

# When IFR **Meets** VFR

Safely integrating into the VFR traffic circuit requires forethought and a conscious shift from an IFR mindset to a VFR mindset.



You're the pilot of a light twin or turboprop. You happily truck up and down the country in straight lines everyday. You get vectors to final, then cruise on down the glideslope.

Until one day, when you have to land at an aerodrome in Class D or G airspace – where 'lighties' abound like killer bees in "The Swarm". You suddenly realise that finding your way around the circuit visually, and judging your position in relation to other traffic, are distant memories from your student pilot days.

You hear four aircraft in the circuit, another one joining and one vacating – what sort of bug-smashers will they be? Either way, you will eat them alive – better hang everything out in an attempt to slow down.

When your friend, TCAS, starts having kittens keeping up with all the traffic, it dawns on you that you should really start looking out the window and actually fly the aircraft with reference to the ground.

You take a deep breath and disconnect 'George'. Your downwind leg ends up too wide, and you maintain circuit height about as well as all the student pilots in the circuit. You get a headache trying to figure out when to turn base to allow time for the 'lightie' on final to clear the runway.

Somehow it all works out this time. When you barrelled on in, you only terrified one student pilot in the circuit into giving up flying – the CFI will thank you for weeding out the weakest link, won't they?

What could you do differently in the future? Why was fitting into the VFR traffic pattern at a small airport, on a nice day, so difficult?

If you are flying IFR in an aircraft that is considerably faster than the average GA bug-smasher, here are some tips for integrating into the VFR traffic circuit.

## Get Ahead of the Aircraft

### Prepare Early

Obtain the latest METAR, or listen to the ATIS (if available) to establish the runway in use. Think about the terrain around the aerodrome, the direction you will approach it from, how big your circuit should be, and how you will enter the circuit.

Joining the circuit straight-in will give you less time to see, and integrate with, traffic already established in the circuit.

Consider joining crosswind or downwind – it may take you a couple of minutes longer, but it will help with the integration process. Visualise all of this before you have to execute it.

Always brief a visual approach as thoroughly as you would an instrument approach.

### Speed Planning

The faster you are, the more challenging it will be to integrate – therefore more important to plan ahead.

Work out what speed you want to be, and what altitude you need to be at, when you join the circuit. Plan your descent accordingly. This can be overlooked if you are used to receiving altitude and speed assignments from ATC. Reducing the speed differential will make it easier to see and fit in with VFR circuit traffic.

### Traffic Awareness

As soon as you can, listen out on the local frequency for traffic in the circuit and build a mental picture of what is going on. When you are close enough, make sure you keep a good lookout. Don't leave it up to ACAS (TCAS) – you need to be actively looking for traffic. ACAS is an excellent tool to help you visually sight traffic.

Remember how accurate your radio calls were when you were learning? So don't rely solely on what you hear – believe it when you see it.

Let other traffic know where you are in terms they will understand. Give your position relative to visual reporting points (VRP), or the aerodrome, rather than reporting which instrument approach you are conducting. VFR pilots may not know what an 'NDB ALFA' approach is, but they will understand '10 NM southwest'. Knowledge of local VRPs will help your situational awareness. A position report should be made approximately 10 NM from the aerodrome, but this is not a hard and fast rule, if there is a well known VRP at 12 NM report there instead (if it will help VFR traffic understand your position). Also, make yourself visible by turning on lights.

Give some thought to how you will slot in among the slower traffic. Traffic already in the circuit has right of way – joining aircraft must fit in around them.

The most dangerous situation would be flying an instrument approach when the

cloud base is around 1200 feet, with VFR aircraft already established in an opposing circuit. For example, flying an approach to the sealed runway 20 at Timaru, with a GA aircraft in the circuit for grass runway 11. You would be popping out of cloud with the least amount of time possible to see and avoid the traffic flying through your final approach path. It is essential for two-way communication to be established with the traffic in the conflicting circuit. Make sure they are aware of the situation, rather than just transmitting your intentions and hoping they understood what you are planning to do.

### Practise

Practise judging visual approaches. This can be a long lost skill if you are used to flying straight-in approaches, with vectors to final, and having a glide slope or advisory altitudes to follow. If you can, also practise visual approaches purely with reference to the ground – without using the approach lights or checking your DME distance, in case you have to do just that at an aerodrome without lights (such as Hastings), or somewhere the lights are unserviceable.

### Attitude

Think about how your actions will affect other aircraft. Barrelling into the circuit with a 'get out of my way' attitude, or sitting on the runway waiting for a clearance (causing light aircraft to go around), is not conducive to a peaceful coexistence.

### Small and Fast

This scenario does not, however, only apply to light twins, biz jets, and turbo props flying IFR into aerodromes in Class D and G airspace. There is such a variety of aircraft speeds within the GA category now, that the same principles apply to fast GA aircraft (flying VFR).

### Tips for VFR Circuit Traffic

Here are three simple things you can do to help faster aircraft integrate into the VFR circuit pattern:

- » Make clear radio calls, accurately stating your position.
- » Actively look for the faster traffic.
- » If you don't understand their position report – ask them to explain where they are. ■