Induction Manual

1. The Club

The Gold Coast Model Flying Club has a long history and has been operating from its Numinbah Valley site since April 1996. The flying field is leased from SEQWater who own the portion of land on which the lease is located as it forms part of the Hinze Dam catchment.

The Club is registered as an Incorporated Association, and membership consists of Ordinary Members and any of the following classes of members – Life, Senior, Senior 65 +, Junior and Associate.

The Club's day to day affairs are run by a Management Committee, the members of which are voted in at the AGM which is normally held in early August. The Management Committee has the ability to make or amend By-laws which all members of the club are obliged to comply with. The current set of By-laws is attached hereto and new members and visitors must read and comply with these By-laws when on the Club's lease.

In addition to the Club's By-laws, all members and visitors to the Club must abide by the MAAA (Model Aeronautical Association of Australia) Safety Code which is also attached.

Also attached is a plan showing the area in which it is safe to fly and a No Fly Zone (NFZ) in which fixed wing aircraft must not be flown. This NRZ covers the pilot box, start-up area, the pits, the parking area and the heli-pad. The heli-pad is not visible from the pilot box and thus pilots flying from the pilot box must always assume that there is flying activity on the heli-pad.

All members and visitors to the Club's flying field must sign either the Members Attendance Book or the Visitors Register on every occasion they are at the field. This requirement is necessary to comply with MAAA regulations with respect to insurance cover.

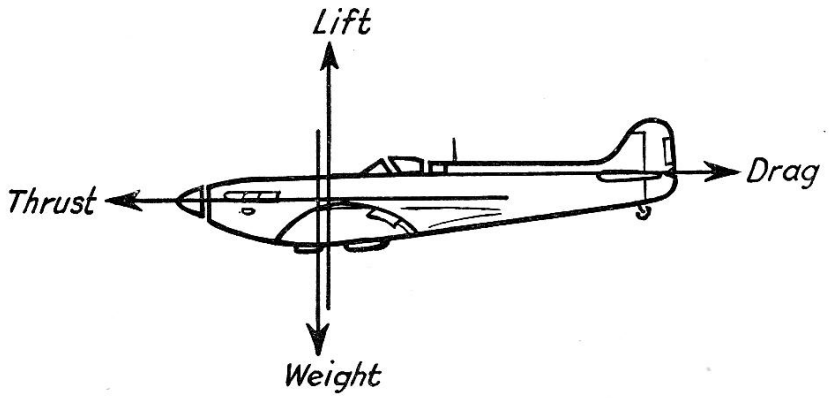
Members and visitors must only fly between dawn and dusk to comply with the conditions of the Club's lease with SEQWater.

Members must not fly unless there is another competent person on site to render assistance in the case of an incident causing injury.

2. Basics of Flight

2.1 Forces Acting on an Aircraft in Flight

The figure below shows the forces acting on an aircraft in flight.



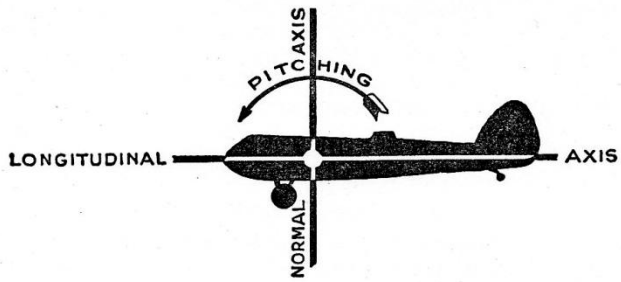
The thrust is provided by the propeller, EDF, etc., whilst the drag is the air resistance to the aircraft moving through the air. The lift is provided by the airflow over the wings while the weight shown acts through the centre of gravity of the aircraft in its flight mode.

It is important that the centre of gravity is ahead of the centre of lift and therefore it is important that the centre of gravity, or balance point, is located in the correct position. It should be located according to the directions in the construction manual supplied with the aircraft kit, or as marked on the plan from which the aircraft was built.

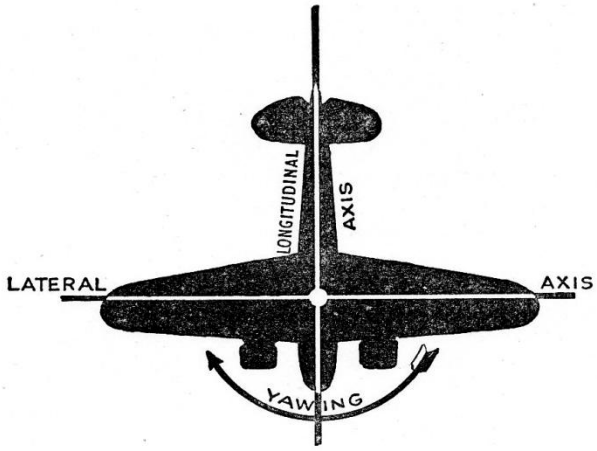
New members and visitors who do not have their Bronze Wings must have the balance of their aircraft approved by the Safety Officer, a qualified Instructor or a Gold Wing member of the club before any attempt to fly the aircraft.

2.2 Aircraft Control

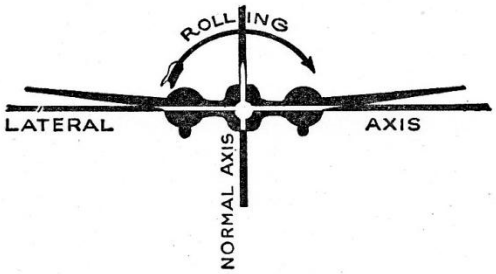
Aircraft are controlled about three axes as shown in the figure below.



Controlled by the elevator



Controlled by the rudder



Controlled by the ailerons

The aircraft is controlled in flight by the movement of the elevator, ailerons, rudder and throttle.

Of these, the elevator is used to gain or lose height of the aircraft while the ailerons are used to control the direction in which the aircraft flies by turning the aircraft. Some “up” elevator must be used in conjunction with the ailerons to maintain the height of the aircraft during turns. The rudder may also be used to control direction and to turn the aircraft, also in conjunction with some “up” elevator.

All new members will be instructed in the control of their aircraft by a qualified Instructor and must fly under the supervision of the Safety Officer, a qualified Instructor or Gold Wings member of the Club until the Management Committee is satisfied of their ability to fly unsupervised.

3. Risks and Safety Procedures

Model aircraft are not toys and are capable of inflicting serious, or even fatal, injuries if not treated with respect. The following risks and relevant safety procedures are the most likely to cause safety related incidents but all procedures detailed in the Club By-laws and the MAAA Model Aircraft Safety Code must be complied with at all times.

3.1 Glo and Petrol Powered Aircraft

- No motors are to be started up in the Pits area. all motors must be started in the clearly signed Start and Run-up area.
- If the aircraft is unrestrained and the motor is started, it can move forward and the propeller can cause severe injury to the body of the person starting the motor. Always restrain the model before attempting to start the motor.
- Upon starting a glo or petrol motor it is possible that the propeller may fly off if not securely fastened or a damaged blade may fly off. Upon coming free, these will tend to be projected forwards and/or sideways. Therefore, only the person actually starting the motor should be in front of the propeller. Always start the motor at a suitably low throttle setting.
- The motor can kick back or start in reverse causing damage to hands. Therefore, start the motor with a heavily gloved hand, a “chicken stick” or an electric starter.
- After the motor has started, always move to a position behind the propeller and make any adjustments of the throttle from the rear.
- Similarly, always move to a position behind the propeller before bringing the motor to full revolutions with the transmitter.
- Once the motor is running and the restraint has been removed, always stand behind the wing to guide or pick up the model.

3.2 Electric Powered Aircraft

- Once the battery is connected to the BEC of an electric powered model, there is a potential for the motor to start unexpectedly, even if a receiver switch is fitted and the transmitter is turned off. Therefore, under no circumstances are batteries to be connected in the Pits area, all batteries must be connected in the clearly signed Start and Run-up area.
- If the aircraft is unrestrained and the battery is connected resulting in the motor starting, the aircraft can move forward and the propeller can cause severe injury to the body of the person making the connection. Always restrain the model before attempting to connect the battery and stand behind the propeller when making the connection.
- Upon connecting the battery of an electric powered aircraft and testing the motor, the propeller may fly off if not securely fastened or a damaged blade may fly off. These will tend to be projected forward and/or sideways. Therefore, always stand behind the propeller before bringing the motor to full revolutions. Note that some aircraft have “pusher”

propellers, in which case, stand in front of the propeller before bringing the motor to full power.

- Once the model has been prepared for flight and the restraint has been removed, always stand behind the wing to guide or pick up the model. If the aircraft has a “pusher” propeller, be sure to keep well clear of the propeller.

- When the flight of an electric powered aircraft has been completed, the battery must be disconnected in the Start and Run-up area before returning to the Pits.

- Lipo batteries require careful handling or they can catch fire spontaneously. Never pierce a lipo battery. It is recommended that lipo batteries never be discharged below 25% of their capacity. For prolonged life, lipo batteries should not be charged at an excessive rate. A recommended charging rate is the battery capacity in mAh divided by 1,000, for example, a 2200 mAh battery should be charged at 2.2 amps (2200/1000 = 2.2).

3.3 Rotary Winged Aircraft

The safety procedures for Rotary Winged Aircraft (helicopters and multi-rotor) are fundamentally the same as for Fixed Wing aircraft. However, because Rotary aircraft are not normally restrained during startup it is important that the actual startup takes place as close as possible to the intended flightline (preferably at the flightline) and well clear of other pilots (a 9m rule applies, see below).

Since the designated Heli-pad flying zone is in close proximity to the general flying area, it is strongly recommended that all Rotary pilots employ a Spotter. This will help minimize the potential of mid-air collisions and will allow the Rotary pilot to be notified if another aircraft is within the no-fly zone. A spotter should be employed by any rotary pilot flying in the general flying area from the pilot box if this area is being used by any other aircraft (fixed and/or rotary).

4. GCMFC Code of Conduct

To ensure maximum enjoyment of our hobby, GMFC members must:

1. Be ethical, fair and honest in all their dealings with GMFC members,
2. Treat all persons with respect and courtesy and have proper regard for their dignity, rights and obligations;
3. Cooperate with your fellow club members.
4. No unsportsmanlike behavior or intentional abuse of fellow members or equipment will be tolerated.
5. Comply with MOP056 on safe flying conduct;
6. Be responsible and accountable for the conduct of any guests and children at the GMFC field.
7. Pilots and members should also be aware of the MAAA's MOP041 Member Protection Policy.

5. Member's Responsibilities

Members joining the Club have certain responsibilities under the Club's By-laws and Flying Rules. These include,

- Every member is responsible for himself or herself, and any visitor in their charge, being aware of the Club By-laws and Flying Rules as well as MAAA Model Aircraft Safety Code. These are displayed on the Notice Board above the Members Attendance Book and the Visitors Register as well as being included in this manual.
- Every member, and any visitor in their charge, has a responsibility to abide by the Club By-laws and Flying Rules as well as the MAAA Code.
- Every member and visitor will be responsible for flying safety and is obliged to request other members or guests to comply with safety regulations as set out in the Club By-laws and Flying Rules and the MAAA Code.
- Members and visitors must restrict their flying to the hours between dawn and dusk and must abide by the terms of the Club's lease with SEQWater.
- Every member or visitor must conduct himself or herself in a manner that is not injurious or prejudicial to the character or interests of the Club.

Gold Coast Model Flying Club Inc.

(ABN 91 126 904 154)

BY-LAWS and FLYING RULES

Amended October, 2025

1. All members and visitors must abide by the Club By-laws and the MAAA code, attached hereto.

2. Any member who engages in flying activities from any non-MAAA approved flying sites could jeopardize their insurance cover.

3. Flying must only be carried out if there is another responsible person present who could render first aid if needed.

4. Prior to flying all members must register in the attendance book with their Name, FAI number and signature or, in the case of a new member who is awaiting their FAI card, their telephone number.

5. All visitors must be registered in the permanent Visitors Register with their Name, Address and Signature and the Name FAI number and Signature of the Member responsible for the visitors' compliance to Club rules.

6. Every member will be responsible for ensuring that they, and any visitors in their charge, are aware of the Club flying and Safety Rules. Associate members are not entitled to invite other flyers (including MAAA registered members) to fly at GCMFCs' fields.

7. No member will be permitted to fly without a current FAI license. The FAI card must be shown on request.

8. Use of mobile phones is not permitted in the area forward of the front line of the pits.

9. Smoking in the Pits, Starting area and Pilot Box is prohibited. It is allowable in the car-park area only.

10.Alcohol is not to be consumed until after the cessation of flying for the day. Illegal drugs are banned entirely.

11. A Safety Officer, qualified Instructor or Gold Wing member of the club must assess all new members and visitors before being allowed any unsupervised flying at any of the club flying fields.

12. Any model aircraft that a new member or visitor proposes to fly at any club flying field must be inspected and approved by a Safety Officer, qualified Instructor or a Gold Wing member of the Club until the member or visitor has been allowed to fly unsupervised.

13. An order or directive from the Clubs Duty / Safety Officer or Committee will be complied with immediately. The Management Committee will settle any dispute at a later date.

14. No member will fly or operate equipment that is faulty, in need of repair or has not been tested and checked prior to flying. All 36 MHz radios are to have an official bandwidth check. The resultant certificate or sticker attached to the transmitter must be made available to the committee on request.

15. **Red flag no fly restriction**

On occasions when special flight conditions require no other planes to be flying and no noise from engines being ground run, a committee member or instructor will place a red flag at the western end of the pilot's box. Pilots flying will land and shut off their aircraft, all engines running in the pits area will be shut down and pilots are requested not to gather in the pilots box until the red flag has been removed.

Special flight conditions may include aircraft certification flights, pilot rating assessments, maiden flights, occasions where instructors believe it will benefit learner pilots to have clear flying conditions, when high speed aircraft may pose a hazard to normal flying and where matters of safety are beneficial.

Special flight conditions will not exceed a duration of 15 minutes.

16. No aircraft must enter the landing strip or be hand launched without the

pilot first having notified and received confirmation from any pilots

already flying.

17. All aircraft must have a noise emission level of 96 Decibels or less, recorded from a distance of 3 meters from the aircraft at ground level measured in 3 directions from the aircraft with GCMFC equipment.

18. Heavy Aircraft flown at GCMFC fields must comply with MAAA MOP015. A

current permit must be shown.

19. Cars are to be parked in the designated parking area and models and equipment are to be carried to the pit area. The speed limit of cars transiting in the GCMFC grounds will not exceed 10 KPH.

20. No equipment or gear whatsoever will be placed on landing or take off areas.

21. Every member will be responsible for ensuring that they, and any visitors in their charge, are aware of the Club flying and Safety Rules.

22. No aircraft is to be started in the Pits. All aircraft must be started in the Starting/Run-up pound and aircraft must be restrained with a tie-down or held by another person while starting.

23. All electric aircraft are to be restrained prior to the battery being connected and the radio is switched on. Electric powered aircraft must only be armed inside the Starting/Run-up area and must be disarmed before returning to the Pits. All electric aircraft must be fitted with an engine cutoff switch.

24. No member will fly or operate equipment to the danger of others or in a manner as to present likelihood of harm or injury to persons or property. Any member who causes damage, loss or injury to any other member's aircraft, or equipment through the unauthorized operation of his own equipment, or by dangerous or irresponsible behavior will be liable for such damage or loss.

25. Every member and visitor will accept the responsibility for flying safety and is obligated to request other members and visitors to comply with safety regulations or ask offenders to leave the area.

26. All pilots will fly from the designated area. No pilots will take- off, land or fly over the pilot area, pits, pilots or car park areas.

27. A pilot may only move from the flying (pilot) area to obtain clear vision for take-off, landing or to recover aircraft. During recovery, the Transmitter is to be left in the pilot area unless the engine is still running. All pilots must indicate by calling out their intentions i.e. "On the Strip", "strip clear", "low pass left to right" A pilot must fly in the same circuit direction as all other flyers. All pilots flying must agree upon any change of direction.

28. A call of "dead stick" will have first priority right of way at all times. Upon hearing the call "dead stick," all members will keep clear of the area and give all assistance possible to allow the pilot to recover his aircraft safely. Gliders shall have second priority right of way. Pilots shall "call" their intentions or emergency loudly.

29. All aircraft flying 3D/IMAC routines must comply with MAAA MOP014-6.4, i.e. all manoeuvres, even by models exempted under MAAA MOP014-6.4, must be carried out more than 9 meters from all pilots. At the GCMFC field this means all manoeuvres must be carried out to the north of the "flight line" away from the pilot's box. The "flight line" is defined as an imaginary line running down the centre of the mown airstrip for its full

length.

30. 3D/IMAC routines must only be flown when there are no other aircraft flying. If other aircraft are being flown, 3D/IMAC aircraft must join the circuit being flown by the other aircraft.

31. FPV drone pilots must limit their operations to the designated FPV zone, as shown on the aerial photo mounted in the Sign-in Box, if aircraft are being flown for the main strip and must not exceed 10 metres in altitude in this zone. While FPV drones are being operated within the FPV zone, no person must enter this zone.

32. If no other aircraft are being flown, FPV drones can operate without restriction. FPV fixed wing aircraft must be flown from the pilot's box and the pilot must be accompanied by a spotter at all times. All rules that apply to fixed wing aircraft apply.

33. Any member requested to fly a model owned by another member, will

take all care but no responsibility if the aircraft is damaged during a test

flight.

34. Any financial member is entitled to invite any one guest to fly at the

Numinbah field a maximum of 4 times before that guest is required to

either join the club or join as an associate member if he/she is a member

of another Model Flying Club. Furthermore, any member can invite a maximum of 4 guests in any one financial year.

35. Prospective members or visitors will be permitted introductory flights with the clubs equipment under the following conditions: Day 1: 1 or 2 flights at the clubs expense. Days 2 and 3: must pay $5.00 per flight. From the 4 th day on the person must pay $10.00 per flight and join GCMFC on the 5th day. A maximum of 10 flights applies. All flights must be on the buddy system.

36.The field must be kept clean and tidy and members must take all their rubbish from the field.

37. All members must comply with the SEQWater occupancy agreement.

38.All gates must be kept closed and locked by the last member leaving the

property.

39.Members must restrict their access to between Dawn and Dusk at Club

Flying Sites.

40. Pilots flying will agree on a direction of travel in a circuit and all pilots

must fly in that same direction. All pilots must fly from within the Pilot Box once their aircraft is airborne

41. Aircraft that are to be hand launched must be launched from either side of

the pilot box depending upon the wind direction. Aircraft must be flown to

the front of the pilot box and never cross in front of the pilot area.

42. No person may enter the landing strip while aircraft are flying without first notifying and receiving acknowledgement from pilots flying. Persons leaving the strip after having

retrieved their aircraft must notify pilots still flying that they have done so by calling “strip clear”.

43. Members breaking these by-laws and/or flying rules will be dealt with under the terms of the constitution.

OFFICIAL MAAA MODEL AIRCRAFT SAFETY CODE

Model Flying MUST be 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.

GENERAL

1) I shall make myself aware of and abide by the requirements of the MAAA Manual of Procedures (MOP), CASA regulations and MAAA and Club rules. The MOP is on the MAAA web site at www.maaa.asn.au
2) I will not fly my model higher than 400 feet unless allowed under Civil Aviation regulations.
3) I will give right-of-way and avoid flying in the proximity of full-scale aircraft. Where necessary, an observer shall be utilised to supervise flying to avoid having models fly in the proximity of full-scale aircraft.
4) In addition, where established, I will abide by the safety rules for the flying site I use, and I will not willfully and deliberately fly my 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) I will only operate radio controlled model aircraft on frequencies that have been approved by the MAAA.
7) I will not fly my 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) I 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 MAAA rules is 50kg.
9) I will not operate any gas turbine powered model aircraft unless I have 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) I 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 I operate models with extremely hazardous fuels such as those containing tetra-nitro-methane or hydrazine.
11) I 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) I will be aware of and follow the MAAA Alcohol, Drugs & Illness Policy. Therefore I will not consume alcoholic beverages or illegal drugs prior to, or during, participation in any model operations.
13) I will not taxi my aircraft without restraint close to or where it may be a danger to other people.
14) I will not fly my model any nearer to powerlines than 15 meters or any greater distance if specified in State Legislation.

RADIO CONTROL

1) I will have completed a successful radio equipment ground range check before the first flight of a new or repaired model.
2) I will perform my initial turn after takeoff away from the pit and spectator areas.
3) I 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.

ELECTRIC

1) I 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) I will always check the direction of rotation of the propeller before launching an electric glider.

FREE FLIGHT

1) I will not launch my model aircraft unless at least 30 metres downwind of spectators and automobile parking.
2) I will not fly my model unless the launch area is clear of all persons except my mechanic, timekeepers and officials.
3) Use of fuse De-Thermalisers is not permitted in Australia.

CONTROL LINE

1) I will subject my 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) I will ensure that my flying area is safely clear of all utility wires or poles.
3) I will ensure that my flying area is safely clear of all non-essential participants and spectators before permitting my engine to be started.


FPV Drones zone outlined in Yellow
N
S28°06'54"
E153°14'6"
Flight Line
40 metres
Heli Pad
No Fly Zone by Fixed Wing Aircraft outlined in Red
91 m
Image © 2016 DigitalGlobe
© 2016 Google
Google Earth
Imagery Date: 7/1/2016 28°06'53.93" S 153°14'04.14" E elev 99 m eye alt 506 m