

Safety Rules for Flying at the GSOA field

All members must familiarise themselves with, and abide by, the contents of this document.

M.A.A.A. RULES, GUIDELINES AND PROCEDURES

1. CODE OF ETHICS

GSOA is an anti discriminatory and harassment free organisation and abides by the following code.

- (a) The purpose of this code is to protect the health, safety and well being of all GSOA members and of those who participate in the activities of GSOA and the activities of its members.
- (b) GSOA also seeks to provide a safe environment for those participating in the activities of GSOA and its members.
- (c) This code confirms that GSOA and its members will not tolerate harassment, discrimination or abuse of those involved in its or its members' activities.
- (d) This code also records GSOA commitment to strong ethical principles and its requirement that all people participating in its activities must comply with principles of responsible and professional behavior.
- (e) GSOA believes everyone who participates in its activities has the right to be treated with respect and dignity. They also have the right to have any complaints dealt with in a fair, confidential and sensitive manner, and to be given the opportunity to be heard before penalties are imposed.
- (f) This code also recognises that certain types of harassment and discrimination are unlawful and that the notification of abuse to the relevant government authority, in certain cases, is a legal requirement.
- (g) GSOA members also seek to recruit and retain only those people who commit to the principles set out in this code.
- (h) GSOA members are required to act in accordance with relevant State Laws and are to abide with the appropriate State regulations that apply to those people who have unsupervised contact with children under the age of 18 years of age.

1.1. Responsibility

It is the responsibility of all GSOA Members to ensure that their activities conform to the Code of Ethics.

2. MOBILE PHONE POLICY

GSOA requires that Mobile phones can only be used in the spectator area, ie: the area within the fence surrounding the shed and car park. Any person moving into the pit or flight line areas must leave their mobile phone in the shed or on the table under the awning.

2.1. Guidance

With the widespread use of mobile phones and the benefits that they bring for general use, and also for emergencies, it is not the intention to unreasonably restrict their use at model flying sites.

It is anticipated that the layout of most flying fields will allow convenient areas to be available, such as public viewing areas or the car park, where mobile phones can be operated safely and in accordance with this Policy.

Consistent with the intent of this recommendation, a buffer zone should exist between where mobile phones are allowed and the location of any radios control transmitters in the transmitter pound or pit area. It is recommended that distance should be a minimum of 2 metres.

For the GSOA field, it is proposed that the no-go zone shall be the area from the pit fence up to, and including, the flying strip.

Mobile phones that are switched on radiate at regular intervals to maintain identification with the base station, not just when a call is in progress. Due to the difficulty in identifying whether a mobile phone is switched on or not, it is recommended that the ban apply to all mobile phones not just those that are switched on.

3. ALCOHOL & ILLEGAL DRUGS

When operating a model aircraft the pilot must not be under the influence of alcohol or illegal drugs.

In applying this, it is not possible in a normal model flying environment to specify, and measure a specific level at which the increasing effect of, for example alcohol, impairs performance sufficiently for any given individual. For this reason, alcohol or illegal drugs should not be consumed or used prior to, or during, participation in any model operations.

3.1. Drugs in Sport

The GSOA, as an affiliate of the FAI requires, that all its Members abide by the FAI Anti-Doping Rules and Procedures as referred to in the General Section of the FAI Sporting Code.

The GSOA is a member of A.S.A.C. all Members must abide by the A.S.A.C. Policies on Drugs in Sport that covers the application of the FAI code in the Australian environment.

3.2b. Medical Conditions

Members are expected to use their own judgment if they feel that either a short or long term condition would impair their ability to the point where there is an increased safety risk to themselves, fellow fliers or to the general public. However, as a minimum, a person must not operate a model aircraft without competent supervision, taking into account the type of aircraft being flown, if their medical condition is such that it would contravene the requirements to be legally able to hold a motor vehicle driver license or operate a motor vehicle in their State of residence.

4. SAFE FLYING CODE

Model Flying MUST be conducted in accordance with this Code, unless otherwise prohibited by law in order for MAAA Liability Protection to apply. In the event of conflict between this and the MAAA Manual of Procedures, the latter shall apply.

4.1. General

- 1) Each member shall make himself or herself aware of and abide by the requirements of the MAAA Manual of Procedures (MOP), CASA regulations (CASR 1998(CASR) Part 101) and GSOA Club rules. The MOP is on the MAAA web site at www.maaa.asn.au
- 2) Each member will not fly his or her model higher than 400 feet unless allowed under Civil Aviation regulations.
- 3) Each member will give right-of-way and avoid flying in the proximity of full-scale aircraft. Where necessary, an observer shall be utilized to supervise flying to avoid having models fly in the proximity of full-scale aircraft.
- 4) In addition, where established, each member will abide by the safety rules for the flying site, and will not wilfully and deliberately fly his or her models in a careless, reckless and/or dangerous manner.
- 5) Flying over the pits, spectator areas or buildings is prohibited, unless beyond the control of the pilot(s).
- 6) Each member will only operate radio controlled model aircraft on frequencies that have been approved by GSOA.
- 7) Each member will not fly his or her model aircraft in events, displays, air shows, or model flying demonstrations until it has been proven to be airworthy by having been previously and successfully flight-tested.
- 8) Each member will not operate a model aircraft with a mass greater than 7kg without a valid Permit to Fly. In any case, the maximum permissible mass of a model, without fuel, allowed to operate under GSOA rules is 50kg.

- 9) Each member will not operate any gas turbine powered model aircraft unless he or she has obtained a Permit to Fly for a Gas Turbine Powered model aircraft and complied with the MAAA GT Rules.
(Note: This does not apply to ducted fan models using piston engines or electric motors.)
- 10) Each member will not operate models with metal-bladed propellers or with gaseous boosts, in which gases other than air enter their internal combustion engine(s); nor will he or she operate models with extremely hazardous fuels such as those containing tetra-nitro-methane or hydrazine.
- 11) Each member will not operate models carrying pyrotechnics (any device that explodes, burns, or propels a projectile of any kind) including, but not limited to, rockets, explosive bombs dropped from models, smoke bombs, all explosive gases (such as hydrogen-filled balloons) and ground mounted devices launching a projectile.
- 12) Each member will be aware of and follow the GSOA Alcohol, Drugs & Illness Policy. Therefore, Each member will not consume alcoholic beverages or illegal drugs prior to, or during, participation in any model operations.
- 13) Each member will not taxi his or her aircraft without restraint close to or where it may be a danger to other people.

4.2. Radio Control

- 1) Each member will have completed a successful radio equipment ground range check before the first flight of a new or repaired model.
- 2) Each member will perform his or her initial turn after takeoff away from the pit and spectator areas.
- 3) Each member will not knowingly operate an R/C system within 4 kilometres of a pre-existing model club flying site unless in accordance with the MAAA Manual of Procedures.

4.3. Electric

- 1) Each member will make sure the receiver is switched off or if it is on, make sure the transmitter is also on with the throttle set low, before connecting the main flight batteries to the speed controller.
- 2) Each member will always check the direction of rotation of the propeller before launching an electric glider.

4.4. Free Flight

- 1) Each member will not launch his or her model aircraft unless at least 30 metres downwind of spectators and automobile parking.
- 2) Each member will not fly his or her model unless the launch area is clear of all persons except his or her mechanic, timekeepers and officials.

4.5. Control Line

- 1) Each member will subject his or her complete control system (including safety thong, where applicable) to an inspection and pull test prior to flying. Pull test will be in accordance with the current Competition Regulations for the applicable model category. Models not fitting a specific category, as detailed, shall use those pull test requirements for Control Line Precision Aerobatics.
- 2) Each member will assure that his or her flying area is safely clear of all utility wires or poles.
- 3) Each member will assure that his or her flying area is safely clear of all non-essential participants and spectators before permitting the engine to be started.
- 4) Each member will not fly a model closer than 15 metres to any electrical power line.

5. MAAA SPECIFIC RULES

5.1 Heavy Model Aircraft

The M.A.A.A. requires that all model aircraft with a dry mass, (excluding fuel, but including all batteries if electric powered), of greater than 7kgs and less than 25kgs must be inspected by an M.A.A.A. Heavy Model Inspector prior to its first flight. Heavy Model Aircraft must be operated in accordance to the "Large Model Aircraft Operation" Procedure (MOP015) in the M.A.A.A. Manual of Procedures.

5.2 Gas Turbine Powered Model Aircraft

The M.A.A.A. requires that all gas turbine powered model aircraft must be inspected by an M.A.A.A. Gas Turbine Inspector prior to its first flight. Gas Turbine powered Model Aircraft must be operated in accordance to MOP030 – Gas Turbine Rules in the M.A.A.A. Manual of Procedures.

5.3 Giant Model Aircraft

The M.A.A.A. requires that all model aircraft with a mass, (excluding fuel, but including all batteries if electric powered), of greater than 25kgs and less than 50kgs must be inspected by an M.A.A.A. Giant Model Inspector prior to its first flight. Giant Model Aircraft must be operated in accordance to the "Large Model Aircraft Operation" Procedure (MOP015) in the M.A.A.A. Manual of Procedures.

Although C.A.S.A. define a Giant Model Aircraft as a model aircraft that weighs more between 25kgs and 150kgs, M.A.A.A. Rules only allow models with a maximum mass of 50Kgs. The operation of models over 50Kgs will not be covered by the M.A.A.A. insurance policies. The M.A.A.A. definition of Giant Model Aircraft applies to this document.

5.4 Displays

The M.A.A.A. requires that all Displays of Model Aircraft Flying organized and conducted by the M.A.A.A., M.A.A.A. Ordinary Members (State Associations), Clubs and Affiliate Members of the M.A.A.A. to which non Affiliate Members of the M.A.A.A. are invited or organized to attend are approved by the relevant State Association and where required through them to C.A.S.A.

See the Display Procedure (MOP019) in the M.A.A.A. Manual of Procedures.

5.5 Flying Field Spacing & Distance Between Transmitter Locations

The M.A.A.A. requires a minimum spacing of radio-controlled model aircraft flying sites of 4kms. Operations at less than this distance shall be carried out in accordance with the Close Fields Operation Procedure and Policy (MOP008) in the M.A.A.A. Manual of Procedures.

5.6 Instruction

Inexperienced operators operating under the M.A.A.A. insurance policy shall be instructed on all relevant safety and frequency management matters by an experienced member prior to the commencement of operations.

5.7 Inspection of Aircraft

It is recommended that prior to flight the operator does a safety inspection applicable to the type of aircraft.

5.8 30 Metre Rule

The CASA requirement for safe operation of model aircraft is specified in CASR (1998) Part 101. However this is not in detail terms and in order to give M.A.A.A. members better guidance on acceptable practice the MAAA requirements are as follows. Someone who is operating a model aircraft must normally ensure that, while the model aircraft is IN FLIGHT, or is LANDING or TAKING OFF, it stays at least 30 metres horizontally away from, and at any height vertically above, any person or occupied building/vehicle, not directly associated with the operation of model aircraft

This requirement is not contravened if;

- (i) people are behind the model aircraft while it is taking off.
- (ii) if the model aircraft is flown in a competition within 30 metres of someone who is judging the competition.
- (iii) if the model aircraft is flown within 30 metres of pilots and their assistants operating other aircraft, Flight Line Directors, Safety Officers, Instructors, and similar people who are directly involved with the operation of model aircraft at the time. In addition these may include pilots and their assistants with aircraft in the "pits" provided that this area is **not** accessible by the public. Wherever possible the pits shall be located outside the 30 metre limit or if this is not possible as near to 30 metres as can be reasonably achieved.

Whilst CASA require that a person must not operate a model aircraft over a populous area at a height less than the height from which, if any of its components fails, it would be able to clear the area, model aircraft can fail in modes that do not permit the aircraft to glide clear of an area. It is acceptable to the MAAA that the requirement be relaxed and model aircraft be allowed to fly above ground where there **may** be people directly below provided it shall only be at a reasonably high altitude and after careful consideration that there is low risk to the life, safety or property of someone who may be in the area but is not connected with the operation. This shall not, under any circumstances, include the car parks and public viewing areas of model aircraft clubs.

Note: This rule is more rigorous than the requirements of CAR (1998) Part 101 - 101.395 – see item 5.4

5.9 Flying Site Layout

Flying sites ideally should be arranged such that all flight operations are conducted in front of the operators with the pit area and all other persons to their rear. Where this is not possible, as a minimum pilots should have a clear and unobstructed view of the flying area and there should be clearly designated no fly zones complying with the 30 metre rule, covering the pit and other public areas such as car parks.

5.10 Flight Proficiency

State/Territory Associations and clubs are encouraged to promote the use of the M.A.A.A. Flight Proficiency Scheme. See the Procedure "Guidelines for the Award of Wings" (MOP027) in the M.A.A.A. Manual of Procedures.

5.11 Hearing Protection

It is recommended that hearing protection be worn by any person conducting noise testing in connection with any competition or where lengthy engine running or testing is required.

5.12 Engine Starting

It is recommended that hand starting (that is, without chicken stick, or electric or spring start) be prohibited with engines of capacity greater than 2.5 cc.

5.13 Engine Adjustments

It is recommended that all adjustments to running engines be done from behind the engine.

5.14 Propellers

It is recommended that propellers fitted to engines of capacity greater than 2.5 cc (not being static, non-flying propellers) have the tips delineated with a contrasting colour.

5.15 Aircraft Restraints

It is recommended that the model aircraft be restrained mechanically and/or physically by a person other than the person starting the aircraft, during engine start-up.

5.16 Radio Certification

The M.A.A.A. has recommendations for radios to be checked and certified by an approved testing station prior to use. See the M.A.A.A. Radio Certification Policy (MOP052) in the M.A.A.A. Manual of Procedures.

5.17 Internal Navigation Systems

The M.A.A.A. does not allow the use of internal navigation systems in model aircraft. See the M.A.A.A. Internal Navigation and Stabilisation Policy (MOP044) in the M.A.A.A. Manual of Procedures.

5.18 Safe Flying Code

See section 4.

5.19 Radio Equipment and Operations

5.19.1 Frequency Control

An adequate frequency control system shall be used at all flying sites where radio controlled models are operated. A keyboard system is recommended. See the M.A.A.A. Frequency Directive (MOP013) in the M.A.A.A. Manual of Procedures.

5.19.2 Radio Testing

Radio testing shall be as per the M.A.A.A. Frequency Directive (MOP013) in the M.A.A.A. Manual of Procedures.

5.19.3 Frequencies

Only frequency approved by the M.A.A.A. shall be used for the control of model aircraft. See the M.A.A.A. Frequency Directive (MOP013), 40MHz Policy (MOP047) and 27MHz Model Aircraft Policy (MOP048) in the M.A.A.A. Manual of Procedures.

5.19.4 Operation at 10 kHz Spacing

Clubs may decide to allow operation with radio frequencies separated by 10 kHz. All individuals taking advantage of this should ensure that the 10 kHz rated radio equipment that they use conforms to the 10 kHz testing requirements for technical performance and currency specified in the M.A.A.A. Frequency Directive (MOP013). In addition, in view of the more stringent requirements for operating at 10 kHz spacing, these clubs are required to ensure that all members comply with the field practices also specified in MOP013.

5.19.5 Radio Equipment

See the following documents in the M.A.A.A. Manual of Procedures;

- (i) Radio Certification Policy (MOP052),
- (ii) Frequency Synthesised Equipment Policy (MOP053),
- (iii) Mobile Phones at Model Aircraft Flying Fields Policy (MOP045),
- (iv) M.A.A.A. Frequency Directive, (MOP013)
- (v) 40MHz Policy (MOP047)
- (vi) 27MHz Policy (MOP048).
- (vii) 2.4GHz Equipment (MOP058)
- (viii) Interference Policy (MOP060)

5.20 Indoor Flying

Indoor flying shall be conducted in accordance to MOP059 – Indoor Flying Policy.

6. GSOA SPECIFIC RULES

6.1 Novice Pilots

Until such time as the pilot has achieved Bronze Wing status, he or she will not be allowed to fly unless accompanied by an experienced pilot, preferably an instructor, and a buddy box system must be employed, with the instructor having the master controller.

6.2 Transmitter Operation

When not in use, transmitters shall be placed in the transmitter pound, which is normally the table under the awning. Before switching on any transmitter, the key matching the transmitter frequency must be placed in the keyboard. If the slot is already occupied, the pilot must ascertain the current user and negotiate a co-use strategy. Under no circumstances must another pilot's key be removed without his or her knowledge.

Range checks shall be made as described in section 4.2

6.3 Engine starting

Before starting the engine, the pilot must ensure that the following conditions are met:

- a) The aeroplane is securely tethered to prevent unexpected motion, and is facing away from the pit fence.
- b) The control surfaces and throttle are operating correctly, in accordance with the transmitter joystick movements.
- c) The throttle is in the idle position.
- d) The propeller and spinner (if fitted) are firmly attached to the crankshaft and are undamaged.
- e) The engine is securely attached to the fuselage structure.
- f) There are no loose objects in front of the propeller that could be drawn into the airstream.
- g) No other person is in the path of the propeller, should an accident occur

When the above conditions are met, the engine may be started, preferably by means of an electric starter or a chicken stick. Immediately after starting, the pilot must remove his hands and body from the area in front of, and the plane of, the propeller. All adjustments must be made from behind the propeller. It should be noted that a spinning propeller is a very dangerous object, even at tickover speeds. Unexpected causes of accidents can include:

Propellor becoming loose, and taking off in a forward direction.

Spinner fracturing and flying in all directions.

Propellor breaking and flying off tangentially.

Engine breaking away from it's mounting.

Crankshaft breaking, allowing the propeller to take off.

All the above can cause serious injury, and the pilot should be prepared for any of the above possible events.

Once started, the pilot may check operation throughout the throttle range. It is strongly recommended that the model be held securely at the rear of the fuselage, in addition to any fixed restraints in use, since vibration and/or forward thrust may cause the model to break free.

6.4 Moving to the flight line

When the pilot is satisfied with the engine performance, the throttle must be returned to the idle position. The model may then be removed from it's restraints and taxied to the flight line, taking care to ensure that only sufficient throttle is used to maintain forward motion at walking speed. It is normal to maintain full up elevator during taxiing, to reduce the risk of unexpected early flight.

On approaching the flight line, the pilot must check that no other models are in the process of taking off or landing. He must also advise any other pilots that he intends to take off by calling out "taking off", and must wait if he receives a negative response.

6.4 Taking off

When cleared for take off, the pilot will taxi the model to align it with the centre line of the strip, facing into the wind. He should then double check that the control surfaces are functioning correctly, and advance the throttle smoothly to the full position, using the rudder to keep the flight path along the centre of the strip. Once flying speed has been reached, the elevator can be moved slightly up, until the model leaves the ground. The model should be flown straight until well clear of the ground. While it is permissible for the pilot to stand behind the model during take off, it is strongly recommended that the pilot move to the pilots area prior to take off. If he or she does stand behind the model during take off, he or she must move to the pilots area immediately afterwards.

Pilots must space themselves at least 2 metres apart within this area to minimise the possibility of radio interference.

6.5 Flying

The pilot must take due care to avoid collision with other models, and must at all times keep the model within the safe boundary, which is defined by a vertical plane, 30 metres from the fence surrounding the shed, and also a vertical plane 30 metres from the power lines running parallel to the main road. Under no circumstances must the model fly over the pits, spectator area, car park, or the main road. The pilot must also ensure that the model maintains a safe distance of at least 10 metres from other pilots at the flight line.

6.6 Landing

Prior to making a landing approach, the pilot must advise any other pilots of his intentions by calling out "landing". When no negative response has been received, the pilot may complete his landing approach and land the model along the centre line of the strip. When the model comes to a stop, the pilot must taxi the plane off the strip, calling out "clear" when successful.

In the event that the engine stalls on landing, the pilot must call out "on the strip". When no negative response has been received, the pilot may proceed to retrieve the model, again calling out "clear" when pilot and model have left the strip.

If the engine stalls during flight, the pilot must call out "dead stick", and make such efforts as possible to land the plane on the strip. The other pilots, on hearing this call, must ensure that their models are kept well clear of the landing aircraft, until the model has been cleared from the strip.

6.7 Taxiing to the pits

After a successful landing the pilot may taxi his or her model carefully and slowly to the pits area, taking extreme care to steer clear of any persons in the pit area. When the model is within 5 metres of the pit fence, the engine must be stopped, and the model carried the remaining distance. The receiver and transmitter must then be turned off, and the transmitter placed in the pound, preferably removing the frequency key and hanging it on the transmitter aerial.

6.8 Visitors

Visitors to the Club are always welcome. They are to be managed as follows:

A. MAAA Members Visiting to Use the Club's Flying Facilities

MAAA member visitors wishing to fly their models are required to:

- a. Present a current MAAA membership card to a committee member. The committee member will ensure that the visitor is briefed on the Club's rules, and advised that he or she must adhere to them.
- b. Enter their details in the Club visitors book.
- c. Strictly adhere to the Club's 20 kHz frequency spacing policy.

- d. Liaise with any Club member who may be using the same frequency and arrange for a time to fly. The visitor is required to place a frequency key with his or her name clearly marked in the frequency control board before turning on his or her transmitter. GSOA members always have frequency priority. If the Club is hosting a competition event, the participants have frequency priority.
- e. Treat the Club facilities with care and respect.

MAAA member visitors are only permitted to use the Club facilities 10 times per membership year.

B. Casual Visitors or Spectators

Any Club member observing the arrival of a visitor or spectator should make the effort to introduce themselves, and request that the visitor watch proceedings from the spectator area. If the visitor wishes to view the pits or flying areas they are to be accompanied by a Club member.

C. Children

Children visiting the Club's facilities are to be supervised by a parent or guardian at all times. Unless accompanied by a Club member, children are not permitted in the pits, taxi zone or flying areas.

6.9 Pets

Pets are strictly prohibited in the pits, taxi zone and flying strip areas. Members or visitors bringing pets to the Club's field are to ensure that they are securely restrained, either in the spectator area or within their vehicle.