



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

October 2016



Seen at the last Club meeting, Bryan Spencer's Hilliard designed Dwarf, now for electric power.



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: James Price's Tomboy, seen at Richmond NSW

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 November Slipstream is October 29.

Editorial – Indoor pursuits

Amongst the usual mix of articles, this month's Slipstream includes a number of indoor articles. It was impossible to allow the passing of our Balmoral indoor venue without a retrospective of activity there. A number of us, myself included, made our first flights of models in various classes there. Despite the limited space and in some cases wall, chair and ceiling banging by our models, most look upon the venue with warm thoughts of the good nights and great flights experienced there. It has been a great help in fostering interest in free flight indoor classes over the years.

The monthly club meeting theme last month, was indoor models and the projects and models on view offered optimism for continuing strong activity in indoor classes. Mike Mulholland's and Gwyn Avenell's initiatives with scouts and primary school groups respectively are to be commended in creating interest in the hobby as well as in indoor flying.

This month's Morrinsville event is significant for both club indoor fliers and those from elsewhere in the country able to attend. On the basis of previous events there and contact from those interested in attending, all points to a very successful day. The Morrinsville Stadium day has already proved the value of great venue and has brought fliers back into indoor flying again as well as attracting indoor flying 'regulars'. Hopefully, this success will be repeated on October 9.

Stan Mauger



Above: Balmoral Hall on an indoor scale evening.

Left: Ricky Bould winding his Hangar Rat with Don Spray assisting. John Swales setting up his Hangar Rat beyond them.

Monthly Club Night - Mike Fairgray

5-9-16

Present were Gwyn Avenell, Ricky Bould, Paul Evans, Mike Fairgray, Lloyd Hull, Angus Macdonald, Stan Mauger, Mike Mulholland, Brendon Neilson, Arthur Pearce, Bryan Spencer, Don Spray, John Swales, Keith Trillo, Charles Warren and Keith Williamson.

President Charles had his ankle encased in a 'moon boot' so handed over to Ricky Bould to conduct the table. Mike Fairgray had his usual selection of model magazines.

Theme for the night was Indoor Models

On first look a number of members had been busy building peanut models which were presented in the construction stage of the build. How they manage to build such detailed and small models is a wonder.

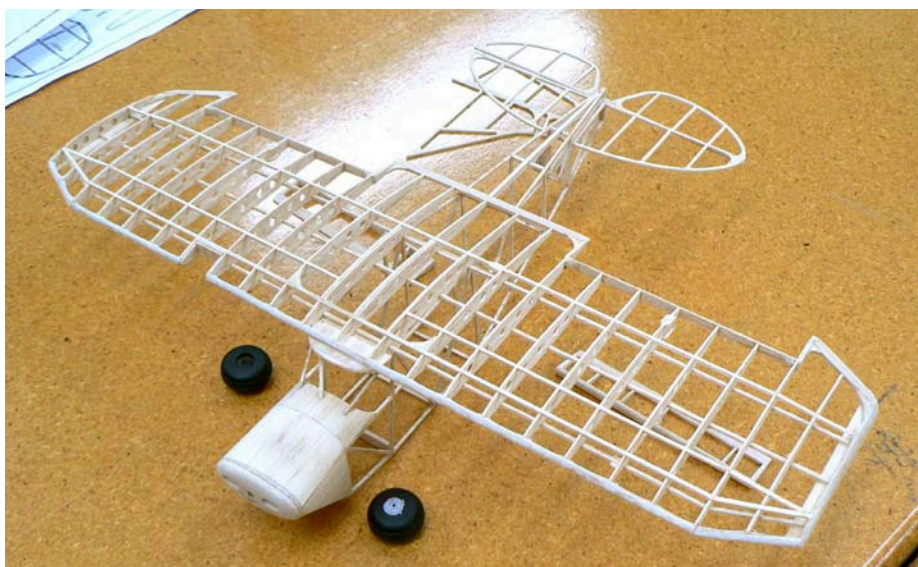
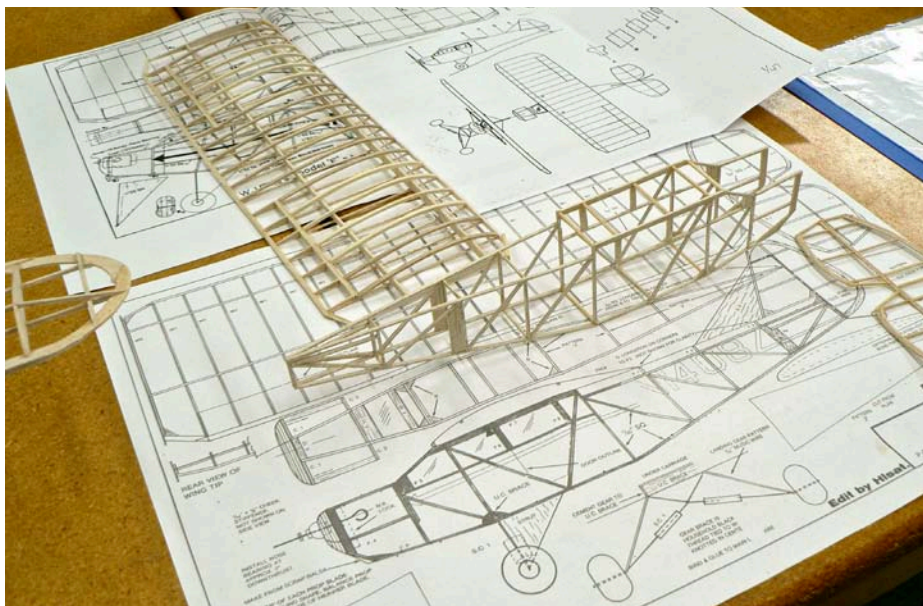
First up was Keith Trillo's finely crafted peanut Fike model E. This was of the Rudi S Marczs 1975 modified version of the original Fike, using downturned tips rather than the end plates fitted to the original design. Keith had been able to connect with the son of the designer via the Internet, who supplied additional information on the aircraft.

Ricky Bould had caught the Fike bug. His slightly larger design was nestled next to Keith's. His model was of the original Fike E from the Micro X kit, scratch built from the plan. Formers were used to make the open ribs, and all outlines were laminated. He also had his Keil Kraft Luscombe Silvalaire, reporting that it was starting to perform well now. Just goes to show that with years of experience in the art of trimming models, these Keil Kraft kits which drove many a young modeller crazy, can be made to fly well.

Angus Macdonald had brought his nearly completed Jumpin' Bean 36 inch electric powered model. This was described as an 'easy build' which Angus said was far from the truth, as it was a 'shocker' to build. The original model was designed for a .5cc engine and Angus had now converted it to electric. Placing all the required electric components and cables into the nose and very narrow fuselage was project in itself. Angus had also found some early photographs dating from 1932 of himself as a youngster with models that were the type in vogue for that time.

Don Spray's Piper Pacer was definitely not an indoor model. It was finished in the typical high standard that we have come to expect in Don's models. He did redeem himself with a peanut scale Tailwind and an indoor Keil Kraft Piper Family Cruiser proving once again that the small Keil Kraft models are suitable for Kit Scale and Plan Scale competitions.

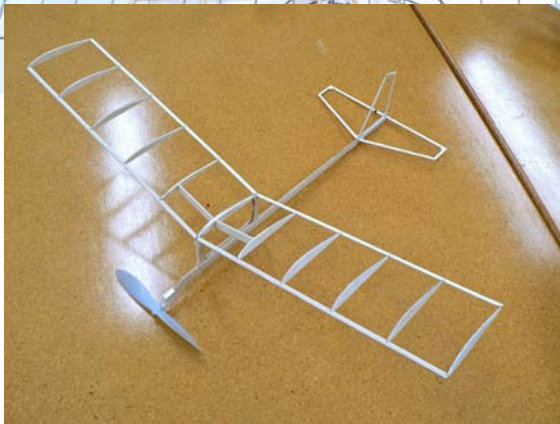
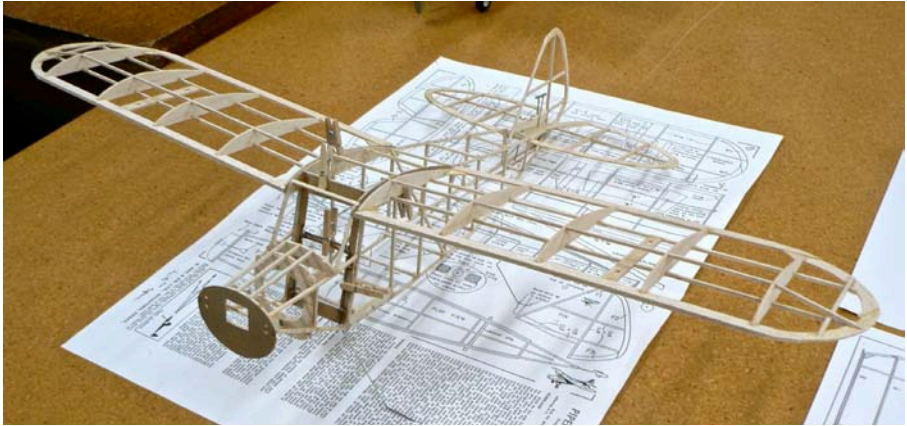
Bryan Spencer had been hard at work building an enlarged Dwarf from the Dave Hilliard 1949 plan that was originally for a Kalper diesel. This is a 26 inch free flight pylon model that he has converted to electric, using the gear from lightweight electric models that are stripped of their electric components once they have taken their last flight. Some months ago Bryan brought along felt markers that used a spray to colour in areas. This was the first time that he had used the marker spray and he found it changed yellow colour areas to red when it hit an area where super glue had been used. Other than that, reasonable colour coverage was achieved.



New Peanut Scale Fikes.

Upper: Ricky Bould has chosen laminated sliced rib construction.

Lower: Keith Trillo is further on with his model. It looks well detailed.



Keil Kraft 3/6D flying scale nostalgia.

Upper: Don Spray has his Piper Family Cruiser well under way.

Lower: Ricky Bould's Luscombe Silvaire, now well trimmed for indoor kit scale flying.

Left: The School Rat prior to covering, built by Mike Mulholland (see p.15).

Keith Williamson brought his well-flown Hangar Rat. He also had an Ohlsson 23 converted to glow, for sale, which saw Charles procuring the engine for an undisclosed sum. Lloyd Hull has now completed the build of his RC Airmaster and it looked splendid in its red and yellow covering. It is electric-powered and there is plenty of room in his hand made aluminium cowl. The Airmaster was originally kitted by Modelair.

Mike Mulholland has been working on the production model of the Tiger Moth that Avetek will be offering as a kit. The model is 1/5 scale and designed for a 120 4 stroke engine. Mike is building two fuselages and Gwyn Avenell is building the four wings. Mike has taken his usual approach to model building by making a jig to produce identical fuselage sides. First, he built one side and then using a flat length of MDF board laid the completed fuselage down and with the use of many small wooden spacers placed either side of the longerons and cross pieces, the exact shape and positioning of the components was duplicated, the result being that every fuselage side produced was an exact copy of the master.

His Peanut Scale Somer Monoplane was sitting on the table next to the Scout project which is a redesign of the Hangar Rat called a School Rat. The changes made were larger wings, solid ribs and a plastic propeller. These changes were made to enable a simpler build for the Scouts. Mike has been assisted by Ricky Bould in building one half of some of the wings where the Scouts were running out of time to complete the full wing. Flying will take place at the Drury Hall and as before, members were encouraged to attend and lend assistance and bring winders. This is a great project and thanks go to Gwyn of Avetek who supplied the balsa and laser cut parts, Mike and Ricky for assisting with the project.



Left:
Mike Mulholland's
Peanut Scale Somer
Monoplane showing
the pencilled
indication of fuselage
cable bracing.

Mike Fairgray had a squadron of indoor models well-made but never flown. They were a silver finished KK Luscombe Silvaire, KK Cessna, Modelair Auster and Rearwin and finally a Druine Turbulent.

And so now to the technical part of the night, with a presentation on glues by Gwyn Avenell of Avetek. Avetek is the distributor for Bob Smith Industries (BSI). Gwyn explained that there are a vast number of glues available to suit almost any gluing requirement and made the following comments about BSI glues. They have a shelf life of two years and this is due to the way that BSI ensure that there is no moisture present in the bottles when packaging them. Glues come in thin (1-2 sec) gap filler (5-10 sec) and slow (10-25 sec). The thin glue wicks into all available places and can end up where it is not wanted. Gap filler has the advantage of keeping glue where you want it as well as allowing for some alignment before full cure takes effect.

There are foam safe glues in both thin and thick. The thin glue is suitable for gluing clear plastic such as canopies as the glue does not blush when drying.

Other types of CA glues available are:-

- Flexible which allows for some give and come in both thin and thick.
- Brushable for plastic modellers.
- Carbon infused glue which takes a long time to cure.



Top:
Don Spray's nicely built CO2 Piper Pacer is a well proven flier.

Lower:
His Wittman Tailwind for Peanut Scale.

- Tyre glue for rubber tyres which is more flexible and used by R/C car modellers.
- A glue that works under water and allows for items to be glued into fish tanks for example.

A kicker is also available to set the glue off faster as well as an un-cure for those who get body parts stuck together or on the model. Epoxy glues come in 5, 15 and 30 minute cure. The longer the cure time, the stronger the bond.

Members are welcome to purchase products from Avetek, just make it known that you belong to AMAC. Gwyn was thanked for his very informative presentation.

The free to a good home bits and pieces were on the end of the table with items from Mike Fairgray and Bryan Spencer. Mike did not need to take anything home.

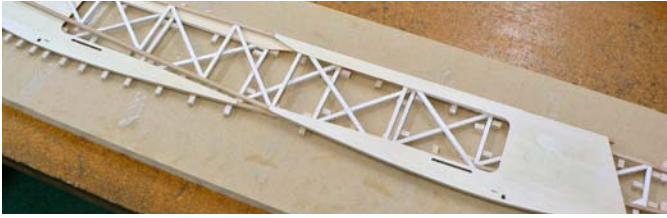
Brendon Neilson had returned from his trip to the US and had some kits that he had purchased, up for sale including a SIG Cub (not the Piper type), Dumas Gee Bee Model E, Guillows Flying Machine and Herr Engineering GB R2 Racer, all free flight rubber powered.

I noticed that both Keith Williamson and Don Spray had kites under their arms when leaving.

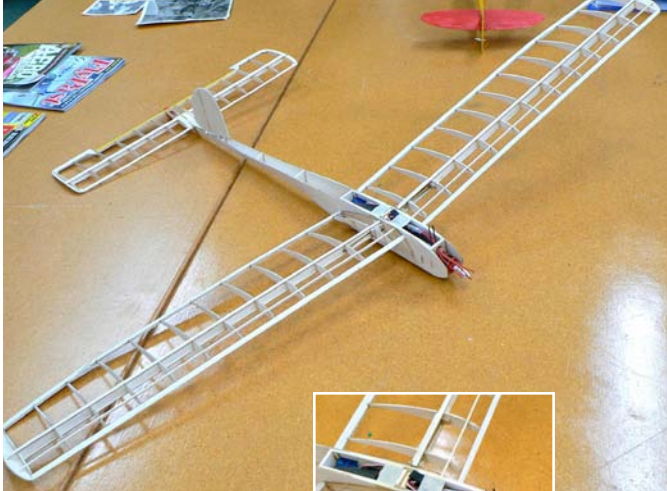
This concluded the table so it was off to tea and biscuits.



Mike Fairgray's rubber powered scale fleet including clockwise from top left, KK Cessna, Druine Turbulent, KK Luscombe Silhouette, Modelair Auster and Modelair Rearwin Speedster.



Top: Mike Mulholland's jig construction system for the new Avetek 1/5 scale DH Tiger Moth.



Centre: Electric Jumpin' Bean with radio and motor installation (inset), brought by Angus Macdonald

Lower: Lloyd Hull's Modelair Airmaster is now set for flying.

Lower Inset: Keith Williamson's Hangar Rat flown a number of times.



Centrefold - Michael Taylor's Airbus, 1991

Back in the early nineties a number of us acquired Z Models compressed air motors or ran to shops to buy Air Hogs. I suspect that not much happened with a number of these purchases. However, having seen Mike Stoodley's excellent Daphne flying on the last Patetonga scale day, I have heightened confidence in the potential of compressed air power for models that suit its installation. One such project was Michael Taylor's 1991 Airbus, drawn by Maurice Poletti. The following is Michael's abridged article on the model published in January 1994's Slipstream. Note that if you receive Slipstream by email, it should be possible to marry up the two pages of the plan. In the hard copy version, the plan is placed in the centrefold so there is no problem - *Ed*.

The concept

A semi-scale look was chosen and this needed an undercarriage, which also helps to put the c.g. in the right place without ballast. A flat wing with tip dihedral was chosen to simplify the mounting and the whole airframe was constructed on basic lines to insure lightness. No plan was drawn, but having decided on the length, span, chord and other main dimensions, the components – fuselage sides, wing and tail – were built over graph paper to keep the parts in alignment.

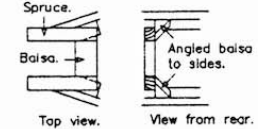
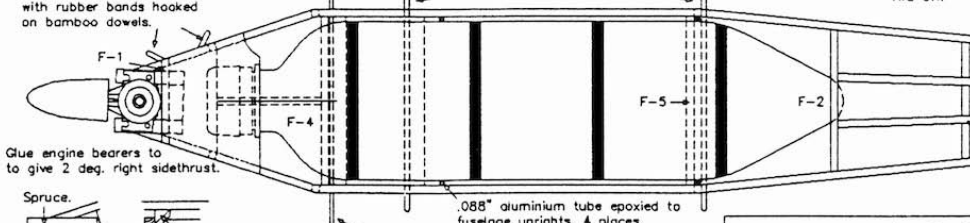
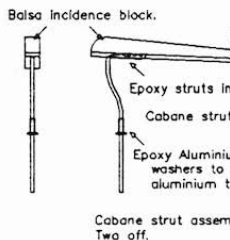
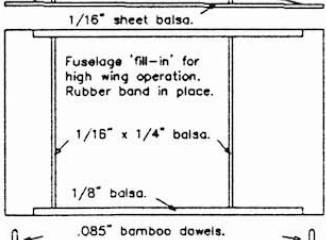
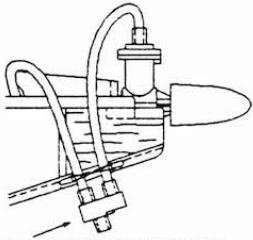
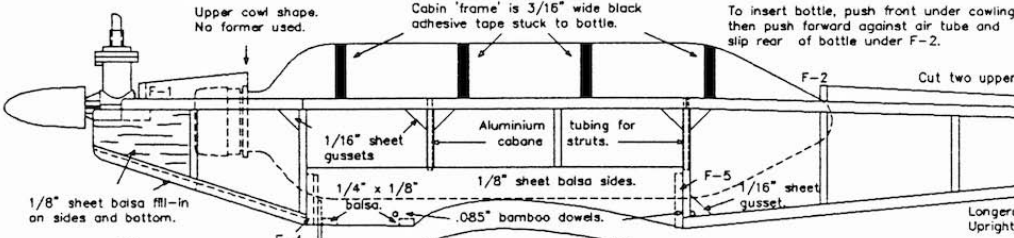
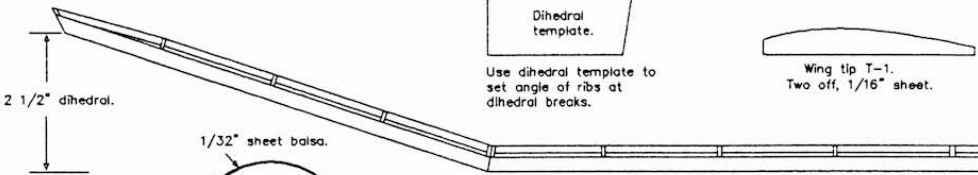
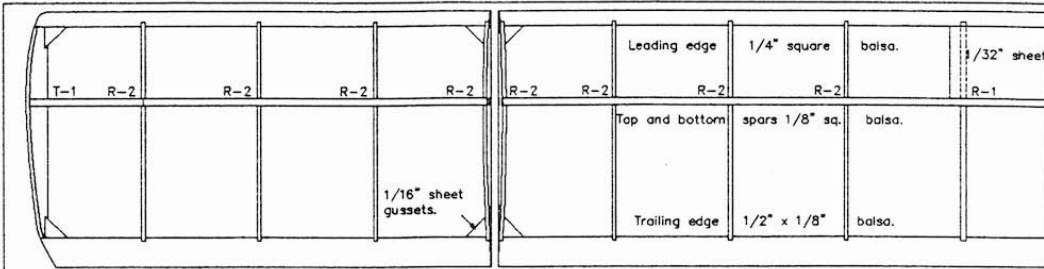
The covering is lightweight tissue, water shrunk then finished with two coats of weak dope. A 1/8" washout was built into each wing tip. No serious warps of wing or tailplane have developed. Just two thin rubber bands are used to secure the wing, and another two for the tail, so that these can displace on landing (or fencing!).

Flying

The Z Models compressed air motor runs for about two minutes plus, but as with all power units of this type, the power decreases through the run so that the model never reaches a true glide. Thus trimming was carried out with low pressure charges of 30-40 strokes of the pump, then the charge was progressively increased to that achieved by 70-80 strokes. Meanwhile the wing and tail incidences were varied by packing until settings for a steady cruise were reached. There is no tendency for a stall under power, and the model can be launched quite firmly to gain an initial ten to fifteen feet, from which its own power takes it into a shallow climb.

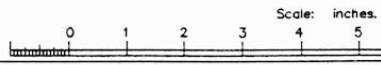
Airbus is able to weathercock and progress into a fair breeze before settling to earth. However, the preferred trim is to twist the fin and tail assembly so that the leading edge is up 3/16" off axis, which gives a turning circle of about 25 yards in radius. The model turns to left or right equally safely, and the launch direction is therefore chosen to best avoid any downwind hazards. Being very light the craft lands with little risk, and has proved to be able to fly successfully in breezy as well as light wind conditions.

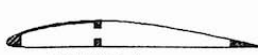
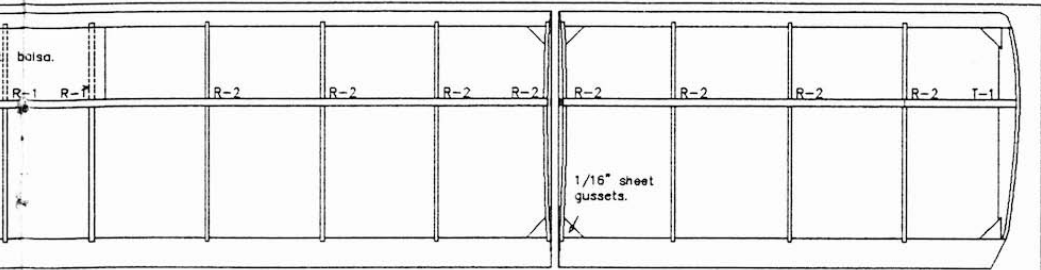
The initial trimming took place at old Karaka in 1991, since then Airbus has made 92 flights, mostly of 30-50 seconds, with several over a minute and a best of 87 seconds. It has stayed out of thermals, since the typical flight pattern is two or three circles below a height of 50 feet.



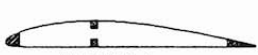
AIRBUS

A 34" free-flight model designed by Mike... compressed air motor. Airbus may be... configuration, but the low wing version... so far. The model first flew in April 19...



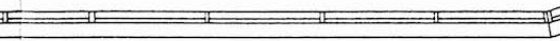


Wing rib R-1.
Two off 1/8" balsa.
One off 1/16" balsa.

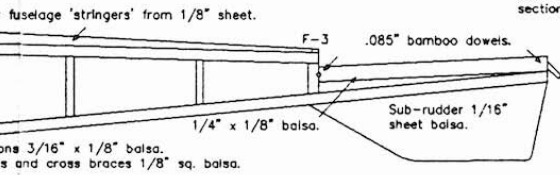


Wing rib R-2.
16 off, 1/16" balsa.

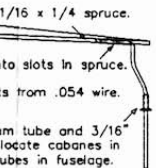
Build in 1/8" washout on each wing tip.



The original was covered with yellow Modelspan on fuselage, rudder and wing and tail tips, with white Modelspan on inner wing and tailplane sections.

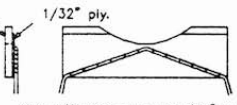
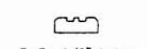
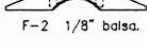
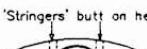
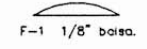


Tailplane outline
1/8" x 1/4" balsa.



ply for high-wing version.

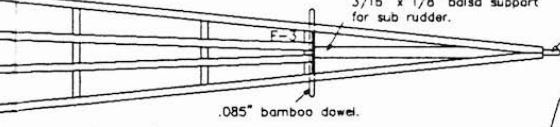
longerons 3/16" x 1/8" balsa.
stringers and cross braces 1/8" sq. balsa.



F-4 and undercarriage detail.



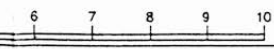
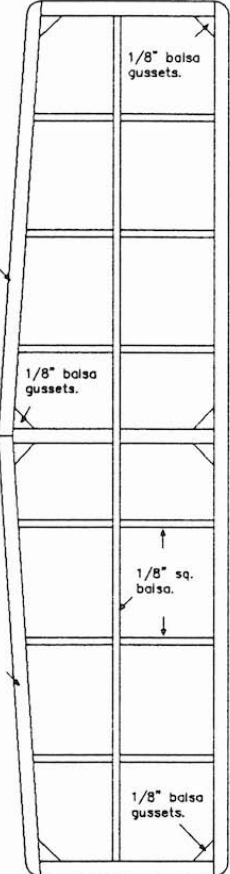
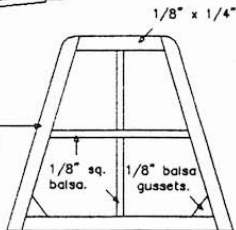
F-5 1/8" balsa.



Use tapered 'stringers' to cross braces.

U S
Michael Taylor for the Z Models
has won in either high or low wing
class produced the best times
91.

Rudder outline
1/4" x 1/8" balsa.



Free Flight contest day
**Indoor flying at
Morrinsville**

Sunday October 9, 2016

- **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 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

Open Rubber - Year long Competition 2016

Dust off any rubber model (including scale types) and get times recorded by another clubmember any time throughout the year. Give results to Keith Trillo, Club recording Officer.

Drury Cub and Scouts indoor evening - Stan Mauger

15-9-16

It is great to see the Cub and Scout movement being introduced to aeromodelling. Mike Mulholland was able to share his modelling experience with the two groups. This evening was an opportunity for Cubs and Scouts to test their models made on earlier evenings, from parts supplied by Gwyn Avenell. Cubs flew well-proven Airsail Mantis gliders but the Scout design was a new simplified and somewhat experimental development of the Hangar Rat. On the night, it became clear that some trimming was needed to get the best out of these new designs and modellers present were kept on the go, adjusting models for better flight performance.

In the first part of the evening, Cubs were assisted by Mike Mulholland, Gwyn Avenell, Ricky Bould, Angus Macdonald, Stan Mauger and Don Spray, to get their Mantises flying and soon the hall was busy with balsa models. Further help with winding was offered by Scouts and parents. It was really great to see dads in particular assisting with holding models and also at times, getting a sense of what was needed to get models flying.

In the second part of the evening, School Rats were put to the test with several making really good flights. As a postscript to this, Gwyn, assisted by Ricky and Don has taken the slightly modified design to Hobsonville Point School (on September 23) and had these models flying really well. These initiatives are to be commended and may result in some budding aeromodellers, but at the very least serve to create greater public awareness of our hobby. The challenge is there for other clubs elsewhere in the country to follow this example.



Above: Showing how it should be done, Mike Mulholland started the Scouts' School Rat part of the evening with a great flight from this design.



Cubs and their mantises

Left: Gwyn Avenell assisting Cubs to get models flying.

Middle and lower: Scouts gave Cubs a hand with winding Mantises.





Left: It was great to see dads assisting Scouts with their School Rats.



Above: Scouts with School Rats at the start of the flying.

Left: Scouts getting models ready.

Balmoral retrospective - images from bygone evenings



Left hand column (from top):

Ever ready to assist, Keith Williamson helping John Swales with his Hangar Rat. Bryan Spencer helped Bruce Keegan to get to the Hall and to set up his models. Representing mini-vintage, George Fay with a reduced profile version of the Copland Wakefield. A great flier.

Right hand column:

(From top) Keith Williamson got some good times from his Push E. Terry O'Meara's unorthodox model was one of the few that refused to fly. Keith Williamson, Evan Chugg and Terry in a Post Mortem session. Keith Trillo with his delightful diminutive Mini Mini-Stick film covered model, surely smallest in the hall!



Clockwise from top left:

Colin Rothery proved hard to beat at times, with his Push E. Angus Macdonald was often hard to equal in Hangar Rat seen here with a new model from his stable of many. Note the chair hazard beyond. Stu Mellsoop was one of a number who flew small RC foamies and helicopters. He was the first hall organiser. John Poletti with his beautifully built Hawker biplane, from his store of great scale models. Trevor Martin was also often near or at the top with his fine Hangar Rat models.

Karaka Diary - Ricky Bould

11-9-16

On such a good day it was not surprising that a good number turned up to fly. Some of the regulars were away because of flying elsewhere. Free flight scale was well represented with a good number of models. Mike Mulholland flew his Airsail Piper Cub which was beautifully decorated and flew an indecently long time, well into the 40 plus seconds. His Bristol Scout put in good times, coming close enough to fly right into Ricky Bould's camera. The damage (to the model) is apparently fixable, if a bit of work! Don Spray's Puss Moth continues to perform well producing a minute 7 seconds on one flight. It looked so nice in the air. His CO2 Piper Pacer is also stable and he is getting worried that when he gets a full charge into it, it may go a long way. His smaller Zlin with a Millish, sustained damage to the aluminium engine mount. It goes so well, but needs to have the turn open out a bit. It is stable enough that it doesn't wind in, however. Paul Evans's new PAW .55 Luton Minor was showing promise but needed to have the left hand turn opened out. George Fay's Me109 did pretty well, gaining considerable altitude. He also flew his Pe2. Ricky Bould had his Luscombe Sedan making a minute 10 seconds. His GM160 CO2 powered Comper Swift flew rather well as did his Micro-X Waco, doing about 35 seconds (also CO2 powered, with a GM63).

Martin Evans's Telco powered Fozzle, flew well until he knocked a wing off it. Also a CO2 powered model, Mike Mulholland's mini-replica Viking had great flights once it was sorted out. Patrick Roxburgh was flying tip-launched gliders gaining good height with them. Martin's handsome RC electric Mini-Eros looked great in the air. Mike Mulholland's Playboy Snr, powered with a combat-tuned PAW, was also flown and that went up like a homesick angel. It's a lovely model that looks superb in flight. Keith Williamson was seen flying his Lanzo Bomber and Rex Benns had his Radian flying expertly.

We packed up after midday. Someone had run into a power pole during the morning so there was no hot coffee at the café.



Left: Don Spray launching his CO2 Piper Pacer. Keith Williamson's Lanzo Bomber is seen to the right.

Opposite

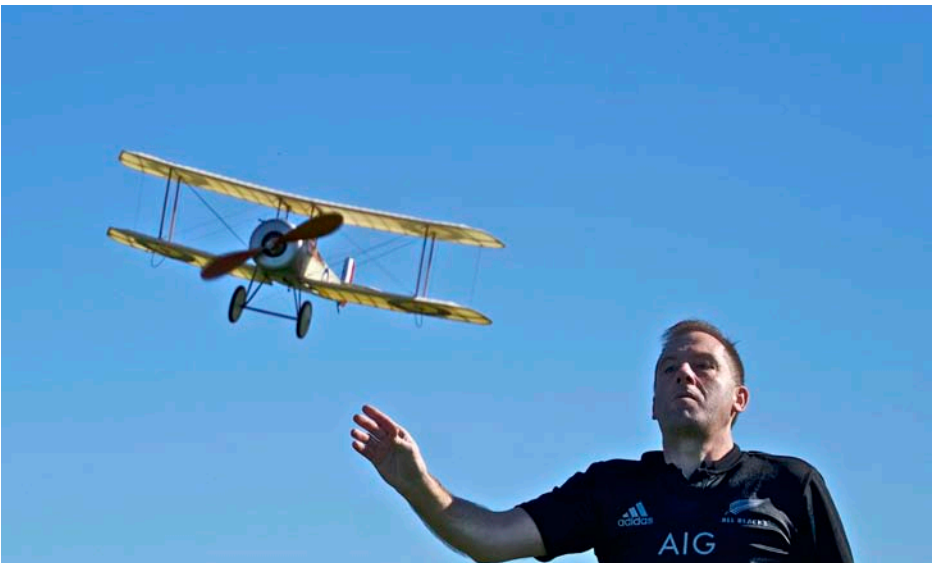
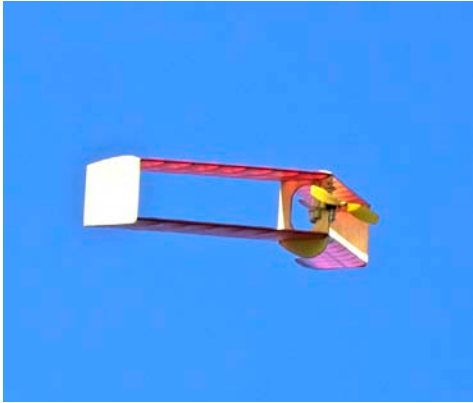
Top left: Martin Evans's Fozzle climbing away. (Camera has frozen the propellor).

Top right: Don's Piper Pacer looked great as it set off.

Centre left: Mike Mulholland had his Airsail Piper doing good times.

Centre right: Martin Evans's Mini Eros on flyby.

Lower: The moment before impact. Mike Mulholland's Bristol Scout heading for the camera.



Calendar October

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 events See under Hoteo.

Karaka Steward

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

HOTEO

October 16

Free flight Scale Day Hoteo

Contests for all classes

- *for Club points.*

NDC events including:

Open Glider

Vintage RC Open Texaco

Open Power

Classic RC 1/2E Texaco

Open Rubber

Classic RC E Texaco

1/2A Power

Vintage FF Catapult Glider

Vintage FF hand Launch Glider

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.

Instructor

Brett Naysmith

Aka Aka Steward

Brett Naysmith 09 235 8803

brejo@xtra.co.nz

CONTROL LINE

Contact C/L Steward

Stan Mauger 575 7971 stanm09c4@gmail.com

INDOOR EVENTS

Drury

Monday October 31

Push E, Kit Scale NDC and Hangar Rat [7.30-10pm]

- *for Club points.*

Ellerslie

Tuesday October 11

Tuesday October 25

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

FREE FLIGHT **SCALE DAY**



Sunday **October 16**, Hoteo
from 8.00am

All free flight scale classes

- F4A power scale • Rubber scale • CO2 / Electric • Kit scale
- Plan Scale entries • Plus Open Rubber

Intending fliers and visitors please check for cancellation because of weather conditions, by calling Stan Mauger on 575 7971 before departing.

Organised by the Scale Free Flight and Control Line SIG in conjunction with AMAC.

FF &CL SIG Postal **Plan Scale Competition 2016**

Any rubber powered scale model built from a published plan (or kit) qualifies. Flights may be put in at any site including your local park as long as the flight is timed by someone else.

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 (+\$70 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 October 3, 2016

ASME Clubrooms, Peterson Reserve, Panmure.

Theme: Nationals models

Items for the table:

Models, plans, engines, photographs etc

Trading table:

Buy, swap and sell

**Visitors or intending members
welcome**



Be there