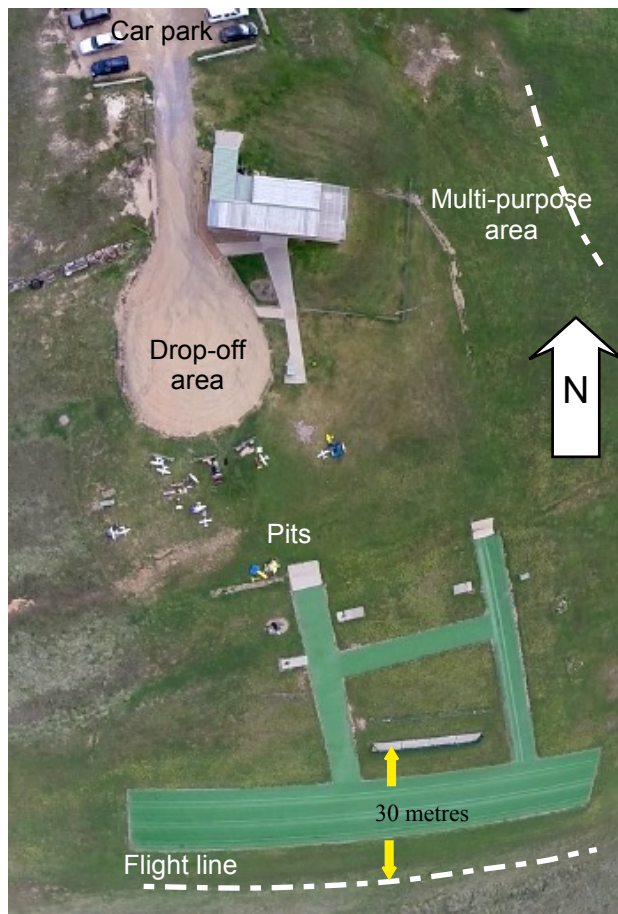


BMAC New Members Handbook

Welcome to the Belconnen Model Aero Club. This handbook is to provide you with information about the club and its procedures.

If you want to know about something that's not in here, or make a suggestion, speak to a committee member.



The clubhouse and surrounding areas are shown in the photo.

The area that includes the field is a grassland nature reserve, but the ACT government allows us to use it for model flying. There are restrictions on its use (see page 9).

Field information

The multi-purpose area is for smaller, slower models.

Other models are flown from the flight line. (See page 5)

The main car-park is for members and any visitors, while the drop off area is only for loading and unloading your vehicle.

Equipment and facilities



The club has lawn mowing equipment (used by the Field Officer and his helpers), fire-fighting and other equipment to maintain the field.

In the clubhouse there is a toilet,



tea-making equipment and supplies, a library (mostly magazines), and storage for chairs, the frequency

board, a wind sock etc.

To the left of the clubhouse door is a store for tables and model stands.

The names and contact details of the committee members are in

each Wingtips (see page 10). A committee member will try to help you with any problems you may have.

All members are issued with a key that opens the gate and the clubhouse.



Before anything else – which mode?

This issue arises occasionally: should newcomers learn to fly using Mode 1 or Mode 2? Ignoring the merits of either, it's a fact that most Australian model fliers use Mode 1. (That is, the transmitter left stick controls rudder and elevator while the right stick controls aileron and throttle. If you choose Mode 2, no other member can help you by flying your model, and you can't fly anyone else's. You're on your own!

Training and assistance for beginners

If you're not a proficient flyer (or are uncertain of your ability) see the Chief Flying Instructor ('CFI'), first thing. He is a committee



member so his contact details can be found in Wingtips (see page 10).

Advice to beginners: don't buy a model aircraft before talking to the CFI – he'll suggest a suitable trainer. Many beginners think radio control



flying must be easy and unwittingly buy a model that's tricky to fly. After the inevitable crash they are discouraged. Remember: pilots of full-size aircraft start on a stable, basic machine – you should do the same. Incidentally here's some bad news for full-size pilots: your knowledge will be very useful, but model flying involves completely different skills because you're outside the aircraft and need to rely on sight alone. Expect to start at

the beginning. (Some BMAC members are full-size pilots, ask one!)

You will benefit from flying a model flight simulator before starting on a real model. Most pilots agree that the price of the simulator is much less than the cost of replacing wrecked models.

Training

The CFI can use a dual control system ('buddy cable') to get you started. If you don't have a model,



or if yours isn't suitable, the club has two high-wing trainers and all radio equipment to teach newcomers. Apart from membership fees there is no additional cost for tuition flights.

Once you've gone solo (no-one knows how long that will take, everyone is different) and shown that you can fly safely, you should try for your Bronze or (for a larger model) Silver Wings, the first test of proficiency. See the Trainee Pilots Handbook.

Later on there's a Gold Wings award for those who want to improve their skills further.

The club's instructors can test you for either Wings.

Procedures for first in and last out

If you're the first to arrive, leave the gate open and unlocked and



unlock the clubhouse. Before flying, put up the wind sock and frequency board. Users of VHF



equipment (e.g. 36 MHz) must put their frequency key in the correct slot. For 2.4 GHz users you just put your key on a 2.4 GHz hook.

Place a fire bucket near the pilot's box. (An electric model that crashes badly may catch fire! The equipment in the bucket will be useful.)

If you're the last to leave, return the above equipment to the clubhouse. Please be certain to lock both the clubhouse and the gate. The smaller padlock on the gate is for the water-meter reader so you need to lock the gate as in the photo below.



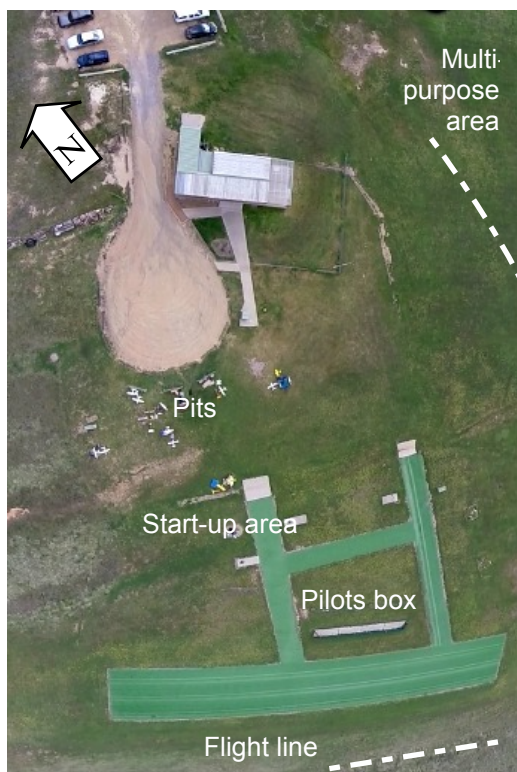
Safety issues – particular areas

The multi-purpose area. This is intended for helicopters, multicopters, small, slow gliders and park flyers. (A park flyer is a model weighing less than 1.5 kg that's hand launched; but use common sense – fast models must fly from the flight line even if they're less than 1.5 kg.) Models flying from the multi-purpose area must not fly south of the flight line.

Flight line. Models flying from the flight line must stay south of the flight line, which is 30 metres south of the pilots box. In other words, don't fly over the pits or the multi-purpose area.

Pits. The pits is the area between the clubhouse and the rock and concrete depression. This is only for storing and preparing your model. Electric powered models in the pits must be disarmed (that is, set up so that an accidental bump of the throttle won't make the motor start up.) There must be a green ribbon to show that models are disarmed.

Start up area. The start up area is south of the pits. It's for starting engines or arming electric models. Note that, by law, no-one is allowed to fly if a member of the public – even one of your guests – is within 30 metres of a model that's flying. Therefore, only club members are permitted in the start-up area.



Before a flight

Maiden flight. If your model hasn't flown before, double check that all the control surfaces move in the correct direction! (Most flyers have, at one time, made the mistake of having the ailerons reversed, that is, having one go up when it should go down and vice versa. The model takes off, quickly rolls onto its back and crashes!) When you move the aileron stick to the right, the starboard aileron should go up and the port one

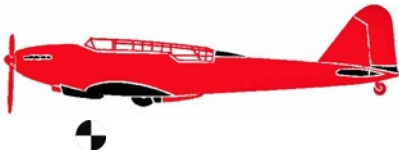
result. Be aware that the centre of gravity instructions for some ARF models are wrong. Run the c of g utility * to get a 'second opinion' and, if still in doubt, ask an experienced club member.

Range check. Before a model's first flight on any day, do the range check as set out in the transmitter instructions. If the radio fails the check, there is a serious problem



down.

Check for the correct operation of the elevator and rudder.



Also check that the centre of gravity is in the correct place – if it's too far back, the model will be unstable and a crash will probably



with your gear. Don't fly until it's sorted out.

Fail safe. With the engine or electric motor running and the model restrained, switch off the transmitter. The engine/ motor should stop. Therefore, if there's a radio failure, at least your model won't fly away.

* <http://www.adamone.rchomepage.com/>

Starting i.c. aircraft. (To us “i.c.” means internal combustion, that is a glow, petrol or diesel engine.)



Except for the smallest engines, use a chicken stick or electric starter. Once the engine is running, perform any adjustments from behind the model. Don't go to full throttle if anyone is in front of the model.

Control surfaces. Just as in full-size flying, before taxiing out check that the model's controls move freely and in the correct direction.

Flight line announcements

At the flight line other pilots must always be looking only at their models, so you must clearly announce each of the following, then wait for all other pilots to acknowledge it before proceeding.



- take-off or hand launch. Call “Take-off” or “Hand launch”
- landing, and if there's minimal wind, say which direction. E.g. “landing from the left”
- touch and go E.g. “Touch and go from the right”
- low level pass
- 3D flight

- walking on or crossing the strip. E.g. “On the strip”
- if your model or someone else's goes out of control near the pits call “Heads up”

After your model has landed and taxied off the runway, or after you have walked off the strip, call “Clear”.

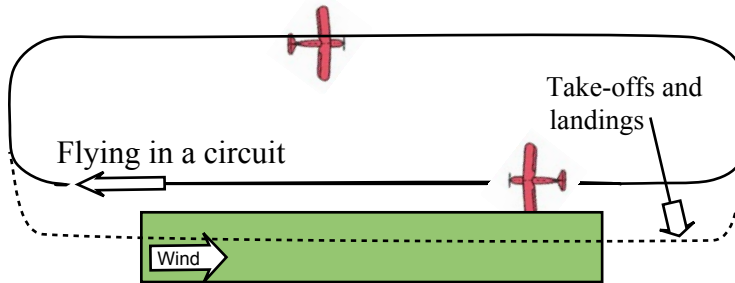


Most importantly, if a model's engine stops while in flight, the pilot calls “dead stick” and has right of way over any model that can safely continue flying.

Flight line procedures

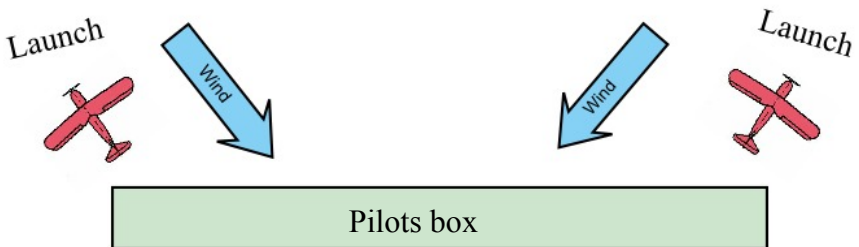
Always take off and land into the wind. Fly in a circuit, as in the diagram, not back over the runway. This reduces the possibility of a mid-air collision. If there's no wind or a cross wind, fly in the same direction as other pilots.

FPV pilots must, for safety, have a 'spotter' watching the model.



If someone is flying a model for the first time, it's courteous to wait until the flight is over before taking off.

Hand launching from the flight line



How to hand-launch at the flight line: Look at the direction of the wind. Choose the appropriate end of the pilots box, so when you launch the model into the wind, it's

travelling away from, not across, the pilots box.

Restrictions

Legal requirements

Some of Part 101 of the Civil Aviation Safety Regulations 1998 relates to model aircraft. Under



that Part, it's an offence to fly a model aircraft:

- so as to create a hazard to aircraft, people or property,
- closer than 30 metres from a member of the public,
- at our field, at a height over 400 feet without clearance from Air Traffic Control

The maximum fine for those offences is \$8 500!

Other restrictions

The field is closed on total fire ban days, and is closed every afternoon during the fire season.

It's a condition of our licence, that dogs are not permitted at the field (even in a car). For safety reasons, consumption of alcohol is banned.

A model weighing over 7kg must be given an inspection certificate before its first flight.

Jet turbines and pulse jets are not permitted at our field. Electric ducted fan models are okay.

Engines emitting more than 94 dbA at 3 metres are not permitted. (The test equipment is in the clubhouse, and engines are tested at full throttle.

The vehicle speed limit on the club access track is 20 kph for safety and to preserve the track.

Model Aeronautical Association of Australia

The MAAA is the national body in Australia, representing over 300 model aero clubs. It's recognised by the Civil Aviation Safety Authority and can speak for our interests relating to the Regulations. Because accidents do happen, the MAAA has arranged public liability and personal accident insurance.

BMAC is affiliated with the MAAA through the ACT

Aeromodellers Association, and provides two delegates to the ACTAA to represent its interests.

The MAAA has compiled a Manual of Procedures ('MOP') setting out rules and procedures for all kinds of model aeronautical activities. If you'd like to find out more go to their website. *

* <http://www.maaa.asn.au/documents-manual-of-procedures>

Emergencies

If someone is seriously injured or ill, phone 000 and ask for an ambulance. Describe the location of the field using the instructions in the clubhouse. If someone is bitten by a snake, the bitten area should not be washed, just bound by wide bandages. The person should not be moved.

If there's a sizeable grass fire, phone 000 and ask for the fire brigade. Because of the risk of injury to club members, the ACT Fire Brigade have asked the club not to attempt to put out a grass fire. It doesn't cost anything for the Brigade to attend a fire, so don't hesitate! For a small grass fire near the runway, there's a tap at the left side of the runway, and a hose.



For small injuries, there is a first aid kit in the clubhouse.



Communication

The club has a website: www.bmac.org.au where information is posted.

Wingtips, the club's newsletter will be e-mailed to you on the 15th of each month. Contributions are welcome, by the way.

Also see the club's Facebook page: just Google 'Facebook Belconnen Model Aero Club'.



Club activities and events

In case you haven't noticed, in Canberra it's often windy in the afternoons. Tuesday, Thursday, Saturday and Sunday mornings are the times when you will find members at the field (weather permitting), although there are usually a few on any morning that the weather is favourable.

Several times a year the club runs Fun Flys, sometimes combined with a General Meeting. There's always a



as the Old Timers held in Canowindra, NSW every Easter.

During winter the club holds indoor flying meetings in a gymnasium for those who'd like to fly despite the bad weather. Some members make float planes and occasionally fly from a lake.

Once or twice a year there's a working bee for a couple of hours to carry out field maintenance. Often, members with particular skills will volunteer to complete particular tasks, e.g. roof repairs or drainage.

At each Annual General Meeting awards are presented to recognise the achievements of some members, e.g. the Clubman of the Year for someone who has contributed to the club 'over and above the call of duty', and the Heracles Trophy for a scratch-built scale model.

Finally, there's a Christmas dinner, usually at the Southern Cross Club, Jamison, and members' wives, friends and family are welcome.



Christmas Fun Fly, for example.

Occasionally the club hosts an event to which members of other clubs are invited. E.g. a scale rally. Similarly, our club is invited to events at other ACT area clubs. Some members travel to compete in events such

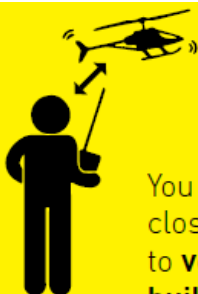


From the CASA
leaflet intended for
new model aircraft
pilots.



Australian Government
Civil Aviation Safety Authority

FLYING WITH CONTROL?



You must only operate this aircraft in your line-of-sight in daylight. **Don't let it get too far away from you.**

You must not fly closer than **30 metres** to **vehicles, boats, buildings or people**

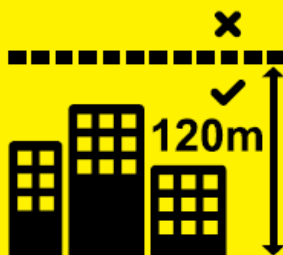


30m



You must not fly over **any populous area**, such as beaches, other people's backyards, heavily populated parks, or sports ovals where there is a game in progress

If you are in controlled airspace, which covers most Australian cities, you must **not fly higher than 400 feet (120 metres)**



You should not fly within **5.5 km** of an **airfield**.

It's illegal to fly for money or economic reward unless you have an unmanned operator's certificate issued by the Civil Aviation Safety Authority (CASA).

Safe and happy flying!