



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

January-February 2021



Paul Evans with his Zaunkonig built by Brian Crocker and entered in the provisional free flight scale Memorial Flight Class at the Nationals. *(Photo: Stan Mauger)*

Angus Macdonald Commemoration



Hornet

E V E N T

Drury School Hall, Young Crescent, Drury

April 19, 2021

Plans and building notes for the Hornet were in the last Slipstream. For a fullsize plan contact Stan Mauger.

Ricky Bould has kits of parts available for those who would like to build one.

Indoor Free Flight Morrinsville Day

Sunday October 17, 2021

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

Westpac Stadium Hall, 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

Editorial – On the table

As regulars at monthly meetings are aware, the sharing of information and inspiration from viewing contributions on the table is a key part of these meetings. Those of us who have been with the Club for ages will recall some of the entertaining moments when Club presidents did their rounds. Maurice Poletti comes to mind as one who could be both astute and entertaining as he elicited information about models and other offerings on the table. His humour and good nature in cajoling individual club members to talk about their models is still remembered. In my early years in the Club, in particular, I remember the ideas and information that had come out of these moments and importantly, what bearing they might have on my own modelling interests, as I drove home after Club meetings. Henry Grocock, many will remember, could also entertain us with repartee as well as a genuine intent to discover the background to both items on the table, and also the whims of builders.

They both established a ritual that was very capably continued by a string of other Club presidents, vice presidents and others officiating. Charles Warren in particular, deserves honourable mention for many years of monthly commitment to this role. But there have been many others who have given time to lead the rounds of the table; too many to mention, and this continues with Ricky Bould's monthly contribution.

However, 'the table' is entirely dependent on everyone bringing models and other related items for review. It might be considered that the prolific builders amongst us have an advantage as there is always something that can be picked up and loaded into the car before they depart for meetings, but we all have models and related bits and pieces from past or present endeavours that are of interest to others and that can convey what we do in our modelling. Lets all take to heart, Don Spray's quip on the back page, "no model, no biscuit at supper!". It would be great to have a table full of contributions at the next meeting.

On another note, many thanks to all contributors to this later than normal issue. There are also a number of notices of events that will provide a focus for the year.

Stan Mauger

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.

The deadline for articles for the March-April Slipstream is February 20

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

Monthly Club Night - Stan Mauger

12-11-20

There were a few regulars missing, however, those present were Ricky Bould, Guy Clapshaw, Paul Evans, Brian Howell, Stan Mauger, Brendon Neilson, Ken Smith, Bryan Spencer, Charles Warren and Tony Woodroofe.

President Ricky Bould started the meeting by reminding us of the Club's intention to run another Red Fin precision-style event, again with the prize of a Red Fin engine, next year. He also mentioned that another Peterborough-Auckland Cloud Tramp Challenge is scheduled for 2021 with the date to be advised. Paul Evans announced that there would be a Vintage day on Sunday November 15 at the Blackfeet field. Bryan Spencer reminded us of the next Drury indoor meeting where Kit Scale and Modelair Hornet will be contested. Still on the subject of Modelair Hornet, Stan Mauger mentioned that the committee had decided on an annual Modelair Hornet contest as a commemoration of Angus Macdonald, himself a keen Hornet flyer. While the date is to be confirmed, Stan encouraged us to get building and had spare plans and his nearly completed model on the table as a promotion of the event. *The date has subsequently been confirmed as April 19 as noted on p2 - Ed.*



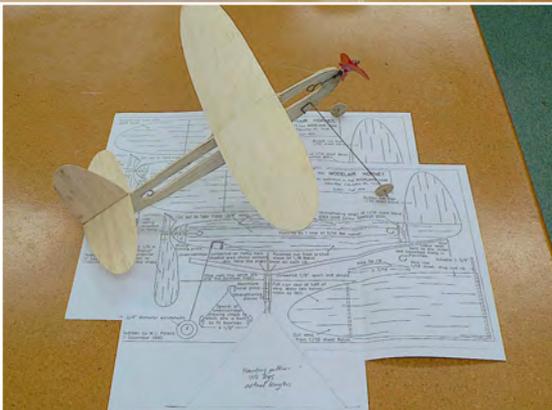
Above: Stan Mauger's Trainer built to learn more about biplane trimming.

Right: Tony Woodroofe's test rig to show how propeller angles influence turn, was demonstrated at the meeting.



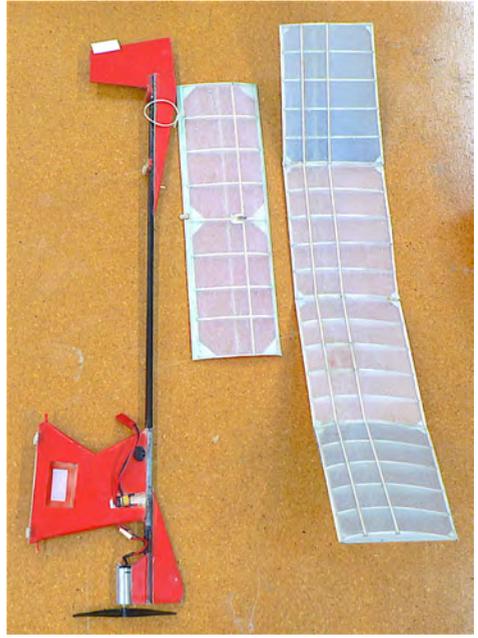
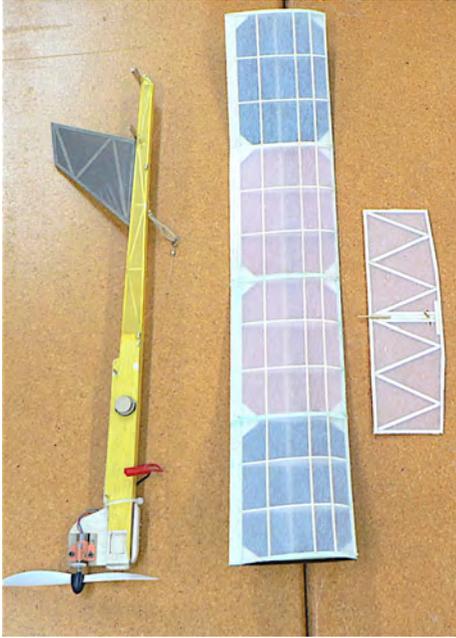
There was a good showing of models on the table considering the lower than average number attending. Stan Mauger had a number of models built or completed over the Covid period, or more recently. He had designed the latest, a biplane, as a trainer to get a better idea of setting up biplane trim, without damaging his free flight scale Vildebeests. He had found that test glides of the Trainer suggested that he had probably got the set up about right. The model was a quickly built simplified design with the same flying areas and proportions as his Vildebeests. Beside it was his APS Frankenstein built to 80% of the original to suit his Red Fin .06 diesel. The model was described in the last bulletin, but he added that covering was lightweight silk over green tissue for fuselage and fin and heavyweight Modelspan for flying surfaces. The wings were two piece to allow for transport and the undercarriage was also detachable. His Keil Kraft Cessna had been completed to fly at Morrinsville, and had been brought to the table previously.

Tony Woodroffe had a scientific looking experiment in the form of a rubber propelled test rig. This was created to test the effects of differing propellor angles on model trim as models take off. He gave a demonstration of this by putting on a few winds and showing us what it would do. A full description of the project is to be found in his article on p17.



Above:
Stan's new Frankenstein, yet to be test flown, but with a large tailplane and light construction, it should present few problems.

Left:
His Modelair Hornet built for Cub competition, but also to encourage support for the coming event to commemorate Angus Macdonald.



Next in line and in keeping with the night's electric theme, was an enlarged APS Tom-boy, of 48" span, designed by David Boddington. It was built for RC by Geoff Northmore and was now in the care of Brendon Neilson. The model was originally Mills 1.3 diesel powered but had been converted to electric by Brendon, using an Emac cf2822. It had flown a lot over its lifetime. Brendon had flown it six times on its last outing at Karaka and as expected, found it a great flyer. Brendon had also brought an electric motor that had an interesting story. It was a HiModel Electric Brushless Motor supplied by Life RC Hobby Supplier and Made in China - where else(?). The rotating part was an interference fit on the base which is attached to the bulkhead. The pull of the propellor caused the two to separate. However, all is not lost, as this motor will be great in a pusher mode.

Continuing the electric theme were two models brought by Ricky. These were his E20 and beside it his Ferry 500. Both have been flown and have about the same endurance capability. The E20 has a geared motor and the Ferry500 has a direct drive. Parts and plans for both models were offered for anyone interested building them.

Ken Smith also brought two electric models. His Jim O'Sullivan Blizzard uses a Roger Morell timer for the motor. The DT is servo driven, and this feature was demonstrated by him. The other model, a Gym Bob of all sheet construction used a capacitor with a small pager motor.

Brian Howell had some interesting offerings for the table. The most visible was a largish unidentified sport electric powered RC design awaiting test flying, that looked to have all the right proportions. It looked a bit like an enlarged Junior 60. Beside it was his Fling discus launched glider that Brian will probably launch with a bungee. These along with an OS glow motor of about .15cu size were purchases at the last Tauranga MAC auction. In a separate box there was a canard indoor model built by Angus Macdonald some years ago and Brian reported that this was a good flyer when tested at Drury.

Dominating the end of the table was Guy Clapshaw's Cirrus glider that had been converted to electric and altered to include wing spoilers as well as ailerons. The winglets fitted had been designed to be removable. There was also a scrapbook of photos from Angus Macdonald from the days when he built a well researched replica of Jean Batten's Percival Gull for a film to commemorate her famous flight to New Zealand. It included photos of Brian Borland's Gipsy Moth also flown in the film. Guy mentioned that he was happy to offer reference to these for anyone who may have an interest the aircraft documented.

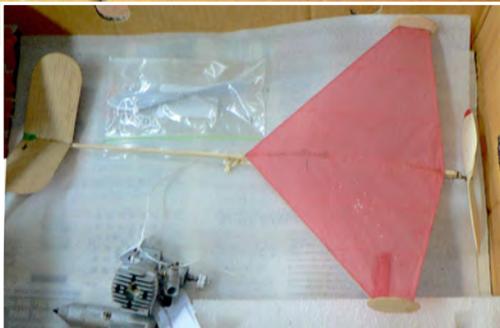
The eagle-eyed may have spotted some further finishing details on Ricky Bould's Flyline Bellanca Skyrocket, including more defined ailerons, further spray finish and detailing to engine cylinders, tail rigging and the carved 9 1/2" propellor.

The evening concluded with some lively natter about full-size aviation subjects and the offer of a cup of coffee.

Opposite: *Models reflecting the electrics theme of the night including*

Top: Ricky Bould's E20 and Ferry 500

Lower: Ken Smith's Blizzard and Gym Bob sheet model, both for electric.



Top: Guy Clapshaw discussing his Cirrus glider progress with Brendon Neilson.

Centre: Ricky Bould's rubber powered Bellanca with some further detailing since last on the table.

Left: Brian Howell's unidentified canard built by Angus Macdonald.

Monthly Club Night - Stan Mauger

17-12-20

Present were Ricky Bould, Guy Clapshaw, Martin Evans, Paul Evans, George Fay, Brian Howell, Eddie Mann, Stan Mauger, Harold McGrath, Brendon Neilson, Colin Polglasse, Ken Smith, Bryan Spencer, Don Spray, Keith Trillo, Charles Warren and Tony Woodroofe. Bryan Spencer reminded us of the Indoor Drury night on December 21 which will be a good opportunity to check out models for the Nationals. Then it was time to go through the models on the table. Putting down his camera, Stan Mauger referred to a plan and article he had brought, for O-Fungle, an unorthodox design by Joel Rieman, from American Aircraft Modeler, which followed the theme of the meeting. It was not unlike a circular version of the Stringless Wonder Tenderfoot design. Having been impressed at how well enlarged Stringless Wonders performed in the Australian Scramble event at the Richmond scale rallies, he wondered whether the design may go well enlarged and strengthened and with Mills .75 power. Also following the unorthodox theme was Charles Warren's tail(plane)less Ludd Bug, designed and built by Geoff Northmore. There was a murmur that maybe he hadn't rolled out the plans completely!

Geoff Northmore was reported to be on to building a canard design for RC electric power. Charles had not flown the Ludd Bug, but Geoff had commented that it flew well and was very aerobatic! A large 3 metre span flying wing, also from Geoff Northmore, was now in Charles's care. The colour scheme was utilitarian, being the result of only having red heavyweight tissue to complete repairs. Power was originally a diesel engine, but that had been replaced by a 3 cell electric motor. The model has a tight looping radius and if control was lost it just kept looping. Rudders turn outwards only. Charles had one more contribution, his APS Li'I Plank, a Pete Wyatt design powered with a DC Dart. The model was found to need plenty of tail weight to fly well.

Next was Guy Clapshaw's DH108-inspired foam tailless RC model. It had started life as a foam combat wing to which Guy had added a fuselage and lots of lead in the nose. He had not had a smooth journey with getting it to fly, having encountered suspected interference problems, which may have been the result of foil covering on the wing affecting radio signals.

Ricky Bould had brought an all sheet canard Ebenezer styled design built some years back. It was powered by a Cox .010 glow motor, and designed by Australian modeller Jim Fullarton. The engine sported a laminated prop and the model was reported to need a wing turbulator. It would be fun (and noisy) to get that Cox engine running again.

Keith Trillo described his models inspired by the Aero Modeller Oculus design. They use 2.7 volt and 3.0 volt super capacitors. Two were Balsa sheet and the third had Depron surfaces outlined with balsa, which was a lot of work to make. Heat had been used to assist forming the Depron, which was laid over a pine form block heated to 140°C. The Depron surface was held down with small weights.

Scale models were as usual, well represented. Don Spray's Stinson SR5 built from an early Peerless plan is progressing well, with covering completed to water shrunk stage.

The cowl complete with a number of blisters, looked like a time consuming job, but worth the effort. He had been busy making up propellor blades using two laminations of .4mm ply and 1/16" balsa surface. They were in turn joined to the propellor hub with square cross-section 3.5mm weed trimmer line. Rubber power was expected to be four strands of 3/16" rubber. His Yak-9 fighter really looked the part and is awaiting flying trials.

George Fay also brought two rubber scale models. His nicely built Albatros DV was from an DPL Laser cut kit, which had good light balsa and light vacuum formed parts, and bodes well for a light good flying model. His Kawasaki Tony built from an enlarged 3 view, had already been flown and like his last Tony with the same colour scheme, was a great flyer.

Paul Evans had been busy re-covering his Zaunkonig inherited from Brian Crocker some years ago. The new covering and spray finish were expertly done and the model will be a worthy contribution to the Free Flight & Control Line Scale SIG's new Memorial Flight event.

Stan Mauger's Keil Kraft Auster Arrow, for Kit Scale was nearing completion. His original model had suffered the ravages of both indoor and outdoor flying over a number of years and the blue tissue had become markedly grey. Starting from scratch again seemed better than doing more repairs.

With the table done it was time to go through a pile of aviation books brought by Keith Trillo and soon all were eagerly taken. Over on the front of the table were Ricky's usual collection of SAM magazines and beside them copies of Slipstream.



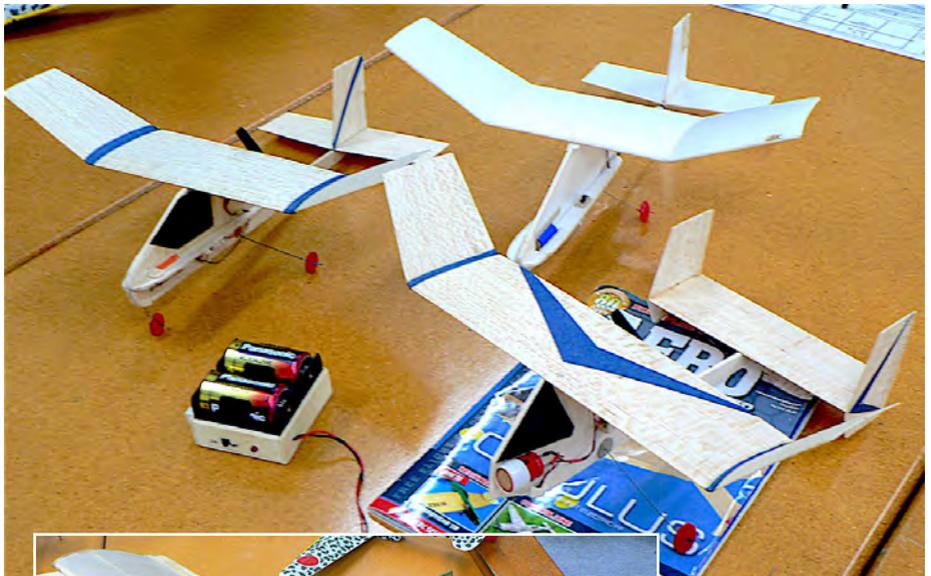
Above: Ricky Bould's Ebenezer style canard easily fitted the unorthodox model theme.



Above:
Two unorthodox models brought by Charles Warren, his Pete's Plank upper and below it, his flying wing.

Inset:
A close-in view to show the electric motor and folding prop.





Above: Guy Clapshaw's DH108-like foam tailless RC model.

Centre: Keith Trillo's Oculus-inspired models to test the use of supercapacitors.

Left: Still on the unorthodox theme was the Ludd Bug now in Charles Warren's care .



This page

Upper:

George Fay expressed enjoyment in building this Albatros DV from a DPL kit.

Lower:

His Kawasaki Tony for rubber power has proven itself to be a good flyer.

Opposite

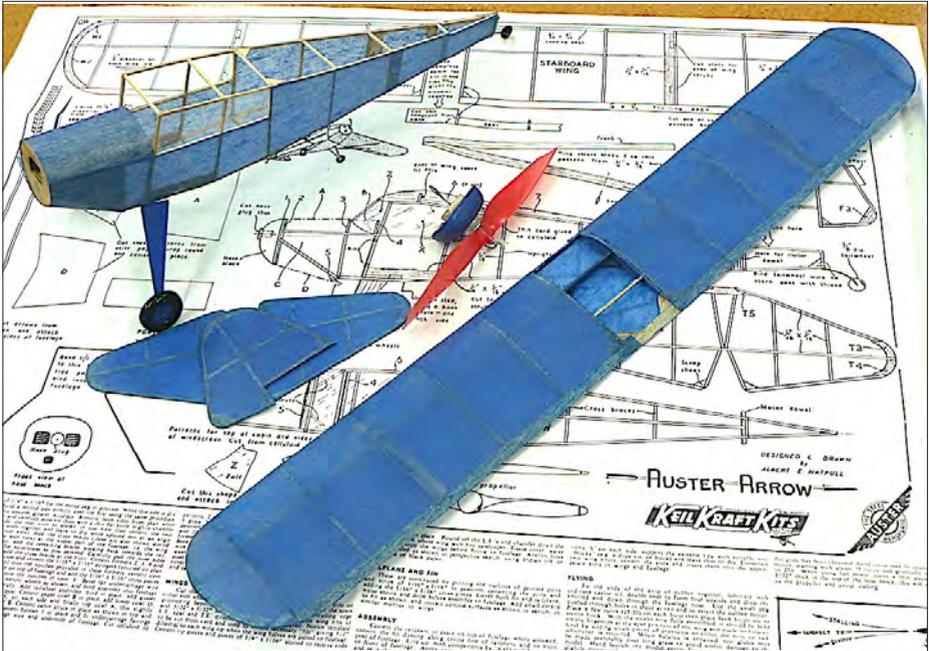
Upper:

Don Spray's Yak-9 looks the part and is awaiting flying trials.

Lower:

Don Spray has been hard at work on his Stinson SR5 which is progressing well.





Upper:
Stan Mauger's Kit Scale Keil Kraft Auster is looking renewed after a rebuild and fresh covering.

Above:
Also much improved is Paul Evan's APS Zaunkonig which has been recovered and repainted for the new Free Flight Scale Memorial Flight class.

A little more than torque - Tony Woodroffe

A couple of Drury Indoor meetings ago Stan Mauger and I were debating the factors that come into play when a model, if failing to become airborne from a ROG or when landing back with a reserve of rubber power, invariably careens around the floor in a right hand pattern.

In consideration, these rubber powered indoor models run slow turning right hand propellers with a particularly coarse pitch and running across the floor in nose up/tail down mode the propeller is in what's termed "translation motion".

This means that the down going blade has an increased angle of attack and may be fully stalled thus producing little or no thrust whereas the upgoing blade has a reduced angle of attack and may be producing far more efficient thrust. This asymmetry would produce a right hand yawing moment. In addition, the tail fin sitting down in the prop wash of the lower traversing blade may be contributing further right-hand yaw.

These scenarios required further investigation. Consulting Darrol Stinton's superb treatise entitled *The Design of the Aeroplane* he states: "A rotating propeller causes several complicated effects, especially when it is pitched or yawed and is no longer more or less normal to the relative airflow. Together they add up to P factor".

Under the headings of: Asymmetric Blade Effect, Precession, Pitching Moment, Prop Wash and Torque, he contributes broad insight but no definitive answer. So what next? A test rig?

Concurrently, I had acquired some excellent indoor model paraphernalia, in particular a beautifully made propeller, handed down from Angus Macdonald's substantial collection. To the prop, rubber motor and adjustable tail fin assembly I fitted a universal joint, positioned for static balance, positive directional stability and with provision for adjustable settings about the pitch axis and either fixed or free traverse about the yaw axis. All pedestal mounted on a tricycle rolling chassis (**Photo 1**).

From a range of settings came these salient test run results:

- Prop shaft horizontal and in line with the rolling chassis, fin neutral, a straight run across the floor for both yaw axis fixed and free resulted.
- Prop shaft 30° pitch up, fin neutral and yaw axis fixed, a right hand curved track, resulted as expected from observation of indoor models.
- Prop 30 degrees pitch up, fin neutral but yaw axis free a right hand rotation of the prop/motor/fin assembly about the yaw axis and the chassis rolling forwards and backwards occurred repeatedly, a great party trick! and clear evidence of torque reaction dominating proceedings.

For further investigation I fixed the prop/motor/fin assembly to a vertical bamboo skewer suspended from the ceiling by a cotton thread thus allowing free yaw axis traverse and omnidirectional pendulum travel (**Photo 2**).

Further tests of a range of pitch and rudder settings revealed the major influence the fin/rudder plays in directional stability and damping of the torque reaction in both pitch up and pitch down thrust settings.

Further salient results

- Prop shaft horizontal, fin neutral stable straight run to maximum pendulum rise (thrust limit) left rudder left hand pendulum circuits, right rudder right hand pendulum circuits little discernible effect of fin placement above or below thrust line.
- 30 degrees pitch up, fin neutral right hand pendulum circuit.
- 30 degrees pitch down, fin neutral left hand pendulum circuit.

Further evidence of torque reaction dominating and opposite rudder settings damping rates of directional change.

Reference

Sinton, D. (1985). *The Design of the Aeroplane*. London: Collins.

1. Lower: The prop, rubber motor and tail fin assembly on a tricycle rolling chassis.

2. Right: The prop, motor and fin assembly attached to a skewer



Drury Indoor - Brian Howell

16-11-20

Flyers included Ricky Bould, Keith Trillo, Dean Trillo, Brian Howell, and Geoff Burgess. Also present were Paul Burgess, Jeremy Davies, Tony Woodrooffe, and Rex Bennis. It was a great night for all, especially for Keith Trillo who trimmed his Capacitor powered planes and then proceeded to make some awesome flights using most of the hall's space available. It was just amazing to watch.

Ricky was busy trimming some of his models with varying levels of success. It was a good opportunity to sort out his kit scale Veron Comper Swift, Keil Kraft Cessna Bird Dog and Veron Luscombe Sedan. He also flew his Modelair Hornet, and like many it flew well.

After doing some repairs to my Hangar Rat I managed to get flights of 1:32, 1:27, and 1:20, and I took my plane home requiring no repairs. I still need to do a little more trimming as there was a slight stall in the flights, and need to turn my attention to finding the best number of turns on the motor for the model. Dean was flying a Vapor as was Geoff. Dean was showing good signs of flying skills. I would have flown my Vapor but I left my Tx at home. All in all in was another enjoyable Drury night.

REDFIN Precision Event, Karaka

The winner of this contest will win a RedFin SAM 75 .75cc engine. The contest is now scheduled for April/May. Date to be notified by email.

Rules

1. Model: Any IC Engine powered model.

2 Target Time: To be set on the day by the CD.

3 Flights: The Contest will consist of three flights.

4. Scoring: The score will be one point for each second variation from the target time up to the set target time.

This will be scored for each flight and the person with the lowest score will be judged the winner.

In the event of a tie a further flight will be made.

5. Minimum flight time is 20 seconds.

6. Engine timers are allowed.

7. DTs are allowed but they must operate at a time greater than twice the target time and are seen as a means of ensuring the model is recovered. In the event of early operation the flight will score the maximum penalty.

Karaka Diary

15-11-20

Brian Howell was first at Karaka, arriving there sevenish. Weather on arrival was perfect for light foamies. He flew his Aeronca Champ all over the whole field looking for lift and found the odd bit here and there. Don Spray then arrived and started flying his scale rubber powered models selecting from his Fairchild Ranger, Bellanca Skyrocket and Stinson Voyager.

Then Ken Smith then turned up. He couldn't sleep either, and he flew his Ferry 500 free flight model and a capacitor powered Gym Bob model from an Aeromodeller plan. He had installed a tiny drone motor and early indications are that it will be more suitable than the previous power source. Both flew pretty well. Ricky Bould turned up next, he couldn't sleep either but wanted brekky before the serious business of flying.

Trimming was the order of the day, as the wind was getting up a bit which wasn't helping. John Swales was last to arrive. He must have had a sleep in and brekky! He flew his T28 Trojan, ending his session with a bad landing with broken prop and nose wheel damage, sadly.

Brian also flew a DJI Mini drone for its second flight and took a video of Ken and Don while they were setting up their planes. He flew an Horizon Sport Cub with SAFE gyro technology but could not get used to aileron control, however, it was a bit difficult as the wind had got up by then and the model was too light for the conditions. He called it quits at about 11am.

BRIAN HOWELL

15-11-20

Don Spray, George Fay, Ken Smith and Brendon Neilson were out early and Charles Warren joined later. Don and George flew a variety of free flight rubber powered scale models. Predictably, George had great flights with his Folkerts SK3 Racer but unfortunately his other Folkerts Racer an SK4, was not on its best behaviour climbing steeply and then zooming down in a hard arrival. Always a good flyer, his Curtiss Robin once again gained good height and looked great in the air. Don Spray came with a number of models to test and fly, bringing out his Stahl Mustang, Yak-9 and Auster to trim. Each showed signs of being stable flyers. His Puss Moth had been refurbished and predictably, flew well.

Brendon flew his electric SAM 56 R/C model that was a scaled up version of a vintage rubber design, and his electric R/C Tomboy. Ken's Bleriot monoplane had been flown early. By the time Charles got there he was flying the Sloworm, high in the sky. Charles flew the electric 2 metre flying wing built by Geoff Northmore, followed by the Ludd Bipe, a dumpy square style biplane, and lastly his Radian. The weather was perfect all day but by lunchtime we were toasted both sides and ready to go home.

CHARLES WARREN



Upper: George Fay preparing his Folkerts Racer.

Lower: Ken Smith posing with his successfully flown R/C electric Sloworm. Further back, George Fay is seen setting up his rubber powered Curtiss Robin.



Above: George Fay's Rubber powered Curtiss Robin on its way to a great flight.



Don Spray and George Fay conferring on the delicate operation of winding the Puss Moth.



Vintage Free Flight Precision Models

Paul Evans's Diamond Demon with Mills 1.3, and below it Ricky Bould's Simplex and Stan Mauger's Frankenstein, both Red Fin powered.

Free flight at the Nationals - Paul Evans

On arrival to the campsite we found that the site we have used previously was taken so the best on offer was 20 metres from the rail line which is not so good when the train comes at 3 30 am. Martin arrived in a campervan and I had a tent with all the models in it. We had a day to spare which was good, as we found a tear in the tent. With Skyla and her sewing we were fine for the week. Ricky Bould arrived and put up his tent, in dry conditions.

The First day was scale and a report on this will be in Scale News. Then next day it was free flight at the free flight field. Ricky was soon in the air with three flights in Vintage Precision with a Simplex. The model was very good in the windy conditions we had as the morning progressed and Ricky was happy. I flew my Diamond Demon in Vintage Precision but only had one flight because of a poor engine run

Martin flew his Archangel in Vintage Glider with some good flights but was trying not to get into the crops as the wind was getting stronger, but his model hit a fence and that ended his day. The wind was too strong for my old Lulu glider. The next task for the day was to get Ceinwen to tow up a glider for the first time. She achieved three good flights. So my time was taken up bringing the model back. Ricky also did some trimming with a P30. On the next day Martin flew in Classic Combined

Aggy was flown in the evening with a good number taking part. Martin and Ricky entered but said they would only be walking for retrievals. Ricky was first away with his SAM 35 powered Presto, Martin took a long time to start the motor of his Fokkernezer biplane. Both were seen on some long walks in the same parts of the farm, but it was a good Aggy event.

On the last day at Free Flight it was too windy for me but Martin had some flights in Open Glider with his Seraph. After three flights the model hit a fence. He flew his volidrome, but the best of the day was Ceinwen having her first glider competition, in A1. The first tow was good in the wind and got a max. A long look failed to find it, so she needed a second model for second flight and this flight was also a max requiring a long look for her model again, under some wild cloud looking like rain. But both models were eventually found and brought back. On the last flight, the wind was still there and the model, a Hot Max, got to the top of the line but then the wings folded so that meant the end of her flight. The next glider, a Mimi took the force of the wind and had a shorter flight so as to stay out of the crops. The time for three flights gave her a winning score in her first A1 glider competition. Martin was jumping for joy that Ceinwen had won on her first try. It had taken him ten years to win the A1, incidentally, with the same model.

The best part of the Nats is meeting other friends and the spit roast dinner was a good night. In the evenings it was good to see indoor flying to a high standard. Ricky made second in Hangar Rat and Ceinwen sixth. We had a great chat and fish/chips evening with Martin, Selma ,Skyla, Ceinwen, Ricky and Stan Mauger who brought his great cake . So come to the Nats for good flying, good mates and a good time, you will learn a lot.



Upper: Ricky Bould returning from retrieving his Simplex in Free Flight Vintage Precision, accompanied by Paul Evans. .

Lower: Martin Evans's Archangel Glider after suffering damage in a collision with a fence..

Free flight Scale at the Nationals - Stan Mauger

The obvious factor that can make or break Nationals is weather and those flying free flight scale events could enjoy near calm conditions in the early time slots of the first two days of the Nationals. Free flight scale drew a good number of entries in Kit Scale in particular. Control line Sport Scale continues to be well supported too. Ricky Bould, Paul and Martin Evans and Stan Mauger all made the upper three places in various free flight scale events, so the Club was well represented in free flight scale. Gwyn Avenell had success in winning the F4H RC Scale event. A full report on free flight and control line scale events will appear in the next Scale News due out shortly. Results can be found by going to the MFNZ website: https://modelflyingnz.org/Admin/Event_Results_Detail.php

Calendar **January-February**

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

NDC RC Vintage events (refer to MFNZ under NDC)

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

Aka Aka Steward

Intending flyers should phone Lloyd Hull to arrange to fly
Lloyd Hull 09 235 2890

CONTROL LINE

As advised

Control line flying
Intending flyers should phone Stan Mauger
to confirm where and whether there will be flying.
Stan Mauger 575 7971 stanm09c4@gmail.com

C/L Steward

INDOOR EVENTS

(For Club points)

Drury

Drury School Hall

Monday February 15

All indoor free flight Scale classes and Modelair Hornet trimming (7.30 - 10pm)

Monday March 15

Hangar Rat and Modelair Hornet trimming (7.30 - 10pm)

Indoor Steward

Brian Howell 020 4121 5201 b.how@xtra.co.nz

Calendar **Looking Ahead**

2021

DRURY

Monday April 19

Drury School Hall (7.30 - 10pm)

Angus Macdonald Memorial - Modelair Hornet

MORRINSVILLE

Sunday October 17*

(10am to 4pm)

Indoor Free Flight classes

Hangar Rat, Hand Launched Glider, Modelair Hornet

Indoor Free Flight Scale classes

Open Rubber Scale, Peanut Scale and Kit Scale

* Note date change

OFFICERS OF AUCKLAND MODEL AERO CLUB INC.

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Club subscriptions

NZMAA Affiliation is mandatory for Club flying

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

Junior \$10 (+\$30 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 meetings 7.30pm at ASME Clubrooms,

Peterson Reserve, Panmure.

February 1: Nationals stories

March 1: Model engines

Your current projects, models, plans, engines and photographs etc are also welcomed for the table.

Please contribute to the table. As Don Spray says, "no model, no biscuit at supper!"

Trading table:

Buy, swap and sell

Visitors or intending members welcome