



Operating in the new airspace

A clarification of how to fly in VFR Class E and G airspace in the new National Airspace System.

Communications Concerns have been raised about the appropriate VHF frequencies to be used and when pilots should speak up.

The NAS education material and AIP refer to appropriate frequencies to be monitored. In determining appropriateness, pilots need to consider their location and phase of flight. For example, if operating in Class C or D airspace it should be obvious that the appropriate frequency to use is the ATC frequency for that volume of airspace. These frequencies are shown on VTCs, in ERSA and en route charts.

However, in Class E and G airspace, some pilots have had difficulty in identifying the appropriate frequency. If departing, arriving or flying within the airspace in which MBZ or CTAF procedures apply, the frequency allocated to that aerodrome is the appropriate frequency. AIP sections ENR 1.4.4, ENR 1.1 56.4 and ENR 1.1 56.6 provide the appropriate guidance information. If near the circuit area of any other non-towered aerodrome and at or below 3000 ft agl, use 126.7 (MULTICOM).

Similarly, when operating in Class G or E airspace in the vicinity of a Class D Tower the appropriate frequency may be the Class D tower frequency. The VNC, VTC and ERSA provides guidance on which Class D towers have responsibility for overlying Class E airspace and this will assist pilots to determine the appropriate frequency. In other areas the appropriate frequency could be the Class E or G frequency as depicted on the recently-issued frequency planning

chart. The frequencies published on charts are for operational purposes only. They are not a means of social contact. If you need to pass non-operational information to another pilot, use 123.45.

The CAR requirements are stated in AIP ENR1.1 60.1, which specifies that pilots of radio-equipped aircraft must listen on the appropriate frequency and "announce if in potential conflict". The challenge for many pilots lies in identifying potential conflict. There are several factors to take into account.

You need to be on the same frequency as those flying around you. And you need to listen to the radio, not just have it on. Standard radio calls are designed to make it easier for you to gather important details.

Do you know where the other aircraft is if you hear a radio broadcast or ATC traffic advisory to you or someone else? Are they below, above, same level, climbing, descending, approaching your position or flying away? If you are in any doubt or if you can't work this out, you have not clearly identified the possibility of conflict. If you believe there is potential for conflict, then you need to broadcast your position and intentions to give the other pilot a chance to share the burden of collision avoidance.

Do not assume that the other pilot knows that you are there or that they can see you. Light aircraft are difficult to see, even when you know where to look.

Two Cessna 172 aircraft with a closing speed of 200 kt have 18 seconds to impact

at a separation of 1 nm. At that distance, the head-on view of a Cessna 172 is the same as an object 0.72 inch (18 mm) wide. A Boeing 737 is much bigger and easier to see but there is no guarantee that you can be seen in a light aircraft at the same distance.

Transponders Some pilots think that use of a transponder is optional outside controlled airspace. Not so! If an aircraft is fitted with a transponder, it must be operated constantly, except in a GAAP zone (AIP ENR 8.1.2).

ATC staff cannot provide traffic advisory information on your aircraft if they cannot "see" it. The final protection provided by TCAS does not exist if your transponder is not operating. As a matter of airmanship, you should ask ATC for a check of your transponder when within radar coverage (thelight blinking is an indication) to ensure that it is operating in between required checks.

If you intend to fly in Class E, D or C airspace, whether VFR or IFR, a transponder must be operating with mode C (altitude reporting). Although there are some limited exemptions, they are quite specific to aircraft without electrical power generating systems or flights associated with maintenance. The general exemption for aircraft without generating systems does not apply in class E airspace within 40 nm of a Class D tower. AIP Section GEN 1.5.6 provides an explanation of the requirements and exemptions.

These are requirements backed up by the law, not recommendations.