

# WINGSPAN

THE OFFICIAL JOURNAL OF THE MODEL AERONAUTICAL ASSOCIATION OF AUSTRALIA
MEMBER NEWS | EVENT REPORTS | AROUND THE GROUNDS | SAFETY MATTERS | CLUB ACTIVITY PROGRAM



### THE WINGSPAN PRINCIPLES

**The WINGSPAN PRINCIPLES:** Elevating Aeromodelling through Inclusive Communication, Embarking on a mission to redefine the narrative of aeromodelling, WINGSPAN stands as a newsletter dedicated to uniting, informing, and inspiring our community. This manifesto outlines the what and why behind WINGSPAN.

#### **Purpose:**

WINGSPAN exists to cultivate a vibrant community, fostering camaraderie, amplifying voices, and celebrating the shared passion that fuels our aeromodelling journey.

#### What WINGSPAN Stands For:

- Community-Centric Communication: WINGSPAN places open, transparent, and inclusive communication at its core, serving as a dedicated channel to connect every member of the aeromodelling family.
- Filling the Void: Recognising the need for effective communication, WINGSPAN addresses the void, providing a hub for sharing stories, updates, and insights, creating a sense of belonging within the aeromodelling community.
- Beyond Retention and Growth: Going beyond conventional metrics, WINGSPAN prioritises fostering a strong sense of community, ensuring the well-being of our members, and addressing the need for effective communication beyond the surface. It's not about membership growth or retention at ALL.
- Safety First, Always: WINGSPAN is committed to upholding the highest safety standards in aeromodelling, understanding that a safe environment is the foundation for an enjoyable and fulfilling hobby.
- Inclusivity as a Guiding Principle: As a beacon of inclusivity, WINGSPAN
  welcomes individuals of all backgrounds and abilities, ensuring that every
  aeromodeller finds a place within our community.

#### Why WINGSPAN Matters:

- Creating a Sense of Belonging: In the vast skies of aeromodelling, WINGSPAN
  creates a focal point where individuals can connect, share, and feel a genuine
  sense of belonging.
- 2. *Inspiring Participation:* WINGSPAN inspires greater participation by highlighting diverse activities, events, and achievements, fuelling the enthusiasm of both seasoned veterans and newcomers alike.
- A Politics-Free Zone: WINGSPAN remains steadfast in its commitment to a
  politics-free environment, focusing solely on the joy of aeromodelling and
  the community we cherish.
- A Platform for All: More than a newsletter, WINGSPAN is a platform for every member to share stories, insights, and expertise, enriching the collective experience of the aeromodelling community.

#### The Defined Role:

In alignment with a re-envisaged communication strategy of Council, WINGSPAN is one of several channels delivering information to our members. This perspective allows for an acceptable level of repetition to ensure messages reach all members, especially those who may not grasp information through other means.

WINGSPAN is, first and foremost, a dedicated communication tool targeting members who may not readily receive messages via other channels. By balancing repetition for clarity with captivating content, WINGSPAN aims to be a comprehensive and engaging resource for all members, ensuring no one is left uninformed.

With members stretching far and wide, united in the love of the skies, WINGSPAN is not just a newsletter; it's a shared journey where clarity, repetition, and compelling content converge to elevate the spirit of our community.

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**COVER PHOTOGRAPH:** Model owned by Greg Adams. Yes it is a model, find out more about this gorgeous helicopter on page 39 of this issue.

## PRESIDENTS REPORT



Welcome to the latest issue of Wingspan.

Since my last article, I've been doing a fair bit of travel to various events, and meetings with our stakeholders.

In June, I attended the Queensland Turbine Flyers event in Goondiwindi and the Festival of Aeromodelling in Inglewood, Queensland. Both were well run events, and I highly recommend both to anyone considering attending in the future. The organisation at Inglewood was

first class, with multiple flight lines in concurrent use, allowing flying the model of your choice pretty much whenever you felt like a flight. My congratulations and thanks to both event organisers for well run, safe and enjoyable events that were very friendly and accommodating to all attendees.

On my way home, I dropped in to TARMAC in Toowoomba for a brief visit and to meet their members. Again my thanks for your hospitality. I also visited the NSWFFS field at West Wyalong in May and witnessed the F1A/B/C team trials. I must admit watching an F1C model in its launch phase is really something, and if you get the chance, it is a rarely seen part of aeromodelling that is amazing to watch.

There has been a substantial number of Australians travel overseas to competitions and world championships for the Northern Hemisphere summer. The stand out is David Law winning the world championship in F4C in Romania a few weeks back. David is an all round nice guy, and is a well deserved World Champ who faced stiff competition from around the globe. There are many others in R/C who competed in Europe, the Control Line guys headed to the USA, and our own Len Surtees from Queensland travelled to the US to defend his HLG title in Muncie and compete in five classes of FF glider at the US Nats.

Our relationship with CASA continues to develop. In early August I attended a meeting in Brisbane with the CASA team responsible for regulating Model Aircraft activity. We are

working on a proposal that will see substantially less paperwork and administration for area approvals for our clubs that need them, particularly those with low risk environments. This initiative will hopefully see only 'exceptions' needing to go to a full review process - clubs that are in close proximity to airports and the like. If I'm successful, it will dramatically reduce administrative burden for our clubs, and allow us to manage ourselves within a framework agreed with CASA for normal club operations.

Further to this, in the last week of August I met with the CEO of CASA and members of her Leadership Team at their offices in Canberra to further develop our strategic and operational alignment. Nurturing this relationship is critical to us continuing to earn the respect of CASA at the highest levels, and to have confidence in our leadership, systems and governance. This will ensure we have the best possible opportunity to continue to do what we love the way we've always done it, but absolutely in line with, and respect for CASA's obligations to safely manage airspace for all users.

At the MAAA, we often get questions from states, clubs and members about 'will I be covered by insurance if...'. It really is quite simple.

A fundamental condition of our insurance is that you are acting in accordance with our MOPs, and are at all times are acting lawfully. This means if you are flying at a site where you do not have proper permission to fly there, or use radio equipment that does not meet the requirements of the legislation as administered by the ACMA, then you are taking a personal risk that exposes you to potential financial and legal liability if something goes wrong.

I'm constantly being made aware of radio brands that can be personally imported where the Tx use a different part of the 900 MHz spectrum than what is licensed in Australia, or even some with variable RF output that enable you to transmit at higher power than permitted under our regulations.

Taking risk is everyone's choice, and people have different appetites for it, however be aware that our insurers are

commercial entities who if given the ability to decline a claim, have every right to. Its no different to car insurance, they wouldn't cover you in the case of an accident if you weren't licensed, that's not surprising. Our insurers will be just as predictable - doing the right thing is the only way to ensure coverage, otherwise it may fall back on the individual to cover any loss.

Safe Flying

Carl Bizon

MAAA President

# 2024 FAI F4 WORLD CHAMPIONSHIPS

By Greg Lepp - F4 Team Manager

The 2024 FAI F4 World Championships for Scale Model Aircraft was held in Strejnic, Romania, from August 10 to 17, 2024. Our team participated in the F4C and F4H classes, which are the premier classes for scale model aircraft competitions.

Results: David Law (AUS) - 1st Place in F4C and Melissa Law (AUS) - 12th Place in F4H



The competition was fierce, with participants from 18 different nations showcasing their meticulously crafted scale models. The event was well-organised, and the atmosphere was friendly and supportive among competitors.

One of the main challenges we faced was some logistical issues with gaining access to the airport for flying. However, thanks to the understanding and cooperation of our fellow competitors and the event organisers, we were able to resolve these issues, and the competition completed in the required timeframe.



The 2024 FAI F4 World Championships was a remarkable experience for our team. We are proud of our achievements and grateful for the support from our fellow competitors and the event organisers. We look forward to continuing to represent our country in future competitions and furthering the art of scale model aircraft.



# 2024 FAI F3F GLIDER-WORLD CHAMPIONSHIPS

Saturday 28th September saw the process chosen AUS Team depart Perth for Toulouse via Doha to all be immersed in our first ever glider slope soaring world championship. Individual ski sports tubes containing three gliders and additional baggage carrying ballast etc. was our first hurdle endeavouring to fall right on the 30kg limit. It was a relief to achieve check in and we all endured extra screening in Perth and along the way.

Once on the Airbus A380 the throwing yourself in the deep end really started to sink in especially when the big girl lifted off from the runway. It was an 11-hour flight to Doha followed by 7-hours from Doha to Toulouse. On arrival we secured our big black van and given I felt I had the best sleep on the plane I took the reins to drive to our accommodation in Limoux. I was under pressure as I was now sitting in the left-hand side having to change a six-speed manual with my right hand.

We deployed Rossco as navigator and driving support which was what we did successfully for the rest of the trip alternating between each other. Thankfully the roads were pretty quiet generally given we were based in the countryside. Doing 130kph on the toll way was a new experience! On arrival to our accommodation for the two weeks stay we were blown away by what Rossco and Carla had secured for us. It was an amazing house situated on top of a hill overlooking Limoux and mountains in the distance. It even had a heated pool

which we jumped in on arrival to wash away all the travel fatigue.

The next days were spent settling in, assembling gliders, shopping and a visit to the WC headquarters where we met contest organisers Andreas Fricke and Jean-Luc Galdeano. We had a nice lunch together where I enjoyed a Cassoulet French stew. Andreas kindly passed on the tungsten I ordered for my Freestyler 6 glider. When ready we headed out to the Saint Ferriol slope where our navigation led us down the garden path. After some goosing around we finally made it to the destination, but the wind was too light. We met a few other competitors, so it was great to do the reconnaissance and worthwhile getting out and about.

The following day we headed out to another slope called Laurac Le Grand. The Hong Kong and Danish teams were there flying, and they kindly offered for us to jump the queue and get in the air. It was an interesting flying experience for all of us given the somewhat lack of lift power in relationship to home.

Laurac has an unimpeded flat plain pretty much to the horizon line, so it is the place to go when light winds are the order of the day. The slope is not perfectly manicured, so it is pretty turbulent. The left-hand end rolls around the corner so an extended turn has your glider stopping coming out of the turn

as the wind generally comes in off to the right and suck back is experienced. The right-hand end has a big headland jutting out which delivers a lack of lift and also turbulence especially when either trying to gain entry height or hovering back and forth preparing for a landing. The landing area is a large bowl off the back full of limestone type rocks. The only saving grace is the grass is long enough to land your glider flat on top avoiding the rocks, providing the pilot deals with the rotor and associated turbulence. It was great to fly at Laurac as it would prove to be the most challenging spot for everyone during the competition.

Given we headed to the WC a week early we were fortunate enough to score the Saint Ferriol slope for two days with winds in excess of 10m/s. Saint Ferriol slope is a sheer vertical limestone cliff with really powerful lift when the wind strength is up there. This slope was the best slope I have ever flown! Just flying there made my trip! The only downfall to the Saint Ferriol slope is the really tough landings with a slightly declining flat plain subject to extreme rotor effects. This slope would deliver some fantastic times for competitors during the WC but also landing pain upon trying to bring your glider home. Laurac and Saint Ferriol slopes highlighted that the WC also has an aspect of endurance which pilots constantly battled to keep in check. You can soon run out of three gliders when 17 rounds are the final result, and you have practice flying as well as The Pyrenees Cup in the mix! The other slope which the French had in their bag of tricks was called Escueillens. The slope was located in a military fly zone so was pretty much

open to flying only during the WC. We did not have a chance to fly there prior. The slope was well manicured and had a tree line just past base B and a nice, grassed landing area just past base A. Entry to the landing area was over a sunflower crop in which you did not want to fall short. Escueillens was a nice slope to fly at and was certainly challenging dependent on the air cycling through. The only trouble with Escueillens was that it was subject to fog which had us waiting to start rounds from 9am until it cleared at 2pm during one instance. Escueillens certainly equaled slow starts!

Saturday the 5th of October saw the AUS Teams debut into a big competition, The Pyrenees Cup. Laurac was the call, and the wind was light to moderate coming in late afternoon after sitting around all day. During sitting around, I introduced myself to the single Romanian pilot Cristinel and his friend Gabriel. Gabriel was not proficient in launching so as a team we took Cristinel under our wing. Once away, we completed one round containing the 70 pilots. I unfortunately clipped a bush hugging the terrain putting a fist size bite in my Pitbull leading edge and achieved a did not finish. Luke did well with his Mojo posting a respectable 59.51s but unfortunately snapped his nose on a rock landing in the bowl. Rossco tried his best but pre-empted the base performing a cut securing a 74.77s, probably in ordinary air too. Luke super glued the Mojo nose as he likes this glider, and it was cutting through the air nice. On arriving home, I sculpted a chunk of sand able foam packaging from my tungsten order and fitted that to the bite in my Pitbull wing. I then taped on a cutout coke can sheet



as the wind to keep her in the air. The next day saw us hit Escueillens only to sit around being fogged out until the afternoon. One round was flown where Rossco was the standout for the AUS Team posting a 55.97s run. I flew a conservative back on the horse run to post a 59.46s and from memory Luke cut badly, probably in ordinary air too, to post a 70.28s. The Pyrenees Cup was awesome to go through the motions and to see what the top pilots do pumping wise for entry height gain and how they fly the course. Given the opening ceremony was scheduled for 7pm in the town square of Limoux, the Pyrenees Cup was finished, and we enjoyed a really good opening ceremony being introduced as a team to the other competitors and a great audio-visual historical big screen video and photo display from the French F3F fraternity.

the best hook arounds back towards the slope to regather I have seen. it was pretty aggressive and brazen leaving not much room from the safety line. He bounced back on his second run generating some good speed with the Pitbull 2 with better turn preparation and not so aggressive aileron wafting to achieve a 49.41s run. He nearly took out the wind meter and unfortunately crossed the safety line for a penalty. Geez we would have never heard the end from Erik Schufman if he did clean up the wind meter! Luke posted a 56.90s run for round 2 hovering around bases from memory awaiting the buzzer beep. My round 2 effort was a dismal 68.24s struggling to pump the Device and fly her through the course a bit heavy in bad air. Learning curve though in regard to selection of appropriate glider and ballast for the conditions.



Tuesdays flying saw us hit Saint Ferriol once the muddy track was deemed drivable. We were greeted with 6 to 7m/s wind initially which saw Luke first up flying well to achieve a 50.33s run. Cut balking again washed off his nicely gathered momentum during his run. Rossco was dealt some light conditions but even though not off to a good pump and start he is great at building the momentum during the run. The wind kept dropping and was not contestable to complete group 2 of round 3. Andreas called rerunning of group 2 which was great for Rossco getting extra fly time advantage. I just chilled eventually coming to the realisation that I might not fly, which did come to fruition.

Monday morning saw us hit Escueillens with a delayed start due to fog again. I was the first cab off the rank flying my Device well to achieve a 42.32s run and received some clapping on conclusion due to my precisely timed turns. My pumping helped too as I was carefully monitoring and planning my strategy via watching 7 pilots prior. Luke unfortunately performed a cut on his run and was spooked by a potential other as well. Luke flew it out well to achieve a respectable 51.73s. Rossco's first run was not ideal for him as I think he struggled with the pumping and performed a cut to post a 61.52s. When he did the cut however, he performed one of



Wednesday Laurac Le Grand was the call where completion of round 3 and an additional 5 rounds was flown in on average 10m/s and above winds. It was a big day of flying and looking back guite crucial in eventually exceeding 14 rounds where the worst two can be dropped. Landing was really tough with me and Rossco being blown off the back of the landing area. I was lucky with no damage but unfortunately Rossco cracked his Wasabi fuselage. Luke was keeping his Mojo going super gluing the nose when and if required. At one stage I noticed it loose prior to launch with 5 pilots in front. It was a frantic sprint to the car for the super glue, but we ended up being able to send our team mate on time. Rossco opened with a 71.46s round 3 re-flight followed by a 58.70, 47.31s, 61.65, 58.19s and a 50.82s. Luke a 50.40s, 48.77s, 51.11s 59.64s and a 45.80s. My round 3 was a 56.49s followed by a 71.27s, 54.20s, 46.69s, 51.90s and a 42.91s. Laurac Le Grand was a difficult place to pump and adapt to flying through the course. It was interesting to watch the top pilots push through well while for others the slope and associated attributes did not work well with their approach and style. Although it was daunting at first, it was really great to fly heaps and push through the rounds especially with a nice Saint Ferriol Thursday forecast of the same predicted.

Thursday saw us greeted with a fantastic day of flying ahead at Saint Ferriol as forecast with winds in excess of 10m/s up to 15m/s and sometimes down to 6m/s. Luke was the standout Australian pilot where after learning from his cut balking mistakes he found the groove and followed suit really well adapting his style to mimic the top pilots. It was a pleasure to watch Luke fly his smooth putting it on the line style in which a lot of good pilots stood up and took notice. Luke achieved a round 9 39.69s and round 10 39.71s which was epic,



especially to witness his elation at his achievement, and to hear fellow competitors clap accordingly. Lukes following runs at Saint Ferriol were a 45.17s, 54.44s and a 55.46s as the wind and good air fell away. Rossco also came out firing in the good conditions with a nice 41.30s followed by a 43.66s. Rossco flew consistently good as the conditions lost the initial strength to post a 47.27s, 51.52s and a 49.84s. For me my

times were 45.41s, 41.17s, 49.13s, 55.25s and a 60.67s. Unfortunately, I snapped an elevator on one of my Device tails with a high-speed ground loop landing followed by breaking the nose of my Pitbull. I fixed my Device elevator after round 11 and continued to fly out round 12 and 13 with her. I did land really good with a different approach for these two rounds as I took the time to watch local legend Sebastian Lanes go through the motions and followed suit accordingly. Friday saw a lay day which was great for me to be able to fix my Pitbull which ended up being a good option to claw my way back on Saturdays last four rounds at Escueillens.



spent a fantastic week with. The French were awesome in how they all The last day of competition on Saturday prior to the evening's presentations and banquet was run at Escueillens with the intention of achieving round 14 and 15 so a total of two round scores could be dropped. Due to the fog god being kind we hit the ground running and achieved a total of 17 rounds.

The wind from memory was on average 7m/s and cycling through with good and bad air sometimes. Luke opened with a 51.59s and before his next flight I was challenged by Team USA's Warren Day to a wager for Luke versus him. I was up for it, so I put 20-euro on Luke. Luke did not let me down and posted a great 38.07s, his fastest for the competition. Warren then stepped up to the plate and won the round with a 37.45s. Well done to Warren who adapted his style closer to the ridge and executed a nice less distance travelled run! Luke then executed a nice 43.89s followed by a 49.60s. For me I tried to step it up without pushing too hard and possibly performing a

cut to claw my way back up the ranks, which I was happy that I did somewhat. I started with a 45.61s then a 47.93s, a 46.82s and finished off with a nice final run with a different to the rest style which worked well and achieved a 43.95s and gathered me some good points against the group's times. Rossco flew out the competition pretty consistent with no mistakes apart from letting me down when I backed him again against Warren Day for another 20euro loss. Rossco's final times were 46.69s, 49.39s, 51.69s and 55.39s. In the evening the presentations were amazing and carried the great camaraderie of F3F enthusiasts and good sportsmanship experienced throughout the competition. The banquet was excellent, and it was really sad to part ways with competitors and officials in which we had

banded together to make the World Championship happen. They all did such a sterling job. Made our first WC so special and memorable. Thank you so much! Thank you to Carla as well for giving our team support, especially for Luke and me. We really learnt a lot from competing against the world's best and it has definitely given us a new purpose to take what we have seen and learnt lifting ourselves to new heights and speeds. There were also many new friendships forged.

Team AUS WC final placings: Luke Ancill 40th out of 55 Stuart Hamilton 41st out of 55 Ross Cox 47th out of 55

AUS Team overall 16th







By Shane McMillan

I've always liked the Anderson Kingfisher, since reading a build article for a ¼ scale version in the old American RCM magazine as a teenager. It's only taken me about 30 years to finally build one!

This project was born last October (2023) at the annual Albury float plane fly in at Hume Reservoir. I was flying my Grumman Goose flying boat, in company with Tim Nolan who was having fun with his own design 1/4 and 1/3 scale Kingfishers, and a fellow modeller (who for various reasons wants to remain anonymous), who we shall call Michelangelo (because he is somewhat the artist), or 'Mikey' for short. At some point Mikey suggested I should have my Dornier Do24 (3 engined flying boat) project completed for next year's event. Knowing this was probably a 2 year build and I

hadn't yet started It I replied that was unlikely! Quick as a flash Mikey replied, "Kingfisher then, and I'll build one too". With that the race was on!

Plans were laid on the trip home to build Kingfisher v2.0 incorporating some mods Tim wanted to make to the design, and shortly after I found myself at Tim's place, along with several other willing helpers for a 'boys weekend' laying up fibreglass fuselages for the two ¼ scale Kingfishers, (Mine and Mikey's), as well as one for the baby 1/5 scale version. It may be obvious by now that this is no ARF model, rather a true builders project that will take many months to complete. Several other projects were going on at the same time also so it turned out to be a fun weekend. Mikey unfortunately missed out on the fun as he was sent away on an overseas 'work' trip. Being the shadowy '007' secret agent type that



he is, I believe he was stalking through Kazakhstan chasing down Borat's sister!

Tim sent me home with plans for the wing and tail unit along with his original written kit instructions from 20 years ago (when he was actively making and selling kits for these models), and a set of foam tip float cores and his wooden bowing outlines for the tail and wing tips. Wing ribs and engine pod formers had to be laser cut but that was a problem as the guy who used to do that for Tim was no longer contactable and he had the cut files!

To the rescue came modelling buddy Brett Solanov (we can use his name!), along with his engineering and CAD drawing skills. Brett spent many hours, in consultation with Tim re-designing the wing and engine pod structure incorporating a thicker wing section (13%)

instead of the original 11%) than the original design (a change made by Tim as designer several years back for better lift characteristics). It now features Frise ailerons with custom engineered and CNC router-cut G-10 sheet hinges, lightening holes in all ribs and an interlocking engine box / wing center section that works very well indeed. More on all that later.

Construction began in earnest with the delivery of my completed fibreglass fuselage from Tim and a set of laser cut 3mm birch ply wing ribs and formers from Laser Cut Kits Australia, in Tasmania.

#### Fuselage / Hull

Fuselage center section formers had to be made from plywood strips bonded into the fuselage and aluminium wing strut

retaining tongues bolted to these, protruding through the fuselage sides. A plywood servo and battery tray fits across the inside of the nose to keep weight as far forward as possible.



View inside the fuselage.

Aluminium spray rails are fashioned for the front of the hull area and screwed and epoxied to the lower hull sides. These are stretch formed using a hammer and dolly and were a challenge in themselves.



Fuselage spray rails

At the tail end two 8mm balsa tailplane support ribs are bonded inside the fin followed by the fin post (best left till the last minute though!).

The upper wing center section containing the engine pod forms the top of the fuselage and is built up in the traditional manner



Upper wing center section

and is bolted to the fuselage from the inside, through the port side window hatch (which had to be cut from the fuselage moulding). The engine firewall is laminated from layers of 3mm ply and slots into the pod structure. The football-like fibreglass rear pod moulding slots around the engine pod uprights and is epoxied and fibreglassed in place. It is structural and greatly adds to the rigidity of the engine mount.



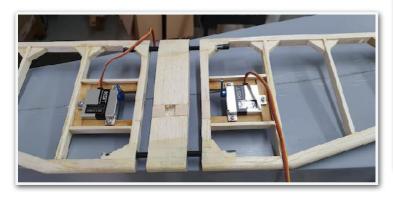
Wing strut attachment points

Wings attach to the center section outer ribs with through bolts angled from underneath and are supported by the wing struts, (just like in a Piper Cub). Like a Cub, there is no center wing joining tube, the wing struts carry all flight loads. In fact the full size Kingfisher uses a standard J3 Cub wing.



Mikey by this stage had returned from his international martini drinking soiree (I hope he didn't waste the olives!) and had (finally!) started work on his own Kingfisher having visited Tim's workshop to help complete his own fuselage and engine cowls, somewhat making amends for skipping out on the boys weekend / workshop.

#### **Tail Surfaces**



Tailplane structure

The mid mounted tailplane is strut braced, and is a pretty standard balsa stick flat plate structure. Rudder is similar but is tapered to match the fin. Ribs are sanded to shape in situ. I used Sig Easy Hinges for elevator and rudder hinges. I put two small flat wing servos in the tailplane which use short direct pushrods to the elevators.

Servos are covered by moulded fibreglass shrouds supplied with the kit.



Covered tailplanes

I made my tailplane halves removable using carbon rods and tubes with magnet retainers. They will not come off often I suspect.

#### Wings

Wing structure is straightforward, very much a Piper Cub wing structure, with the possible exception of the aileron leading edge design and its incorporated shrouds in the wing trailing edge. This is a slotted, frise type aileron and uses a rolling cuff between its leading edge and the wing trailing edge.



Wing & Hinge point assembly

The hinge point is set below the bottom skin and a fair way back such that the aileron leading edge protrudes below the wing lower surface on upwards aileron movement. This helps reduce adverse yaw. The CNC Cut aileron hinge blades are jigged into the wing spars and guarantee correct hinge point placement. It is VERY well thought out, and works very well. Hinge pins are from 3mm shoulder bolts and nuts.



Close up of the hinge assembly

Aileron close up

My wing was the first of the new design to be built so I was figuring out the assembly process. (Plans and instructions have yet to be updated). There were a few minor issues due mainly to my not quite understanding some of the subtlety of the design, (mainly around the aileron leading edge shrouds).

I was effectively writing the instruction manual for the new design wing as I went along). Mikey meanwhile was making progress, following my build log photos and comments, albeit slowly, amidst 'work' trips and various mystery illnesses. (No doubt caught from Borat's sister!).

Wing struts are constructed from 10mm dia. aluminium tube (from Bunnings!) and utilise custom machined aluminium end fittings and Bunnings G-10 sheet mounts bolted through the wing structure.

More Bunnings 12mm aluminium angle makes the tip float mounts again bolted through the wing structure.



Finished wing structures



Wings covered and ready to go

Paint scheme was applied in Norglass Weather-shield marine enamel using the Norglass spraying thinner.

My model uses a 'Sunday scale' paint scheme of my own design, drawing inspiration from several of Tim's previous designs. It is a bright and fun scheme and I think it worked out well.

# Tip floats

Tip floats are made from foam cores sheeted in 1.5mm balsa, (using contact cement) and covered in 0.75gram glass cloth and epoxy. Tip float struts are from 5mm carbon tube with 6mm stainless steel tube (from drinking straws!) upper attach fittings.



Completed tip floats

#### **Covering and finishing**

I covered my wing and tail surfaces in SIG Coverall using Nitrate dope. Fuselage, cowl and tip floats were primed with Automotive acrylic primer after body filling the center seams. Several coats of filling and sanding as required before being ready for paint.



WE.

Tip floats and engine cowling



Final colours being applied to the fuselage

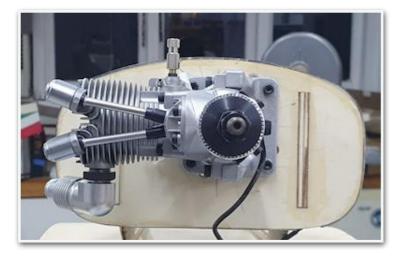


Wings being painted

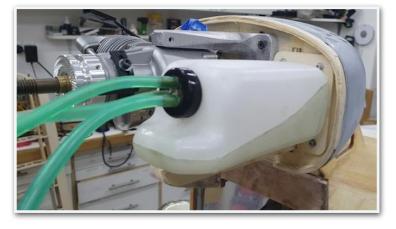
Covered, primed, filled and almost ready to paint

#### Motive power and final setup

I installed a Saito FG21 petrol 4 stroke engine in my model and this has proved to be very suitable. I am using a 16 x 8 APC propeller. The model does very well with any 120 size 4 stroke engine (Tim's model uses an OS120 Surpass). Propeller clearance can be an issue with larger engines due to the prop being sited above the fuselage nose decking.



SAITO FG-21 four stroke



Another view of the SAITO FG-21 & fuel tank

The model weighs 8 kg including 450 grams of lead shot ballast in the nose (epoxied in place) which Tim tells me is typical.

Control is via FrSky Tandem XE radio, using TD R10 dual band 2.4gHz / 900 mHz receiver. All servos are digital.

#### **Flying**

My model had its first flight on Sunday 12 July 2024 at the regular 'Wings over the Regatta Center' float fly meeting at Penrith Lakes in Western Sydney. After some initial tuning of the new engine which up to that point had not been run in the airframe, only on a test bench, and the obligatory pre-flight on water photo session, we were away. Taxi out on early morning glass smooth water was uneventful as was the takeoff run. Lift off was fairly smooth and it trundled about comfortably at half throttle. I made a dozen or so circuits with the requested low camera passes for the model's paparazzi designer (Tim) then lined up for a landing. Touch down wasn't perfect with a small bounce but OK for a maiden flight. Taxi back to the dock and shut down the engine. Phew!

I did four flights in total on the day with only minor changes to radio programming. I need to re-route the engine crankcase waste oil discharge line so it doesn't spray oil over the windscreen and shorten the throttle servo horn as it has slightly too much travel. Not a bad first flying session maintenance change log!

#### Where's Mikey?

Mikey fortunately was present for my models first day out and was nearly as happy about it as I was. Following more 'work' trips both home and abroad and a few relapses of his exotic Eastern European malady he is still building his model and is currently about to start covering. He may need some help to get it finished before October for this year's Albury float fly event but between Tim and myself we'll get him and his model there, as long as we can keep him away from the Martinis and Borat's sister!



## **NSWFFS** TRANS-TASMAN SCALE WEEKEND



The NSWFFS Trans-Tasman Scale Weekend for Free Flight and Control Line was held at Richmond on July 5th-7th.

After 5 years it was good to have New Zealand back at our scale weekend, ably represented by Stan Mauger and Ricky Boulds. We have been promised more from NZ in 2025 now travel is back to normal.

Friday was set for static judging. Most were completed until Sydney's fickle weather turned to rain. More judging took place Saturday morning for the interstate visitors and anyone else whose models were not quite ready. There was some test flying done on Friday before the rain.

Saturday, more early trimming and static judging before official flying began. Early flights had calm conditions and flying judges were kept busy all morning till it became too windy. Most flyers had at least one scoring flight, others had to rely only on static scores due to flying incidents. We had light misty rain, but showers held off.

We had 27 cars on the field which was not too bad considering the weather forecast which would have kept quite a few at home.

There. was a big verity of models from very small rubber, WW1 biplanes, WW2, Sport aircraft and even a Russian Jet.

We had 31 models entered for the competition. There were some beautifully built models presented by the flyers, a credit to their skills. All scale modellers out there, please dig out your old models, or build new ones for next year.

Sunday, much better weather. The day started with a scramble which had the best conditions you could possibly get. If it had been an hour scramble, I think we would have had a new Australian record.

After the scramble there was plenty of fun flying taking place. It was great to see the new president of ANSW Dino Riebolge join us. The way Dino was taking photos I don't think he had seen free flight models before. He and everyone is welcome to have a go, we can organise a model for you to fly, it might only be a Tomboy but it would give you some idea of free flight.

Just let us know a few days before so we can prepare something for you. We are on the field most Friday mornings for general flying. We would love to have you join us.



#### **Control Line Scale**

This was the first time we ran a control line scale competition; Control line scale has been in the doldrums for quite some time and it was suggested we include it. We had seven models on the flight line and a nearly finished DC-3 in the background, there were murmurs from the crowd wanting to do something for next year. Yes, we will give it another go in 2025 let's hope the numbers improve.

Back to the competition, the wind was a bit tricky on the Saturday. The Corby Starlet was the first to fly with an interesting flight given the conditions. It suffered a broken U/C and had to be retired but will fly again next year.

Both Bruce and Matt entertained the crowd with some impressive flying. Sunday drew calm conditions to finish the rounds and help the marginal models like the Ryan St to put in some flights. It was interesting that two of the models had or should have been RC but were converted to Control Line. Again, numbers were good with twenty-nine cars on the field showing scale is popular.

A perpetual trophy has been made for the people's choice. This year it went to Ray Ogle with his nicely presented Hawker Hurricane. He will have to be back next year.

Enjoy the photographs over the next few pages. The joy and passion for aeromodelling is evident in each and every one.











# THE FLIGHT OF THE FOKKER EV/DV111

By Roy Summersby

Why did I decide to build the Fokker D8? Well, I did have the Model Aircraft plan by M.F. Hawkins, and it is one of the few WW1 aircraft that doesn't have two wings and countless wires running every which way.

The Hawkins 1961 plan is 1" to the foot and he used a DC Dart, this was only 27" span, "too small for me", so I had the plan enlarged 50% to make it 1/8 scale, I think it's now a nice size at just over 40" span, and should suit the new SAM .75 nicely. The D8 was in fact designed by Reinhold Platz and in his day, he was an extraordinary aircraft designer. In spite of his genius for aircraft design he was content to work in the shadow of Tony Fokker and see his boss claim all the credit for his work. Platz's idea was simplicity. Once he had proved that a satisfactory and safe cantilever wing could be built it was obvious to him that the ideal aircraft must be a monoplane and thus make it easier for aeromodeller's in the future.

The actual build is very straight forward. I did change the stab and fin to sheet balsa with carbon stiffeners. There was some cursing with the wire bending, but this is quite normal for me as I think that I am the worst wire bender in the country. All the wire struts are covered in aluminium streamline section and how I did this is was detailed in a past wingspan. I covered the whole model using 38-micron film then doped tissue over that. The cowl I have made by cutting eight pieces of 1" square balsa to form a circle, then gluing two layers of ¼ sheet to the front. Inside the front, I again cut eight pieces of triangular balsa as a filler to support the radius that has to be formed to the front. Behind this I epoxied a strip of thin aluminium sheet to give me the depth needed. This turned out far better than I had expected and I would use this system again.

Hawkins plan shows lozenge patten on the fuse. OK not so hard, I have done this before, but before it was a hexagonal patten, very simple by comparison, one stencil and just reposition it for the next colour. This patten was to be entirely different, Good old Jacko (Peter Jackson) sent me a nice colour print which showed a total of six different colours and shapes (he must really hate me).

This meant a different stencil for each colour, this in its self is not a problem but getting them to line up and fit together did create a few worrying moments. In fact, the colours on the underneath of the model are different to the sides, why, I have no idea, ask the Germans. I must admit I did have help here, John Pennell's to the rescue. It certainly was a two-man job, one holding the stencil and one using the air brush. There was plenty of brush touching up to be done the next day, but the end result is very pleasing, Thanks Jacko for giving me such an outrageous colour scheme and to John with his expertise on painting.

Flying the Fokker

The NSW Mini Maxout competitions were held on the last weekend in July, so what could be a better time than that to take the Fokker out to our 700-acre paddock at West Wyalong. There was the chance of some long grass which aeromodeller always states that first flights should be over, and there is plenty of room to spare.

First flights showed it turning much too tight to the left so right rudder was put on the trim tab. It also required a bit more power. Cowl off, some more right thrust, and a bit more RPM on the SAM 75. Back out on the field in the late evening and the Fokker was climbing into the setting sun in beautiful left turns. I managed to get in three flights with a full tank before the sun had set. I am very happy with it under power, but I do have to sort out the glide a bit more, as it is too steep.



# MOP UPDATE - HEAVY MODEL AIRCRAFT INSPECTION AND OPERATION (MOPO15)

Did you know the Heavy Model Aircraft Inspection & Operation MOP (MOP015) has recently been updated to better reflect current international practices and reduce administrative burden for members. The focus of this round of changes is on the certification needs for models 7-25kg (Large Models) when owned and flown by MAAA members who are endorsed Heavy Model Inspectors (FW25/RW25).

#### What does this mean in plain English?

Where you are the pilot and also the owner of a Large Model (7-25kg) a valid permit to fly is no longer required IF you are an endorsed FW25 / RW25 (as appropriate) Heavy Model Inspector.

This simplification also applies to Gas Turbine powered Large Models (7-25kg) provided the pilot and owner is a Heavy Model Inspector and Gas Turbine endorsed.

#### What if a non-endorsed pilot wants to fly my Large Model?

However, any additional pilots who are not FW25/RW25 Heavy Model Inspector endorsed will require a valid written permit to fly the model, only they have successfully passed the flight test requirements of MOP015 Section 6.4, this is to demonstrate competency and safety within the proposed flight envelope with that aircraft/helicopter.

If you fly Large Models and are not currently a Heavy Model Inspector have you considered becoming one? Doing so will allow you take advantage of the reduced administration needs when flying your own models.

#### How do I become an FW25/RW25 Heavy Model Inspector?

The process for becoming a Heavy Model Inspector is detailed in MOP006 Appointment & Reappointment Of Inspectors Procedure.

An overview of the process is:

- 1. The qualifications and experience required to be an FW25/RW25 are:
- Must be familiar with MAAA safety rules and guidelines.
- Have 5 years experience in constructing and operating fixed wing models or 7kg in weight or in the of rotary wing of 60 size and above.
- Have demonstrated knowledge of inspection requirements for Fixed Wing Large / Rotary Wing Models as per MOP015.

- Be of appropriate FW/RW Gold Wings standard.
- 2. The appointment / application process is:
- The applicant shall prepare a dossier containing, but not limited to, the appropriate application form and a resume detailing the applicant's relevant experience. It is recommended that the resume contains photographs and details, including but not limited to materials and/or components used, engine size and type, and type of Model Aircraft that the applicant has built and flown.
- The applicant shall then submit the dossier to their Club Executive for review.
- Once the application has been endorsed by the applicant's Club Executive the applicant must conduct a trial inspection in the company of a relevant MAAA Aircraft Inspector (of the same type as is being applied for). In the event of a trial inspection for a Gas Turbine Endorsement the Trial Inspector should hold a Gas Turbine Endorsement for the type of aircraft that will be inspected. The Trial Inspector would be nominated by the Ordinary Member. The applicant will be subject to an Oral Examination comprising 10 questions from a bank of 30 questions. The pass rate is 100% with all 30 questions available to the applicant prior to the Oral Examination. The Trial Inspector will date & sign the application form provided the applicant passes the trial inspection and examination.
- The Club will then send a recommendation, the endorsed application forms and resume to the MAAA Ordinary Member they are affiliated with for consideration.
- The Ordinary Member shall assess both the experience and suitability of applicants prior to submitting a recommendation to MAAA. If appropriate the Ordinary Member shall submit the application to the MAAA Federal Secretary.
- The MAAA Executive shall consider the recommendation of the Ordinary Member in relation to the application and shall decide whether to appoint the applicant to the position. On receipt of the decision of the MAAA Executive, the Ordinary Member shall advise the applicant of the outcome of the application.

Additionally for a Gas Turbine endorsement, the applicant must be an endorsed inspector and have 2 years experience in constructing and operating Gat Turbine powered aircraft, and understand the requirements for Gas Turbine procedures as per MOP030.

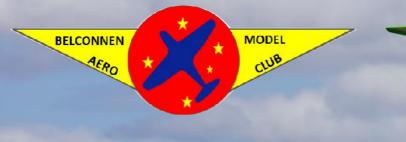
# MAAA HEAVY MODEL INSPECTORS



Changes to the Heavy Model MOP have seen an increase in interest from those wishing to become Heavy Model Inspectors. Here are some of the most commonly asked questions:

- Q What changes have been made to the Heavy Model MOP?
  - Fundamentally, pilots who hold an FW/RW25 Inspector endorsement do not need a
- A Permit to Fly form for Large Model Aircraft (7-25kg) they own/fly. The onus is on the pilot to ensure the model is air-worthy. A complete list of changes can be found at the beginning of MOP015 at www.maaa.asn.au
- Q I already own a Large Model that has a Permit to Fly does this mean I don't need a permit for other models?
- Only MAAA certified Heavy Model Inspectors are exempt. A Permit to Fly is not a Heavy Model endorsement. In this case, all Large Model Aircraft would require individual Permit's to Fly.
- I want to become a Heavy Model Inspector. How do I do this?
- Step 1: Read MOPoo6 for detailed instructions and a clear overview of the process.
- Step 2: Create a resume of models built/relevant experience
  - Step 3: Have your club endorse your application. Application forms can be found on the MAAA website.
  - Step 4: When satisfied the criteria has been met, your club will forward your application to your State body
  - Step 5: When satisfied the criteria has been met, the State will forward your application to the MAAA
  - Step 6: The MAAA will consider your application and notify you of the outcome
- I was previously a Heavy Model Inspector but let it lapse. Do I need a Permit to Fly for my Large Models?
- A Yes. Only current MAAA endorsed Heavy Model Inspectors are exempt.

Please reach out to the MAAA for clarification if you have any questions. Email: secretary@maaa.asn.au



# BMAC HAS GONE

By Brian Martyn

Belconnen Model Aero Club (BMAC) is located within the Crace Grasslands Nature Reserve, a 160-hectare reserve in the heart of the northern suburbs of Canberra, nestled between the major town centres of North Canberra, Belconnen and Gungahlin. A unique



Phase 1 Off the grid solar system

location, less than 10kms from the Canberra City CBD, where members look directly from the pilot's box towards the iconic Canberra landmark Black Mountain Tower.

In late 2021 the BMAC Committee discussed the need to replace an inadequate and failing 12V solar system used to power the clubhouse security cameras and weather station. At that point a survey of club members also indicated that 50.4% of members were flying primarily electric (battery powered aircraft). The committee determined rather than replacing the 12V system a more ambitious program was required to provide the club with its future energy needs. The benefits of this include reduced energy costs, eliminate emissions and prepare for climate change. This would also benefit the surrounding grasslands, club membership and the broader community.

As a result, the BMAC Sustainable Energy Program was implemented to eliminate the use of fossil fuels for 240V power generation, model aircraft battery charging, operation of field maintenance equipment, security etc. Phase 1 of the program commenced in 2022 with the



Phase 2 Electric field equip.

installation of an Off Grid Solar Power System including 9.6 kWh of battery storage. Phase 2 was completed in 2023 when electric battery powered field maintenance equipment (push mower, leaf blower and line trimmer) was purchased to replace fossil fuel internal combustion engine equipment.

Phase 3 has recently been achieved with assistance of a \$28.8K grant from the

ACT Government under the Community Zero Emissions Grants Program. This has enabled the BMAC to proceed with the purchase of an electric (battery powered) ride-on mower.

As a result, BMAC is now using 100% renewable energy generated through our off-grid solar power system for all power needs and has provided club members with a reliable means to recharge their flight batteries at the field.



Phase 3 Brian taking the e-mower for a spin

# DINGS, DENTS & SAFETY FIRST

By Mitch Bannink

As we continue to improve safety in our community, it's important to take a moment to refresh our understanding of the rules and regulations that CASA has in place. These rules aren't just suggestions—they're designed to keep everyone safe and help us enjoy flying while being mindful of others.

Many of us are familiar with traditional model aircraft, but it's worth remembering that the definition includes any uncrewed aircraft flown for sport or recreational purposes. This includes drones like DJI models, depending on how they're used. If you're flying your drone for fun, it falls under the same model aircraft rules, no matter how advanced it is.

One of the most important rules to keep in mind is the 30m distance rule from people. This rule isn't just about staying 30 metres away horizontally; it applies in all directions, forming a vertical cylinder around any person who isn't directly involved in flying the model aircraft. You must keep your aircraft at least 30 metres away in any direction, meaning you cannot fly directly above people at any altitude—whether it's 10 feet or 1,000 feet. The 30m distance is measured from a point on the ground directly below the model aircraft, so even if someone is taking photos or driving a car into the model club, the same rule applies. This is especially important in areas where people gather, such as parks or events. CASA also considered these places to be "populous areas," and flying over them is not permitted. The reason for this is simple: accidents in such areas can lead to serious harm, so it's essential to stay mindful.

Most locations have a 400ft altitude limit for recreational flying, but if you're near controlled or restricted airspace, this can be lower—sometimes as low as 50 feet. It's always wise to check the airspace rules for where you're flying and be fully aware of your club's Area Approval conditions to avoid any issues.

Another key point to remember is that you need to keep your aircraft within your visual line of sight at all times. This means you should be able to see it with your own eyes, not through a monitor or binoculars. Losing sight of your aircraft isn't just risky—it's also a breach of CASA's rules. While this might not be much of an issue for traditional model aircraft, with advancements in drone flight controllers, autopilots, and gyro-based systems, flyaways can become a significant problem.

It's also important to steer clear of airports, airfields, and helipads. CASA has strict rules about how close you can fly to these areas because of potential interference with manned aircraft. Always check how far you are from these facilities before you take off. As members of the MAAA and our clubs, we all share the responsibility to keep each other safe. A friendly reminder to someone about keeping their distance or following altitude limits can make a big difference.

We all play a part in ensuring everyone enjoys flying without putting anyone at risk. Recent incidents at local flying fields highlight the need for ongoing vigilance—especially when it comes to fast-spinning propellers.

#### A Close Call

Just last month, an experienced pilot was getting ready for his first flight of the day when a momentary lapse in concentration led to a serious accident. While making some last-minute adjustments, he reached over the propeller, and before he knew it, his hand was caught in the spinning blades. The result was a severely injured finger, which required microsurgery to reattach.

This type incident is far too common. The MAAA receives reports almost every month of members sustaining injuries from propeller strikes. It is, by far, the most prevalent injury occurring at our clubs. These accidents often happen during what should be routine procedures, but a brief moment of inattention can have severe consequences.

#### **What's Causing These Accidents?**

While each situation is unique, there are common factors that contribute to these accidents:

Momentary Lapse in Concentration: This is the most common cause. Whether it's rushing through pre-flight checks or being distracted by something on the field, even a brief lapse in concentration can lead to inadvertently putting your hand in the wrong spot!

Failures of Restraints: In some accidents, the aircraft has not be properly secured, leading to unexpected movements when the engine is started. This has also resulted in injuries to the legs of by-standing members.

Incorrect Arming Procedures: Electric models, in particular, pose a unique risk because they can be silent but deadly. Incorrect arming procedures can result in the motor spinning up unexpectedly (throttle not at idle).

#### **How Can We Stay Safe?**

Stick to Your Routine: Consistency is key. Develop a safe routine for handling your aircraft and stick to it every time, no matter what. Even if the propeller isn't spinning, get into the habit of keeping your fingers clear!

Always Stay Behind the Propeller: Position yourself behind the propeller when making adjustments, and never reach over it. This simple rule could have prevented most accidents.

Double-Check Restraints: Ensure that your aircraft is securely restrained before starting the engine, with appropriate restraints for the model size and type. A small oversight can lead to a big problem.

Power Off When in Doubt: If you need to make significant adjustments, especially near the propeller, it's best to power off the engine completely. With electric models, always follow the correct arming procedures.

Educate and Share: If you witness unsafe practices or hear about incidents, share the lessons learned. The more we talk about safety, the more we can prevent accidents.

#### First Aid is Key: Know What to Do

Despite our best efforts, accidents can still happen, and when they do, knowing how to respond is crucial. First aid can (and has) make all the difference in the outcome of an injury.

Be Prepared: Ensure that your flying field is equipped with a well-stocked first aid kit and that it's easily accessible.

Know Basic First Aid: Familiarise yourself with basic first aid techniques, especially for treating cuts, lacerations, and shock. Quick and proper first aid can help stabilise an injury before professional medical help arrives.

Act Quickly: In the event of a propeller strike or any other injury, act quickly to provide first aid. Stop any bleeding, clean the wound, and apply a sterile dressing. If the injury is severe, don't hesitate to call for professional medical assistance.

Stay Calm and Reassure: Keep the injured person calm and reassure them that help is on the way. Staying calm can help prevent shock and make the situation more manageable.

#### **A Community Responsibility**

Propeller-related injuries are a serious concern in our hobby, and it's up to all of us to take safety seriously. Injuries should never be considered "part of the job," and we should work together to ensure that everyone at the field is aware of the risks and how to avoid them.

In recent Council meetings, Carl has reiterated the unforgettable and horrible sound the combination of propellers and fingers make. Let's make it a point to "Stop, think, and act" every time we're at the field.

Fly Safe, stay prepared and please keep your fingers intact!





# HAVE YOU APPLIED YET?

# CLUB ACTIVITY PROGRAM

TO SUPPORT CLUB
ACTIVITIES AND EVENTS

GRANTS OF UP TO \$1000 PER EVENT

AVAILABLE

HEAD TO WWW.MAAA.ASN.AU TO APPLY



#### By Graeme Nicholls

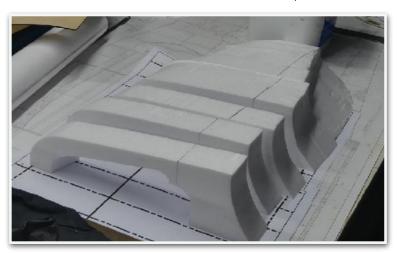
This alternative title to this article might be: Do too many cooks really spoil the broth? This was a club build project that spanned two years, had no plans to build from and used construction methods most of us had no experience with. Was the result worth it? Absolutely!

The WA Electric Flyers are a small club operating in the northern suburbs of Perth. A few years ago we decided our male bonding might be enhanced if we built something together. We started with a club trainer then a Polaris seaplane and a few simple projects. It became sort of a Wednesday night Mens Shed for aeromodellers. Someone suggested we should get ambitious and rolled out a set of plans for a 2.6m span Martin PBM Mariner twin engine seaplane. The Mariner was flown during WW2 by both US and Australian forces and was used for patrol and anti-submarine duties.

The plans were created by Keith Sparks and were originally published in 2003. They showed an innovative segmented foam construction method that looked intriguing. Two 40 size glow engines were indicated. Our internet research suggested that few people had successfully built one from these plans and flown it. A challenge obviously. Each of us brought different skills and tools to the project, like 3D printing, laser cutting, hot wire foam cutting

and fibre glassing. The first curve ball was when we realised the shape was not terribly scale, and some club members insisted on scale fidelity. The plans were swept aside, but while there were lots of photos on the internet, every 3 view we found was unreliable in some aspect. In the end we obtained a 3D computer file of the real thing. We could create outlines and cross sections from this file but nobody had the CAD skills to draw up a proper plan. We did at least decide to follow the construction method of the Sparks design because we liked it. We bumped up the wing span to 3m and chose a pair of suitably grunty brushless electric motors.

The fuselage was made from 33 EPS foam slices, each 50mm thick and cut from sheet with a hot wire and card templates. We used three home-made hot wire tools: a CNC controlled bow, a vertical





cutter we dubbed the bandsaw, and a hand held tool we dubbed the potato peeler. Over many weeks we savoured the delicate aroma of melting foam. Please don't tell us it's carcinogenic. When the slices were glued together and compound curves sanded to final shape, it was glassed with two layers of 2 oz cloth on the hull bottom and two layers of 0.75 oz cloth everywhere else.

Most modellers don't realise that EPS foam sands well using 180 or 240 grit paper. You will have a few beads pluck out here and there but you can make a seriously light shape with compound curves in very little time. A hard keel was made from 3D printed plastic inserted into the foam to resist dents. We thought a lot about how to make the wing removable while minimising water ingress to the fuselage.

The Mariner has a gull wing with dihedral changes at the nacelles, so in the end we decided to make each outer wing panel removable. That way the inner wings and motors would be one piece with the fuselage. To ensure it would fit in someone's car the rear fuselage and tail unit was made removable. Elevator and rudder servos stay in the tail so we just have to plug the extension leads in when we assemble it.

Wings were hot wire cut from EPS foam and skinned with 1mm balsa, then glassed. None of us had done a skinned foam wing before. 6mm ply tongues located the outer wing panels into the inner panels. Cutting these tongues and their corresponding boxes with a laser meant that the fit was perfect. We chose an 18% thick symmetrical section at the root and 15% thick semi-symmetrical at the tip with 3 degrees washout.



Wing tip floats are a vulnerable part of any seaplane. Its so easy to dig in a float on takeoff or landing resulting in big sideways forces on the float as the plane spins around. Our 3D print maestro came up with innovative plastic joints for the float mounts. These would shear before the aluminium tubes would buckle and collapse. So we hoped anyway. The ability to design and 3D print selected complex parts was a boon and used throughout the aircraft.

Like all scratch builds the fit-out seems to take more time than the basic airframe – getting the control surfaces to fit perfectly and not bind, feeding wires though cavities that would challenge Indiana Jones, making hatches as water tight as possible. So as the winter of 2023 turned to spring we realised a big effort was needed to get it in flying condition before our seasonal lake got too shallow. A dodgy coat of paint was applied and some US Air Force stickers slapped on. A few laps of a backyard pool and we knew it was ready. Most of the club turned out to witness the maiden flight, or crash.

With our most seasoned Catalina pilot at the controls, taxi tests were performed to settle nerves. The flaps decided not to play as a

team so we unplugged them. After a curvy takeoff she took to the air with many cheers and whoops. A bit nose heavy but better than the opposite problem. The majestic look of this big warbird cruising past was worth every hour of effort that went in. Over the next few flying sessions we inducted four pilots and even tested out the breakaway float joints. Aerodynamically and hydrodynamically we nailed it. There is something magical about a hull gracefully slicing into smooth water.

The entire build was recorded in a video diary that was periodically uploaded to Youtube (thanks MrWaz11). We plan to do a bit more work, like a realistic cockpit, dummy engines and a better paint job. The club build concept works well for us. Members contribute as little or as much as they want. In hindsight it really would have been preferable to have a proper set of plans. We spent as much time sketching, debating and arguing as we did building, but we never came to blows and our friendships are probably stronger for it.

The videos can be viewed here: RC Martin PBM Mariner build project - YouTube









# **CLUB PROFILE:** THE SOUTH WEST ASSOCIATED RADIO MODELLERS SOCIETY (SWARMS)



The South West Associated Radio Modellers Society (SWARMS) is located in the Bunbury region of WA. The club has been in existence at this location for over 35 years, originally the field was located on private property and in early 2011 there was negotiations that took place between SWARMS, AWA and MAAA with the intent for MAAA to purchase the field for it to be designated as a state field.

In 2012 the decision had been made for MAAA to make the purchase and an agreement was signed for SWARMS to manage and maintain the field. As a result of this agreement and the field now being a permanent structure the club set about conducting a review and timeline to improve the facilities.

As with all clubs funding for these upgrades can become an issue, however, available grants can be obtained if the funding criteria is met so several grant application were compiled and submitted with Lottery West, AWA, MAAA, Capel Shire to see what we qualified for in the way of funding grants.

The important thing was to prioritise the project into stages to be completed over a period of time with the toilet facilities being the main concern.

The portable units had served well but had deteriorated and were hard to maintain so that was a good starting point, with the grant money application to Lottery West we made it for a disabled toilet and we were successful with the application so work commenced immediately on the toilet upgrade.





New toilet facilities

Whilst this work was being carried out upgrade of the pit area was the next focus with the current facilities having the potential to cause accidents with trips, slips and falls due to the old carpet on the pit floor and the inadequate model benches.



Old Pit Area

The old pit structure prior to its removal, the area was levelled in preparation for a new concrete floor to be poured and this was done over a period of two pours.

A steel structure was donated to be installed as the new pit pavilion to replace the old structure, it had to be modified as a standalone structure and after several days modifying the frame work the new building was erected.



New & Improved Pit Area

When these two sections of the upgrade were completed in 2015 the budget funds had been all but drained, with the focus next

moving too improve the runway surfaces there was another search for funding taking place.

The East / West runway was seen as a priority as the surface matting that has been in place for many years had deteriorated and was causing some real concern with the landing gear of aircrafts taking off and landing.

Over the next 4 years the club worked towards achieving a concrete runway with financial support now available work began which was completed in 2020 the finished product was 84 metres long and 8.4 metres wide. The club members did all the preparation for the resurfacing and contract grano workers did the pour over a period of four days in 38 deg heat.



Pouring the concrete runway

The finished product proved that all the effort put into the project



The finished runway

The upgrade of the two taxiways was the next project with the old matting removed in preparation the concrete surface, the replacement now completed.



The upgraded taxiways

In 2023 it was decided to now complete the North / South runway this was planned with the same principle as the first runway, however, this could not be achieved without financial assistance so all avenues for funding were reviewed the funding was then allocated for the project again through grants and donations that had been secured.

The North/ South runway was constructed to the same dimensions as the East / West runway 84 meters by 8.4 metres. A lot of concrete had been moved into the field over the extent of the upgrade project and the trucks were lined up in preparation to dump their loads.

With all the hard work now behind us it is time for the members and visitor to enjoy the transformation that had been achieved over a period of the past 10 years.



Lots of concrete being poured

Many hours of voluntary labour by the members and an estimated \$105,000 has gone into this transformation of the SWARMS field

facilities and it is now there to be enjoyed by model enthusiasts well into the future.









# THIS MONTHS COVER PHOTO - NSW POLICE AIRWING AEROSPATIALE SQUIRREL - POLAIR 3

This gorgeous model is owned by Greg Adams.

Specification of the model:

Shell: Roban AS350 B3 (crashed and rebuilt)

Scale: 1:6.5 Mechanics: Align 700x

Head: Goblin 700 tri head Blades: Goblin 690 tri set

Motor: Egodrift Scale Edition 460kv
ESC: Hobbywing 120a V4 platinum

Control: Microbeast X
Receiver: Spektrum 9080T
Satellites: 3 x Spektrum SRXL

Expander: Advanced radio EXpro RRS Lights main: Advanced radio ILS03

Lights red/blue: Custom circuit

Switches used: Advanced radio AR IG

Power: 2 x 6s 5000mah

Servo 2nd source: 1 x 3s 1800mah

Lighting source: 1 x 3s 1800mah

Customised details : internal plywood structure

Access hatches either side for scale and accessories access.

Scale detailing to external

Landing gear Daylight spotlight Infra red camera (FLIR) Disco lights (Red & Blues)

Cabin lights
Dash and seating.
Vents aerials and sensors.

Colours - Source Polair Airwing Mechanics:

Ford Australia Cobalt Blue Ford Australia Moondust Silver Ford Australia Arctic White

A brief background on the full-size helicopter:

It is a Eurocopter - Aerospatiale - Model AS350 B2 Ecureuil (Squirrel) built in France in 1997. It was operated by NSW Police Airwing (Call Sign: Polair 3) VH-PHB between 14/9/1997 to 3/5/2021 at which time it was sold to NZ as trainer.

3/3/2021 at which time it was sold to NZ as trainer.

Shout out to: Senior Constable Christopher Grime, Aviation command Bankstown for information and access to this helicopter prior to its decommissioning and sale.





#### FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE WORLD AIR SPORTS FEDERATION

# PRESS RELEASE

#### Pilots Get Set for Turbo-Charged 2024 FAI World Drone Racing Championship

Lausanne, Switzerland, 14 October 2024 – Over 100 drone racing pilots from 33 nations are counting down to their most high-pressure competition of the year: the 2024 FAI World Drone Racing Championship (WDRC) in China.

Live and on-line spectators are promised high-octane action in Hangzhou, China between 31 Oct - 3 Nov 2024 as the quadcopters whizz around the triple-level, 650m long track, with its 55 obstacles.

This electrifying event brings together the globe's most talented drone pilots in a high-flying spectacle of speed, precision, and technological prowess. This year, pilots from Estonia, Kazakhstan, Saudi Arabia, Malaysia and Romania will join nations who competed in the Championships last year.

As a hi-tech young sport, the FAI World Drone Racing Championship attracts significant numbers of junior racers: around 40% of entrants overall, and the majority of the female pilots. The competitors have been selected by their national organisations for their exceptional potential in this competitive arena, with each nation permitted a maximum of five racers upon whom is enormous pressure to perform.

In addition to the national team pilots, a handful of wild cards will compete, including the reigning overall World Champion, and the Junior World Champion. MinChan Kim and MinJae Kim, both from Korea, will therefore be battling to retain their titles. In 2023, Korea also won the nation overall ahead of USA and Japan, who are each entering a five-strong team in 2024. Among the female competitors, the remarkable junior pilot Wanraya Wannapong of Thailand will hope to retain her Woman's World Champion title obtained in the fourth previous Championships.

The track for the Championship is available for pilots to practice remotely on a simulator from 26 October, and this same track will be used for the 2024 FAI WDRC e-Drone Racing World Cup, an online race in which anyone around the world can compete from home, with the finals taking place on 9-10 November.

#### Schedule

30-31 October: Model processing and judges' briefing.

31 October: Flight practice, track walk-through, team managers

meeting and Opening Ceremony
1 November: Qualifying rounds

2 November: Additional sequence rounds and elimination rounds 3 November: Final elimination rounds and finals. Award and

Closing ceremony.

About Drone Racing and the World Championships

Drone racing is an exhilarating, high-speed sport that challenges pilots to outmanoeuvre opponents on specially constructed tracks featuring numerous obstacles.

2024 is the fourth edition of the FAI World Drone Racing Championship. Asia has hosted all of the championships, with the 2018 and 2019 events hosted in China: Shenzhen and Ningbo, respectively. After a pause due to Covid, the third 2023 edition was held in Namwon. Korea.

#### Key facts:

Up to six radio-controlled multi-rotor model aircraft at a time compete to be the fastest around a closed circuit.

The drones used are multi-rotor craft that weigh no more than 1kg. On-board video cameras transmit real-time video images to the goggles worn by the pilots. This 'first person view' (FPV) facility allows pilots to control their tiny aircraft around the circuit. The drones can reach speeds exceeding 160 km/h (100 mph), requiring lightning-fast reflexes from the pilots.

The circuit includes numerous gates and other obstacles that the pilots must navigate successfully to avoid penalties and reach the finish line in the fastest time.

Drone racing events can take place indoors or outdoors.

Each race lasts one to two minutes.

The winners of each race go on to compete against each other in successive races, culminating in a final round that determines the overall champions in individual, junior and female categories. Drone Racing offers equal opportunities for both women and men to excel and become champions.

Link to the World Cup Website.

#### THE SCALE AVIATORS - CHRISTMAS IN JULY

By Col Buckley. Kindly reproduced from the Aeromodellers NSW Bulletin 474 - July 2024. Photo credit to Jody Redfern & Donna Judge.

The Scale Aviators, based down in the southern extremities of the Australian Capital Territory, had their annual "Christmas in July" recently. I love my flying and if you add beautiful food to the agenda, include me in!



The weekend dawned with blue skies, zero wind and a temperature of -4 degrees. As the shadows lifted, so did the frost and bleary-eyed pilots with mittened fingers, beanies and heavy overcoats began to assemble aircraft and perform range checks.



If you have never visited the NAAS field south of Tharwa, it gives the impression of being on set, filming the Sound of Music.

The splendid Brindabella mountains and rolling hills make an awe-inspiring backdrop for flying. The field is large, open and the approaches are easy to line up. Aircraft seen over the weekend included L4s, Tiger Moths, Extras, Edges, RV4s, P47s, Super Cubs, gliders and Spitfires just to name a few. The accompanying pics tell more of the story.



John Armarego and his hard-working partner Dianne prepare breakfast, lunch and dinner over the three days to make sure noone goes hungry. The Christmas feast on Saturday night was to die for. Turkey, pork, chicken and ham plus roasted and fresh veggies. Dessert was a diabetic nightmare with a choice of pavlova, chocolate cake, trifle and ice cream. The dining room is oil heated with LED lighting and the long table accommodates everyone with ease. This year Di went all out with the table decorations, candles and the mini Santa hats on the cutlery made Christmas complete.



At night we sat around the huge sump oil heater (which could heat the Antarctic) and regaled tales of the past and 'where was our hobby heading' under a canopy of brilliant stars. The campers stayed up late whilst those who prefer the more comfortable things in life, me included, drove to their Motels.



Sunday was spectacular. A light dusting of snow iced the mountains and the ground was pure white.



As the wind was forecasted to increase during the morning, there was the sound of fossil fuel being burnt early and as predicted, by midday, the wind had started to tug at tent flaps quite violently. At one point a 180 degree wind change took pilots by surprise and encouraged one of the Gazebos to take flight.



We said our goodbyes, again profusely thanked the landlord and his beautiful partner and started the trip back to our various abodes.

Christmas in July at Canberra is already in my calendar for 2025.

Enjoy more photographs from this years Christmas in July on the next few pages.



David Bolstad's Spacewalker



A flock of warbirds



Ian Judge with his Spitty



Rod Slavic and his Spacewalker





#### By Karl Richards

Never did I ever think I would find the challenge, complexity, fun and down right satisfaction could all be found in such an incredible hobby! I always wanted to try RC Helicopters when I was much younger, but back in the day they were quite costly and support was almost non-existent, especially where I grew up in Far North Queensland. Thanks to my cousin Dave, he gave me a heap of advice to get me going on this ride I started on just over 2 years ago and I have no desire to get off any time soon. As my competence and experience grew, I wanted to explore the depths and reach it had in Australia and I was surprised to find it didn't quite offer the kind of events that aims to bring everyone together as a celebration but more of a social fun fly. I wanted to lift this to levels of similar enthusiasts and passionate groups like car clubs and our fellow modellers of fixed wing aircraft.

The Loganholme Aeromodellers Radio Controlled Society (LARCS) field is what I consider a high class facility to host such a gathering, a Jamboree type event for the Heli crowd. Not only does it have ample space, well kept grounds and amazing pit areas, but the location in SEQ means we enjoy favourable weather for a significant portion each year, plus it's in the middle of not one but two international airports! For many heli flyers out there having toilets and electricity is considered 5 star luxury!

Boomstrike RC Heli Festival is the culmination of a desire to build the awareness of this incredible but little known hobby and to provide its enthusiasts a next level calendar event that builds even more passion and engagement. The event was held 12-14 July and the weather couldn't have been more perfect, with light breezes, clear skies and daily temperatures only requiring a light jumper. There were in total 45 registered pilots all hailing from the eastern states plus Western Australia! However we were very spoiled with the attendance of two world class pilots, Kenny Ko from Taiwan and Nick Maxwell of the USA. Mark Hu of VLV International made preparations to invite and sponsor our international guests, being convinced this event and airfield needed to make a statement not only in Australia but on the world stage. Never did I ever consider

having this level of support for what will now be an ongoing annual event. Both Kenny and Nick commented on the fun atmosphere, the amazing grounds and location and said they will be back next year for sure!

While there was plenty of opportunity to just get out there and fly, there were also Drag Racing and Speed Runs for the competitive types with the fastest heli clocking over 250 km/h! Of course a jaw dropping 3d Smack display was scheduled, led by our international guests and our local heroes as well like Rhys Wyatt from Newcastle.

The public were also invited to come and check out the events on the Saturday with approximately 60+ taking up the opportunity, big thanks to the MAAQ for progressing the display permit on short notice and providing the PA system. We also set an Australian record (i believe) to launch the most micro sized heli's in one session called the Micro Muster. With a total of 25 of the little critters making their unique mozzie type sounds, the round finished with no collisions and heaps of laughter. A formal dinner and presentation evening was attended by a large portion of the registered entrants with a delicious buffet roast and deserts.

Preparations are already in place for Boomstrike next year to be held over the same weekend. With plenty of participant feedback and support this event will only get better each year.

Boomstrike was also supported by some of our well known retailers who donated prizes for the pilots draw. Big thanks to VLV, XL Power, Mad 4 Heli, Soxos Australia, Goosky, ZenRC, Egodrift and M1 Hobby Store. An event video showcasing the highlights will be available to view in the near future.



#### By Karl Richards

So much more I could say but thanks to the community that attended the first Boomstrike: RC Heli Festival which will be an ongoing annual affair.

Boomstrike 2024 Wrap up.

45 Registered Pilots

43 Pilots in attendance (QLD, NSW, VIC and WA!)

4 International Guests (Taiwan, China and USA)

9 Speed passes

10 Drag Racers

25 Micro Helis Launched (lots of laughter)

1 Boomstrike!

1 Tree Collision!

Lots of very happy attendees

Seeing the smiles and hearing the laughter was mission accomplished for this aeromodeller that sincerely wants to see the hobby grow to new heights and show the rest of the world that the crew down under can put together a world class event. International professional pilots Kenny Ko and Nick Maxwell attested the event was up there with some of the best they have attended across the world, that the grounds and facility were amazing and the people made their time fun and memorable, to the point they said they would love to come back next year!

We also had the honour to have both Ra Kabun of XL Power and Yutao Zou of EGODRIFT Tengu Heli Motors visit us.

Participation Winner and Runner-up trophies plus some category awards:

3D Smack: Rhys Wyatt and Andrew Emary

Speed Demon: Lachlan Rhys (222Km/h) and Gavin Bartkowski

(214Km/h)

Drag Racer: Rhys Wyatt and Russell Griffiths

Best Dressed Heli: Marc Marais Encouragement Award: David Lack

Best Scale Heli: David Scott

Longest Distance Travelled: Bruce Russell
Tough Luck: Shea Convery
Favourite Pilot (as voted): Taylor Mills



Personally I had a blast, especially having the privilege of attending a pilot school run by Nick Maxwell and watching him successfully plunge a 700 Heli into a very large tree. The crack it made on impact was unbelievable!

The Drag Race concluded with the winner versing Kenny Ko. Rhys Wyatt put up a good fight but he was denied a victory against the world champion, at the cost of Kenny's heli falling out of TX range and crashing into trees and scrub. After assessing the damage we discovered a perfectly placed Boom Strike on his Spectre V2 boom. This artefact has been signed by Kenny and will be placed in a wooden case and proudly displayed at the club commemorating the first of many annual RC Heli Festivals.

Extremely grateful to Nick Maxwell and Kenny Ko for making the long journey abroad to be with us. I don't think I've ever met two gentlemen so humble and willing to offer whatever they could to

Events like these are only as good as they can be because of amazing people that give of their time and contribute to the many tasks required such as running the BBQ, manicuring the lawns and ensuring the backup generator is ready to go when the stored solar energy in the battery runs dry (which did happen). So thank you LARCS volunteers such as Darryl Gunst, Tony Cavanna, Steven Reichard, Mike Maujean, Kevin Homer, Daryl Carsburg, Bill White, Graham Lee-Lovick and so many others, I'm truly grateful for everyone's support.

Miriam Stemp Division 10 Councillor - Dedicated to the Community of Logan, we appreciate all you do supporting LARCS. Thanks for coming to officially open this inaugural event!

Finally a special thanks to all the supporters of Boomstrike: RC Heli Festival: XL Power, VLV International, Soxos Australia, Goosky, Mad4heli, ZenRC, Egodrift, M1 Hobby Store Australia and nickmaxwellproducts.com



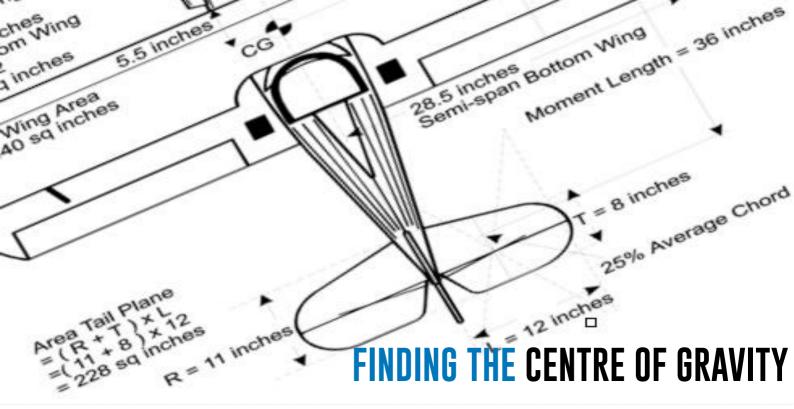












From the archives of the MAAA Flying Instructors Handbook.

You may be scaling down from full size to build a scale model or building from a plan that doesn't show the centre of gravity or perhaps you have purchased a second hand model and don't know where the centre of gravity should be located.

If you apply the following formula it will give you a good starting point to balance your plane for the initial flight that should give good model behaviour.

The Formulae. GC Position = 
$$\frac{\text{Average Chord}}{6} + \frac{3}{8} \times \frac{\text{Tail Area}}{\text{Wing Area}} \times \text{Tail Moment Arm}$$

These formulae can be applied to monoplane, biplane and delta wing aircraft. The first part of the formulae takes into consideration the wing of the aircraft and the second part the affect of the tailplane and its distance from the wing. You start off with 1/6TH of the Average Chord and then the larger the Tail Area with respect to the Wing Area and the longer the Tail Moment arm the further back will be the centre of gravity.

On a delta wing aircraft there is no tailplane so both the Tail Area and Tail Moment equals zero, so the formulae then becomes.

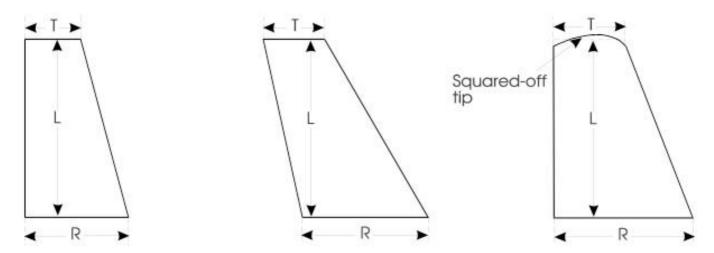
The CG position is calculated from the leading edge of the average chord and then transferred across to the root chord.

That leaves as with working out the values for the following components: -

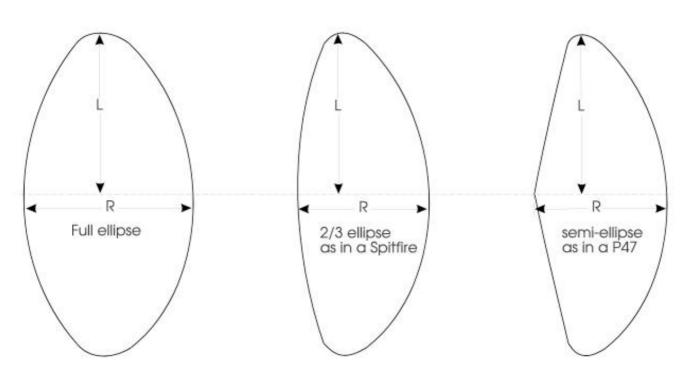
- · Surface Area for the tail plane and wing
- Average Chord
- · Tail Moment

Calculations of Surface Area

#### Calculations of Surface Area



For areas of straight-taper wings Wing Area =  $(R + T) \times L$  Where L = the length of the semi-span



Area for both full and 2/3 ellipses =  $(p \times R \times L)/2$ . Where (p = 22/7)

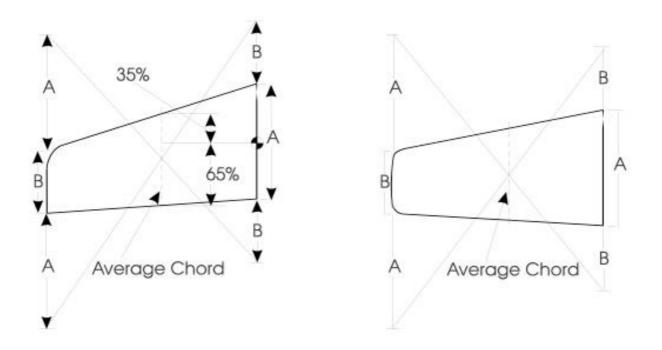
Working out the Average Chord

Finding the position of the average chord on swept or delta wings. A simple method is shown in the drawing below.

NOTE: This works for all straight taper and parallel chord wings

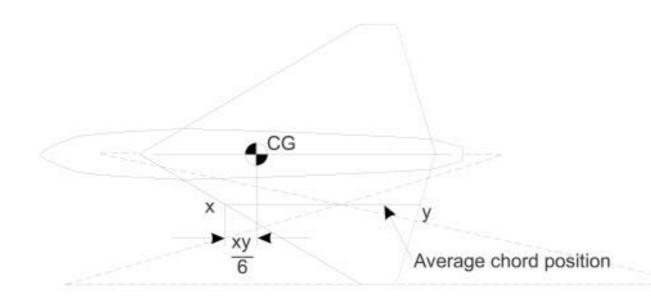
The best procedure is to trace the wing plan of the 3-view. Then extend the L.E. and T.E to the centre-line of the plane. Also square off the tips. Next, extend the opposite chord lengths as indicated; ie. extend B by chord lengths A, and A by lengths B.

Diagonal lines then join the four extreme points. Where these lines intersect, will be found the average chord. Transfer the average chord line back onto the 3-view. If the CG were to be at 35%, then we would mark it 35% back from the L.E. along the average chord line.

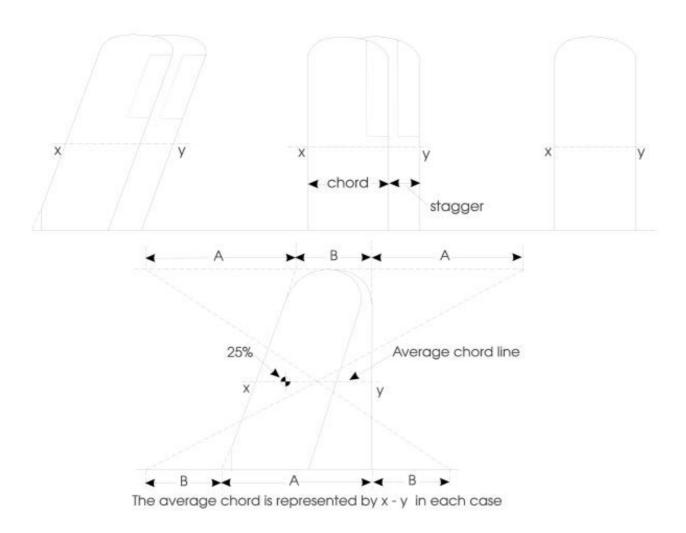


#### Delta Wing Aircraft

For a Delta Wing Aircraft the average chord position is determined the same way and as previously indicated the formula for the CG position is reduced to:



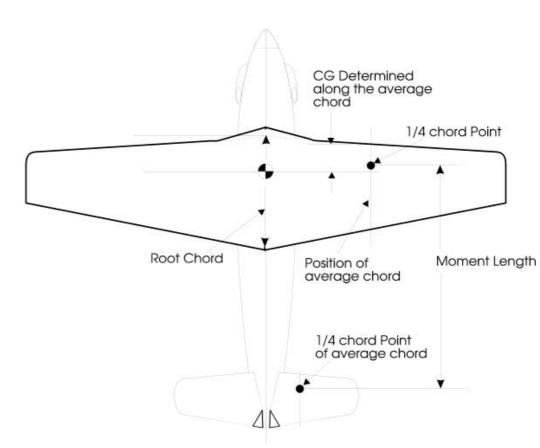
#### Average chord positions for biplane layouts



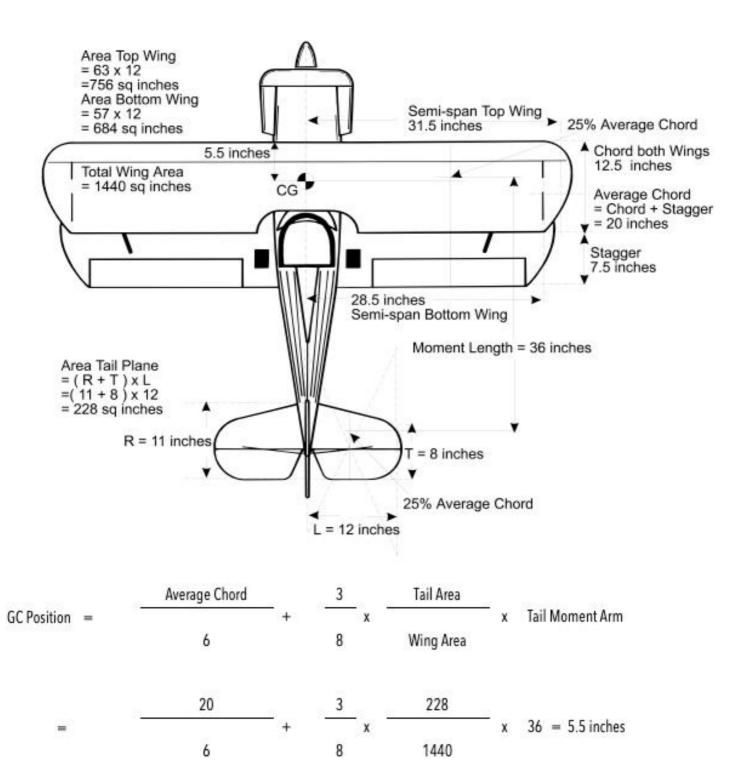
In the case of straight winged biplanes with equal chords on upper and lower wings, average chord xy = chord + stagger.

#### The Tail Moment

The tail moment arm is defined as the distance between the 25% points on the average chord lines of wing and tail. So, on the plan view, locate the average chord lines on wing and tail. Mark the quarter-chord points, and measure the distance between them. The drawing below shows a plan view of an aeroplane where we have located the average chord, having "squared-off" the tail to do so (pure guesswork here). After marking the ¼ -chord points, the distance between them is the tail moment.



#### Example



This works out at 27.5 % of the average chord, this happens to be 2 inches in front of the leading edge of the bottom wing.



## **FIXED WING UP TO 25KG**

#### **ACT**

Club	Inspector Name	Mobile	Email	Rating
BELCONNEN0	ANTHONY DEMARCO	0417 886 225	antnkym@bigpond.com	Fixed Wing up to 25kg
BELCONNENO	TROY BRUCE DENLEY	0432 983 880	baby.muttsy@icloud.com	Fixed Wing up to 25kg
CANBERRA0	STEPHEN JOHN MILLAR	0417 298 741	steve@acrosstown.com.au	Fixed Wing up to 25kg
CANBERRA0	GARY SWEET	0403 936 890	ggee2009@hotmail.com	Fixed Wing up to 25kg
GOULBURN	DAVID CHARLES PUNSHON		david.pushon@bigpond.com	Fixed Wing up to 25kg
QUEANBEYAN	FRED LAMBERT	0428 956 913	Lambert417@dodo.com.au	Fixed Wing up to 25kg
TSAANSW	JOHN A ARMAREGO	0416 015 712	johnarmarego@hotmail.com	Fixed Wing up to 25kg
TSAANSW	PETER EDERLE	0448 737 234	marholymes@yahoo.com	Fixed Wing up to 25kg

#### NT

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EASTPOINT	ROSS A FINOCCHIARO	0418 895 888	ross@territoryproperty.com.au	Fixed Wing up to 25kg
EASTPOINT	RAY YOUNGER	0403 545 664	rayyounger@smartchat.net.au	Fixed Wing up to 25kg

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PHOENIXFL0	KENNETH ST.GEORGE [DR] LAWSON	0419 369 208	kennethslawson@gmail.com	Fixed Wing up to 25kg
PHOENIXFL0	VACLAV WEN NERMUT		wennermut@hotmail.com	Fixed Wing up to 25kg
PHOENIXFL0	KEVIN JAMES HAY		zzkevin.hay@gmail.com	Fixed Wing up to 25kg
PHOENIXFL0	ANDREW GEOFFREY MCENTYRE	0408 969 360	amcentyre49@gmail.com	Fixed Wing up to 25kg



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Club	Inspector Name	Mobile	Email	Rating
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BHMFC	GREGORY POPE	0428 490 456	gregsp71@tpg.com.au	Fixed Wing up to 25kg
CAMDEN VRC	BRIAN VINCENT MCFARLANE		brianvm41@icloud.com	Fixed Wing up to 25kg
CAMDEN VRC	DAVID BRIAN MCFARLANE	0407 298 062	david@modelsports1.com.au	Fixed Wing up to 25kg
CAMDEN VRC	EDWARD VICTOR ORAM	0418 442 458	tedoram@bigpond.com	Fixed Wing up to 25kg
CENTRAL CST.	PHILIP AUNGLE		paungle41@optusnet.com.au	Fixed Wing up to 25kg
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CHARLES K.S.	JOHN WILLIAM CONSIDINE	0409 044 724	kellises@bigpond.net.au	Fixed Wing up to 25kg
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CHARLES K.S.	IAN JAMES MCDONALD	0413 187 509	ijfmcdonald@hotmail.com	Fixed Wing up to 25kg
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CITYMAIT R/C	JASON COLIN RUSS	0414 505 212	jr121972@bigpond.com	Fixed Wing up to 25kg
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COOTANSW	JOSEPH FROST	0403 116 491	frostjos@gmail.com	Fixed Wing up to 25kg
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CRONULLA MAC	BARRY ZIMROZ		barryzim@tpg.com.au	Fixed Wing up to 25kg
CRONULLA MAC	PHILIP GILES	0456 125 443	jethed@gmail.com	Fixed Wing up to 25kg



#### **FIXED WING UP TO 25KG**

**NSW** 

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FORSTER TUNC	DEREK NOTT	0411 759 596	drnott007@gmail.com	Fixed Wing up to 25kg
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GOSFORD CITY	ROBERT GEORGE BATES	0419 622 932	bob@keyboardmonkey.com	Fixed Wing up to 25kg
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GRAFTONMAC	MARTIN WILLIAM COCHRANE	0477 702 293	mwc.scale@bigpond.com.au	Fixed Wing up to 25kg
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H2066MFC	ROWAN HOWARTH	0437 011 019	rowanahowarth@gmail.com	Fixed Wing up to 25kg
H2066MFC	MICHAEL HAGE	0412 683 512	mikehage47@yahoo.com	Fixed Wing up to 25kg
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LISMORE MFC	JAMIE ZAMBELLI		jzambelli@bigpond.com	Fixed Wing up to 25kg
LISMORE MFC	CLIVE WEATHERHEAD	0404 826 880	cliveweatherhead@hotmail.com	Fixed Wing up to 25kg
LOWER TWEED	DAVID ANDREW GEARY	0400 865 302	birdmangeology@hotmail.com	Fixed Wing up to 25kg
MACSPORT R/C	SIMON JOHN HARVEY	0412 065 032	adrosiam@bigpond.com	Fixed Wing up to 25kg
MUSWELRC	SIMON BISHOP		bisho3@bigpond.com	Fixed Wing up to 25kg
NEPEANO	MARK ANTHONY HILLEN		m.hillen@bigpond.com	Fixed Wing up to 25kg
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ORANGE R/C	GARRY HILDEBRANDT	0419 439 165	ghildy@optusnet.com.au	Fixed Wing up to 25kg
PARKES MAC	LINDSAY WALL		wallsmobile@gmail.com	Fixed Wing up to 25kg
PARKES MAC	HARLEY JACK WALL		harley_10@live.com	Fixed Wing up to 25kg
RAAFRIC	STEVEN RAYMOND DALTON-KEEP	0407 750 815	steve.keep@RPS.aero	Fixed Wing up to 25kg
RAAFRIC	STANLEY MACKENZIE BEGG	0418 200 880	stan@kallaroo.net.au	Fixed Wing up to 25kg
RAAFRIC	RICK FRANCIS KUCINSKAS		rickf.kucinskas@gmail.com	Fixed Wing up to 25kg
RAAFRIC	HEATH ALEXANDER MACDONALD	0419 530 342	heathmacdonald@live.com	Fixed Wing up to 25kg



#### **FIXED WING UP TO 25KG**

**NSW** 

Club	Inspector Name	Mobile	Email	Rating
RAAFRIC	MICHAELTULK		m.tulk@bigpond.com.au	Fixed Wing up to 25kg
REBEL R/C	RICHARD ALDER		rfalder@iprimus.com.au	Fixed Wing up to 25kg
REBEL R/C	THOMAS JAMES TOBIN	0412 648 190	tjt1954@bigpond.com	Fixed Wing up to 25kg
REBEL R/C	MARK GROSSENBACHER	0438 390 055	grossy.2@bigpond.com	Fixed Wing up to 25kg
ROW	TIMOTHY BRETT NOLAN		timnolan11@optusnet.com.au	Fixed Wing up to 25kg
ROW	MICHAEL REYNELL	0411 071 748	mike@reynell.id.au	Fixed Wing up to 25kg
S/HAVEN1	MICHAEL BEVERLY	0413 594 461	mcb263@gmail.com	Fixed Wing up to 25kg
S/HAVEN1	JAMES RICHARD GELL	0417 697 462	rgell@boomarc.com	Fixed Wing up to 25kg
SKYACESRC	PAUL DAVID BENNET	0425 292 391	paul@paulbennetairshows.com.au	Fixed Wing up to 25kg
SKYACESRC	LEVI WAGNER	0413 680 279	levi.wgnr@gmail.com	Fixed Wing up to 25kg
SPRINGWOOD	NEILTHOMAS ALLEYN		neilalleyn@gmail.com	Fixed Wing up to 25kg
SSMAC	MICHAEL PIQUEMAL		piquemal@optusnet.com.au	Fixed Wing up to 25kg
SSME	DAVID KENNEDY	0400 020 300	david.kennedy@aeromodelling.au	Fixed Wing up to 25kg
STH HIGHLDS.	SHANE ANDREW MCMILLAN	0447 642 065	shamac70@bigpond.com	Fixed Wing up to 25kg
SUTHERLAND	DAVID ALLAN BURNS	0417 291 369	sc00ter01@bigpond.com	Fixed Wing up to 25kg
SUTHERLAND	HOWARD LINDSAY COOPER	0400 480 839	howard54cooper@gmail.com	Fixed Wing up to 25kg
SUTHERLAND	CHRISTIAN HALBMEIER	0418 493 632	chris.hal@bigpond.com	Fixed Wing up to 25kg
SYDNEY RCS	TIMOTHY PETER OWEN	0400 839 948	tjowen50@gmail.com	Fixed Wing up to 25kg
SYDNEY RCS	BENJAMIN TIMOTHY BURRELL	0414 390 979	benj.burrell@gmail.com	Fixed Wing up to 25kg
SYDNEY RCS	CORINNE OLIVIA PELLATT	0412 718 510	corinnepellatt@yahoo.com.au	Fixed Wing up to 25kg
TAMWORTH	NEILJEWELL		neiljewell@skymesh.com.au	Fixed Wing up to 25kg
TINGALPA	GARY FRANKLIN MC COY	00116723 51259	foxy.norfolkisland@gmail.com	Fixed Wing up to 25kg
TWINCITIE0	GRAEME FRAUENFELDER	0412 214 141	frauen.graeme@gmail.com	Fixed Wing up to 25kg
TWINCITIE0	DAVID BALFOUR	0407 953 903	djbalfour@bigpond.com	Fixed Wing up to 25kg
TWINCITIE0	ROBERT JOHN SARGENT	0412 117 497	robsargent@dodo.com.au	Fixed Wing up to 25kg
TWINCITIE0	DAVID TULK	0438 254 730	davidtulk33@gmail.com	Fixed Wing up to 25kg
WAGGAMAC	KEVIN ROY LITTLE	0428 694 812	kevinrlittle@gmail.com	Fixed Wing up to 25kg
WAGGAMAC	WILLIAM LAMPE		ronbilllampe@dodo.com.au	Fixed Wing up to 25kg



#### **FIXED WING UP TO 25KG**

#### **NSW**

Club	Inspector Name	Mobile	Email	Rating
WAGGAMAC	RONALD GEOFFREY PASSLOW	0409 454 318	ronpasslow@gmail.com	Fixed Wing up to 25kg
WARRINGAH	COLIN H BRUCE	0413 800 230	cbruce@bigpond.net.au	Fixed Wing up to 25kg
WARRINGAH	DAVID FOSTER		dmfost@bigpond.net.au	Fixed Wing up to 25kg
WARRINGAH	DOUGLAS THOMAS RADFORD	0447 404 329	raddies312@gmail.com	Fixed Wing up to 25kg
WARRINGAH	DAVID POUND		davepoundy@yahoo.com.au	Fixed Wing up to 25kg
WARRINGAH	REGINALD THOMAS SPARKES	0419 977 613	thomassparkes00@gmail.com	Fixed Wing up to 25kg
WARRINGAH	RON CLARK	0413 311 645	rsmc1@optusnet.com.au	Fixed Wing up to 25kg
WARRINGAH	WAYNE WEBBER-MAEDER		Searay2000@live.com	Fixed Wing up to 25kg
WSMA	CLIVE GERARD HODDER	0411 236 405	clivehodder@hotmail.com	Fixed Wing up to 25kg
WSMA	JEREMY RANDLE	0418 390 446	jag@acfr.usyd.edu.au	Fixed Wing up to 25kg
WSMA	MICHAEL JOHN CLOSE	0414 645 307	mikeclose@optusnet.com.au	Fixed Wing up to 25kg
WSMA	PETER LEO PAPANTONIOU	0411 882 255	peter@paps.com.au	Fixed Wing up to 25kg
WSMA	CRAIG DYER	0419 628 763	craig_dyer@bigpond.com	Fixed Wing up to 25kg
WSMA	AVIAN HOWARD	0417 449 325	avian580@gmail.com	Fixed Wing up to 25kg
WSMA	JOSEPH TAVORA	0451 975 551	joey_tavora@hotmail.com	Fixed Wing up to 25kg

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Q L D				
Club	Inspector Name	Mobile	Email	Rating
AUSLSM	DAVID JEREMY GARLE	0407 036 020	david@qsi.net.au	Fixed Wing up to 25kg
AUSLSM	AARON LEE GARLE	0407 066 603	aarongarle@gmail.com	Fixed Wing up to 25kg
BUNDABERG	MARK LINWOOD	0417 500 213	sycozedeco@yahoo.com.au	Fixed Wing up to 25kg
BUNDABERG	DENNIS JOHN BURDETT	0427 985 755	dennisburdett1955@hotmail.com	Fixed Wing up to 25kg
CAIRNSMAC0	PAUL ALLAN DIXON	0477 555 515	gimp6@bigpond.com	Fixed Wing up to 25kg
CAIRNSMAC0	BERNARD COURTNEY	0427 740 929	magnum.45@bigpond.com	Fixed Wing up to 25kg
CAIRNSMAC0	SIMON LEONARD COOMBS	0417 793 902	sccoombs000@gmail.com	Fixed Wing up to 25kg
CALVERT	LUKE THOMAS CULLEN	0438 446 505	cullen64@bigpond.net.au	Fixed Wing up to 25kg
CALVERT	MICHAEL ANDREW WALSH	0409 485 496	av8mick@heatandcontrol.com.au	Fixed Wing up to 25kg
CALVERT	WARREN HATHAWAY	0457 456 001	warrenhathaway@gmail.com	Fixed Wing up to 25kg



Club	Inspector Name	Mobile	Email	Rating
CALVERT	STEPHEN TURNA	0417 956 758	essendon_05@hotmail.com	Fixed Wing up to 25kg
CALVERT	JAN ROESTORF	0423 326 465	roestorf@gmail.com	Fixed Wing up to 25kg
GASINC	GLEN WILLIAM JOSEFSKI	0417 568 098	gladstoneaeromodellingsociety@gmail	Fixed Wing up to 25kg
GEMAC	JOHN FREDERICK KING	0452 214 659	kingy1959.jk@gmail.com	Fixed Wing up to 25kg
GOLD COAST	PETER RIEKSTS	0419 302 087	peterandmila@bigpond.com.au	Fixed Wing up to 25kg
GOLD COAST	ANDREW PAUL RANKIN	0402 774 845	kinundrum@gmail.com	Fixed Wing up to 25kg
H/LANDMFC0	PAUL GRIFFITHS		kathygee@bigpond.com	Fixed Wing up to 25kg
H/LANDMFC0	CHRIS VAN DE GRAAF	0481 338 987	cvandegraaf@bigpond.com	Fixed Wing up to 25kg
HERVEY BAY	LAWRENCE MUDLE	0408 196 408	flu.flu@bigpond.com	Fixed Wing up to 25kg
HOWARDMFA	MANFRED BLECK	0412 565 841	manfred.bleck@bigpond.com	Fixed Wing up to 25kg
KINGAROY AMS	PETER SOMERFIELD	0439 381 288	pmsomer@iinet.net.au	Fixed Wing up to 25kg
LARCS	BRIAN HUCKER	0411 335 645	bch2887@gmail.com	Fixed Wing up to 25kg
LARCS	DARRYL GUNST	0408 355 626	dgunstfly@bigpond.com	Fixed Wing up to 25kg
LARCS	DARYL CARSBURG	0477 947 897	dcars@tpg.com.au	Fixed Wing up to 25kg
LARCS	COLIN CLARK	0423 428 593	seahawk55@optusnet.com.au	Fixed Wing up to 25kg
LOCKYER VAL.	MICHAEL ALBERT DAKERS	0438 877 327	m_dakers@bigpond.com	Fixed Wing up to 25kg
LOCKYER VAL.	ROBERT EDWARD PHIPPEN		wolfmodels@aapt.net.au	Fixed Wing up to 25kg
MACKAY & DIS	DAVID GEORGE HELMRICH	0428 185 358	brenda.helmrich50@gmail.com	Fixed Wing up to 25kg
MARYBOROUGH	MICHAELJOHN RYAN	0419 123 933	hell-mik@bigpond.net.au	Fixed Wing up to 25kg
MARYBOROUGH	KARL JOSEPH HARROD		harrodpa@gmail.com	Fixed Wing up to 25kg
MARYBOROUGH	FRANK STANLEY HARROD		fharrod@bigpond.net.au	Fixed Wing up to 25kg
MASCOT N.Q	FRANK JOSEPH GIRSCH	0401 102 168	frank.girsh@bigpond.com	Fixed Wing up to 25kg
MORETON RSS	EVAN BENGTSON		ec_bengtson@bigpond.com	Fixed Wing up to 25kg
MORETON RSS	BRIAN STANLEY FORD	0409 747 737	bford@bigpond.net.au	Fixed Wing up to 25kg
MORETON RSS	KEN FOX	0448 565 463	kenfox1@bigpond.com	Fixed Wing up to 25kg
NOOSA	DAVID B CARKEEK	0435 458 018	davidcarkeek1@gmail.com	Fixed Wing up to 25kg
PAMAC	KEVIN ROY JOLLEY	0428 891 819	kjolley@bigpond.com	Fixed Wing up to 25kg
PMA	JAMES THOMAS WILLSON		jtwillson42@outlook.com	Fixed Wing up to 25kg



Club	Inspector Name	Mobile	Email	Rating
PMA	BYRON THOMAS WEBB	0419 716 405	timetfly@hotmail.com	Fixed Wing up to 25kg
PMA	BRIAN MICHAEL CARSON	0419 794 485	oztigger@gmail.com	Fixed Wing up to 25kg
RAAFAMB0	BRADLEY PETER MARTIN	0401 393 348	bmartin69@bigpond.com	Fixed Wing up to 25kg
RAAFAMB0	RONALD JOSEPH CAVANAGH	0415 747 370	roncavanagh@gmail.com	Fixed Wing up to 25kg
ROCKHAMPTON	GARRY JOHN DE CHASTEL	0418 774 825	gjdec@bigpond.com	Fixed Wing up to 25kg
ROCKHAMPTON	KERRY WAYNE NEIL	0417 160 259	neilkw@bigpond.net.au	Fixed Wing up to 25kg
SAAMBR	DAVID WILLIAM ANDERSON	0407 696 060	dave1943@bigpond.net.au	Fixed Wing up to 25kg
SAAMBR	NEIL HANSEN	0418 987 422	naj1956@datawave.net.au	Fixed Wing up to 25kg
SAAMBR	CHRIS SWAIN	0415 747 144	swain.chris08@gmail.com	Fixed Wing up to 25kg
SAAMBR	ANDREW TISDALL	0413 136 787	andrew.tisdall@qr.com.au	Fixed Wing up to 25kg
SAAMBR	DAMIEN FERRITO	0404 167 581	damof260@gmail.com	Fixed Wing up to 25kg
SAAMBR	PETER CARR	0413 630 776	contactpetercarr@gmail.com	Fixed Wing up to 25kg
SAAMBR	GREG PETHERICK	0414 828 658	petherg@me.com	Fixed Wing up to 25kg
SAAMBR	TONY JAMES BENSTEAD	0402 100 160	vviper34@y7mail.com	Fixed Wing up to 25kg
SAAMBR	DAN IMHOFF	0437 996 233	danimhoff1@gmail.com	Fixed Wing up to 25kg
SUNCOAST	EDWARD HAMBLIN BULLOCK	0402 451 925	tedbullock@bigpond.com	Fixed Wing up to 25kg
SUNCOAST	DAVID JACOBUS BRITZ	0421 598 647	djbritz@gmail.com	Fixed Wing up to 25kg
TARMAC QLD	DOUGLAS ROSS MOODY	0408 583 711	dougmoody19@gmail.com	Fixed Wing up to 25kg
TARMAC QLD	BRUCE JOHN MONDIENTZ	0428 154 023	bjm007@westnet.com.au	Fixed Wing up to 25kg
TARMAC QLD	PETER JAMES LOVE	0412 633 549	pjsb13@optusnet.com.au	Fixed Wing up to 25kg
TARMAC QLD	PAUL GORDON-BRANDER	0447 304 368	sgb05@bigpond.com	Fixed Wing up to 25kg
TIN CAN BAY	CHRISTOPHER JAMES WOOD	0408 405 007	chris.woodee@gmail.com	Fixed Wing up to 25kg
TIN CAN BAY	RUSSELL MITCHELL	0427 405 461	grumman@ozemail.com.au	Fixed Wing up to 25kg
TINGALPA	PHILLIP RAYMOND COLLINGS	0419 768 490	philip.collings@bigpond.com	Fixed Wing up to 25kg
TINGALPA	CHRISTOPHER JASON PATERSON	0417 700 981	crpaterson1@bigpond.com	Fixed Wing up to 25kg
TINGALPA	KEVIN JOHN DODD		kevindodd@y7mail.com	Fixed Wing up to 25kg
TINGALPA	IAN HOWARD	0418 744 070	ian@desertaircraft.com.au	Fixed Wing up to 25kg
TINGALPA	TYSON CRAIG DODD	0417 727 981	tyson@jtenvironmental.com.au	Fixed Wing up to 25kg



ULD				
Club	Inspector Name	Mobile	Email	Rating
TINGALPA	CHRISTOPHER GRAHAM	0404 848 748	chris@qldstainless.com.au	Fixed Wing up to 25kg
TINGALPA	RICHARD JOHN SYMES	0411 226 850	rjsymes@ozemail.com.au	Fixed Wing up to 25kg
TINGALPA	GEORGE ATKINSON	0414 972 118	gatkinson@exemail.com.au	Fixed Wing up to 25kg
TINGALPA	PETER ANTHONY STEVENSON	0455 024 372	peter.stevenson7@icloud.com	Fixed Wing up to 25kg
TINGALPA	NOEL ROBERT STEWART	0412 525 127	STEWARTNR@OPTUSNET.COM.AU	Fixed Wing up to 25kg
TINGALPA	MICHAEL HOBSON	0439 711 719	m.hobson@bigpond.net.au	Fixed Wing up to 25kg
TINGALPA	DAVID MARTIN	0412 500 783	Mr_ticketec@hotmail.com	Fixed Wing up to 25kg
TOOWOOMBA	PETER JAMES LAMBERT	0488 966 394	pjl52@outlook.com.au	Fixed Wing up to 25kg
TOWNSVILLE	SHANE IVAN WILSON	0412 337 472	shanewilson12@bigpond.com.au	Fixed Wing up to 25kg
TOWNSVILLE	GREGORY CHARLES GYSIN	0400 225 709	gregmoz@netspace.net.au	Fixed Wing up to 25kg
TOWNSVILLE	GEOFFREY WOOD	0409 088 679	geoffreymwood@gmail.com	Fixed Wing up to 25kg
TOWNSVILLE	TERRY LLOYD ENGLISH	0427 880 931	tenglish@bigpond.net.au	Fixed Wing up to 25kg

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Club	Inspector Name	Mobile	Email	Rating
ALICESPRINGS	CRAIG ANTHONY HEWITT	0456 842 400	chewitt260@gmail.com	Fixed Wing up to 25kg
AMA	MARCUS JOHN RAYNER	0408 910 146	flyingmjr@gmail.com	Fixed Wing up to 25kg
AMA	ADAM JONATHON TALBOT	0407 794 660	aj.talbs@gmail.com	Fixed Wing up to 25kg
BVMAC	STUART JAMES RATSCH	0415 600 442	stuart@yourtechservices.com.au	Fixed Wing up to 25kg
BVMAC	DOUGLAS OWEN	0403 423 408	doug_o9@yahoo.com.au	Fixed Wing up to 25kg
CMFC	KENNETH WHENHAM	0408 831 806	kenwhen1952@outlook.com	Fixed Wing up to 25kg
CMFC	MARK ROBINSON	0403 946 292	mrobo51@gmail.com	Fixed Wing up to 25kg
CMFC	MICHAEL JOHN SAVILL		ratbagracer47@gmail.com	Fixed Wing up to 25kg
CMFC	JEREMY GORDON REYNOLDS	0412 325 011	jeremy_reynolds@outlook.com.a u	Fixed Wing up to 25kg
CMFC	RONALD HARDY OUSMAN	0423 008 892	ron.ousman@bigpond.com	Fixed Wing up to 25kg
CMFC	TREVOR PEARCE	0400 451 607	trevrise@aapt.net.au	Fixed Wing up to 25kg
GOLDENPMAC	MURRAY ELLIS	0419 522 602	mellis01@bigpond.com	Fixed Wing up to 25kg



## **FIXED WING UP TO 25KG**

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Club	Inspector Name	Mobile	Email	Rating
HMAC	JOHN ANDREW MODISTACH	0417 898 493	foxbat7454@gmail.com	Fixed Wing up to 25kg
НМАС	PAUL HEAFT	0438 716 296	rozpaul@internode.on.net	Fixed Wing up to 25kg
KEILORDIS0	JIM GALEA	0412 735 736	australiaone@optusnet.com.au	Fixed Wing up to 25kg
MMAC	ALAN SAINT	0456 017 391	alansaint@tpg.com.au	Fixed Wing up to 25kg
N/COORTE	BRUCE NEVILLE ADAMS	0424 059 576	brucenevilleadams@gmail.com	Fixed Wing up to 25kg
NMAS	KENNETH WAYNE MILLER	0408 805 308	wmiller@lifestylesa.net.au	Fixed Wing up to 25kg
NMAS	GARRY JOHN OAKLEY	0417 814 373	garry@oakleycontracting.com.au	Fixed Wing up to 25kg
NMAS	BRETT JOHN OAKLEY	0419 807 452	brett@oakleycontracting.com.au	Fixed Wing up to 25kg
NMAS	GREGORY CHARLES LEIGH	0417 834 945	gregsjets@gmail.com	Fixed Wing up to 25kg
ORAM	GEOFFREY M HENNIG	0408 173 375	aeroalpha3050@bigpond.com	Fixed Wing up to 25kg
PLMAC	DAVID JOHN NEWCOMBE	0407 606 400	nuke.d@outlook.com	Fixed Wing up to 25kg
SARCH	WILLIAM MORRIS KENT	0414 883 429	wmkent48@gmail.com	Fixed Wing up to 25kg
SKYHAWKS	JOHN ROBERT MARCUZZI	0457 222 174	johnmarcuzzi300@gmail.com	Fixed Wing up to 25kg
SKYHAWKS	ADRIC WILLIAM SOMMER	0439 083 727	ADRICSOMMER@HOTMAIL.COM	Fixed Wing up to 25kg
SSL	SIMON MORRIS	0427 400 959	foka056@bigpond.com	Fixed Wing up to 25kg
SSL	JOHN ROSS COPELAND	0427 609 408	joroco1924@gmail.com	Fixed Wing up to 25kg
STMAC	ADRIAN MARK MERRYWEATHER	0438 461 711	beaker2507@bigpond.com	Fixed Wing up to 25kg

# VIC

Club	Inspector Name	Mobile	Email	Rating
BAIRNSDALO	BRIAN DOUGLAS HUTCHINSON		brian@itzap.com.au	Fixed Wing up to 25kg
BAIRNSDALO	RONALD LEONARD BARTLETT		handrbartlett@hotmail.com	Fixed Wing up to 25kg
BAIRNSDALO	PETER ANDREW KEITH		keithp912@gmail.com	Fixed Wing up to 25kg
BAIRNSDALO	IAN RICHARD WATERS	0409 796 886	irw2411@gmail.com	Fixed Wing up to 25kg
BAIRNSDALO	SHANE BARTLETT	0409 441 769	Barthog0000@gmail.com	Fixed Wing up to 25kg
BAIRNSDALO	DAVID JOHN CHIPPENDALL	0488 503 539	dj.dm@bigpond.com	Fixed Wing up to 25kg
BALLRCMFC0	MURRI GEORGE ANSTIS	0415 345 922	ansmurri@outlook.com	Fixed Wing up to 25kg
BELLARINE0	DAVID BARLING	0417 135 325	dabarling@gmail.com	Fixed Wing up to 25kg



Club	Inspector Name	Mobile	Email	Rating
BENDIGORC0	ANDREW THOMASA	0428 473 291	andy@rotorswings.com.au	Fixed Wing up to 25kg
BENDIGORC0	LESLIE GORDON DAVIS		les.davis5@bigpond.com	Fixed Wing up to 25kg
BENDIGORC0	STEVEN BRADLEY WILCOX	0424 884 483	swilco70@bigpond.com	Fixed Wing up to 25kg
BRIGHT	JOHN MAUCHLINE	0466 909 636	rjmods@optusnet.com.au	Fixed Wing up to 25kg
CHAMPS	NORMAN DOUGLAS EDMUNDS	0407 098 242	idgara.aviation@bigpond.com	Fixed Wing up to 25kg
ECHUCAMAC0	IAN FRANCIS COCKAYNE	0450 960 200	cocoforte21@gmail.com	Fixed Wing up to 25kg
GBOROUGH0	BRIAN WHELLAN		brianj2@bigpond.com	Fixed Wing up to 25kg
GBOROUGH0	NORMAN THOMPSON	0431 786 573	norm5260@outlook.com	Fixed Wing up to 25kg
GBOROUGH0	GRAEME ANDERSON	0425 785 366	flyer.540t@gmail.com	Fixed Wing up to 25kg
GOLDENPMAC	SHANE MATTHEW KEDDIE	0407 674 002	shane.k7@bigpond.com	Fixed Wing up to 25kg
LATROBEVA0	RODNEY IAN HILSLEY	0417 361 496	rodih@aussiebb.com.au	Fixed Wing up to 25kg
MELR/CHEL0	JEFF SUSSMAN	0417 357 247	jeff@sussman.com	Fixed Wing up to 25kg
MELTONMAC	MARIO PARCESEPE	0488 464 758	mparces@yahoo.com	Fixed Wing up to 25kg
MELTONMAC	PETER WILLIAM STEFURAK	0410 674 085	petestef@netspace.net.au	Fixed Wing up to 25kg
MELTONMAC	ANTHONY PETER ROESSEN	0409 148 747	tony.roessen@bigpond.com	Fixed Wing up to 25kg
MELTONMAC	JOHN BOHATKO	0409 036 671	johnbohatko@gmail.com	Fixed Wing up to 25kg
MELTONMAC	DAVID GOODES	0402 089 751	damagedgoodes@iinet.net.au	Fixed Wing up to 25kg
MELTONMAC	DOMENIC IESUE	0419 306 842	diesue1@tpg.com.au	Fixed Wing up to 25kg
MILDURA MA	PAUL MILLS	0428 253 604	paulmills53@hotmail.com	Fixed Wing up to 25kg
MOIRAMAC	JASON MARK SAGAIDAK	0429 239 308	jasonsagaidak@gmail.com	Fixed Wing up to 25kg
MOIRAMAC	JASON CHARLES STARKEY	0400 080 455	jcstarkey76@hotmail.com	Fixed Wing up to 25kg
NFG0	CHARLES ANTHONY MESON	0407 051 659	charles.meson@gmail.com	Fixed Wing up to 25kg
NFG0	MARK ANDERSON	0419 527 723	mark-a@dcsi.net.au	Fixed Wing up to 25kg
PARCS0	MANUEL JOHANNES RIEDERICH	0418 852 516	mani@c2r.net.au	Fixed Wing up to 25kg
PARCS0	JOSEPH DANIEL JEDWAB	0412 220 657	dannyjedwab@gmail.com	Fixed Wing up to 25kg
PDARCS0	ANGELO FAVALORO		amgfava@bigpond.com	Fixed Wing up to 25kg
PDARCS0	GLENN ORCHARD	0418 502 220	glenn@surfcrew.com.au	Fixed Wing up to 25kg
PDARCS0	SIMON PETER VENTEVOGEL	0412 761 979	spventevogel@gmail.com	Fixed Wing up to 25kg



Club	Inspector Name	Mobile	Email	Rating
PDARCS0	DAVID PETER LAW	0411 605 550	david.law@summitbuilders.com.	Fixed Wing up to 25kg
PDARCS0	KEITH WILLIAM QUIGG	0448 749 865	keithwquigg@gmail.com	Fixed Wing up to 25kg
PDARCS0	IVAN HAROLD CHISELETT		chiseli@optusnet.com.au	Fixed Wing up to 25kg
PDARCS0	GREG LEPP	0437 674 764	glepp@bigpond.net.au	Fixed Wing up to 25kg
PLMAC	MICHAELTERRENCE SHARMAN	0428 822 452	avator@bigpond.com	Fixed Wing up to 25kg
RAAFWILL	RUSSELL AUBREY KEEP		russkeep@bigpond.net.au	Fixed Wing up to 25kg
SALEDIS0	ROBERT BENNETTS		r.b.bennetts@bigpond.com	Fixed Wing up to 25kg
SALEDIS0	GREGORY FRY	0427 179 534	gfry75@icloud.com	Fixed Wing up to 25kg
SUNRAYSIA0	STEVEN DAWBIN	0408 133 684	s.dawbin@bigpond.com	Fixed Wing up to 25kg
SUNRAYSIA0	JOHN DODD	0499 044 661	jdodgy59@gmail.com	Fixed Wing up to 25kg
SUNRAYSIA0	MICHAEL KENNETH TIMMS	0408 105 445	micktim70@gmail.com	Fixed Wing up to 25kg
TWINCITIE0	WARREN LEACH		wassaleach@gmail.com	Fixed Wing up to 25kg
VARMS0	TIMOTHY JOHN MORLAND	0490-115-496	tjkegpm@bigpond.com	Fixed Wing up to 25kg
VARMS0	COLIN KAHN	0414-537-731	colingk@yahoo.com	Fixed Wing up to 25kg
VICJET	CARL STANLEY BIZON	0407 762 140	cbizon@bigpond.com	Fixed Wing up to 25kg
VICJET	PETER AGNEW		info@intairco.net	Fixed Wing up to 25kg
VICJET	GREG ESTCOURT	0404 269 279	excavation54@hotmail.com	Fixed Wing up to 25kg
VRFSHEPP0	ROBERTTHEO POPELIER	0497 536 894	robpop1960@gmail.com	Fixed Wing up to 25kg
VRFSHEPP0	GARY FLANAGAN	0412 140 110	flanagangaskialla@gmail.com	Fixed Wing up to 25kg
W/BOOL	JACK WILLIAMS	0408 148 310	williamsj3280@gmail.com	Fixed Wing up to 25kg
W/BOOL	MARK SMITH		mark-smith34@bigpond.com	Fixed Wing up to 25kg
W/BOOL	ROD MITCHELL	0423 964 781	rodjan@bigpond.net.au	Fixed Wing up to 25kg
W/BOOL	GEOFFREY BERNARD WATSON	0408 337 518	gbwatson7@bigpond.com	Fixed Wing up to 25kg
W/BOOL	JOHN ANTHONY HOY			Fixed Wing up to 25kg
W/BOOL	BRUCE DOUGLAS THOMPSON	0427 507 801	brucet@outlook.com.au	Fixed Wing up to 25kg
W/PORTMAC	MICHAEL CHRISTOPH		thccomputer1@gmail.com	Fixed Wing up to 25kg
W/PORTMAC	ROYCE ANDREW BUX	0417 752 233	roycekara2@bigpond.com	Fixed Wing up to 25kg
W/PORTMAC	MICHAEL BOURNE	0438 597 962	flyboys3@hotmail.com	Fixed Wing up to 25kg



#### **FIXED WING UP TO 25KG**

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Club	Inspector Name	Mobile	Email	Rating
WANGARATTA	WAYNE CHARLES HARRISON		w.harro@internode.on.net	Fixed Wing up to 25kg
YARRAVALY 0	IAN GREGORY BENDLE	0419 382 114	ian@bendleplumbing.com.au	Fixed Wing up to 25kg
YARRAVALY 0	GLEN DUNSTAN	0419 335 800	gdunston01@optusnet.com.au	Fixed Wing up to 25kg
YARRAVALY 0	DAMIEN MOULD	0419 179 058	damienmould@hotmail.com	Fixed Wing up to 25kg

#### WA

Club	Inspector Name	Mobile	Email	Rating
AMAC	DAVID PLAISTOWE		david.plaistowe@bigpond.com	Fixed Wing up to 25kg
AMAC	GEORGE TADD	0427 517 618	1tubbyt2@gmail.com	Fixed Wing up to 25kg
DAMS	ADRIAN THOMAS BYRNE	0452 046 445	whillj@bigpond.com.au	Fixed Wing up to 25kg
GAM	CLIFFORD ALTUS	0419 938 085	caltus@bigpond.net.au	Fixed Wing up to 25kg
GAM	GARRY ADAMS	0409 114 300	garry@gam.asn.au	Fixed Wing up to 25kg
KAMS	KENNETH GREAVES	0419 941 497	kengeor.greaves@gmail.com	Fixed Wing up to 25kg
KAMS	GARYTURNA	0407 423 553	gturna@iinet.net.au	Fixed Wing up to 25kg
KAMS	RICHARD LEONHARDT	0413 158 992	rsleonhardt@gmail.com	Fixed Wing up to 25kg
KAMS	NEIL GIGGINS	0428 027 558	rlgigg39@gmail.com	Fixed Wing up to 25kg
KAMS	VINCENT BELSHAW	0411 265 764	thevman111@hotmail.com	Fixed Wing up to 25kg
SAWA	NIGEL MOLYNEUX	0409 364 186	molyneux.n@gmail.com	Fixed Wing up to 25kg
SWARMS	IAN CLAPP	0458 727 111	ianclapp@bigpond.com.au	Fixed Wing up to 25kg
SWARMS	BRIAN JAMES WILKINS	0487 382 918	Bwilky03@gmail.com	Fixed Wing up to 25kg
SWARMS	JOHN DOGGETT		j_doggett@bigpond.com	Fixed Wing up to 25kg
WAMASC	BARRIE ARTHUR YORK	0403 944 166	sirbazz30b@gmail.com	Fixed Wing up to 25kg
WAMASC	RENO CANALINI	0418 808 488	sante.canalini@gmail.com	Fixed Wing up to 25kg
WAMASC	PETER KRAWITZ	0422 953 231	pietk727@gmail.com	Fixed Wing up to 25kg
WAMASC	MICHAEL SONNEMAN	0409 376 455	citation560v@hotmail.com	Fixed Wing up to 25kg
WAMASC	IAN BAIN	0417 953 213	info@baintek.com.au	Fixed Wing up to 25kg





Club	Inspector Name	Mobile	Email	Rating
WAMASC	MICHAEL WAYNE CUERDEN	0414 402 193	michael.wayne.cuerden@gmail.c	Fixed Wing up to 25kg
WANNEROO	PETER RADWANSKI	0417 945 015	peter.r.perth@gmail.com	Fixed Wing up to 25kg
WANNEROO	ERAN SMITH	0400 922 858	eransmith@gmail.com	Fixed Wing up to 25kg
WARMS	MALCOLM BRUNNING	0411 349 706	malbrunning@yahoo.com.au	Fixed Wing up to 25kg
WARMS	BRIAN LESLIE KIDD	0497 619 125	briankidd@live.com.au	Fixed Wing up to 25kg
WARMS	KEVIN C LUNN	0450 201 088	kevin@rcsmokers.com	Fixed Wing up to 25kg
WDFC	STEPHEN JOHN CORAM		sjcoram@iinet.net.au	Fixed Wing up to 25kg
WDFC	CHRISTOPHER WALKER		walkercp@iinet.net.au	Fixed Wing up to 25kg

All the SNMAC membership is very appreciative of the assistance gained from the MAAA and ANSW via the 2024 MAAA Club Assistance Scheme.



The Springwood Nepean Model Aero Club applied for the 2024 MAAA Club Assistance Scheme to help with the purchase of a new John Deere Zero Turn Z530M 48 inch Cut Mower and trailer to transport it around.

The SNMAC Committee and its members would like to thank the MAAA and ANSW for its continued support for local clubs.









Congratulations and thanks to Simon and James on their contribution to Australian aeromodelling as two of the main drivers behind bringing the 2023 F3A World Championships to Australia.

These awards were presented to Simon and Jimmy representing the huge amount of support crew that made the 2023 F3A World Championships happen, the medals were definitely acknowledgement of the amazing amount of effort these two guys put in to make the event happen.



www.f3a.com.au

Of course there are many others behind the scenes helping make it happen and to to all those wonderful people that generously donated their time a sincere and very heartfelt thank you.

John Tonks APA President

Con Too 5

Congratulations to the Tarmac Toowoomba Club on celebrating 50 years.

Aeromodellers have been flying from the current club site on the outskirts of Toowoomba for nearly 60 years. This field was also the first land that the MAAA purchased.

The club are fantastic custodians of the land and the passion and dedication of the members of the club to improving the facilities is outstanding. We look forward to celebrating many more events at the club for many years to come.



#### **Esperance Model Aero Club**

Esperance Model Aero Club (EMAC) situated on the South coast of Western Australia is suffering like many other clubs with dwindling membership numbers.

With our regular flying field fifteen kilometres out of town it was very hard to get junior members or spectators to attend our regular flying days so our committee decided to give indoor flying a go in a basket ball stadium in the middle of town with the hope that the public can just walk in and have a look and maybe get bitten by the aeromodelling bug.

Our first indoor flying session was held on the 28th July and this was primarily to get members familiar with flying in a confined space (not as easy as it looks) with very promising results and several spectators walking in to have a look. It also generated some enthusiasm within the club with several members going out and purchasing new specialised indoor models.



It is also hoped that with our fickle weather on the South coast the indoor flying will give our members a more regular opportunity to enjoy flying.



F3J World Championship in Norway. At the end of the 14 preliminary rounds Nick Chabrel seventh, Andrew Meyer ninth, and both in to the Flyoffs.

Dan Haskell twenty third, Beth Loveday twenty sixth, and overall third in the Women's comp, and Team Manager Greg Potter twenty second.

And the Team in fourth Place.

WCh F3J

Norway 2024

# CLUB ACTIVITY PROGRAM

TO SUPPORT CLUB ACTIVITIES AND EVENTS

**ACTIVITIES AND EVENTS** 

#### HOLDING AN EVENT, FLY IN OR JUST A GATHERING FOR OTHER AEROMODELLERS?

Then drop the WINGSPAN editorial team a quick email (editor@maaa.asn.au) with the details of your event and a flyer/poster if you have one, and we can publish it in the next WINGSPAN. Also don't forget to let the MAAA and your local State Association know so they can also publish the details.

And of course if you are planning on holding an event or get together don't forget about the Club Activity Program.

program has been designed to make it easy and quick for clubs to obtain funding up to \$1000 just for hosting an event. It can be anything from a simple club BBQ to an all-out public event to promote your club and aeromodelling. Whether you're a well-established club with decades of history or a newly formed group of aviation enthusiasts, this program is designed to cater to your unique needs and challenges.

Follow this link and get your clubs' online application in to be eligible.

Applications will be assessed within a day or two of your application being received, and once approved (up to five days), your funds will be promptly forwarded to your nominated club account

https://maaa.asn.au/club-support/club-financial-support

Further information can be obtained from the Member Services
Officer (David Kennedy)) on 0400 020 300 or at
member.services@maaa.asn.au

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Wilson is currently

competing at the F2 World

Championships in Muncie Indiana USA.

Murray and his pitman Mark "Poshy" Poshkens came 2nd in the World Cup prelim event on Friday. Well done boys! From Murray "Beaten by the current world champions. Only by 3 seconds. Our stops were not up to scratch so things to improve on by World champs time. Trevor and Mark got 4th."

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# ENTRIES NOW OPEN

Go to scaleaeros.com.au to register

Any queries contact the CD Michael Hobson - 0439 711 719

NEW PILOTS WELCOME

# OPEN DAY





Saturday 30<sup>th</sup> November 2024
Commencing at 9:00am

Bring your family and friends and enjoy a day filled with excitement and flying!

Live Demonstrations: Watch our skilled pilots showcase their extraordinary talents flying Radio Control (RC) and Control Line (CL) models.

Model Aircraft Display: We'll have a variety of planes on display. Warbirds, Biplanes, Jets, Gliders and Civil Aviation models. Internal combustion engines and electric motors. Balsa wood and foam planes.

Introduction to Model Aircraft Flying: Keen to fly? Under the guidance of our skilled instructors, you'll have the opportunity to take the controls and experience the thrill of flight firsthand.

RC instructors will be equipped with "Buddy System" transmitters that allow them to take control should any difficulties occurred.

Join us for a Sausage Sizzle: Grab a delicious sausage sanga and meet the pilots! (gold coin donation much appreciated).







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# ACCE FOR WORLD CHANGE AND CHANGE





KAMS RC CLUB, OLDBURY, PERTH.

STUARTHAMILTON6@BIGPOND.COM

**HAMILTON MODEL AEROPLANE CLUB PRESENTS** 

# ANNUAL FUN FLY & SWAP MEET WEEKEND

23rd & 24th NOVEMBER

# Flying from 9.00am until dusk BBQ, Tea & Coffee available

\* All Pilots must have current MAAA Membership

\* Heavy models require certification document to be presented

\* ALL TYPES OF MODEL WELCOME

#### 1145 Branxholme-Byaduk Road, BYADAK NORTH

DIRECTIONS: From Hamilton head out on Port Fairy Road for 16 km. Turn right on Branxholme Road for 5km

GPS: 37°53'8.87"S - 141°55'25.39"

#### CONTACT:

Enzo Diana

**HMAC Secretary** 

Mobile: 0409230446

Email: enzd@bigpond.com



# CONTROL LINE FUN FLY



16th November 2024 8.30 - 4pm

# LAKE MACQUARIE MINIATURE AIRCRAFT CLUB

53 Griffen Rd, Teralba, NSW 2284

As our last fun fly was so successful, we decided we should do it again!!

There will be 4 separate well prepared grass flying circles for aerobatics, general flying, a racing circle marked out for 27 Goodyear and a combat circle.

BBQ, tea & coffee will be available (gold coin donation appreciated) covered meeting & viewing areas.

The plan is to run a 27 Goodyear event and some demonstration combat, aerobatics circle is suitable for 70' lines and a get-together, a raffle for 20L drum of methanol. We are hoping this will be as enjoyable as last year.

**Note:** LMMAC has diethyl ether available for diesel engines for sale at the field in 500ml & 1 litre bottles!

Any questions regarding the day, competition etc please contact:

Ross Middleton - rossmiddleton300@gmail.com

RSVP: Would be appreciate. (For catering numbers to the address above)





Missed the last issue of WINGSPAN, no problem. Below are links to the last few issues of WINGSPAN . Simply click the link (e.g. AUGUST 2022) to view.







