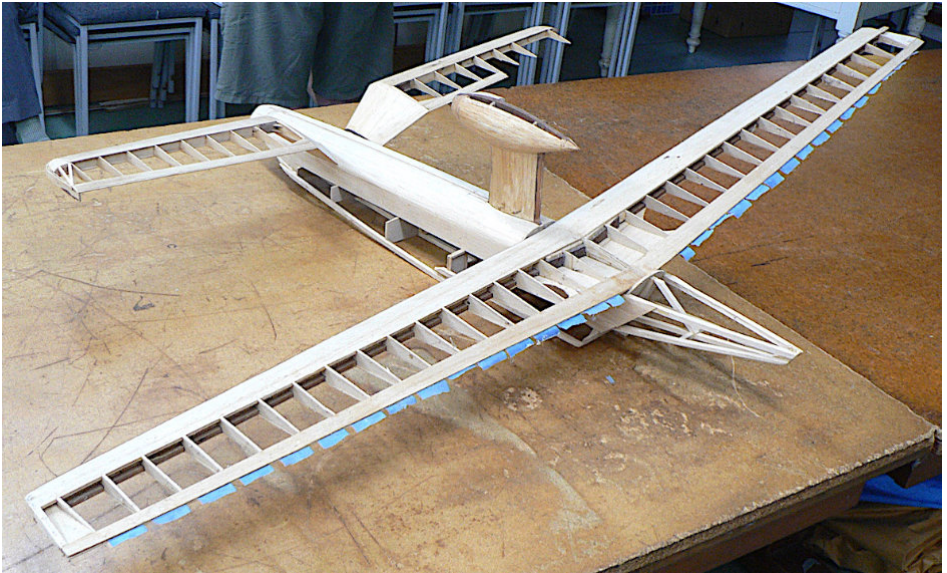




BULLETIN OF THE AUCKLAND MODEL AERO CLUB INC. EST. 1928  
**April - May 2023**



Charles Warren's unusual unorthodox model design brought to the last monthly meeting. See more about it on page 6. *Photo: Stan Mauger*

Angus Macdonald Commemoration



# Hornet

EVENT

Drury School Hall, Young Crescent, Drury  
April 17, 2023

A plan and building article for the Hornet were in the November 2020 Slipstream. Ricky Bould also has kitsets of parts available for those who would like to build one in the limited time left before the event.

## Indoor Free Flight Morrinsville Day

**Sunday October 8, 2023**

- F4D Rubber Scale
- F4F Peanut Scale
- Memorial Scale
- Kit Scale
- Hangar Rat
- HL Glider
- Modelair Hornet

Morrinsville Events Centre,  
21 Ron Ladd Place, Morrinsville

Contact Stan Mauger 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

**Photo credits:** Unless otherwise noted, all photographs are by the authors of each article.

## Editorial – Club communications

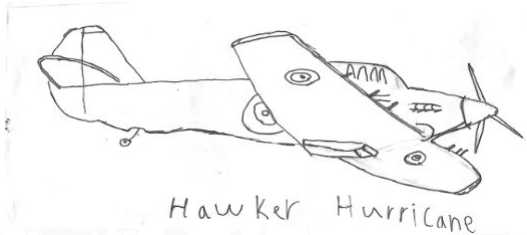
Thumbing through some Club Recording Officer records recently, that dated back just on twenty years, I was struck by the shift from regular outdoor monthly competition to our present situation where we have only a few organized outdoor contests each year. Indoor competition has fared better but with a reduction in organized monthly events. In 2003 competition reports and other articles clearly came rolling in month by month whereas diminishing Club competition and other activity, by May 2018, caused me to rethink the monthly frequency of Slipstream. The switch to bi-monthly was a better balance, but with this came the obvious gaps between sending out bulletins that caused a need for communications in the interim and the secretary, sensing this, sent out a few email letters to membership to bridge the gap. Clearly, Slipstream no longer serves the same function that it did in the period up until the early 21<sup>st</sup> century. Many model clubs have moved to having their club website as their prime point of communication and, from the above, it is clear that we should consider this too. For this move to succeed, however, there needs to be a small group keen to keep it up to date with postings of information related to Club activities, events and modeller's projects. If you are able to assist in this capacity please let us know.

The next meeting will be the Club's AGM. The mention of AGM often sounds a call to office in the minds of many. Breathe easy, this is not likely, but it is your opportunity to comment on the running of the Club over the last year and if you are available to lend a hand, well and good!

STAN MAUGER

---

Brendon Neilson was delighted to receive this thank you from Mishka Meredith, the Club's most recent junior member, for the donation of the model featured on the December/January cover of Slipstream.



Dear Brendon

thank you for giving me such a

lovely plane. I had my first flight with it last Sunday and it flew beautifully it was a very generous gift and I am very grateful kind regards Mishka

# Monthly Club Night- Stan Mauger

6-3-23

Present were Ricky Bould, Alan Bright, Paul Evans, Don Foley, Brian Howell, John Macdonald, Stan Mauger, Brendon Neilson, Ken Smith, Bryan Spencer, Charles Warren Tony Woodroofe and re-joining Club member Jeremy Davies.

## Notices

There were a number of notices and reports to get through. Stan Mauger mentioned that the April meeting would be the Club's AGM. He also reminded everyone of the Angus Macdonald Memorial Modelair Hornet Event looming close on April 17, at Drury School Hall. There were full-sized copies of the building plan on the table and he pointed out that there was still time to build a model for the indoor evening. Ricky Bould was joining forces with Stan Mauger to produce a number of kitsets of parts for anyone needing a Modelair Hornet for the event.

Ricky reported on The Microsoft launch of flight simulator software. He had been asked to provide scale models of full-sized aircraft and assist with displaying them to support the presentation. His efforts were greatly appreciated and created much interest.

Bryan Spencer mentioned that he would be sending out the usual monthly reminder for the Drury indoor evening which will be Modelair Hornet (practice night) and kit scale.

Brendon Neilson had observed that softball players had moved to firmer ground further away from where we normally fly at Karaka, but other park users may use more of the park.

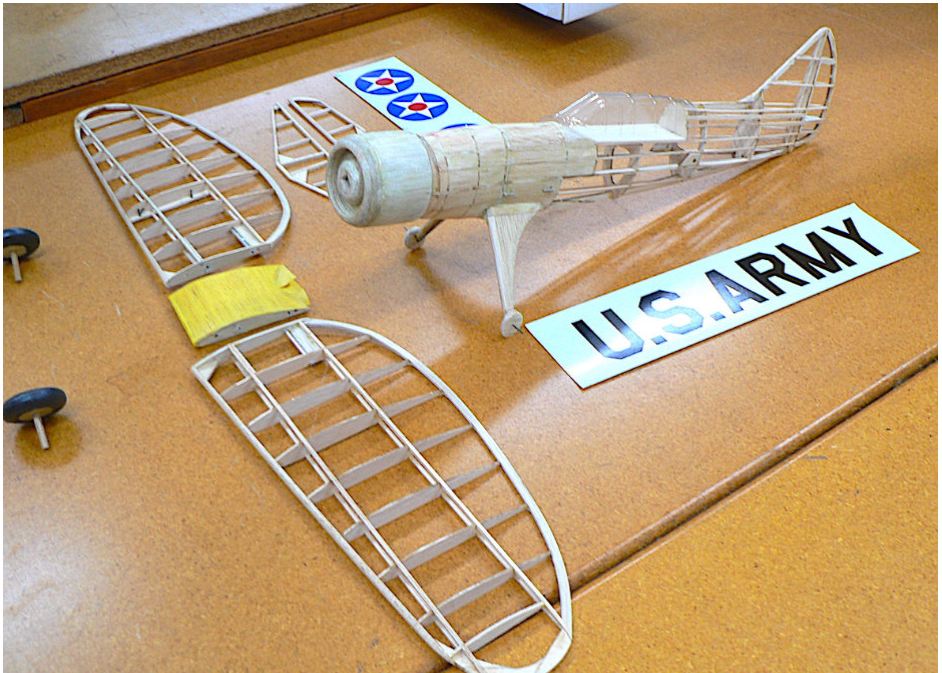
## The table

Looking very much ready for some testing was Don Foley's APS Tomboy. The model had been brought to the table previously, as construction had progressed. Now it was nicely covered and short of a sealing coat to keep away any possible diesel, it was ready for wind under its wings.



**Right:** Don Foley brought his nicely built Tomboy, which is awaiting some testing.

On the opposite side of the table, Ricky's Douglas O-46 of about 24" span, built from a Scientex kit was nearing the end of construction and about to be covered. Some infill has been added to the areas under the cabanes to strengthen the fuselage. This is an elegant model but not without its construction challenges. The Laser-cut parts had speeded up construction and had taken some of the tedium out of accomplishing the cutting of both the ribs for the elliptical wings and flying surfaces, but also of cutting formers for the streamlined fuselage shape. It has all the right proportions to be a great rubber powered flyer.

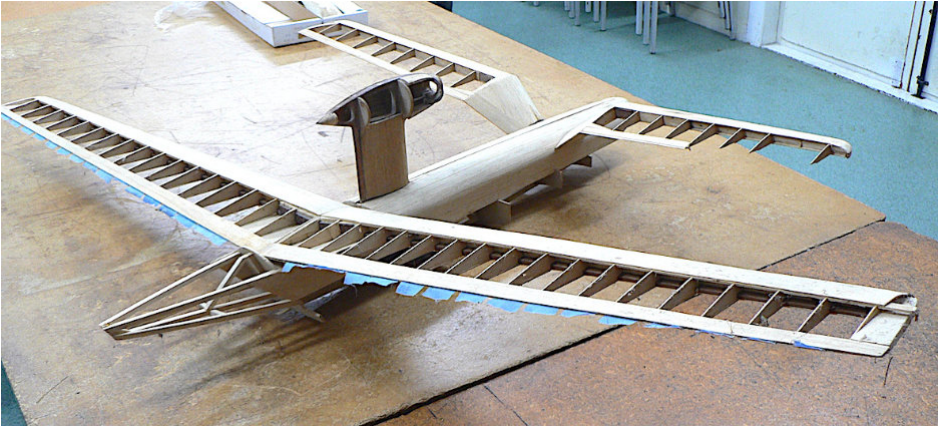


**Upper:** Ricky Bould has been working steadily on his Douglas O-46 for rubber power, with covering just around the corner.

**Left:** Alan Bright found this foam RC Cub too hard to resist buying. It is likely to be flown only in calm conditions. Outdoor testing awaits.

Alan Bright's Cub, close by, is an indoor almost ready to fly, foam model that he had spotted in Hobby Trend in Sylvia Park Shopping Mall and was such good value it was too hard to turn down. The model is too large for indoor RC flying so will be flown outdoors in the wide open spaces when the weather is right.

Making quite an entrance when it arrived on the table, Charles Warren's unorthodox, own-design model had been started some years back. It had been built to his own brief – a model that was unlike anything that he had built or seen before. The design started as an idea on an envelope and had progressed from there and the building plans that followed have disappeared. Fixing elevators on the front gull wings was dropped in favour of possibly building an high all-moving tailplane and using wing ailerons. The pylon is set up for a PAW 1.5cc diesel.



**Above and right:** Charles Warren's unorthodox project is being re-visited. CG will probably be found by trial and error unless anyone has a better method!

John Macdonald made a great contribution to the table, bringing a variety of models and kits. He enjoys building scale models from John Bell Kits and his completed Rearwin Speedster and Hughes Racer kit were both by this kit designer. The rubber powered Rearwin is lightly built and ready for testing. John has had several other scale models on the go as well. His Sterling Spitfire is awaiting a canopy (missing from the kit) and propellor assembly. Also well under way is his Frog SE5a control-liner which will have a 1.5cc diesel installed. John has a great selection of Berkeley kits acquired over the years. The Curtiss Helldiver kit brought to the table, showed the typical contents of Berkeley kits.

The table almost done, Ricky came across some photocopies of an article on the Frog Pioneer design, brought along by Stan Mauger, for Don Foley to pass on to a relative who had experimented with aluminium drink can sheet for model design and fabrication. The Frog Pioneer, an experimental design of the 1950s, had taken a different but more practical approach if metal models were going to have a chance of flying. Senior modellers may recall that the Pioneer used a series of extrusions and fittings to build an aluminium-framed free flight diesel powered model. The table done, it was just left to us to take another look at the bounties of the table before heading home.



**Above:** John Macdonald's nicely built Rearwin Speedster from a John bell kit looks ready for some testing. He has a number of other John Bell kits to build and has also collected a

number of Berkeley kits so is not short of further projects. His Sterling Spitfire is also well under way.

# Karaka Diary - Stan Mauger

19-2-23

This great flying day brought out both free flight and RC models. Don Spray had some notable flights with his rubber scale models. He has mastered the set-up of his scale twins. He views the use of contra rotating props as a means to reduce or eliminate many of the predicted trimming problems with both his Grumman Tigercat and McDonnell Moonbat flying twins. Both of these flew without much trim adjustment. Earl Stahl designs are usually straightforward to trim and his Stahl P-51B is no exception. It has proved itself to be a reliable flyer and like the twins was turning in great flights on the day, but the real excitement of the day was the first flight of his Stuka which looked great in flight.



**Above:** Don Spray's rubber powered McDonnell Moonbat and Grumman Tigercat awaiting assembly. They are joined by his Stahl NA P51B Mustang and George Fay's Vought Corsair in RAF scheme.

**Right:** A well-packed car load of models built by Don and George.  
*Photos: Brendon Neilson*





George Fay was also flying his twins. He had his PE2s in Russian and Polish markings climbing away nicely. The Russian model has an impressive climb, whilst the Polish model is best in windy conditions. He also brought his Corsair in RAF markings but it was not flown.

Jeremy Davies enjoyed flying his RC Radian Glider, finding it a pleasure to fly. He was totally at home with his RC Cessna Cardinal having flown it for a number of years, but is still getting to know his ROC V tail glider.

Brendon Neilson was putting in flights with his two metre glider and Sportster, both of which were previously Geoff Northmore models.



***Inset:*** Don's Tigercat off on a great flight.

***Above:*** George's PE2 in Russian colour scheme climbing away nicely.

***Left:*** another of George's PE2s, this one in Polish colour scheme. ***Photos:*** Brendon Neilson

# Drury Indoor - Stan Mauger

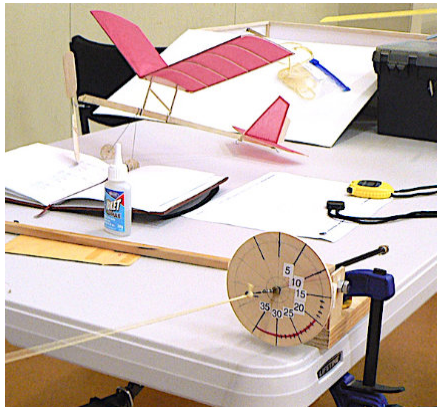
20-2-23

There were some good times recorded for Hangar Rat as the results below show. Ricky Bould was getting consistent times over a minute, while Ken Smith was probably topping any previous Hangar Rat times he had made with his first over two minute times. Bernard Scott also recorded a couple of excellent over two minute flights just eclipsing Ken's scores.

Stan Mauger brought a semi-scale rubber model that he had built to test indoor model set-ups for ROGs. It was still at trimming stage. Alan Bright's new RC Cub drew admiring glances, but he was wondering about flying it indoors. Alan Bright and Rex Benns were both happily fly Vapors, whilst Geoff Burgess had several indoor RC models to fly. Tony Woodroofe was assisting others. It was good to see Brian Howell able to be at indoor.

## Hangar Rat Results

						score
B. Scott	2:08	2:07				<b>4:15</b>
K. Smith	1:55	1:51	2:05	1:47	2:07	<b>4:12</b>
R. Bould	1:32		1:52		1:58	<b>3:50</b>



**Upper left:** Bernard Scott winding his Hangar Rat.

**Upper right:** Ken Smith's table with his Hangar Rat and torque meter (foreground).

**Right:** Alan Bright's new Cub being admired by Geoff Burgess, Ricky Bould, Tony Woodroofe, Ken Smith, Rex Benns and Brian Howell, beyond.



20-3-23

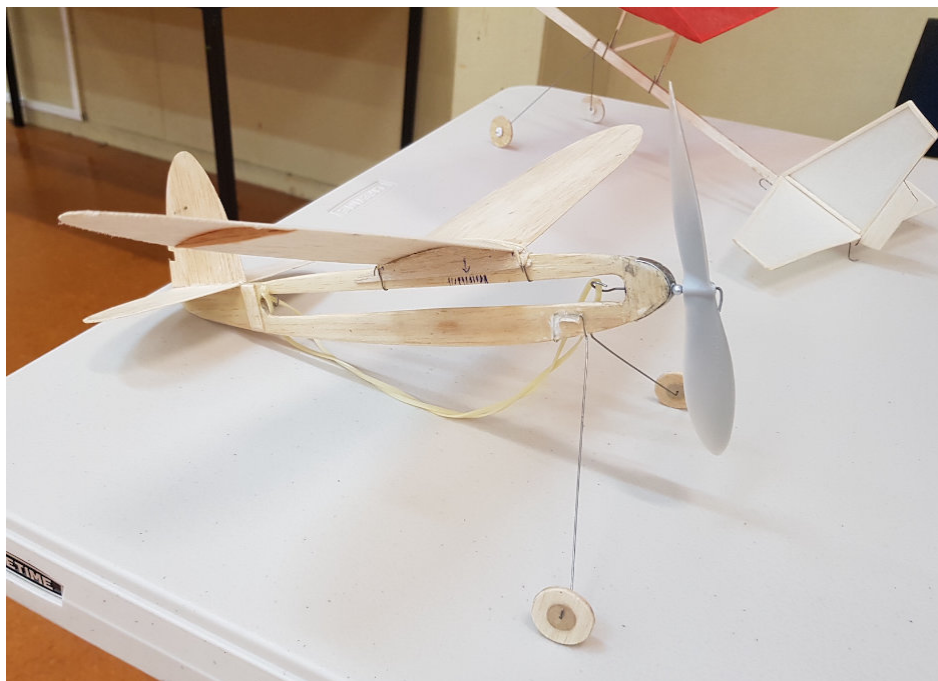
Several took this last opportunity for Modelair Hornet trimming prior to next month's Angus Macdonald commemorative event at Drury. Ricky had two Hornets and Peanut Nesmith Cougar for trimming. His Hornets were starting to fly alright but needed work still. The Cougar seemed to need some thrust adjustments but he made a good start on setting it up. Damage curtailed any further Cougar trimming after several initial flights.

Ken Smith soon had his Hornet flying well after taming the turn, the model using the space of the hall very well. Another Hornet soon transformed was Charles Warren's model which gained much more height after Ricky supplied him a step up in motor rubber size. He had a Hangar Rat there too, but did not find time to fly it. He also brought a Humming Bird plan so that Brian Howell could refer to it to repair his model which was built by the designer, Angus Macdonald.

Geoff Burgess flew several indoor RC models including his foam Citabria and 4 channel Xtra. Both Geoff and Alan Bright flew Vapors. Tony Woodroffe was, as always, ready to lend a hand to assist others.



**Above:** Brian Howell looking over Charles Warren's Modelair Humming Bird plan. Ricky Bould's models in the distance and Alan Bright, beyond. *Photo: Ken Smith.*



**Upper:** Charles Warren's Modelair Hornet now in good flying form.

**Above:** Ricky Bould had a couple of Hornets to trim as well as his Peanut Scale Nesmith Cougar.  
*Photos: Ken Smith.*

## Mike Mulholland's Coupe

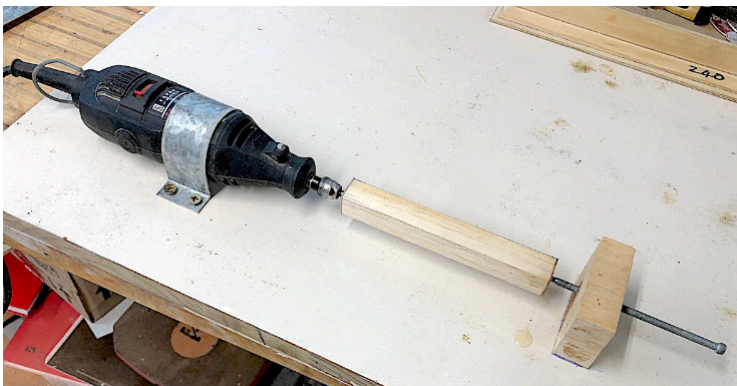
In designer Bob White's article accompanying the plan of the Beau Coupe in the January 1994 Flying Models, the model is touted as suitable for small fields. However, it has all the attributes to perform well in larger spaces. The Coupe d'Hivre class was created in France in the late 30's for off season winter flying. Model Flying NZ rules specify only that the model must be hand launched, and weigh a minimum of 70 grams without motor, and that it is powered by a maximum rubber motor weight of 10 grams.

### The build

This is my first go at this class. I was encouraged to tackle it after seeing the performance of these models built by Paul Squires and others, at the Nationals and North Island Free Flight Champs. Bob White's Beau Coupe seemed to be a good model to start with. The model probably sits near the peak of pre-carbon era Coupe development and construction is quite advanced. I'm not new to building so I thought I'd jump a few steps and build something really competitive.

The fuselage is basically two rolled balsa tubes formed around a mandrel – one parallel for the motor and one tapered for the tail boom. Conventional wisdom recommends using a broomstick for one and a pool cue for the other. Turns out that broomsticks aren't round when you check them, and that the pool cue I bought had the wrong taper and wasn't straight! I had a brainwave and contacted the local wood turning club where the club president took on the production of my mandrels in White Oak as a personal challenge. The third component is a tail section which incorporates the tailplane mount and DT. I turned this from balsa block using my Dremel mounted as a lathe, and bored it out. Photos show the jig used to put these components together in a straight and concentric line!

Wood selection assumes critical importance for this model. The flying surfaces are large, very thin and undercambered. So while wanting to keep weight down, the ribs need to be firm quarter grain wood as they are so thin at the rear. The trailing edges also maintain the curvature of the undercamber which means that the rib / trailing edge joints must be firm if they are to resist the covering forces. The trailing edges themselves need to be very hard and stringy as there's not much of them.



**Left:** The tail section incorporating the tailplane mount and DT, turned from balsa block using my Dremel mounted as a lathe.

The geodetic ribs were glued in as rectangular blanks and shaved and sanded to section using the straight ribs (protected with masking tape top and bottom) as templates. Another feature of this model is the number of jigs and specialist sanding blocks I have had to make. These included sanding jigs to mass produce the geodetic blanks with the correct joint angles.

The twin fin arrangement simplifies the dethermalizer set up. The fins (which are mounted on the outside of the tailplane tip ribs) have an aerofoil section designed to induce a left turn on the glide. This is an easy sanding job on the starboard fin, but on the port fin you need to mask off a flat section for the rib mount, if you want a neat job.

Covering is lightweight Esaki over Mylar, with a varnish seal after doping. This seal was wiped off with 2-ply paper tissue while still wet to leave only a light coat. HLG fliers use this 'toilet paper' technique. The use of acrylic Fluoro red on twin fins and wing tips should aid visibility.

I used rock hard balsa block for the prop blades, which meant that I could make them extremely thin. I sat there looking at them proudly. Then I looked at the pile of wood on the floor and realized that I may as well have carved a form and molded them – next time! Rather than the lighter but problematic fuse DT I buried a stripped down Tomy timer in the wing pylon. The DT line runs internally through the tail boom with only a small section of line exposed near the pylon – very neat.

### **Flying the model**

Coupes are under-powered. You need a glide and ideally you need a thermal. To get the most out of the 10g motor allowance, you wind them right to Death's door. Typically, Coupes use a new motor per flight – 2 flights at most. The good news is that unlike a vintage Wakefield they use very little rubber so it's no biggie! I will be using ten strands of 1/8" rubber wound to about 350 - 500 turns to create a fast climb from the launch, on the 16" diameter prop.

My model has come out just over the minimum weight, at 71g. Testing reveals an incredible slow floating glide with the slightest puff taking it back up again.

Roll on the North Island Free Flight Champs in April!



**Above:** Production of a mandrel for the tail boom turned in White Oak.



**Left:** The forward fuselage tube formed around a mandrel.

**Below:** the jig used to put fuselage components together in a straight and concentric line!





**Upper:** A close-up of the geodetic wing structure.

**Above:** The completed model showing the covered and sealed structure.



## Microsoft Interlude -Ricky Bould

It all started with a phone call from Acumen who inquired if the Auckland Model Aero Club could provide model aircraft for display at a product launch. Microsoft were launching the New Zealand module of its Flight simulator program and they were looking for a model aircraft to display at the event at the Sky City.

As there was less than two weeks to go before the event and they were looking for scale models, I decided to provide them from my own fleet. The next step was to understand how they were planning to display the models and what size they were looking for. The stands and tables were able to accommodate models of 380 to 950 mm and they were looking for about 10 models. The next step was to look at the range of aircraft that were on the simulator and see if there were any in the range I had modelled. Only the Piper Cub and Me 109E qualified but a wide range of types were selected from the propeller driven era with a bias on light aircraft. The selected models were either Rubber or CO2 powered.

Come the day, the first challenge was to find the right entrance to the Sky City car park followed by the challenge of getting the models to the event site. Their baggage trolley took the boxes and assembled models through a labyrinth of corridors after a lift to the floor where the event took place.

Thankfully, there had been no damage and the stands were as described so all that was required was to assemble some of the models. I was slightly nervous about the models being handled, but those attending showed respect, so there was no damage.

In the launch event I was fascinated by the level of detail now available, which has become more than impressive since I last looked at a simulator package in the Air New Zealand facility let alone a home based one. The resolution of 7.5 cm produces amazing detail.



***Inset:*** An Me 109 from the McHard plan.

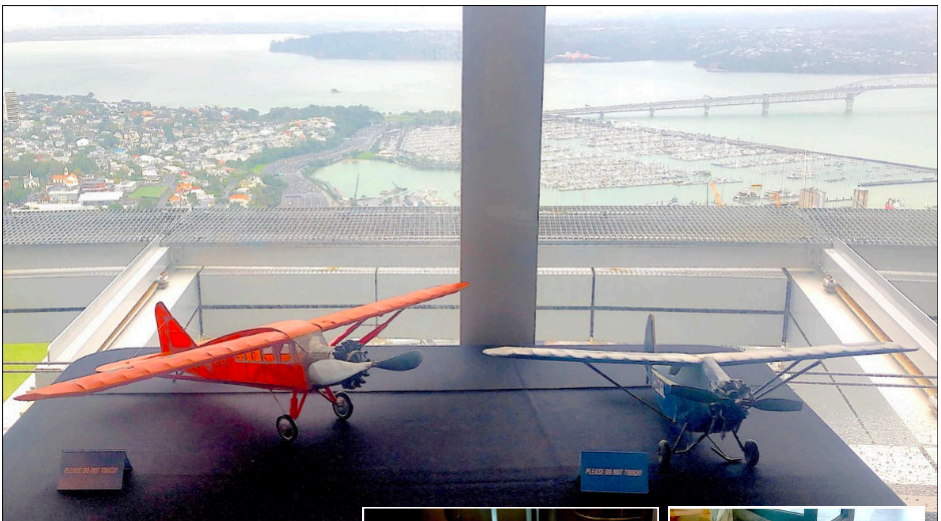
***Left:*** In the foreground, my own design Miles Magister and beyond it, a VMC kit Cessna Bird Dog. In the distance is a GM120 CO2 powered Piper Cub from a Hacker kit.

The entertainment included Ritchie McCaw, after giving an entertaining address, doing an demonstration flight that ended up landing on the northbound ramp on the Auckland Harbour Bridge!

After the presentations the head of the Microsoft team developing the software asked me to talk him through the model. He was German, based in Seattle, and had no difficulty recognising the German types and some of the US aircraft but was not familiar with lesser known aircraft. It was a fascinating discussion that even touched on the possibility of adding a model aircraft simulator module, so who knows!

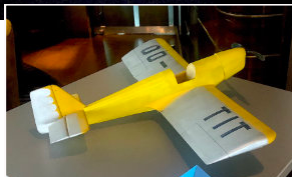
There were also a number of other conversations with participants who usually started with did I make the models, and then showed interest in the detail of the models and what was now available and the material used. Some of these persons were encouraging their children to make models, but it was very much about working on their own. Needless to say I encouraged them look at the MFNZ web site

As we were packing up I was asked if I had tried the simulator, and after answering no I was invited to have a try. I had learned to fly at Cranfield in Bedfordshire and this was selected on the aerodromes list but I had to settle for a Diamond aircraft as the were no Beagle Pups or Austers listed. It was a long time ago. Much to my surprise I managed a slightly squirrely take of that remained on the runway and managed eventually to get lost before finishing. I was then told I was the only one of the visitors to make a good takeoff. All that was required was to pack up and wend our way back to the car after a thoroughly fascinating and enjoyable morning.



**Upper:** Bellanca Skyrocket from the Flyline kit and beside it, a CO2 Comper Swift based on the Aerographics kit

**Right:** Brown CO2 powered APS Tipsy Junior and a VMC Cessna 140.



# Calendar **April - May**

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

---

## **KARAKA**

**Karaka Sports Park**

**Free flight and radio flying within field limitations**

Model trimming and flying.

**Karaka Steward**

Brendon Neilson 09 239 3204

2neilsons@gmail.com

---

## **HOTEO**

**Sundays**

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

**NDC FF Vintage events**

(refer to MFNZ under NDC list).

**Hoteo Steward**

Paul Evans

479-6378 ziply@xtra.co.nz

---

## **AKA AKA**

Saturdays & Sundays

Intending flyers should phone Lloyd Hull to arrange to fly

**Aka Aka Steward**

Lloyd Hull 09 235 2890

---

## **CONTROL LINE**

As advised

Control line flying

Intending flyers should phone Ricky Bould

to confirm where and whether there will be flying.

**C/L Steward**

Ricky Bould

478 8949 unimec1994@gmail.com

---

## **INDOOR EVENTS**

(For Club points)

**Drury**

**Drury School Hall**

Monday April 17

Modelair Hornet

Angus Macdonald Commemoration (7.30 - 10.00pm).

Monday May 15

Scale, all classes (7.30 - 10.00pm)

**Indoor Steward**

Brian Howell

020 4121 5201

b.how@xtra.co.nz

---

# Calendar

**Morrinsville Events Centre Indoor Free Flight Day**

October 8 2023

See notice page 2

**NZ Nationals**

January 1-5 2024

Carterton. Refer [www.modelflyingnz.org](http://www.modelflyingnz.org)

## Slipstream contributions

Contributions of reports and photos on flying activity as well as articles and information about latest projects are very welcome. Please just send them in.

## OFFICERS OF AUCKLAND MODEL AERO CLUB INC.

Patron	Vacant		
President	Ricky Bould	478 8949	unimec1994@gmail.com
Secretary	Stan Mauger	575 7971	stanm09c4@gmail.com
Treasurer	Virginia Fairgray	636 8439	amacsecretary@outlook.com
Recording Officer	Ken Smith	298 6402	kensmith@xtra.co.nz
Bulletin Editor	Stan Mauger	575 7971	stanm09c4@gmail.com
Membership Committee	Mike Fairgray	636 8439	amacsecretary@outlook.com
	Paul Evans	479 6378	ziply@xtra.co.nz
	Brian Howell	020 4121 5201	b.how@xtra.co.nz
	Brendon Neilson	09 239 3204	2neilson@gmail.com,
	Charles Warren	09 238 9430	cpwarren@ps.gen.nz

---

## Club subscriptions

NZMAA Affiliation is mandatory for Club flying

**Senior** \$50 (+\$95 NZMAA)    **Family** \$55 (+\$100 NZMAA)

**Junior** \$10 (+\$30 NZMAA)    **Non-flying** \$40

Intending members with current NZMAA affiliation pay only the AMAC sub

Please make payments using online bank transfer to the Club bank account  
030291-0086069-00 (please use your name as the reference)

---

## NEXT CLUB MEETING AND NATTER NIGHT

**Monthly Club meetings 7.30pm ASME Clubrooms,  
Peterson Reserve, Panmure.**

### **Monday April 3 AGM**

**Theme: Beginner's models**

### **Monday May 1 Prizegiving**

**Theme: Scale models**

**Plus for both meetings, models, plans, engines and  
photographs etc for the table.**

**Trading table: Buy, swap, donate and sell.**

**Visitors and intending members welcome**