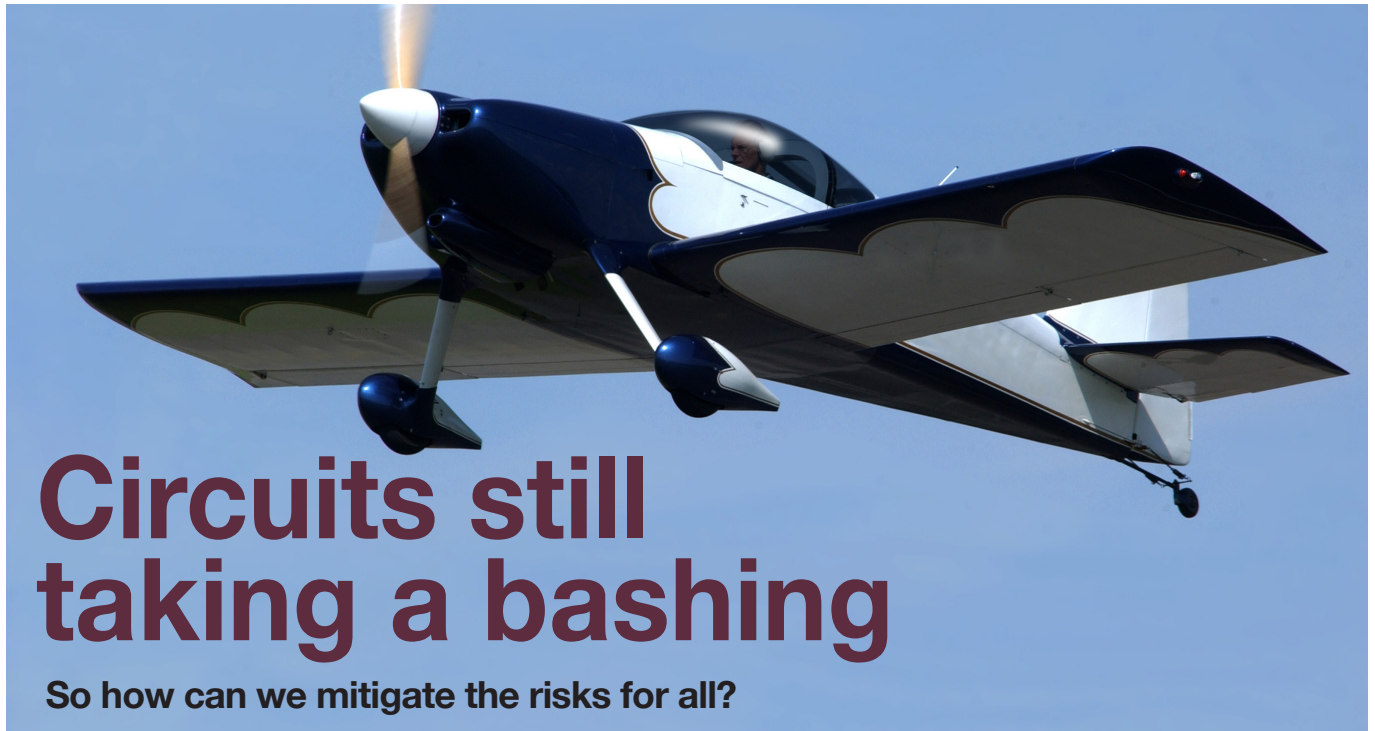




AIRPROX *Insight*

DIRECTOR UKAB'S MONTHLY UPDATE

September 2021



Circuits still taking a bashing

So how can we mitigate the risks for all?

Photo for illustration purposes only: Brian Barr/Simon Finlay Photography

Five circuit-based events were covered in the Board's September meeting and these occur regularly, tending to revolve around the same thing – difficulty integrating with other traffic which normally results from reduced situational awareness.

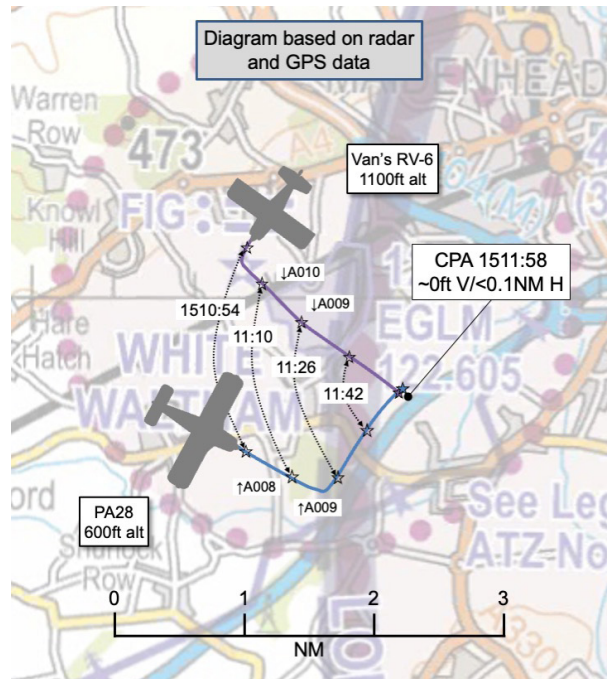
One, Airprox (2021045), happened at White Waltham back in April: The joining traffic was a RV-6 and they describe being very aware of two aircraft on the climb-out which could become a factor on the crosswind portion of their join.

To mitigate this they decided to fly higher than the published circuit height. Even though they describe diligently looking out to clear the downwind leg, they were not consciously looking out below them. They consequently thought that the downwind leg was clear of traffic, they certainly did not see anything on downwind, and they had calculated that the two previous aircraft on climb-out would be behind them in the pattern.

As they turned downwind, however, they saw an aircraft slightly below on their left. There was no time to do anything and it

was probably only the fact that they had been flying at the wrong height which kept them apart. This is ironic, as the fact that they were flying at the wrong height was probably the thing that stopped them from seeing this traffic in the first place.

Both pilots got a shock from this Airprox and indeed had a conversation with each other on the ground. The depth of detail submitted in the report, especially by the RV-6 pilot who was conducting this join, was welcomed – the pilot had clearly reflected very carefully on what had happened and offered their thoughts in their report, highlighting what they think they could have done better and how they had learned from it. They are to be commended for doing this



as it shows humility, consideration and a true appreciation of the responsibilities we all have to each other when we go flying.

You can read the full report [here](#)

UKAB MONTHLY ROUND-UP

The Board considered 27 Airprox in September, including 12 SUAS events (one of which was reported by the RPAS operator). Of the 15 aircraft-to-aircraft Airprox, ten were classified as risk-bearing – five were category A and five were category B. Three were category C, one as category D and one as category E. The chart shows a significant rise in reported Airprox in June where numbers were far in excess of the five-year average.

All but one of these risk bearing events took place between May 26 and June 5 representing an unprecedented spike in events; worryingly, five of them took place in the circuit and were generally the result of difficulty in integrating into the circuit and consequently coming into conflict with other traffic.

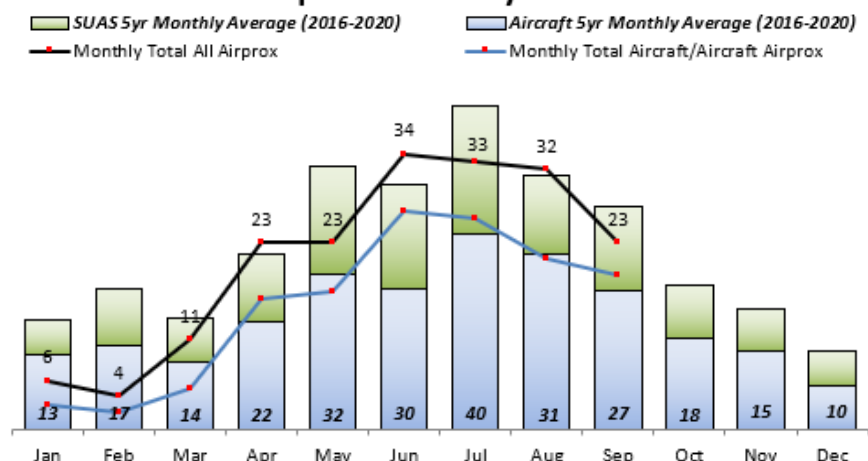
In more general terms, though, what can we do to help avoid situations arising in the circuit, especially when joining?

To join, or operate, safely, in the circuit it's imperative to understand where all the other traffic is. As flying in the circuit is always conducted in VMC under VFR, lookout is the primary means of deconfliction but, as we know, lookout can be unreliable — it's very easy to misjudge the dynamics of the situation when attempting to integrate with other traffic that might have a different performance, or indeed to integrate with pilots who might be flying an unusual shaped or sized circuit pattern. So what can we do to make it safer?

The first thing is to be *absolutely sure* you establish who is there already and exactly where they are. You can do this visually of course, and that is the advantage of conducting an overhead join: this procedure allows you to get into the overhead safely above the established circuit height whilst using your focused lookout to identify all the other aircraft in the circuit. Also you will normally have established contact with any ground elements (where present) prior to arriving in the circuit, either to gain permission to enter the ATZ, permission to join or, where permission is not required, to establish the airfield details and gain an appreciation of other traffic.

With this information you must be diligent in building your mental model so that you can work out how best, and where, to join. If you're unsure, ask for clarification. Secondly, make sure you have studied the relevant documentation so that you understand what is expected, but more importantly what is *not allowed!* Thirdly, be

2021 Airprox - Monthly Distribution



accurate and predictable, and if you intend to do something unusual (but permitted) ensure that you have clearly articulated and conveyed your intentions over the radio.

Finally, be aware of the different performance characteristics of the aircraft in the circuit – including your own.

Misjudging performance can be very dangerous and leave others with nowhere to go if you insert yourself too close behind or in front of another aircraft.

This table shows the weakest barriers and their associated Contributory Factors for Airprox which occurred in the circuit.

Barrier	CONTRIBUTORY FACTOR
Tactical planning and Execution	Did not conform with established pattern of Traffic
Situational Awareness	No, Late or generic Situational Awareness
	Did not assimilate traffic information
	Did not request further information
See and Avoid	Effective non-sighting

For further reading, this table has links to all published risk-bearing circuit events which occurred in 2020 and 2021.

Airprox No	Year	Alt Block	Risk Category	Sector Mix
2020014	2020	501-1000	B	GA-GA
2020018	2020	1001-1500	B	Mil-Mil
2020085	2020	501-1000	B	GA-GA
2020094	2020	1001-1500	B	GA-GA
2020127	2020	1001-1500	A	GA-GA
2020134	2020	1001-1500	B	GA-GA
2020136	2020	501-1000	B	GA-GA
2020141	2020	1001-1500	A	GA-GA
2020154	2020	1001-1500	B	Mil-Mil
2020156	2020	501-1000	B	GA-GA
2020161	2020	501-1000	B	GA-GA
2021038	2021	1001-1500	B	GA-GA
2021045	2021	501-1000	A	A-GA

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