What is IMAC?

IMAC (International Miniature Aerobatic Club) is the organization that grew from the interest in flying radio controlled scale aerobatics.

The group was founded in 1974 with 97 charter members. Their intent was to emulate full scale aerobatics, which was dominated by biplanes at the time, so the IMAC initially called themselves the National Sport Biplane Association. In 1976 the National Sport Biplane Association became affiliated with the IAC and became IMAC.

In the next few years, membership in IMAC grew, and more model aircraft manufacturers began producing scale acrobatic aircraft. The Pitts still was popular, but monoplanes like Leo's Laser and CAP 21s were also being built. At this time (early to mid-80s), most of the scale aerobatic models used in competition were 1/4 scale or less, meaning they had wingspans between 60 and 80 inches and engines ranging from 0.60 to 2.0 cubic inches running on model airplane fuel (glow fuel).

In the late 80s and early 90s, new high-performance mono-planes began to appear on the IAC flight line and also at IMAC contests. Extras, Yak's, Sukhoi's, and CAPs became the hot ride of choice. Here is one major advantage of flying models over their full-scale counterparts—the price difference between a clipped-wing Cub and an Extra is a nonissue!

For IMAC, the only aircraft requirement for classes above basic is that it is a faithful scale model of a known aerobatic aircraft. With all the Extras, CAPs, and Sukhoi's out on the market, many fliers already had what was needed to be competitive, so IMAC membership grew steadily. From the late 90s to the present, growth was not only in membership, but also in the size of the airplanes themselves. It's not a shock to see models 40% to 46% scale on the IMAC flight line.

You might ask why so big and will they get bigger? Size does count. Big tends to fly and present better than small. But size alone does not make you a winner. Many contests still are won, even in the upper classes, by smaller aircraft flown by highly skilled pilots.

So where do I start?

Unlike most other disciplines of RC flying, when flying IMAC you can use any plane you like while competing in the basic class.

There are however a few aspects of your plane that you must take into consideration, the main aspect is the capability of the aircraft to do hammerheads and rolls.

You must also consider the power of the plane. Your plane should be able to fly a vertical up line without dramatic loss of power.

How do I set my plane up the best to start?

This is a very simple process but is better rewarded with the more work and time you put into it.

Every plane and how people like them is totally different but the following settings should be a reasonable benchmark as to not have a plane that is hard to control.

Start with:-

Elevator

Low: 8-10 degrees

High: 14 degrees

Exponential: 30%

Rudder

Low: 25 degrees

High: 35 degrees

Exponential: 40%

Aileron

Low: 16 degrees

High: 18 degrees

Exponential: 30%

Once you have set your plane up to a manageable amount you can begin the trimming process.

Trimming is ALL about reducing pilot load by making a plane fly straighter.

Peter Goldsmith who is a well-known and highly skilled Australian RC Aerobatic pilot wrote a detailed article on how to trim your plane. This information was then tabled and put into a trimming chart for ease of printing and taking to the field.

Trim your plane one step at a time from step 1 through to 10 to complete the trimming process.

You can download the trim chart as well as an article explaining Peter's process in the "Downloads" section under "Self Help". There is also another, similar article in there by Rich Fletcher.

How do I fly IMAC?

You must fly all manoeuvres in sequence with no break in between manoeuvres. Do not worry about your plane flying too far to the left or right of you as the sequence give’s you manoeuvres which will have you flying back towards the centre of your flying area.

To start your sequence you must indicate that you are beginning your sequence. This can best be done by saying “in the box”. Vice versa when you are exiting after your last manoeuvre you can say “out of the box”.

IN the "Self Help" category of the Downloads section on this site is a 2014 Basic Judging Guide, which is designed to indicate how it should be judged. It's also a detailed guide on how each manoeuvre of the 2014 Basic sequence should be flown. It will guide you step by step on how to fly each manoeuvre in the sequence and also what you will be judged on while doing so. It can also be accessed directly by using the menu on the right.

Try your hardest to keep your plane tracking on a straight line and the manoeuvres will point you in the right direction.

Once you feel that you have got the understanding of what is required you can start using the official sequences. These can be found in the download tab on the right of the home page (http://scaleaeros.com.au). You may find the written sequence easier to use as it requires less

memory of the names of manoeuvres.

Ready, Set, GO!!

You are now ready to tackle your first competition.

Everyone will be happy to help and get you in the air for your first few competitions. The IMAC atmosphere is one of fun and everyone pitches in to give a hand or show new people the joy of what we do.

Check our events page to find out where the next closest competition is that you would like to compete in and contact your State Representative who will help you out with any enquiries and assist you with entering the competition.

The "Contact ASAA" link in the top menu will take you to the contacts page where you can get the details for your respective State Representatives.

We wish you all the best with your IMAC experience and look forward to seeing you at one of our competitions.