



AUSTRALIAN AIR FORCE CADETS Aviation Safety Bulletin

AAFC Aviation Safety Bulletin 2/2017 - Radio Operations: "Alerted See and Avoid"

Recent concerns over traffic separation in the circuit necessitate a timely reminder that separation of VFR aircraft is reliant on "alerted see and avoid". This requires an effective radio watch with appropriate radio calls to supplement a thorough and effective lookout to enhance separation.

In the circuit, the minimum radio call required is a timely downwind call when entering downwind. If the call is delayed for any reason, for example excessive other radio traffic, call again as soon as practicable advising, for example "Mid downwind" or "Late downwind" so other pilots will know where to look. To enhance Situational Awareness and separation, additional calls may be made, it is strongly recommended that a 'turning base' call is made when traffic density is high as the glider will be in plain view making the glider easier to identify. Effective lookout is still the primary means of achieving separation.

The PowerFLARM device fitted to most gliders operated by the AAFC is an aid designed to detect other gliders and tugs which have FLARM or Mode 3 transponders and warn of possible conflict. Be aware that most general aviation / light aircraft are not fitted with FLARM or Mode 3 transponders and therefore you will not be visible to each other using the PowerFLARM. Transponder equipped aircraft are visible to air traffic control and TCAS equipped aircraft, such as Regular Public Transport. This is why SI OPS 3-1 places a requirement on all Air Force gliders having a serviceable transponder which is to be switched on for all flights. Again, you need to be aware that most general aviation / light aircraft are not fitted with TCAS and will therefore not see you using this technology. The executive summary is that FLARM equipped aircraft can see other FLARM equipped aircraft and the transponder in Air Force gliders means you can be seen by ATC (when within radar range) and TCAS equipped aircraft. Both of these systems are excellent at providing information and make an important contribution to flight safety but they do not replace good lookout and radio procedures.

Whether in the circuit or in the surrounding countryside, an impeccable lookout is essential as other traffic may be operating on a different frequency. If a transmission is received that may affect the safety of an aircraft, then the pilot should clearly and concisely report their position.

If other gliding operations exist at or near the airfield, where other glider pilots are operating who may not have the same level of skills, lookout or discipline to that required by the AAFC, then utilise "alerted see and avoid" for protection.

When sighting another aircraft, always advise the other pilot of your location in relation to their aircraft so they know where to look.

If glider base or other ground agency advises a traffic that there are (a given number of) gliders airborne but positions not known, the pilot should clearly and concisely report their position, especially if there is a possible conflict. This assists the other pilot, shows a degree of professionalism and indicates a good listening watch.

If operating in a CTAF, each pilot should make themselves aware of the standard circuit altitudes for different classes of power traffic and avoid operating in areas of possible conflict. If operating at aerodromes where there is a published instrument approach, each pilot should have an understanding of where powered traffic may be during their approaches and avoid conflict.



CFIs and Duty Instructors should regularly liaise with other aerodrome users to establish a rapport and a professional understanding of how each other operates by discussion, potential concerns or conflicts, serious incidents can be prevented before they happen.

Some points to consider:

- Radio should be turned on as soon as the pilot enters the glider to check straight away that the frequency is properly selected, and ensure that the volume is correct and information is obtained about the current traffic.
- A common cause of poor broken reception is that the squelch is turned up too high. Check for clear reception as part of the CHAOTIC checks. Instructors need to ensure that students are aware of how to adjust the radio controls and students should ask to be shown if in doubt.
- If you haven't heard anything on the radio by the "I" in your CHAOTIC check, select either flick ATIS or AWIS, if available at the site to check for volume and clarity. Many gliding sites utilise a radio check before take-off. Don't forget to set the volume high enough to allow it to be heard over the expected noise of the airflow. Return to the operational frequency before the completion of the CHAOTIC take off.
- At aerotow sites, pilots should, before taking off, listen for the tug's advisory "rolling" call. If this is not heard, release immediately and rectify the issue before attempting another take off.
- At winch sites, immediately prior to each take-off an appropriate advisory radio call should be made on the local frequency from either the launch aircraft or a radio external to the aircraft. Launch commands, including the 'take-up slack' and 'all out' commands, should be given on the CTAF or local aerodrome frequency to improve situational awareness for pilots flying in the area. The radio must be external to the glider, typically in a launch control vehicle. In this way problems external to the glider and unseen by the pilot can be detected and the launch stopped (e.g. airbrakes unlocked). For this reason, the use of the glider's internal radio for initial launch signals is prohibited.
- During the flight, maintain a good listening watch. If the pilot hears anything specifically directed to them they should, acknowledge clearly and concisely, e.g. "Traffic sighted", "Looking for traffic", "Returning" etc., and finish off with their call sign and airfield name at the end of the transmission.
- The pilot should always listen out before transmitting so that they don't talk over someone else. If when releasing the transmit button you hear the tail end of someone else's message, it is likely that they have talked over the top of the pilot. The pilot may hear a third party comment "Two in together", in which case, the pilot should pause for a moment so that they don't both talk together again, then retransmit. In any case, if the pilot suspects you suspect that they have been over transmitted, they should try again to confirm.
- If the pilot has called another aircraft or the glider base and not received a reply, it is likely that they have not received the transmission, so they should try again, but should not continue "ad infinitum" as it suggests to other users that as a group the AAFC don't respond to radio calls. If something is clearly not as it should be. Check your radio for correct frequency/volume/squelch, wait a few moments and try again.
- The radio should not be turned down when the aircraft is crewed.
- If a student is flying with an instructor and adjusts the radio, they should inform the instructor what they have done.
- The FUST check should be completed once the decision to breakoff has been made, so plenty of time is available to concentrate on setting up a good circuit and making the radio call in good time.
- If for some reason, e.g. excessive external radio chatter, the radio call cannot be made, the pilot should listen for a break and make the radio call as soon as possible as "Late downwind", "Turning base" or even "Turning final" is better than no call at all.
- If for any reason the pilot cannot make a required call or have not received an acknowledgement, they should discuss the matter with the Duty Instructor when they land.
- GFA reference material exists with OSB 02/14 'See and Avoid for Glider Pilots' and OSB 02/12 'Lookout for Glider Pilots'

Authority

This AAFC Aviation Safety Bulletin is issued under the authority of Director Aviation Operations – AAFC.