



BULLETIN OF THE AUCKLAND MODEL AERO CLUB INC. EST. 1928

March 2017



Brett Naysmith with his Aeroworks ProX260 flown at Aka Aka.



Tomboy & Texaco

Tomboy and 1/2A Texaco will be flown as a monthly competition at either the AMAC field at Karaka or the Tuakau Club field.

Contact Keith Trillo for confirmation of site and possible postponement,
Mobile: 027 460 7180.

AMAC placings count to event Club points

Photo of Charles Warren's Tomboy, seen at Karaka. Photo: Ricky Bould

Reminder

**MFNZ subs are now due and must be paid to the Club
before 31st March.**

Editorial – In this month’s bulletin

It was great to receive more reports on flying activities this month and indications are that more will be forthcoming in next month’s bulletin, following a good burst of weather over the last few days. My thanks to all contributors, both to those who send in regular monthly reports on activities and those who sent in articles.

It was a pleasure to receive not one, but two articles from George Fay this month. Both reflect his enjoyment of free flight scale building flying, but they also make a plea for more to come and join him. I do enjoy being able to pass on via Slipstream, positive stories from the workbench and flying field. Mike Mulholland’s progress report on the ambitious Tiger Moth kit development project for Avetek, in conjunction with Gywn Avenell will be of interest to readers. While it is great to hear what is being built, I am grateful to Mike for sharing the problem solving techniques that he describes in his article and in the photos that support it. I am hopeful that there will continue to be building board reports each month and I am sure that we can learn much from others in these write-ups.

There is also a reminder of the forthcoming inter-club Cloud Tramp challenge between the Club and Peterborough MFC. There is still time to put a model together or dust off any you have, for trimming.

There are a couple housekeeping matters to mention. It’s the time of year for trophy returns for engraving for prizegiving. Please bring these to the March meeting. There is also a reminder notice re MFNZ subs. These apply to the coming year and need to be paid, at the latest, by March 31. If you have not paid yours, please note this deadline.

With the improving weather, have a great model flying month . . .

Stan Mauger

Trophy returns reminder

Please return any trophies that you hold so that they can be engraved for prizegiving.

Please ensure that they are polished and in a fit state for engraving and awarding to the next recipient

Slipstream contributions

Contributions of photos and information about latest projects are very welcome for the Building Board section of the bulletin. Field reports and articles are too! Please just send them in.

Deadline for articles for the April Slipstream is March 24

Photo credits

Unless otherwise noted, all photographs are by the authors of each article.

Monthly Club Night - Mike Fairgray reports

6-2-17

Present were Ricky Bould, Mike Fairgray, George Fay, Lloyd Hull, Angus Macdonald, Louis McNair, Rob McNair, Stan Mauger, Brendon Neilson, Geoff Northmore, Arthur Pearce, Bryan Spencer, Allen Teal, Keith Trillo, Charles Warren and Keith Williamson.

The Secretary Mike Fairgray, reminded members to have their MFNZ subscription paid before 31st March and that it could be paid to him now. Bryan Spencer noted that the new season of Indoor nights is starting.

Theme for the night was Nationals stories.

Ricky Bould had a few Nationals Certificates to hand out. Keith Trillo was second in Peanut Scale and first in indoor Kit Scale. George Fay was second in Outdoor Rubber. Ricky said that they had a good Nationals with Club members doing well.

First up was Louis McNair, with his Guillows Cessna now finished. It is not intended to fly, rather, to remain firmly on the ground as a static model. Looked good with lots of detail.

Visitor Allen Teal had the updated Avetek re-designed Airsail Pilatus Porter with less plastic parts, and with laser cut parts and lightening holes in all the right places, making for a very light model in its current bare bones stage. Allen has gone full circle from R/C and Vintage to rubber powered scale kits. He found that it was a little bit fiddly (don't we all). He was looking for a bit of advice on what to use as covering material and wanted to know if Litespan would be OK. The consensus was yes, and as he had used the material before, he should get on fine. His next model is likely to be a Hangar Rat and he was enquiring as to where he could obtain a plan.

Ricky Bould is well on the way with the construction of his new model, a 26 inch Focke-Wulf Fw 190. Next step was to make the canopy and the model will feature a three bladed propeller with shafts from flexible 'weed eater' line to overcome the usual problem of broken propellers on landing. The line has a memory and will spring back into the correct position. He also had his Comper Swift powered by a CO2 motor which competed well at the Nationals. Apparently a full sized version is ready for flight and will be displaying at the Omaka Airshow this year.

Keith Trillo had a very long black balsa tube with an electric motor complete with a folding propeller on the front. The model is named Outdoor Tractor and was designed by Gerald Ritz in 1936 at a young age of twenty years. The wing, which had a complicated looking undercamber wing section, was made with all parts laminated, making the wing quite heavy. An ingenious shaped saddle that had the same contour as the fuselage, allowed the wing to be moved backwards and forwards to set the C of G. Servos were in the tail and Keith managed to procure some very light servo wire to connect the servos to the receiver which was positioned up front. The tail assembly was plugged into the rear of the tube and easily removed to access the servo to receiver plug. The motor and R/C equipment were kept cool utilising a hole through the spinner with the air exiting in a louvred panel further along the fuselage. The driving power was with the use of a mini planetary gearbox attached to the motor and a 17 minute flight time is achievable.



This page:
These views of Louis McNair's Guillows Cessna 150 show how well it is built and covered. It is now looking great with the details and colour trim added since last month.

Keith gave a brief history on the designer Gerald Ritz and it is worth summarising here from an article on the home page of the AMA.

Career:

- Taught modelling for several years in a Chicago Boy's Club
- Built a wind tunnel in the early 1930s and ran tests on airfoils and propellers
- In the 1930s, developed a gas model propeller carving system at the suggestion of Carl Goldberg; supplied millions of propellers throughout the world
- Manufactured 30,000 propellers for target planes during World War II
- Original member of the Chicago Aeronauts
- His Ritz Wing was published in Frank Zaic's 1937 Model Aeronautic Yearbook
- Won the 1959 Nordic Tow liners world championship
- Participated in and was the U.S. team manager for various Wakefield competitions
- Served as chairman of the international Wakefield committee that shaped the rules regarding qualifying trials
- Wrote a series of articles on aerofoils in the late 1950s that were published in Model Airplane News magazine
- Manufactured propellers and airplane kits for ultralight aircraft
- Honours:1982: National Free Flight Society Hall of Fame

Angus Macdonald had his Jumpin Bean 36-inch electric powered model. This model was a result of a 'one design' competition and Angus considered the design not favourable for this type of competition. The fuselage is very narrow and fitting in the electric components proved very difficult. A lot of lead was needed to achieve the required wing loading for the competition. The first flight did not go well, resulting in a broken wing.

This concluded the table so it was off to tea and biscuits and to rummage through the free give a ways of books, plans and other bits and pieces brought in by Arthur Pearce.

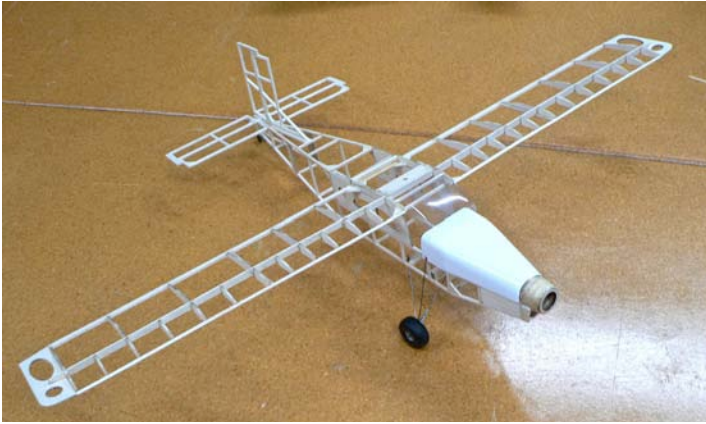
Photos: Stan Mauger

Opposite

Upper: Allen Teal's Avetek Pilatus Porter, shows the lightened structure of this re-engineered kit.

Centre: Ricky Bould's FW190 is progressing well. Leading edge sheeting should make for robust wing structure.

Lower: His Comper Swift back from Nats success.





Above: Angus Macdonald turned over his Jumpin Bean, to reveal the tight space for battery and RC gear.



Top: Keith Trillo's Outdoor Tractor, a Gerald Ritz design from 1936.

Centre: This view shows wing saddle and motor set up.

Left: The strongly undercambered wing section.



Upper: Stuart Ward's 2 metre Crimson electric glider between flights.

Above: Brett Naysmith setting up his E Flite Mystique electric glider on the table prior to flying.

Aka Aka Diary - Charles Warren

On Sunday Jan 29 Stuart Ward flew his Fazer stunt model powered by an OS 46 and his 2 metre Crimson electric glider. That day Brendon and Charles were there flying Radians and Brett his Edge 540 powered by a DLE 35cc as well as his Mystique 2.9 electric glider.

Brett Naysmith flew his Aeroworks ProX260 stunt model at Aka Aka on Sunday 5th February and on the same day he flew his E flight Mystique 2.9 metre electric glider. Brendon Neilson and Charles flew Radians that day and Brendon flew his Spirit Elite off the bungee. There was a southerly wind and the gliders were soaring well along the ridge. Brendon and Charles had been soaring their gliders on the ridge the day before when the wind was southwesterly and the Highstart bungee was used for the 2 metre gliders. On Waitangi day the wind had dropped and Brendon went out again and flew his Red Zephyr off the strip.

There has been some flying at Aka Aka on a couple of other days as well, so the site has been quite well used whenever the weather has been suitable.



Above: Stuart with his Fazer stunt model powered by an OS 46.

Karaka Diary - Keith Trillo

Due to the weather forecast showing an increase of wind to over 20kph as the morning progresses, the turn out at the Karaka field has been light during the last three Sundays.

On the 29-1-17 Ross Northcott flew his 1/2E Lanzo Bomber. Angus Macdonald and Keith Trillo flew E Tomboy flights, once again Angus getting the best time.

E Tomboy

A. Macdonald	15:47	7:22
K. Trillo	11:45	14:04

On 5-2-17 the highlight was Martin Evans flying his Gadfly on its first flight, and two subsequent flights after control adjustments. The plan for the Gadfly came from Outer Zone. Martin also flew his Tom Thumb which handled the wind as good as the Tomboys and also a Coronet that has a Speed 400 Brushed Motor.

Angus Macdonald flew his Humming Bird, 1/2E Texaco 8 ball and E Tomboy. Keith Trillo flew only his E Tomboy. No timed Tomboy flights were recorded as the wind was getting too strong.

On 12-2-17 Angus flew his 1/2E Texaco 8 ball, and Jumpin Bean and Keith had three flights with his Cox.049 1/2A Texaco Skipper, getting only a 4 minute engine run. Not one flight made the 8 minutes that is required for a Max.



Above: Martin Evans with his APS Tom thumb adapted for RC.



Top: Out of the frame, Martin holding his Electric powered Coronet. **Above:** His Gadfly was out for it's first flight.

Control Line & Indoor at Whangarei

PROGRAMME 11-12 March

Saturday 11 March from 9:30

61 McGill Road, Portland, Whangarei

- Control line, aerobatics and grass racing

BBQ lunch

- CL Sport flying (including scale)

- indoor sport flying and trimming in the hall during the day.

Sunday 12 March from 9:30

61 McGill Road- CL coaching on Sunday (mufflers required).

- indoor sport flying and trimming in the hall during the day.

League field is available and radio can be flown from the strip.

We would love to see as many there as possible to make this meet a success. A \$20 registration fee covers all flying with food extra.

Phone Daniel Walker 021 450 338 09 4360615
for further details.

“Where have all the FF scale flyers gone . . .?”

- George Fay

Yes, where are they all? At the last Nats at Matamata, contestant numbers were noticeably down in free flight scale events compared with the Nats there a couple of years ago. The unpredictable weather may have been a contributing factor in keeping people away. Prior to the Nats there was some good weather slotted in. Don and I trekked out to Hoteo and Karaka on several occasions, for a spot of flying but it always seemed to be just the two of us. I know we are both retired and have all the time in the world, but it would be nice to have a few more flyers for company.

Sunday January 26 was a gorgeous morning at Karaka with sunny blue sky and no wind but just us two again - Don and myself. Between us we had a dozen models to fly - and fly we did!

Don was already flying when I arrived, just after 8.00am. His CO2 powered Piper Pacer was doing circuits, but unfortunately suffered some slight damage later in the morning. His rubber powered Bellanca Skyrocket was brand spanking new. After a couple of trimming flights to get the C of G right, it was off on a couple of superb flights - scale speed, good flying height and stable as . . . Our man Don is quite an innovative sort of a guy. He not only builds superb models, he knows how to make them fly. After several flights, his DH Puss Moth got in a thermal, going up and up for at least three minutes, to a great height. Luckily it managed to come down on the edge of the field, facing the road. His lucky day!

The Stinson, always a good flier, was doing some tight turning circuits, looking capable of some aerobatics. On another occasion his CO2 Piper flew a perfect ROG off the cricket pitch - great stuff! I had my big Curtiss Robin requiring trimming flights on that day. The small Folkerts SK-3 was on form and with an extra strand of rubber flew as though on rails. My Fokker Eindexer was given a flight or two but required more power, having used old rubber (Don threatened to chop the rubber up!). The Ryan ST flew a reasonable height on the first flight, but refused to fly after that. The trim must have altered. My PE2 twin stayed in the car as by this stage in the morning, the wind had picked up. We both had a great morning. All of our models remained in tact and they all flew - can't ask for more than that.



Left: Don Spray's Bellanca Skyrocket proved to be a good flier at Karaka.

Photo: Ricky Bould

Flying Jumbo Rubber Scale - George Fay

Having built and flown dozens of scale rubber models, mainly low wing fighter types, over the years, I decided to set myself the challenge of a large high-winger. Previously my high wing efforts had been mainly been in open vintage type models. The Curtiss Robin was chosen as a plan was available and the design appealed to me. The plan was enlarged giving a 48" span model. Construction was quite straightforward bearing in mind a lightish model in the end would have better performance. I envisaged a large 'floaty' aeroplane turning a large prop.



Above: The Curtiss Robin on its way at Karaka. *Photo: Ricky Bould*

Trimming

The finished model weighed 300g. I made a 16" flexible propellor and proceeded with the trimming process. Having to glide the Robin on level ground was a bit trying, because of the model's size. A slope would have been ideal. I hand wound the model giving it about fifty turns and as I launched it the nose went up and the left wing dropped. The left wing dropped again after I added right thrust, nose weight and gave the model 100 turns – it really did not want to go. Turns were increased to 400 on the 16 strand 3/16" motor used with a 15" prop. With this set-up the model flew low and level but at the end of the flight the wing dropped. Frustrating . . .

So some "midnight oil had to be burnt" I had to do something – I thought high-wingers were supposed to be easy to trim! I moved the motor peg forward by three inches and took out 25g of nose weight. The rubber motor was changed to 14 strands of 1/4" and the length reduced from 26" to 24". The propellor was shaved down to 14" and on 500 turns – guess what? The model climbed away perfectly, did a couple of left hand circuits and landed safely. Just to make sure that this wasn't a fluke, a couple more flights followed in which the model did a left hand circuit and there was no dropping of the wing at the end of the flight. The next time out I tried a modified 15" propellor and on 500 turns the model climbed away and circled to the right (high wingers aren't supposed to fly right – right?).

The present configuration consists of 14 strands of ¼” rubber and a 14” prop. Taken to 500 turns this gives a flight of 20-25 seconds. I would need to fine tune a few things to get a more acceptable flight time of 30-40 seconds. All this trial and error has taken place over a period of some weeks and the Curtiss has taken a bit of a battering with bits breaking off and the fuselage has been re-covered twice. I am building a new flexi prop at present and hopefully, it will improve the flight performance further.

Winding the 14 strand ¼” rubber motor

Here is my method. I hammer two metal tent pegs into the ground for the fuselage and motor peg, with a brass rod through the tube motor peg. I find having the model on the ground is a safer way than on a winding stooge. I proceed to wind the brute of a motor, usually kneeling on one knee. Everything has to be secure. The torque of the motor feels as though it could catapult me over the model! I have made a winding or blast tube just to be on the safe side, when winding this big motor. Now that the Robin is flying (after some frustration) I hope to see more jumbo rubber scale models airborne.

Notice of AMAC Annual General Meeting

The Club's 89th AGM will take place on Monday 3 April 2017 during the regular club night held in the ASME rooms.

AGENDA

1. Apologies
2. Minutes of 2016 AGM
3. President's Report
4. Secretary's Treasurer's Report
5. Remit changes to rules Rule 3 Officers, Rule 4 Duties of the Officers, Rule 15 Subscriptions.
6. Confirmation of Subscription
7. Other Reports
8. Election of Officers. With the exception of the President Charles Warren all other Officers are willing to stand again
9. General Business

Mike Fairgray
Hon. Secretary

AMAC subscriptions for 2017 are due after being set at this meeting
PROMPT PAYMENT PLEASE,
BY cash or cheque or direct banking to Auckland MAC

A tale of two tigers - Progress update

- Mike Mulholland

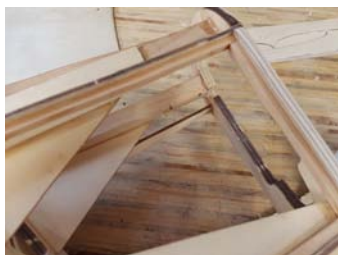
You would have thought that after I got back from the NSW Trans Tasman free flight scale champs in July last year I would have had enough of Tiger Moths for a while, but then Gwyn Avenell came up with the idea of building a 70" 1/5 Tiger Moth for .91 4-stroke – each! This is a joint project with a division of labour; Gwyn gets to build 8 wings and for my sins I get to build 2 fuselages and tail feathers.

As a boy I used to drool over a Fokker Triplane plan for 10cc engines that appeared in the APS catalogue. This came with the dire warning that it was for experienced modellers able to interpret drawings and design their own structures or words to that effect. The Tiger Moth is built from a plan by Farooq Ahmed and carries a similar warning that “this model requires accurate workmanship and should not be attempted by inexperienced modellers”. – They're not wrong!

It's fair to say that the plan is very accurately drawn and that the basic design is extremely sound but there is a lot of constructional detail still to be determined by the builder. As is frequently the case the major time involved in this project has simply been figuring things out.

The front end

Since the last update both fuselages are together with the rear decking in place, and the engine bearers installed and drilled. A fair bit of thought went into designing the front end so that the engine and tank could be accessed and removed from the front without the need for a top hatch. This has been achieved by making the nose pan and the two side cheek panels removable. I was particularly pleased with my re-design of the side cowlings. These now have an inner plate that plugs neatly into the fuselage side, and which carries the external scale structure. The two panels are simply held in with a stout internal rubber band linking them.



Upper left:

The rebated sections of the nose structure providing a seat for the cowling plug.

Upper right:

The cowling Lite ply plug in place.

Lower left:

The internal structure of the plug with a diagonal brace

Lower right:

The port side showing the nose construction.

Opposite

This view of the fuselage shows the silver soldering of 4mm rod and 16g wire, used in undercarriage and cabane construction.



The undercarriage and cabane structures

On this model they are significant feats in themselves. The structure is 4mm rod which requires the use of heat to make the bends. The wire just laughed at my Propane torch and was still sniggering and smirking when I attacked it with Mapp gas. It only gave up and did what I wanted when I gave it the oxy-acetylene treatment!

5mm steel templates were made to ensure that the angles were all perfect and to be fair it was the dissipative effect of this extra metal rather than the 4mm rod itself that dictated the use of oxy-acetylene.

I decided to silver solder all of the joints for strength, and to avoid having to bind them with fuse wire. It was important to keep all of the joints as small as possible as all struts have to be faired in with wood, and it would spoil the effect if parts of the metalware were oversize and could not be fully covered.

This was the first time I had attempted silver soldering and it proved to be quite straightforward. As with all soldering and brazing the trick is to have clean metal, a good flux, plenty of heat and a reliable system to keep everything together in the right place while it is being soldered. I made accurate jigs to hold the parts together with suitable 'dead' zones where I would be applying heat. Flux paste is applied to the area to be soldered and the silver rod is cut to length and placed in the joint. Then the work is heated until the solder melts and flows. Silver solder flows beautifully and I found it a simple matter to achieve good strong joints.



Strut fairings

Also worthy of note is the process for forming the strut fairings. These are hard 5mm square balsa with a channel routed out to go over the cabane wires. The two pieces are cyano'd on to the wire and then profiled.

In the absence of a tiny router or a milling machine and with a bit of thought, it proved possible to use a Dremel tool in a drill press for this purpose. I used my bench grinder to carefully dress down a standard Dremel tip to the correct profile to cut a 4mm semi-circular groove, and made up a simple guide for the material, which in turn was just temporarily cyano'd to the base of the drill press.

Grinding balsa with a Dremel tool results in burning unless you take small cuts so I ran sufficient material through to do all of the struts for both models, and then took the next cut and so on. Six passes were required to do the job without excessive burning.

As with many aspects of this dual project there has been a fair amount of mucking around with constructing jigs and tooling but the result has been that the second set of everything has been a breeze.



Clockwise from upper left: the Dremel router, completed half strut fairings, assembled fairings and strut fairings in situ on struts.

Coming up - April 2017 NDC Calendar

HOTEO

1/2A Power, Open Rubber, Open Power, Coupe d'Hiver, P30, A1 Glider, Kiwi Power, Open Glider, Catapult Glider, Hand L Glider, FF Nostalgia 1/2A Min Replica, FF Classic Power Duration

KARAKA

RC Vintage 1/2E Texaco, RC Vintage A Texaco, RC Vintage E Texaco,

Cloud Tramp Challenge

As we have been challenged by the Peterborough MAC to a Cloud Tramp Competition that will be flown in late April, this is a call to arms for support from club members to fly in the event. It is an opportunity to let the models stretch their legs in daylight at Karaka. If you want to enter and do not have a model (it is a 3 hour build) one can be provided together with rubber and guidance on trimming. The rules are simple and not too demanding on the recovery. All interested talk to Ricky.



Bruce Keegan built this Cloud Tramp. Where is it now?

Free Flight contest days 2017

Indoor flying at Morrinsville

Sunday June 11, 2017

Sunday October 8, 2017

Put them in your diary!

• **Hangar Rat** • **HL Glider**

Flown to MFNZ rules

• **Push E** • **Modelair Hornet**

Flown to AMAC rules

• **F4D Rubber Scale** • **F4F Peanut Scale**

Flown to FAI rules. Refer to link on MFNZ website under Scale FF & CL SIG

• **Kit Scale**

Flown to rules on MFNZ website under Scale FF & CL SIG

Come and join us

Venue: Westpac Stadium Hall, 21 Ron Ladd Place, Morrinsville

Programme: **9.45am** Arrive and unpack ready for start time

10.00am Hangar Rat, Push E and HL Glider
Scale static judging until 12.30pm

12.30pm Peanut Scale, Rubber Scale, Kit Scale

3.45pm Prizegiving.

3.55pm Hall vacated.

Fliers Entry: \$20.00

Spectators welcome

Contact Stan Mauer 09 575 7971, stanm09c4@gmail.com for more information



Organised by the Auckland Model Aero Club Inc
in conjunction with the Scale Free Flight & Control Line SIG

Calendar **March**

For information about the location of club fields and cancellations or postponement of flying, contact the field stewards.

KARAKA

Sundays

Tomboy Extravaganza (*for Club points*)

Flying can take place between 10am and 2pm

(9am to 3pm for gliders and other silent models)

NDC RC Vintage events **RC Vintage IC Duration, RC Vintage E Duration, RC Classic E Duration. (also see Hoteo FF list)**

Karaka Steward

Keith Trillo 09 298 4161 027 4607180 careith@hotmail.com

HOTEO

Call the field steward if you would like to go up and do some free flight and vintage flying there.

NDC FF Vintage events **FAI F1B Rubber, Kiwi Power, Kennedy Precision, Aggregate, Tip Launch glider, FF Classic Duration, FF Vintage Rubber Duration. (also see Karaka RC list)**

Hoteo Steward

Paul Evans 479-6378 ziply@xtra.co.nz

AKA AKA

Saturdays & Sundays

Intending fliers should phone Brett Naysmith to confirm that there will be flying.

Instructors

Brett Naysmith

Aka Aka Steward

Brett Naysmith 09 235 8803 brejo@xtra.co.nz

CONTROL LINE

Whangarei

March **11-12**

Control line flying (refer to notice on page 17 for details)

Intending fliers should phone Daniel Walker to confirm that there will be flying.

C/L Steward

Stan Mauger 575 7971 stanm09c4@gmail.com

INDOOR EVENTS

Drury

March **27**

Drury School Hall

Hangar Rat [7.30-10pm]

- *for Club points.*

Ellerslie

Tuesday March **14**

Tuesday March **28**

Michael Park School Hall

Indoor radio flying [7.00-10pm]

Indoor Radio Scale including ARF Scale, Simple Scale and Full Scale classes [7.00-10pm]

- *for Club points.*

Indoor Steward

Bryan Spencer 570-5506 bspencer@xtra.co.nz

OFFICERS OF AUCKLAND MODEL AERO CLUB INC.

Patron	Angus Macdonald	575 7232	angusmac@xtra.co.nz
President	Charles Warren	09 238 9430	cpwarren@ps.gen.nz
Vice President	Ricky Bould	478 8949	unimec@ihug.co.nz
Secretary	Mike Fairgray	636 8439	amacsecretary@mail.com
Treasurer	Mike Fairgray	636 8439	amacsecretary@mail.com
Recording Officer	Keith Trillo	298 4161	careith@hotmail.com
Bulletin Editor	Stan Mauger	575 7971	stanm09c4@gmail.com
Committee	Paul Evans	479 6378	ziply@xtra.co.nz
	Brendon Neilson	09 239 3204	2neilsons@gmail.com,
	Don Spray	828 4892	drlmspray@xtra.co.nz

Club subscriptions

NZMAA Affiliation is mandatory for Club flying

Senior \$50 (+\$75 NZMAA) **Family** \$55 (+\$75 NZMAA)

Junior \$10 (+\$20 NZMAA) **Social** \$40

Intending members with current NZMAA affiliation pay only the AMAC sub

Please make payments to

The Treasurer Auckland Model Aero Club

Mike Fairgray,

3 Kanohi Tce Mangere Bridge 2022, Auckland

NEXT CLUB MEETING AND NATTER NIGHT

Monthly club meeting

7:30 PM

Monday March 6, 2017

ASME Clubrooms, Peterson Reserve, Panmure.

Theme: Free flight models

Items for the table:

Models, plans, engines, photographs etc

Trading table:

Buy, swap and sell

**Visitors or intending members
welcome**

Reminder

**MFNZ subs are now due
and must be paid to the
Club before 31st March**