

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

September-October 2021



Ricky Bould had his colourful Bellanca Skyrocket out for testing in the very pleasant conditions at Hoteo in early August (refer p. 24).

Photo: Stan Mauger.

Free Flight contest day

Indoor flying at Morrinsville

Sunday October 17, 2021

- Hangar Rat HL Glider
 - Flown to MFN7 rules
- 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 MENZ website under Scale FF & CL SIG

Memorial Scale

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

Come and join us

Venue:

Programme: 9.45am Arrive and

Subject to a move down to Covid-19 Level 2

3.55pm Hall vacated.

Fliers Entry: \$20.00

Spectators welcome

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 - Subject to change

August started off very well for model flying. Sunday August 1, was one out of the box with beautifully calm conditions enjoyed by those who summed up the day and ventured either to Karaka or Hoteo. Whilst it was a smaller attendance than normal, the Club meeting on the following evening was lively with a varied table of offerings.

During August I received the report included later in the bulletin, from the Hamilton MAC, recording a very successful evening of Hangar Rat flying that included a number of RC fliers. August 15 saw the North Shore MAC's first indoor evening at the Te Atatu Community Hall. Lots of people arrived. There was a good number of RC flyers but also free flight scale models flown by Ricky Bould, Ken Smith and myself. These flyers were joined by a strong spectator group. On this basis, the hall seemed to be a venue that could lend itself well to regular evenings like this. On the next evening we had our regular Drury indoor evening and as my report this month relates, numbers were down a bit but the venue continues to enjoy support from a group of enthusiastic flyers, including Dave Crook and Bernard Scott who travel the distance from Hamilton to join us. In between putting in some Kit Scale flights I managed to get some photos of the evening and on the following afternoon in the middle of colour correcting them for the bulletin, the phone rang and a friend asked if I had heard the news that had broken at three o'clock. We had had our first community-transmitted case of Covid-19, the Delta variant, since last year's outbreaks. As all New Zealand readers will be aware, our Prime Minister shut down the country immediately and we moved into Level 4, our highest level of isolation.

This of course means that Club activities are all on hold for the present until we return to Covid levels that allow us to get out and fly again and to hold meetings. We have been advised by the Karaka Sports Park that it is closed. Morrinsville have notified us that the Stadium will be closed until we are down to level 2. The Peterborough MFC have also indicated that our Annual Cloud Tramp Challenge should move to next year and we agree. As the requirements at the various Covid levels may have changed, it is worth checking them once more on the Covid website https://covid19.govt.nz

Club activities are very much subject to change. The Club committee will advise when each of our normal activities will resume. Until then make the most of isolation and stay safe . . .

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 next Slipstream is October 26

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

July Monthly Club Night - Stan Mauger

5-7-21

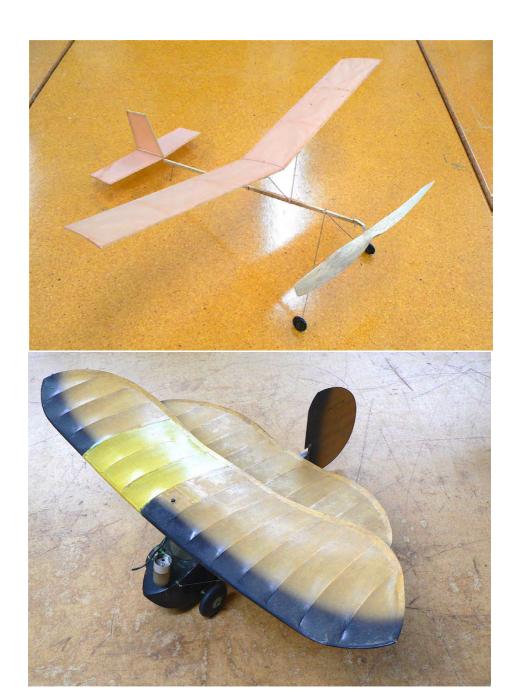
Present were Ricky Bould, Paul Evans, Brian Howell, Eddie Mann, Stan Mauger, Bill McGarvey, Brendon Neilson, Colin Polglase, Ken Smith, Bryan Spencer, John Swales, Charles Warren and Tony Woodroofe

The meeting got under way with the usual call for notices. Bryan Spencer reminded us of the coming indoor Drury evening this month and Stan Mauger confirmed that the classes flown would be as per the list on the inside back page of the July-August Slipstream. Ricky Bould detailed the MIMLOCT Cloud Tramp Commemoration event also advertised in the last bulletin, pointing out that models do not need to make endurance flights in the Domain. The Peterborough – Auckland Cloud Tramp Challenge is also on the horizon for later in the year. He also noted the Morrinsville Indoor day in October, classes for which are listed in each Slipstream until then. Bill McGarvey put out a plea for the plan of the Bettair Sunchaser, a Modelair Peanut look alike. He hoped that someone could help. There were suggestions that the plan may have been redrawn and published in Slipstreams pre 1990. Bill reflected that the model was light and flew on not much rubber.

Turning to the table Ricky looked for the owner of an indoor model that looked like a Hangar Rat but wasn't. All was resolved when Bill McGarvey mentioned that the model was his and that it was a Modelair Trainer. The wire wing saddle gave it away. It had a nicely carved propellor made by Bill and the model dated back to the days when the Club ran a class for this design as an endurance event.

Next to it was Stan Mauger's APS Tomboy originally built for a Cox .049 Babe Bee and reduced to 34" span. It had been recently covered in heavyweight Modelspan and repaired after some years of use in Aggie events. The Tomboy was brought to the table as a poster model to create interest in the forthcoming RedFin Precision Challenge and Ricky Bould had brought the SAM75 diesel that will be awarded to the winner of this event. Stan's model caught the attention of Eddie Mann who is getting under way with building a Tomboy for RC and electric power. Several noticed that Stan had put in washout on both wings. This prompted a discussion about the benefits of washout to prevent tip stall. Tony Woodroofe also came into the discussion presenting another perspective informed from his knowledge of full size aircraft design. He suggested that wings with a square plan form would not normally need washout and that using it would reduce aerofoil and wing efficiency.

Brendon Neilson had designed a single box to carry both his Hangar Rat and his Modelair Hornet. The design also included places for a clamp and table top winding stooge. It all looked very compact. Another clever box design was brought by Brian Howell. He had configured his simple box for a top and tail accommodation for two hangar Rats with the wings fitting neatly on a top ledge. He had also brought a Modelair Hornet built by Keith Trillo and handed to him.



Top: Bill McGarvey's Modelair Trainer built some years back is of similar layout to a Hangar Rat. **Above:** Also from Bill, a Bryan Marsh-built Flying Flea in need of a new home.

Charles Warren had also brought a Hangar Rat and Modelair Hornet. Both of these models have been flown very successfully at Drury. Charles's final offering was a nicely built APS Sporty biplane built previously flown by John Poletti. It drew admiring glances.

Ricky Bould had inherited a block form for making Modelair Hornet wings. This along with templates for wing and tail outlines had equipped him for production of Hornet parts for any who would like them. He explained that he used Sardine top panels for making the metal strip nose bearing on the model. Others suggested that drinks can top panels were also ideal. It looks as though model builders are very resourceful. Beside it were Ken Smith's nicely built Hangar Rat and Modelair Hornet, both of which are now proven flyers.



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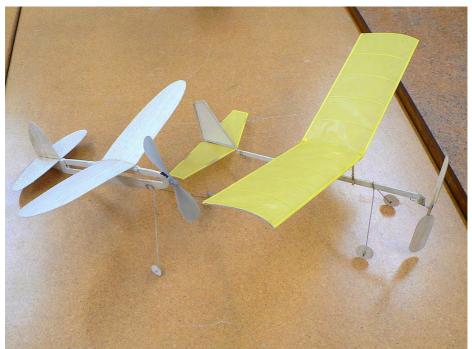
There were also a couple of scale models on the table. Paul Evans had received a partly built Stearman biplane for RC and electric power, from Keith Williamson some years back, with the condition that the model be completed. Paul felt a strong incentive to get on with it. Bill McGarvey related an interesting background to the Flying Flea (Pou de Ceil) tandem wing subject that he had inherited from well-known aero modeller, Bryan Marsh. Some years ago, Bryan had asked Bill to look after a number of his models, including the Flea, so that space could be made for a mobility scooter, in Bryan's garage. Sadly he died and Bill was left with these models. As it was unlikely to be flown by Bill he was looking for someone to hand the model on to. Ricky weakened and was seen carrying the model away at the end of the evening. It will be challenging to restore, with the generous wing wash-out needing attention. As was murmured in the meeting "the considerable washout would need considerable consideration!"

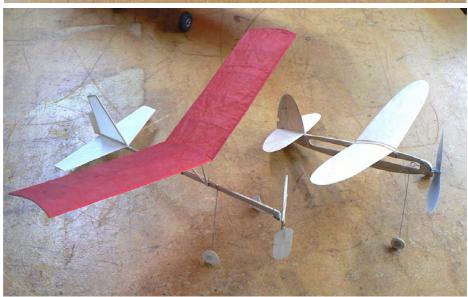
It was heartening to see so many indoor models brought for the table, following the theme of the evening.



Opposite: Brian Howell's model box show Hangar Rat fuselage accommodation in the base of the box (lower) and a tray for the wings (upper).

Above: Brendon Neilson's indoor box for Hangar Rat and Modelair Hornet, with places for tools and stooge as well.



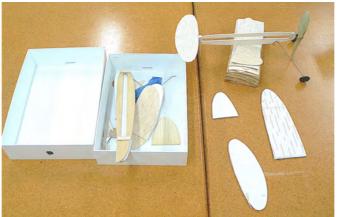


Upper: Brendon Neilson brought his Modelair Hornet and Hangar Rat. **Above:** Charles Warren also had these two indoor designs for the table.









Top: A lightweight film covered indoor duration model built by Keith Trillo and brought along by Brian Howell.

Centre: Brian's Modelair Peanut now a regular at Drury(left) and an indoor carnard pusher that is already a proven indoor flyer.

Left: Ricky Bould's modelair Hornet and beside it the forms used to mould wings.





Left: The RedFin Challenge SAM 75 engine to be contested for when the weather is right.

Monthly Club Night - Stan Mauger

2-8-21

Present were Ricky Bould, Guy Clapshaw, Paul Evans, Brian Howell, Stan Mauger, Mike Mulholland, Bill McGarvey, Brendon Neilson, Ken Smith, Bryan Spencer, Mike Stoodley, John Swales, Charles Warren and Tony Woodroofe

Ricky Bould reported that the Peterborough-Auckland Cloud Tramp Challenge had now been moved to October. It is just a matter of finding some good weather to fly the event during that month. The usual stalwarts plus any other supporter of the event were reminded of the annual MIMLOCT event down for Saturday August 7. This is an international celebration of Charles Hampson Grant's contribution to aeromodelling. Ricky also reminded us of the Morrinsville Indoor Day on Sunday October 17. Bryan Spencer mentioned the coming Drury evening on which Kit Scale and Modelair Hornet will be flown as Club events. It is also a good time to sort models out for the Morrinsville day.

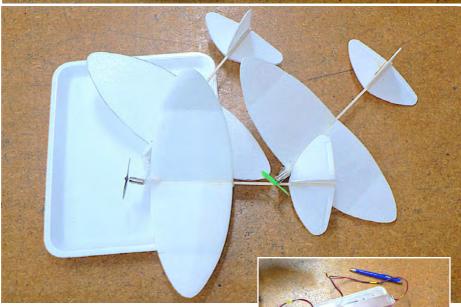
First to talk about models on the table was Brian Howell, who had brought along the beginnings of his Presto from the Aeromodeller plan. Beside it was his lovely SAM 35 diesel, surely a good incentive to make some more progress. He also had a plan for a Chubby 13" span control liner from another Aeromodeller design, made largely from 1/8" X ½ balsa. He plans a twice sized enlargement of this for an RC model.

Fresh from some testing at Hoteo, Ricky Bould's Cloud Tramp was a reminder of the MIMLOCT fly off on the next Saturday. His recently acquired 2.5cc David-Andersen diesel, a beautifully engineered motor, was about to be tested. His Power Up kit looked like a suitable model for super capacitor adaptation. The model would make up into something that looked much like a paper dart. The kit came with a clear instruction sheet.

Mike Stoodley and Ken Smith both brought super capacitor models. Mike had built a small foam model as a test bench and was able to give us an update on his experimentation so far. Ken Smith started with reference to his Gym Bob model from Aeromodeller. This had been the starting point for getting under way with super capacitor powered models. The design offered much information on equipment and motor set up. He also acknowledged the progress made by the late Keith Trillo.

The two APS sports models brought by Stan Mauger, his Tomboy and Frankenstein, were on the table to show the changes he had made to tail elevation when testing them both at Hoteo on the previous day. This started a discussion about how much tailplane trailing edge packing had been used by some who had Tomboys. With a quite large lifting tailplane it seemed that Tomboys could be flown with a more rearward centre of gravity than models with flat plate or symmetrical tail sections and smaller tailplane areas. Stan had also been through Club Slipstream archives and was able to find the Bettair Sunchaser design that had been redrawn by Maurice Poletti in the 1980s. This design was brought for Bill McGarvey who remembered the design fondly from his teenage years and was keen to build it again. At the end of the table was a 2.4m glider acquired by Bill as a possible radio control project some years back but never proceeded with. He was looking for a new home for it and gave it to Brian Howell on his way out. This was an evening of varied subjects for the table. Something of interest for everyone!





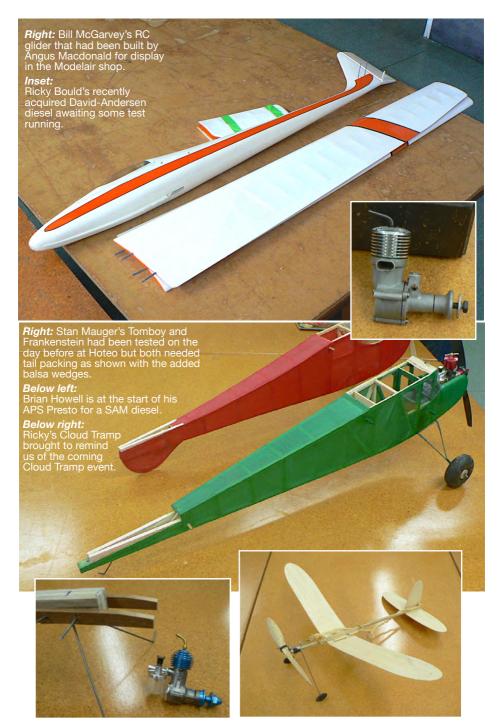
Top: Ken Smith's Gym Bob model and the Aeromodeller article that initiated his interest in capacitor powered models

Above: Ken's experimental models also for this power source, all built using recycled foam trays.

Right: A plastic container for the charger.







Drury Indoor - Brian Howell

19-7-21

There was what must be a record attendance on this indoor night with quite a number of spectators. Of those just enjoying watching proceedings, several are set to be regulars. There were nine flyers and eleven spectators.

Being down for a practice night, there was no competition flying. However, a number were testing and trimming Hangar Rats and Modelair Hornets.

Most of the evening was spent sorting out Hangar Rats with varying success. The group included Ricky Bould, Dave Crook, Brian Howell, Brendon Neilson, Ken Smith, John Swales, Colin Polglase and Charles Warren. Many of the above also had Modelair Hornets. It was good to see Mishka Meredith getting good flights from his Hornet.

Geoff Burgess and John Swales also had some RC Electric models to fly. Geoff flew his Citabria, Champ and Pup ARFs and Vapor. John his Vapor and Trojan. He also assisted visitor Paul Bolland to fly his new Stearman ARF RC model.











Top: Ricky Bould offering some tips to Brendon Neilson for his Hangar Rat (left). Brendon setting up his Hangar Rat, Charles to the left (right).

Above: John Swales looking happy with his Hangar Rat (left) and Ken Smith looking over his (right).

Drury Indoor - Stan Mauger

16-8-21

After the good numbers last month, attendance was down on this night. Some indoor flyers had also been to the Te Atatu Hall evening on the night before. There was plenty of Modelair Hornet activity during the evening, including flying by Ricky Bould, Ken Smith, Brian Howell and Bernard Scott, but no one elected to put in contest flights for Tony Woodroofe and Manfred Scherbius who both had score sheets and stopwatches poised for results. The judges were also awaiting entries for Kit Scale but only Stan Mauger put in flights with his Keil Kraft Cessna for judging. He soon had his model flying well in the space of the hall. Ricky Bould encountered problems with his VMC Bird Dog and decided to put it away. A big thank you to both judges who coped with scale judging at short notice, very well. We continue to enjoy the participation of Hamilton MAC flyers Bernard Scott and Dave Crook who make a long journey to join us. They contribute some great model flying to the evening.

Right: Brian Howell offering Ricky Bould some help to wind his Modelair Hornet.

Below right: A close-up of Dave Crook's method of anchoring his Hangar Rat for winding.

Below left: Stan Mauger getting his Keil Kraft Cessna away for a Kit Scale flight.





Float like a butterfly - Tony Woodroofe

Experimenting with paper darts in my early teens, I discovered that a simple rectangular piece of light cardboard of about 6 to 1 aspect ratio suitably balanced with a blob of plasticine on the leading edge and set with a few degrees of dihedral could maintain a stable glide of more than 5 to 1 in the family lounge. What I found interesting yet puzzling at the time was that the wing would only achieve a stable glide with a precise centre of gravity setting of 30% chord, whereas the theory told me that the centre of lift was at 25% chord.

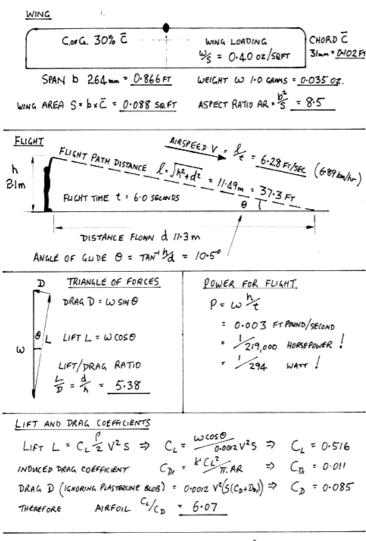
Fast forward more than half a century and my first introduction to indoor model flying (at Drury) ... what a revelation! What have I been missing? Being an observer immersed in this new super low Reynolds number environment I realised it was about time I worked out some numbers relating to that simple flying wing format from my youth. Putting aside dreams of a sophisticated low speed wind tunnel with delicate instrumentation, one can make do with nothing more than a tape measure, homemade micro balance and a stopwatch. Instead of light cardboard I cut a thin (1.5mm) rectangular wing of blue styrofoam on my homemade hotwire table, gave it a pinch of dihedral, balanced it to 30% chord with a blob of plasticine and weighed it ready for test flying.

Note that the accompanying flight results were measured in 'METRIC' units then converted to 'GRAVITATIONAL' foot slug second pound force units for calculations of simplified equations.



As for the 55 year old puzzle?

Although unable to determine accurately, the wing appears to fly reasonably flat so that the angle of attack is around 8 to 10 degrees. Along with a lift coefficient of 0.5, this would suggest a laminar bubble shifted well forward near the upper leading edge of the wing and hence the centre of lift shifting aft to 30% chord.



Hamilton - Bernard Scott

Inspired by AMAC indoor flying at Drury, an evening of Hangar Rat flying was arranged for the Hamilton club. After some encouragement at Club meetings, about a dozen members took up the challenge of building a Rat - a good number as almost all members are strictly RC fliers. A hall at Te Rapa proved excellent for indoor flying, bigger and higher than Drury with just one central wire to be avoided. The quality of the builds was variable but all were commendable considering this was a first-time FF attempt for most. I was impressed by the doggedness of some of the new flyers in getting their Rats airborne and achieving flights of 30-45 seconds, which I think is rather good for first attempts. Fraser Briggs, the world-class aerobatic flier, was particularly impressive, for after solving problems with thrustline he was clocking up 60+ seconds flights.



Above: Busy preparation at some of the tables

Right: Allan

Right: Allan Rowson used an electric drill to wind



MIMLOCT in Hamilton - Bernard Scott

Despite the Hamilton club's willingness to embrace Hangar Rat, no amount of cajoling got any takers for the 2021 MIMLOCT, so I went it alone again. The original idea of simultaneous flying around the world appeals, so I flew at 4am, hoping that I had got the time conversion correct. The evening before was wet and windy as was the later morning of the appointed day. It had looked like it would be a grim morning, but, between 3am and 6am the skies were clear, bright stars were out, and the wind did not blow - a little window of opportunity, opened just to fly MIMLOCT at the early hour.

To reduce model weight I had replaced the heavy LED beacons on the Cloud Tramp with lighter ones and removed the sound beeper. The LEDs turned out to be barely adequate to follow the model and I needed to keep right under it while it was flying. For this reason, turns were limited to 400 to keep flights lower and shorter than usual. The CT performed very well, or so I judged by the steady circling of a patch of light against the black sky. The novelty of night flying and the calm conditions encouraged more than the usual couple of flights and I only quit when my fingers became too numb to wind safely.

Photographs were taken with a cellphone but activating the flash is beyond my technical capabilities so the results were just murky blurs. However, a bit of doggerel started to come to mind as brain cells cooled to optimum operating temperature and this is attached for (hopefully) your entertainment.

THE THINGS WE DO FOR C.H.G.

MIMLOCT moment comes to pass As frost is crisp upon the grass For timing here in our En-Zed Is when the sane are warm in bed.

Yes, I know they've changed the rules But there are some, perhaps just fools Who like to play the harder part And choose to suffer for their art.

Spurn the early morning start?

That's what sets MIMLOCT apart!

Sadly, up in Auckland town

They all prefer their eiderdown.

On appointed winter's morn Cold and bleak, but ne'er forlorn I cross the empty local park To meld into the icy dark.

A bright headlight upon the hat Helps with winding, and all that Then, by following beacon flashes Off on blind retrieval dashes.

What do neighbours make of this Surely something is amiss? The Police at 4am are slow There's time to fly, retrieve and go.

So will it be, again next year Facing another morning drear To honour the glorious C.H.G. (However dubious that may be).

Bernard Scott, 2021





Far left: Fraser Briggs watching his Rat circle.

Left: Wayne Cartwright launches. He made excellent times

Karaka Diary - Charles Warren

1-8-21

This was a beautiful sunny day with a light wind which gradually died away as the morning wore on, Ken Smith, Dave Vare and Russell Brown were at Karaka early and Charles and son Roger turned up later. Roger was i/c photography for the day. Later Tony Woodroofe and Mike Mulholland visited to see what we were up to.

Ken flew two Ferry 500s and his capacitor powered Gym Bob. The little Gym Bob was sulking after bending itself on the ceiling of Drury hall at the indoor meeting. One of the F500s flew better than the other.

Dave's electric powered aircraft flew consistently and apart from the ones pictured he had his helicopter and ducted fan Super Scorpion. His Fox electric powered glider took off from a dolly made from a modified push chair shown below. His dog chases it on take off and is disappointed when it flies off and just leaves its wheels behind.

Russell flew his V tailed FMS electric glider with no problems. Charles flew the angular bipe and the latest iteration of his electrified Fledermaus as well as his old stand-by the Radian.



and symmetrical wing section.

Right: The slow flying Ludd Bipe which only goes to show that it does not have to look pretty to fly all right.





Top: Dave Vare's Extra 330 electric powered 3D model at rest between flights.

Above: Dave's Fox electric powered glider which takes off from a dolly made from a modified push chair shown at right.

Hoteo Diary - Stan Mauger

1-8-21

Early to fly during the day was visitor Dave Coleman, with his Modelair Humming Bird powered by an ME Hornet. The Heron gave a healthy reserve of power and the model was heard puttering overhead. The Humming Bird had been built some years ago to test RC escapements. On the day it was flown both as free flight and RC. Martin Evans had a number of models to fly. He flew his Coronet vintage model throughout the morning and Ceinwen Evans also took the controls from a hand launch for several flights. She is now a confident pilot. Martin also flew his Meadow Lark and Mini Drake. Paul Evans added some excitement, with some fast flights up and down, from his Ebeneezer. His electric Stearman seen on the table at the July meeting was still needing some trim adjustments. He also tested a Sopwith Camel with pendulum control built by Michael Taylor way back. There was still some setting up needed. The usually reliable Fearnley–designed Luton Minor was not wanting to fly so he put it away.

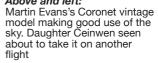
Ricky Bould had a number of models to fly. He was particularly pleased with flights from his VMC Jodel, KK Elf and Simplex. His Bellanca still needed work. His Presto was going better and better as the new Schlosser diesel had more running time.

Stan Mauger took advantage of the calm conditions to test two sport models. The first, his rebuilt MP Jet powered APS Tomboy was not wanting to climb until a good deal of packing was applied under the tailplane trailing edge. His reduced Frankenstein, also an APS design, suffered in the same way and received the same remedy. Adjustments made, both models flew nicely with gentle glides once power was off. After building free flight scale models, it was clear that larger tailplanes on these sport models affected the trimming process.



Above:Dave Coleman getting his ME Heron-powered Modelair Humming Bird away.









Above: Stan Mauger's APS sport model designs including a MP Jet powered Tomboy right, and reduced Frankenstein with a new RedFin .06 diesel, left.

Below: Paul Evans tuning the DC Dart in his Sopwith Camel scale biplane as he made a start on trimming flights.

Inset: Ricky Bould's Keil Kraft Elf on the winding stooge.



Calendar September - October

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

KARAKA

Karaka Sports Park PRESENTLY CLOSED

HOTEO PRESENTLY CLOSED

AKA AKA- PRESENTLY CLOSED

DRURY HALL PRESENTLY CLOSED

MORRINSVILLE

Subject to a move DOWN to Covid-19 Level 2

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 Memorial Scale,

and Kit Scale.



Above:

Ricky Bould's Ballerina, none the worse for some time out in the paddock at Hoteo and since returned on the morning by the farmer who found it.

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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) **Non-flying** \$40

Intending members with current NZMAA affiliation pay only the AMAC sub

Please make payments to

The Treasurer Auckland Model Aero Club Virginia 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.

September 6: Cancelled due to Covid-19

October 4: Theme - Models for Morrinsville
SUBJECT TO MOVING TO COVID-19 LEVEL 2

Trading table:

Buy, sell, and free to a good home.

Visitors or intending members welcome