WAMASC NEWS

JULY/AUGUST 2016

FIELD SAFETY

First Aid personnel, defibrillator and Firefighting equipment are available at the field for your convenience.

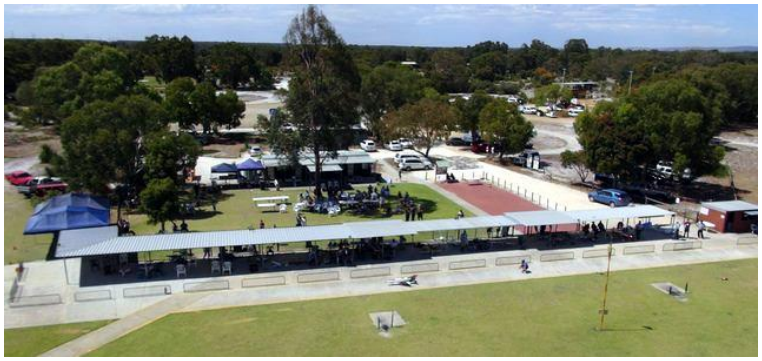
NEWSLETTER

This is your Newsletter and I welcome any articles and photographs that Members may like to contribute. We look forward to hearing from you!

Please feel free to contact any of the committee or me directly at: david.collett2@bigpond.net.au

The opinions expressed in any given articles are not necessarily those of the Editor or the Committee.

SAFE FLYING!



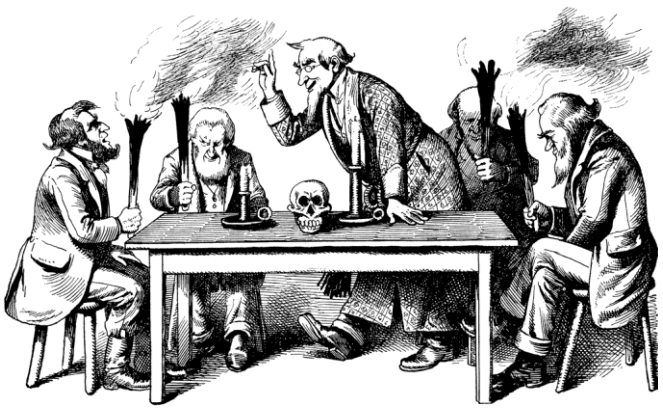
Following the WAMASC Annual General Meeting held on 2nd July

The WAMASC Committee for 2016/17 is

Chairman:	Steve Brown
Vice Chairman:	Rob Gaden
Secretary:	Garry Burton
Treasurer:	Garry Burton

General Committee members;

Ian Craig (CFI), Peter Baldrey, David Collett, Roy Lewis, Bill Davies and John Kress



(http://etc.usf.edu/clipart)

Chairman's Report

With the praise and comments received from officials and competitors who attended the Control Line World Championships we can now confidently say that WAMASC is a world class aeromodelling field. Again I would like to thank all of our members who have contributed to preparing the field and to Trevor Letchford and his team for organising a great event.

There have been a lot of physical changes to the field that would not have been possible without the requirement to prepare for the world championships. We still have work to do and the replacement pits are next on the agenda.

Apart from the obvious work that has been done to improve the WAMASC facility the committee has been working on restructuring the operation of the committee and WAMASC to improve the running of the club and benefits to members.

Specifically:-

1. Committee positions now have job descriptions
2. We have aligned the election of the committee with the start of the membership year
3. The fee structure has been changed to recognise the efforts of members who are prepared to donate their time
4. We are implementing a new by-law today to clarify and improve the ability of WAMASC to train new pilots

We are finalising a new lease with Whiteman Park. This lease will provide WAMASC with a guaranteed 20-year tenure at an annual lease fee equivalent to 10% of the commercial lease value. Key features of this lease are: -

- Increased site area for future expansion
- Agreement with MORBC for common area cost sharing
- Changed flying hours with Social activities and the flying of unpowered or electric powered aircraft permitted between 6am to 9.00pm. Flying of gas turbines, nitro and petrol powered aircraft remain unchanged at 8am to 6pm

Overall it has been a busy and positive year. There are however a few negatives which we want to fix.

What is disappointing is the continued lack of understanding by some members of our operating rules and lack of adherence to basic conditions of membership. There is no doubt that you are all paying for people who choose not to join and pay fees to use the facility. Our only means of policing this is the wearing of membership cards, all Committee members have the authority to demand the wearing of cards and ask individuals to leave who cannot do so. We are proposing to implement immediate on the spot suspensions of 1 month this coming year in an effort to enforce this. Non-members caught flying will be banned from entry until membership fees are paid in full.

Also of disappointment is the lack of tolerance shown by some to other WAMASC members, we want all forms of aeromodelling to be enjoyed at WAMASC and the attitude of some must change for that aim to be achieved.

Several years ago the decision was made to abandon the individual club structure to form one club. We now see efforts by some to revert to the old structure where you could only fly at set club times and the committee was unable to effectively operate. There are no club rules at WAMASC other than the WAMASC rules, there is no requirement for anyone to be a member of another club to fly at WAMASC and enjoy the facilities and if any of the social clubs whether AWA affiliated or not believe otherwise they are quite welcome to go and fly at another field.

Finally I would like to thank the outgoing executive and committee members for their work during the year and support, particularly Garry Burton and Rob Gaden.

I would also like to thank the members for their support and encouragement.

Steve Brown
WAMASC Chairman

Training at WAMASC

All instructors conducting training of students at WAMASC are required to register their Intention to train students. The Instructors and student details are required as part of our Risk Management Strategy.

If you intend to train / buddy box any student / visitor at the WAMASC Field you are required to advise the WAMASC Chief Flying Instructor, Ian Craig, via the WAMASC 'gmail' address prior to conducting training.

By-law 14

14.1 All training activities at the WAMASC field are to be administered by the WAMASC Chief Instructor.

14.2 The WAMASC Chief Instructor is to coordinate training and will keep a register of all student pilots under instruction at the WAMASC field.

14.3 Training is only to be conducted by Club Instructors or current MAAA Instructors. All Club Instructors are to be approved by the WAMASC Chief Instructor.

14.4 MAAA Instructors teaching students cannot test and award wings for their students.

14.5 Training is not to commence until the student has joined WAMASC and is covered under insurance. (visitor and trial flights excepted when signed in as a visitor)

Ian Craig (CFI),

Partisanship and Communication

I've only visited the club a few times and I'm a fairly new member, but a recent visit left me wanting to make some notes and encourage people to think a little more about what they do and how they interact with others at the club, particularly on the busier days.

One of the telling examples I saw was someone calling out that they were crossing the runway and waited for acknowledgement before crossing. Just after they cleared the sealed surface of the runway an aircraft landed. I'd throw a couple of questions out there with this situation for people to consider: Did they actually get acknowledgement from everyone flying (3 or 4 people near the threshold)? Did someone think it was ok to land as soon as the person was off the sealed surface? If the issue was the former then I'd suggest it's in your own best interests to make sure everyone heard you before you cross a live runway. If someone thought it was ok to land with someone that close to the runway I'd ask you to have a think about how often aircraft don't stay on the sealed surface; indeed why is it that we don't control our planes from closer to the sealed surface than we do?

The other issue that cropped up is something I've noticed repeatedly but with less impact than what I saw on Saturday; the partisanship of fixed wing v everyone else that is prevalent in many members. Runway 35 started out as the duty runway with lots of people flying at once. Cones were out across the middle of 09/27. After a while setting up some scale helicopters one of our members started setting up his small quad copter for a little warm up. Then some of the fixed wing guys removed the cones across 09/27 and put them away. The Heli/quad guy wandered off to the Eastern end of the field and launched his Quad (believing this was the designated safe area for Helis and Quads at the time). After realising that he was now flying in the wrong area he discontinued his flight and set out the cones for the other area. When he went to set out the cones a number of the fixed wing guys started complaining about him just setting out the cones and not talking to anyone. When the Heli guy was spoken to he was left feeling pretty bad and no consideration was given to what had happened to him just before, even though the people in question had been informed as soon as they started grumbling.

Please, people, communicate better with your peers. If there is someone that is obviously a heli or quad guy (and 600 or 700 sized scale helis are pretty hard to miss) and you are going to stop them from using one area and force them to use another do be good enough to include them in the plan. Better yet, if you are going to close one heli/quad (and light foamy area) then open the new one if there is anyone in the pits that is going to fly that type, be a good neighbour.

If you get irritated by the other side of the partisan fence doing things a way you don't like (just flying heli aeros from the centre field without asking), then take the higher moral course and give them role model behaviours to follow by asking them next time you want to do something similar; and if it really bugs you then discuss it before it festers for you too much by waiting until they have finished flying and then discussing it directly. With the average age of members (I suspect I'm below average at 39!) I wouldn't think it would be too hard for people to behave as grownups.

Todd Montgomery
Silver multirotor and Bronze Fixed wing

It's a Wrap.

By Norm Kirton

The 2016 F2 Control-line World Championships are over and all of the local modellers concerned with it can give themselves a huge pat on the back.

Even the weather gods smiled on us every day, well except the first Saturday which was an administration day anyway. Every flying day of the World Cup event which preceded the World Championships was pretty good and then the skies cleared, the wind dropped and all was perfect.

The Opening ceremony was held on a stage set up in front of the existing Radio Control pits area, where three flagpoles had been erected alongside the existing one. Each country was called in turn to parade their team, supporters and flag around the field before assembling in front of the stage. The FAI flag was unfurled as the FAI anthem was played following a short speech by their representative. The City of Swan Mayor then gave a welcoming speech. This was followed by a welcome address by Mr Philip Brofo on behalf of the aboriginal peoples of Western Australia which was followed by an Indigenous dance troupe performing to the sounds of a well played didgeridoo. This was very well received by our overseas visitors.

The F2A (Speed) event ran like clockwork under the direction of Andy Kerr from NSW and featured a large LED display over the pits area which showed the actual speed attained by each competitor. This gave spectators an instant indication of just how fast they were going. The official times were recorded by three timekeepers with stopwatches for accuracy. Eventual winner was Paul Eisner from UK with the fastest flight of 304.3kph followed by Peter Halman also from UK with a 303.0kph and third place going to Italian Luca Grossi 302.8kph – so close.

Over at the F2B (Aerobatics) areas, which were situated at each end of the Radio Control strips, the data recorders were kept busy as scores came in from each of the two circles. These were input into two laptops and the results printed out regularly. Flight director Frank Battam from NSW kept the flights going smoothly and the standard of flying was incredibly high with precise square corner pullouts so close to the tarmac. The winner was Orestes Hernandez (USA) with a score of 2266.62 followed by Igor Burger (Slovakia) with 2264.03 ahead of third place Richard Kornmeier (Germany) 2247.92

F2C (Team Race) ran very slickly indeed with the next three teams to fly having their lines checked prior each race by the ever vigilant Dickie Morrow. The newly constructed LED display, which was situated in front of the northern fence-line gave an exciting addition for the spectators who were able to see each team's lap-count, elapsed time and number of warnings in realtime as the 100 lap races progressed. The racing was monitored by a three man jury led by Brit, Derek Heaton and the race directed by our own Paul Cameron from South Australia. The race times kept tumbling until the Ukranian team of Makerenko / Fulitka created a new World Record with a blazing 3:03.0 for 100 laps. The nine fastest race times were then flown to find the three fastest who would contest the Final. Those three successful teams were Fitzgerald / Ellins (Australia), Wilson / Poschkens (Australia) and Ougen / Surugue (France).

And what a thrilling final it was with most competitors from the other classes crowding the marquees to watch the 200 lap race. All three teams were so evenly matched for speed that there was little chance for overtaking, even though Fitzgerald tried his best. This left it up to faultless pitstops which were critical for a result. Both of the Australian teams made each of their three stops in a scant 3 seconds with the French having some starting difficulties. At the 197th lap Murray Wilson was a fraction of a second ahead but Rob Fitzgerald risked an extra warning to whip his model and overtake Murray's. The results were separated by only tenths of a second with times of 6:22.8, 6:23.3 and 6.28.6 respectively. That Final will be talked about for some time to come.

And so on to F2D (Combat) which was very efficiently run by the local Bellis brothers. Victorian David Axon came over to help and ended up presiding over the line check area. The cut judges, Garry Turna, Fred Adler, Daniel Adler, Rob Fry, Hans van Leeuwin and Kim Parks did a sterling job despite long delays whilst some protests were resolved from time to time. From what I saw, the standard of competition was extremely high and it was fantastic that the eventual winner was the young junior flier Illia Rediuk (Ukraine). Second place was Pavel Narkevich (Russia) and third was Aleksandrs Prokofjevs (Latvia).

Throughout the World Cup and the World Championships the results were constantly being posted to our website by the tabulators. This feature was achieved by the use of two "Vodaphone CUBE" hotspots which each had a range of 250 metres to give total field coverage. This meant that enthusiasts around the world were kept up to date with results and this was a world first achievement. It has set the standard for future World Championships.

The prize giving and closing ceremony wound up the proceedings with many delegates echoing the statement by the FAI delegate that it was the best World Championships that he had ever attended.

This article by Robert Bishop was from the internet.

(www.rc-airplane-simplified.com/scale-model-rc-airplane.html)

The scale model RC airplane: How to find the balance point (C.G.)

The scale model RC airplane has to be balanced but where is the position?

There are many schools of thought regarding where to balance a scale model RC airplane. I do not wish to get into any arguments with aerodynamicists,(who know far more than I do) but I would like to pass on the information that I have used to successfully find that elusive and so important point!

My own design Fairey Fantome, balanced using info from this

The above photo does prove that the methods listed here do work and are fairly simple to use.
If you would like more info on the Fantome or even purchase a set of plans **visit this page.**

Mean Aerodynamic Chord (MAC) for monoplane scale model RC airplanes

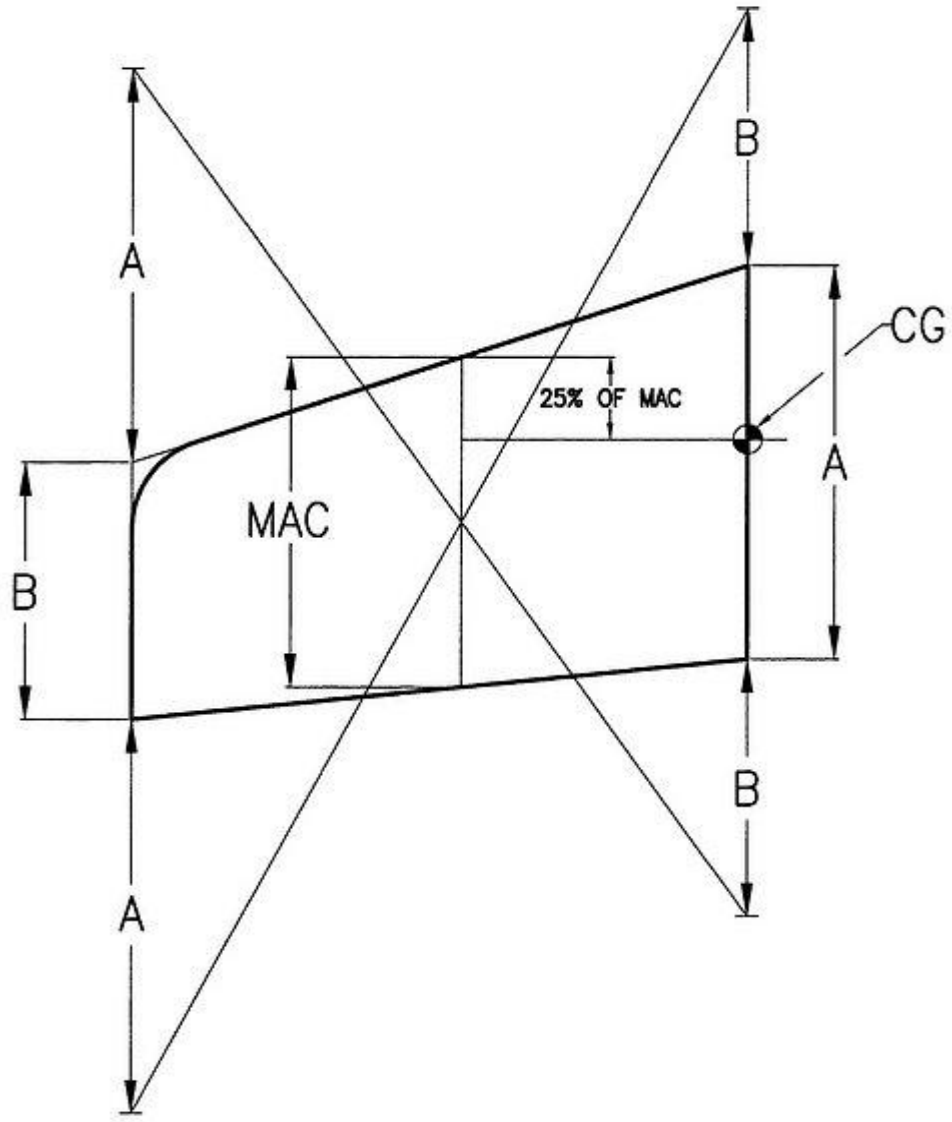
One theory is that all aircraft should balance at a point defined as 25% of the Mean Aerodynamic Chord, with no consideration given to tail area or moment arm. For the scale model RC airplane, I prefer to take these facts into consideration.

When designing a scale model we do not have the ability to change dimensions or ratios-we are restricted by our wish to build an accurate reproduction of the full size.

The formula I have used, came from a book written a few years ago by Gordon Whitehead titled "Radio Control Scale Aircraft Models for Everyday Flying" (A great book that every scale modeler should own)

Here is the formula- CG POSITION = MAC/6+(3 X TAIL AREA X TAIL MOMENT ARM) / 8 X WING AREA. Note that the Moment Arm is defined as the distance from the 25% MAC of the wing to the 25% MAC of the tailplane.

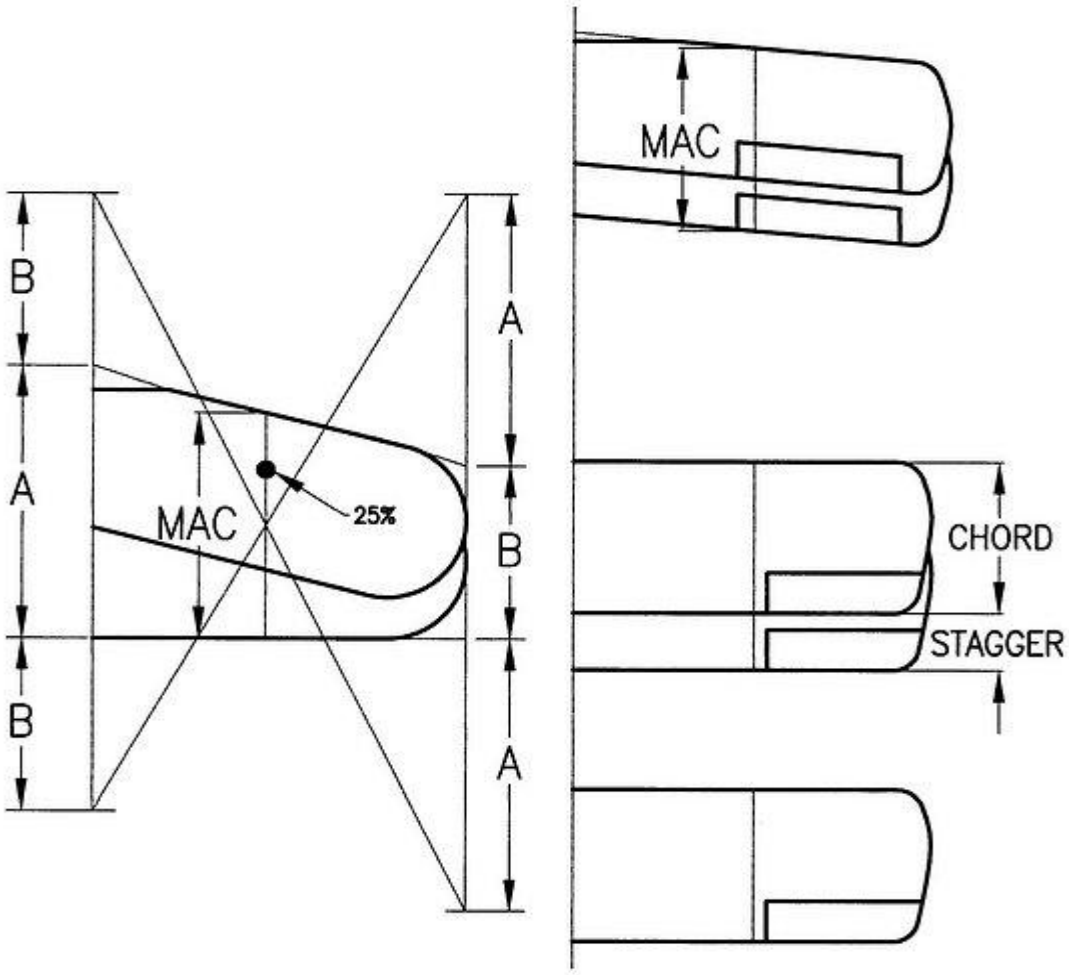
For a constant chord wing the MAC is obvious but for tapered or swept wings it is not so easy. However a simple graphical method is shown here-



Draw or trace the wing shape as shown. Then extend the Leading Edge (L.E.) and Trailing edges to the center line of the plane. Also square off the tips. Now extend the opposite chord lengths as indicated on the drawing; i.e. lengthen tip chord B by root chord A and A by length B. The four extreme points are then connected by diagonals. The point where these lines intersect will indicate the Mean Aerodynamic Chord (MAC). To find the 25% of MAC position we must measure 25% of the MAC back from the L.E. and extend this to the aircraft center line.

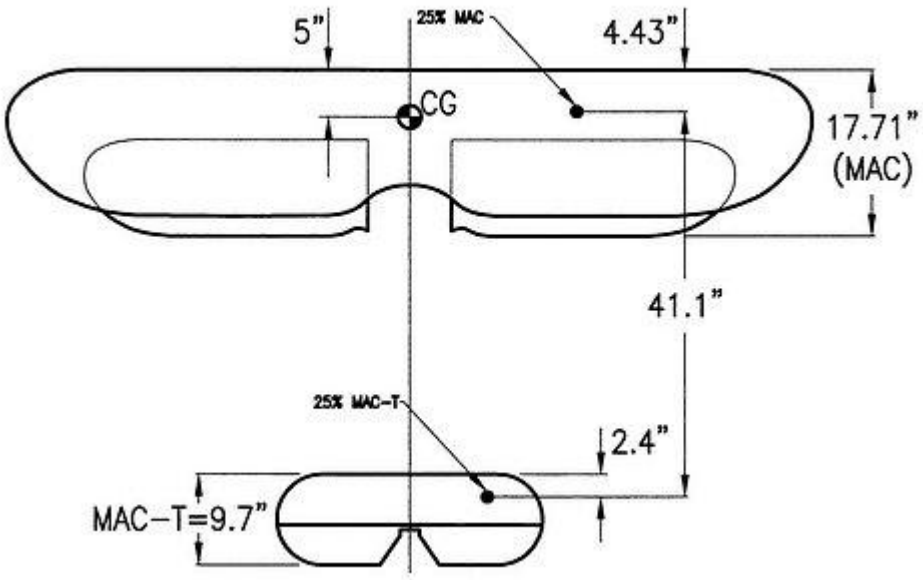
A useful calculator **can be seen here**, that may save you some time and/or confirm your calculations.

Mean Aerodynamic Chord (MAC) for Biplanes



The drawing shows various biplane plan view layouts.
In the case of straight wings then the MAC= CHORD of UPPER WING + STAGGER.
The example on the left is the most complex and shows the procedure for types with a swept upper wing and straight lower, such as "The Little Toot"

Calculation Example- The Fairey Fantome Biplane



Note that the top wing area=1220.8 square inches, bottom wing area= 583.1 square inches, giving a total wing area of 1803.9 sq.inches. The tailplane area=239 sq. inches. The Moment Arm was found to be 41.1 inches. Substituting these numbers in the formula-

CG POSITION = MAC/6+(3 X TAIL AREA X TAIL MOMENT ARM) / 8 X WING AREA.

= 17.71/6 + (3 X 239 X 41.1) / 8 X 1803.9

= 2.95 + (=29468.7) / 14431.2

29468.7 = 2.40

14431.2

= 2.95+ 2.04

= 4.99 inches. Say 5 inches.

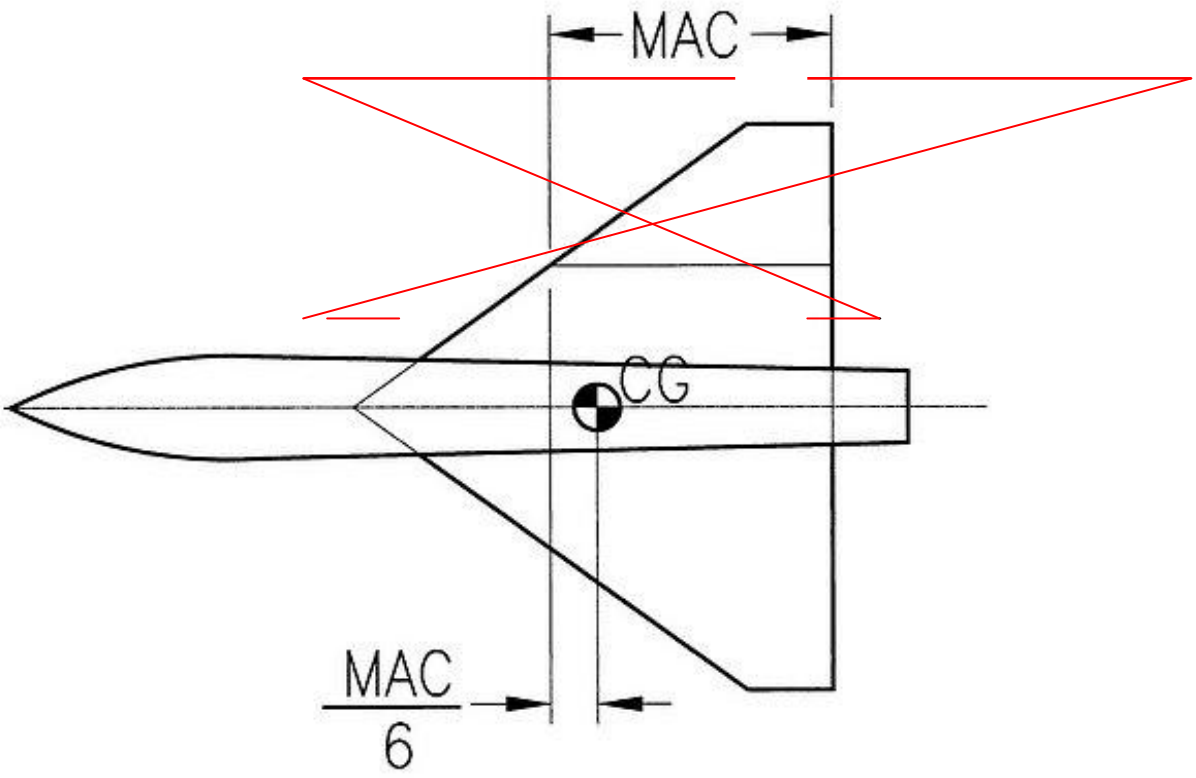
Elliptical Wings-Spitfire Etc

For the scale model RC airplane with an elliptical wing, such as the Spitfire, we divide the wing area by the wing span. The result is the average chord. If you now move your ruler along the wing plan, until you find this dimension, this will give you the position of the MAC (or at least close enough for our purposes)

Do a similar exercise for the tailplane and you will now be able to find the moment arm. Now you should have all the information to plug in to the formula.

Tailless Designs and Deltas

If the scale model RC airplane you are designing is a delta or of a tailless configuration then the formula reduces to - CG POSITION= MAC/6 Therefore locate the MAC, on the wing plan and measure back from the leading edge 1/6 of this distance. This point is the CG or balance point.



In this example say the root cord (A) is 530mm and the tip cord (B) is 110mm the MAC at the intersecting lines is 316.5mm. Using the above formula MAC/6 for this example the CG POSITION is 316.5 = 52.75mm say 53mm back from the leading edge.

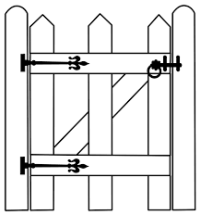
Don’t forget.....

To...

wear your Membership card in the pits or flight line
(must be visual at all time)

To...

close the pit gates after you or others who can’t be bothered.



To...

lock the main gate (if you are the last out) in the correct sequence.

To...

take your crashed model home with you, please don’t put it in the WAMASC bins

To...

leave your swearing at home. It’s not appreciated by our members or the general public.

Merchandise Sale

Jackets $45

Embroidered Shirts $55

Caps $20

Mugs $8

MEMBERSHIP BADGES

Membership badges are the means by which we identify members of the club. It is a requirement of membership that membership badges are worn at all times by members in the pits or flight line.

The rule is that the membership card needs to be displayed at all times or flying is not permitted.

We have had a number of incidences where members have become hostile when reminded of the requirement to wear badges by other members or the committee. It is somewhat frustrating that some members continue to ignore this simple rule.

The Committee is sure that members would be unhappy if people did not pay membership fees and continued to use the facility.

The mandatory wearing of membership cards is the easiest way to ensure that this can be policed.

We ask for your cooperation.

WAMASC Committee

WAMASC Sponsors

The on-going support of these sponsors is appreciated. If members have a need for any of these services, please give them your support in return.