



BULLETIN OF THE AUCKLAND MODEL AERO CLUB INC. EST. 1928
September 2017



Looking very finished, Mike Mulholland's superb Borel Chemet Monoplane, seen at the last club night.



Tomboy & Texaco

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

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

AMAC placings count to event Club points

Photo of Keith Williamson's Tomboy at Hoteo. Photo: Stan Mauger

Editorial – Horizons

A little earlier this time, next month's Drury indoor night has been brought closer to September 18 to allow for other school commitments for the hall on the usual fourth Monday in the month slot. Please note this if you are an indoor flier.

The October 8 indoor Morrinsville day is on the immediate horizon. This event has now gathered some momentum, but for it to continue it will need ongoing support. As many are aware, the venue was found for the Matamata Nationals in 2015 and your Club committee felt that this venue was a great place for indoor flying in the tradition of the Tokoroa indoor events of the past and soon set about organising the first Morrinsville indoor day. As the CD, I was really pleased to see the support it gained on the first day run after the Matamata Nationals. The Morrinsville event has the potential to be a focus for indoor flying and to bring together good numbers in events, as well as setting high standards in flying. Morrinsville indoor days have demonstrated how a partnership between the Free Flight & Control line Scale SIG and AMAC can lend the necessary support to organise this event. Morrinsville has also attracted fliers from elsewhere in the North Island and the regional aspect of the day is one of its strengths. It is a great forum for keeping in touch with others flying these classes. Most classes have been well supported, but Open Rubber Scale welcomes more fliers! While numbers were down on the June day, I am putting this down to cool weather and regarding it as a temporary blip! Please prove me right, by coming to Morrinsville in October.

Further on the horizon lies the 2018 Nationals. Every Nationals I tend to look at, at least some models, and think that I should have made a start at planning, building and trimming, much earlier. So here is a respectful reminder that the Nats are on their way, running from January 3-7. It is also a good idea to get on to sorting out accommodation sooner rather than later if you are planning to be there. In the meantime here's hoping for some gaps in the patchy weather to get in some trimming.

Stan Mauger

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 October Slipstream is September 22

Photo credits

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

Monthly Club Night - Mike Fairgray reports

7-8-17

Present were Ricky Bould, Guy Clapshaw, Paul Evans, Mike Fairgray, George Fay, Angus Macdonald, Stan Mauger, Mike Mulholland, Brendon Neilson, Geoff Northmore, Arthur Pearce, Bryan Spencer, Don Spray, Keith Trillo, Charles Warren and Keith Williamson.

Stan Mauger advised members that he had just heard that a past member, John Raybould had passed away.

Theme for the night was Travelled Scale Model Aircraft.

Unlike last month an extra table had to be placed so all the models could be displayed. Stan Mauger had his winning Antarctic Auster which had recently travelled to England for the BMFA Free Flight Scale Nationals where he won first place in power scale. This is not the first time it had travelled, having also competed in Trans-Tasman and the Australian Scale Nationals in Richmond Australia. This is a well proven model which is able to take-off from the ground with a realistic climb out and flight envelope. The latest Aeromodeller features Stan, Ricky and Don in the BMFA Nationals report.

Ricky Bould had his Auster AOP9 which was still a work in progress needing trimming. His C02 powered Comper Swift and rubber powered Tiger Moth join Stan's model in being well travelled to England and Australia.

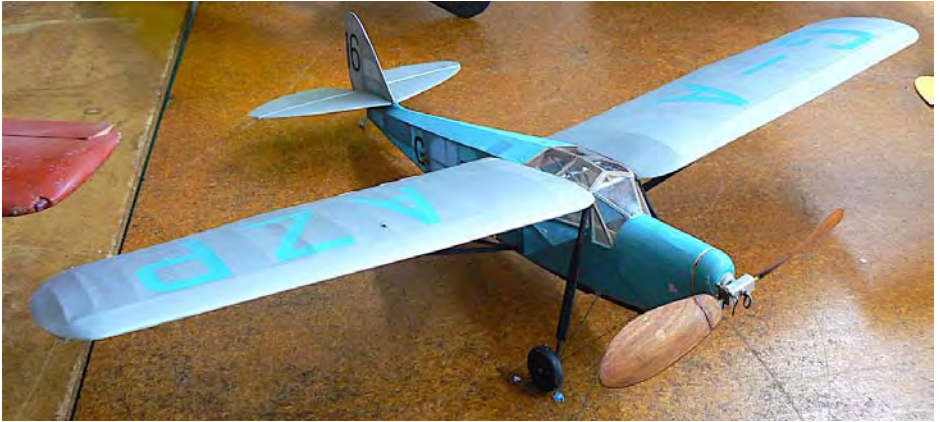
Not to be left out, Don Spray had his Puss Moth which is a 1.5 scaled up version of the West Wings kit. Don was placed first in Flying Only Rubber Scale at the BMFA Nationals and the model has also attended the competitions at Richmond. However, it now required some repairs to the left hand side of the fuselage after the rubber blew out the side of it at Karaka in the weekend.

The message from Ricky was if you intend travelling with your models by air then make sure the box in which you transport them is strong and light with the models well protected with foam and that they are well secured inside the box. Having lots of Fragile Stickers on the box does not guarantee that they will be handled carefully.

While not scale, Keith Trillo's Stardust Special is a 'model of many talents'. A quick change can see the nose power pod change to accommodate different motors allowing the model to be flown in I/C Endurance, I/C Texaco and open Texaco, making it truly a versatile model.

George Fay has built a smaller version of his SK3 Racer. Requiring less rubber makes it a better handling model than his larger version. He will fit a larger propeller in the hope of obtaining a longer duration. George's method of launching the model resembles that of a "Javelin thrower". Whilst in Australia he was handed an Aero Graphics kit of an SE5A with laser cut parts and what looked like good quality light balsa.

Keith Williamson's Eastbourne Monoplane dominated the smaller models placed around it. The rigging, wire wheels and pilot were hand crafted by Keith and it flies well under power. Guy Clapshaw brought an Airsail Chipmunk powered by a OS 40FSR, which was his first build of the model having later built a second version with working flaps. The second model is better to fly, however, he nearly lost it when he applied 60 degrees of



Travelled scale models

Don Spray's Puss Moth now needing some repairs after contest successes (top). Stan Mauger's Auster has been a consistent flier but is now tabled for replacement by a certain biplane (centre). Ricky Bould left his competition models in the box showing how they are accommodated for travel.

flaps that acted like air brakes. He was able to recover it before the model hit the field. After a couple of attempts with the same result another pilot identified the problem and once the flaps had been reset to fewer degrees the model landed ok and went on to be problem free.

Another model from Don Spray was his Doonside Mills powered Stringless Wonder, a design used for Aggie at the meeting he attended at Richmond Australia. It was his first attempt at applying shrink film and as we have come to expect from Don, he made a good job of it. This and another model, the Flying Carpet are set to be built by several club members, for training at Karaka in preparation for flying at Richmond next year.

Angus Macdonald had his much travelled and flown Nesmith Cougar. It was 42 years old and had attended every Nationals since the introduction of Peanut Scale and had been placed first on a number of occasions. This qualified for the most travelled model of the night.

Charles Warren had his Arabian Night Flying Carpet, which is the other model of choice flown at Richmond. Charles's model is powered with a Dart which splutters and pops when the tank is not filled but when full goes like a rocket and decides to fly away landing four paddocks from the launch point. Charles had brought along the plan and building instructions from the Aeromodeller article.

Paul Evans has just finished a scale model of the Longster powered by a Redfin Millish .5cc motor. The Longster is a home built aircraft. Paul has, as usual, presented an exceptionally finished model and although it is yet to get wind under the wings it looks right so should fly well.

Mike Mulholland's contribution was his Borel Chemet rubber scale model with detachable floats. He has employed an adjustable thrust line device in the nose and the propeller is carved to scale. He has been assisting Avetek with the redesigning of the CT4 Airsail kit. The prototype has laser cut light balsa with lots of lightening holes to reduce weight. The bare bones weigh in at 19 grams compared with the model of the original Airsail



Left:
Angus Macdonald's well travelled Peanut Scale Nesmith Cougar. Forty two years of return trips to the New Zealand Nationals must surely have exceeded several trips around the world!

kit completed by Mike's father, with a finished weight of 65 grams. The improvement in weight will make this a competitive model. His third model was his twenty year old rubber powered free flight Jaguar, recovered and flown at Karaka last weekend. In order to make the tissue covering more impervious to wet damp conditions, which we all know makes tissue go limp, he has employed an interesting fix. After doping the tissue with two applications of weak shrinking dope followed by two coats of non-shrinking dope, he applied two coats of thinned down mineral turps based polyurethane. The finish was very shiny and according to Mike, repelled the water. Certainly worth a try on larger models.

Mike Fairgray had three rubber scale models, an SE5a from a Keil Kraft kit (using own wood selection), Frog Moth Minor from an Internet plan, and a Keil Kraft Cessna. He commented that the Moth Minor was an attractive looking aircraft and that the trim and markings were made using shrink covering, which he uses for all of his models. The Keil Kraft Cessna was from a plan off the Internet. Last month he had the Keil Kraft Luscombe Silvaire that he was refurbishing. As he pointed out, the original wing hold down system was not particularly stable so he was changing this to a plug-in wing design. To do this he had to make two new wings and redesign the centre section with tubes to take the wire inserts from the wings. Now that this has been completed, the next step is to attach the strut points and cover the wings and centre section. Next month should see the refurbishment completed.

So ended another club night with an outstanding nineteen models on the table.



Models of choice for Australian Scramble events

Don Spray's Doonside Mills powered (what better) Stringless Wonder (upper), and (right), Charles Warren's Flying Carpet with DC Dart.



Top: Keith Williamson's Eastbourne Monoplane showing his handmade wheels, metal detailing, replicated engine and pilot.

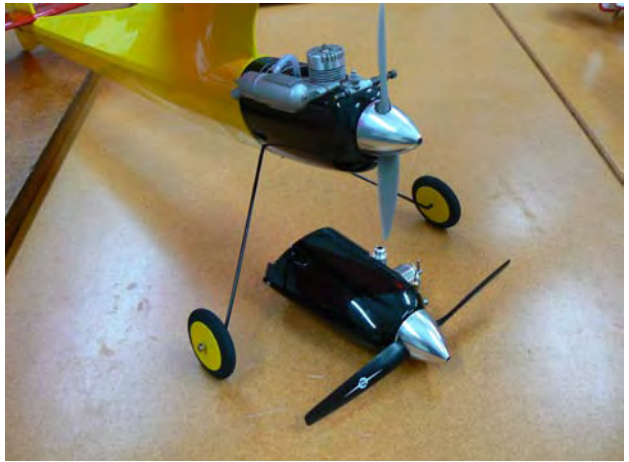
Inset: Keith's workmanship in making the wheels needed to be enlarged to be appreciated.

Left: Mike Mulholland explaining the finishing process on covering his Jaguar. Bulletin reporter Mike Fairgray is seen hard at work to the right.



Top: A study in weight saving. Mike Mulholland brought along the existing Airsail CT4 and his new much lighter version.

Above: Paul Evans's nicely finished Longster has all the right proportions to be a great flier.



Above: Various power pods on Keith Trillo's Stardust Special allow quick changes to power for different motors for I/C Endurance, I/C Texaco and Open Texaco.

Centre: Guy Clapshaw's OS 40FSR powered RC Airsail Chipmunk now flying well after reducing flap settings.

Right: George Fay has had a number of satisfying flights from his smaller but well-travelled Folkerts SK3 Racer.



Above: Mike Fairgray's two Keil Kraft 3/6D classics, an SE5a and Cessna look ready for some flying.

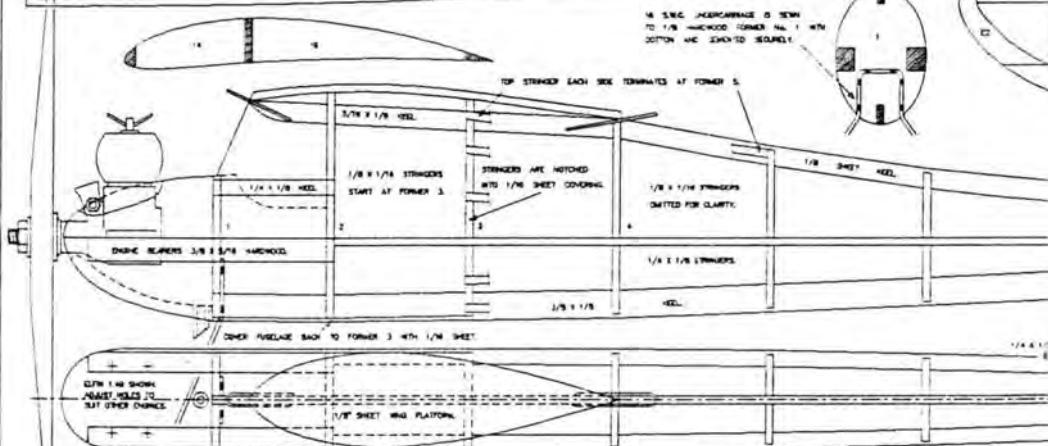
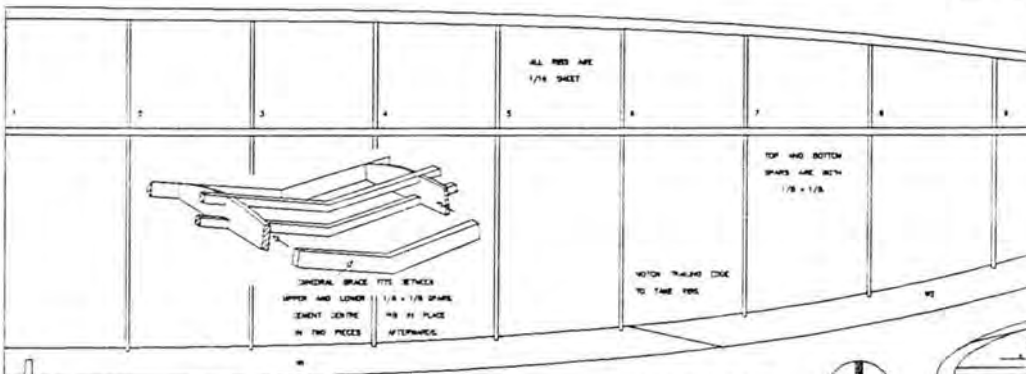
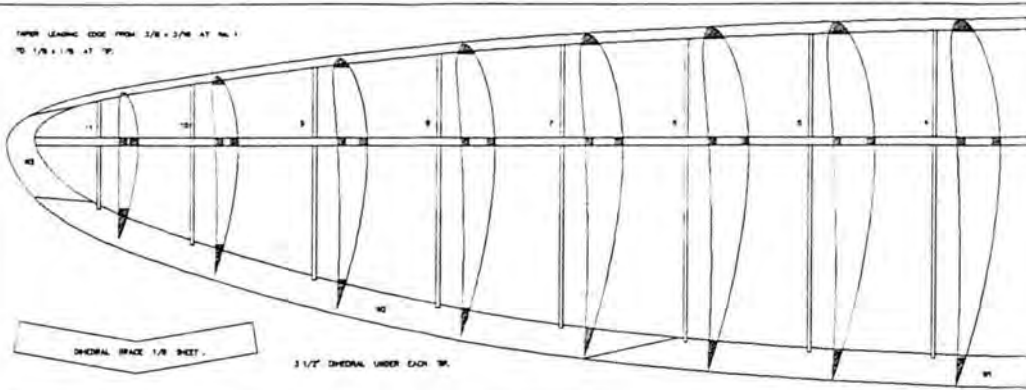


Centre: Mike's attractive Frog Moth Minor is nicely finished. Why don't we see more Moth Minors modelled?

Right: Mike's larger power series Keil Kraft Luscombe Silvaire showing the adaptation to plug in wings.



UPPER LEADING EDGE FROM 3/8 x 3/8 AT No. 1
TO 1/8 x 1/8 AT 10.



1/8" CUT FROM 1/8 x 1/8 STRINGERS BACK TO FORMER 3 TO ALLOW FOR SHEET COVERING

LAY DOWN HEEL AND RUB RUBBER PEELES AND CEMENT HALF FORMERS 1 TO 4 IN PLACE. FIT 1/8 x 1/8 SIDE STRINGER WHICH STARTS AT BACK OF FORMER 2 AND NOTCHES INTO FORMERS 3 TO 5. INCH DRY BEARING FROM PLAN AND FIT OTHER HALVES OF FORMERS. FORMER 1, ENGINE BEARERS, STRINGERS AND 1/4" PLATFORM IN PLACE.

SCALE INCHES



THE

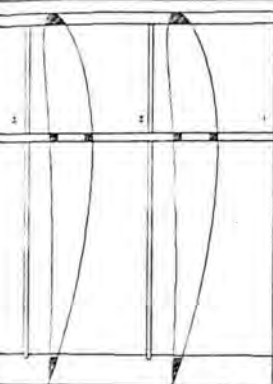
Designed and Produced in New Zealand by
 MODELAIR LTD., Newmarket, Auckland.

MODELAIR

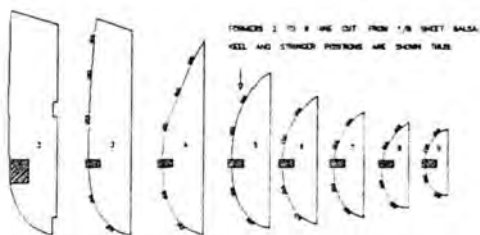
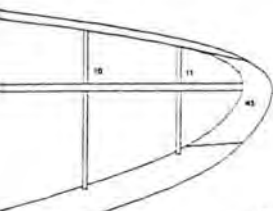
HIGH PERFORMANCE
 CABIN MODEL
 FOR ENGINES
 UP TO 1.5 cc

KEA

DESIGNED AND DRAWN BY ANGUS MACDONALD



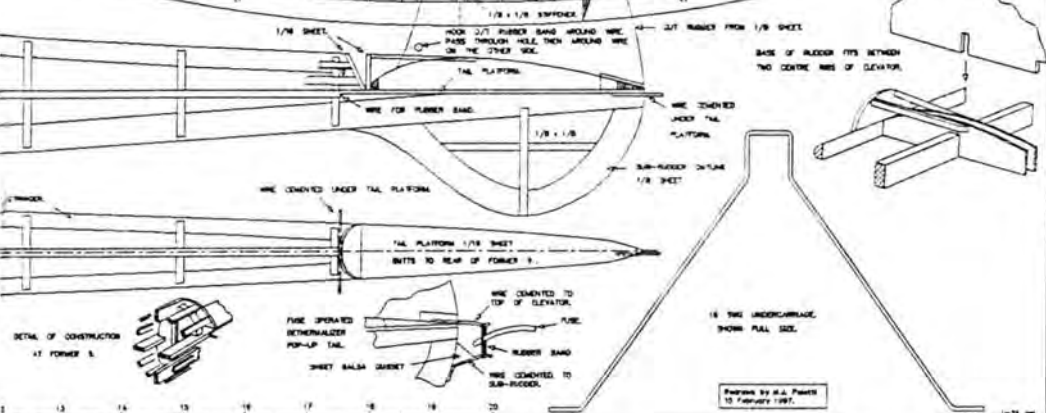
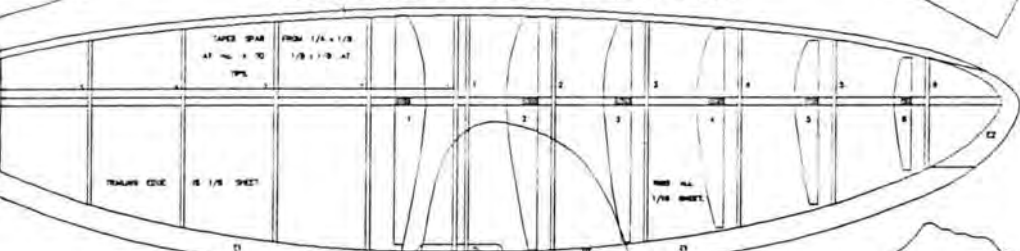
TRAILING EDGE 1/8 SHEET



RIBS 1 TO 10 ARE CUT FROM 1/8 SHEET Balsa.
 HELL AND STRINGER POSITIONS ARE SHOWN THIS



TAPER LEADING EDGE FROM 1/8 x 3/16 AT No. 3 TO 1/8 x 1/8 AT THE CENTRE. WIRE ARE 1/8 DIAFT.



1/8 SHEET.
 HOOR 3/7 RUBBER BAND AROUND WIRE. PASS THROUGH HOLE, THEN AROUND WIRE ON THE OTHER SIDE.
 TAIL PLATFORM.
 CUT RUBBER FROM 1/8 SHEET.
 BASE OF RUBBER FITS BETWEEN TWO CENTRE WIRE OF ELEVATOR.
 WIRE COINED UNDER TAIL PLATFORM.
 TAIL PLATFORM 1/8 SHEET. BENTS TO REAR OF FORMER 9.
 WIRE COINED TO TOP OF ELEVATOR.
 FINE.
 RUBBER BAND.
 WIRE COINED TO SUB-ROCKER.
 SUB-RUBBER CUTLINE 1/8 SHEET.
 IS THE UNDERCARriage, SHOW FULL SIDE.
 DETAIL OF CONSTRUCTION AT FORMER 5.
 FINE SPINNED BETHENALIZER POP-UP TAIL.
 SHEET Balsa GARNET.
 WIRE COINED UNDER TAIL PLATFORM.
 TAIL PLATFORM 1/8 SHEET. BENTS TO REAR OF FORMER 9.
 WIRE COINED TO TOP OF ELEVATOR.
 FINE.
 RUBBER BAND.
 WIRE COINED TO SUB-ROCKER.
 SUB-RUBBER CUTLINE 1/8 SHEET.
 IS THE UNDERCARriage, SHOW FULL SIDE.

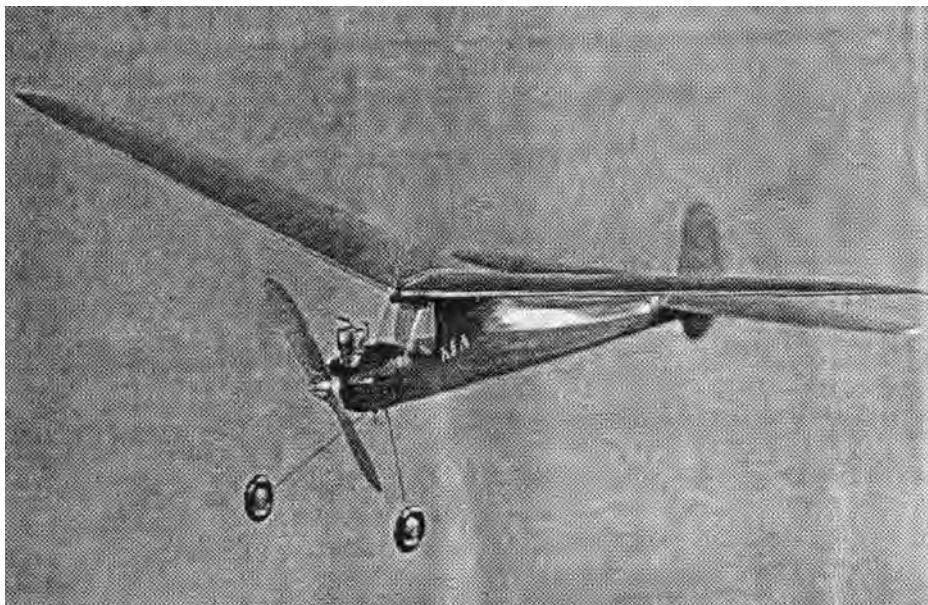
Pattern by H.J. Powell
 10 February 1967.

The Modelair Kea

The Modelair Kea will be known to some as a delightful free flight sport model just right for an ED Bee. What is probably less well known is that a second contest version was also designed. This nicely proportioned free flight model has stood the test of time and could make a great flier with RC as well. This is an abridged version of Maurice Poletti's original article from the April 1997 Slipstream. - Ed.

It is believed that the Kea was designed around June 1949, and the kit produced in July of that year. The wingspan was 38" and the plan was a blueprint and .Angus recalls that the kit came in a plain box with a Modelair label. As can be imagined, the kit sold well and with the Bee the model was relatively docile. But in April 1950, the Modelair advertisement in NZ Flying mentions Elfin diesels for the first time. Angus remembers the 1.49 arriving first and feeling that the Kea would be uncomfortably lively with an Elfin.

By January 1949 Angus had flown a modified version of the Kea fitted with the Elfin 1.49, drawn the plan, and started preparing for kit production of the new version. This had a 42" wingspan and a lengthened fuselage. The prototype used several turns of fuel tubing for a tank and must have performed very well. Detailed on the plan is a fuse type pop-up tail dethermaliser (this was of course in pre-snuffer days). The plan for this version of the Kea was offset printed, a photocopy of which was redrawn (with minor differences - the u/c has been drawn full-size, for example) to produce the plan featured overleaf. The date that the new Kea was introduced is not known with certainty, but it was probably about March 1951.



Above: The Kea, nicely covered and ready to go, with the early ED Bee clearly visible. The photo is from Modelair publicity dating back to the launch of this design in their range.

MIMLOCT- Ricky Bould

The winter flu hit some of us this time and we were down to three hardy souls. Paul Evans, Don Spray and Ricky Bould made it to the forecourt of the Auckland War Memorial Museum for the 0400 launch. The temperature was a mild 10 deg. C but there was an edge on the fresh easterly wind. We had a quick flight, and as a result of a lull at launch, my model vanished over the brow of the bank, fortunately in a straight line, so retrieval was not difficult. We de-power our CTs with only 4 X 1/8 motors and they still perform well enough.

Below is a quick photo, with the self timer working. Just to add spice to the proceedings I managed to leave my iphone behind after using it to angle the camera. So there was a quick trip back to site to retrieve it. I was still in bed for a lie in by 0445. Again a feeling of satisfaction that we were able to attend.

Since this MIMLOCT event, there has been discussion about changing the time of day for the next year. With the recent interest in Cloud Tramp generated by the Peterborough-Auckland Challenge, a more agreeable time for those who are less inclined to leave their beds at 3.00am may see more forthcoming to support MIMLOCT next year - Ed



Above: Paul Evans, Don Spray and Ricky Bould caught in the theatre spotlighting of the Auckland War Memorial forecourt.

Drury Indoor - Ricky Bould

31-7-17.

A small group of modellers consisting of Bill McGarvey, Keith Trillo, Rex Benns, and Ricky Bould plus two visitors, Ken Smith and Brian Howell, gathered for a very cold night's flying on the July 31.

Bill and Keith concentrated on trimming Hangar Rats while Ricky was sorting out the Keil Kraft Luscombe Silvaire that is now behaving itself, after the addition of 1.2 gm of nose weight. We all found it was necessary to use a thicker section of rubber to get an acceptable duration.

The radio fliers flew in between the free flight as usual and cleared the hall promptly when required. Thank you for the consideration. Steve Fifield flew an Amber, Rex Benns his Champ and Vapor. Geoff Burgess had his Champ, Pup, Vapor, and spacewalker for flying.

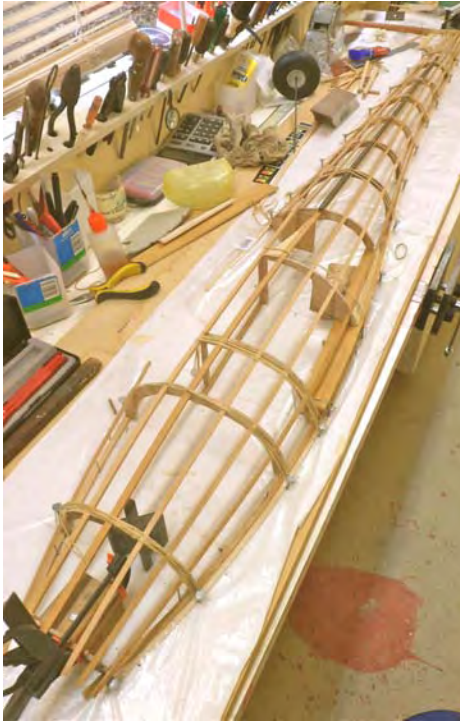
By about 9.30 the cold was getting the better of us all and there was a rapid exit to the warmth and comfort of our cars for the drive home.



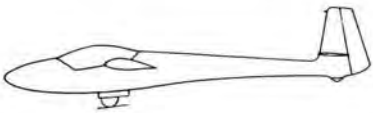
Hangar Rat flying: Keith Trillo (above) and Bill McGarvey (right) setting up their models.

70th Nats
3-7 January 2018
Be there

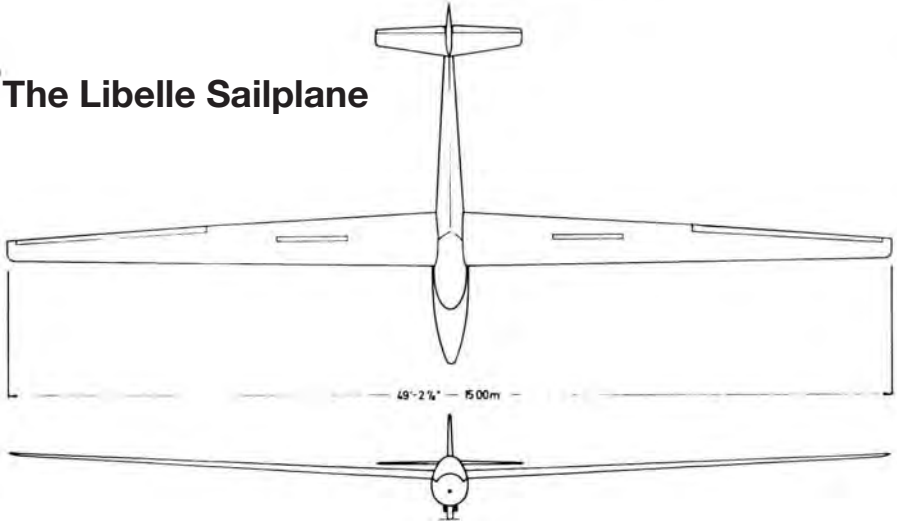
Libelle Sailplane (1/3 scale) - Angus Macdonald



After selling my two large gliders (Bowlus Baby and Olympia 419) withdrawal symptoms were felt and visions of a more modern 'glass' sailplane took over. The Libelle, a very early 'all glass' machine, had often attracted my attention. Google produced a 3 view and lots (hundreds) of photos so pencil was put to paper. To make a plug, then a female mould to produce a 'true' glass fuselage would be too much work for a 'one off' so old fashioned formers, stringers and planking with a glass skin would do. Design?- (fuselage side view and eyeballed formers) and construction proceeded simultaneously to produce a half fuselage.



The Libelle Sailplane

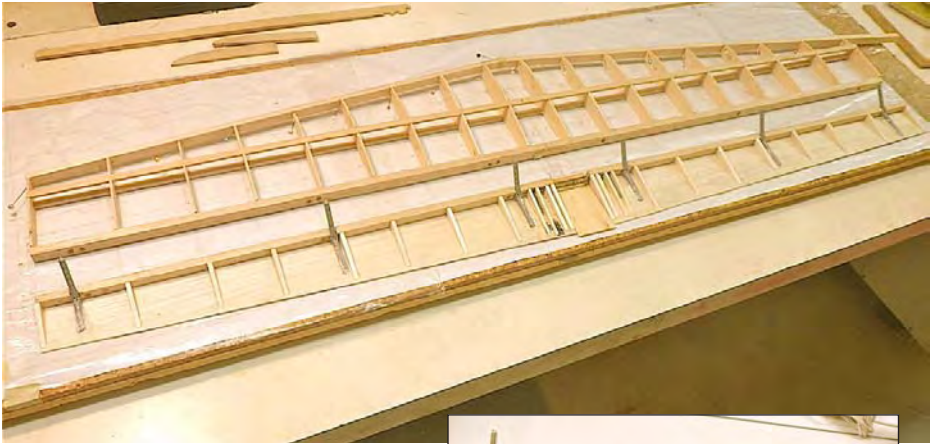




A variety of 2mm and 3mm sheet balsa was thoroughly soaked with ammonia and was persuaded with the help of pins, tape, bandages and rubber bands, to take up unnatural double curves and when dry, glued in place.



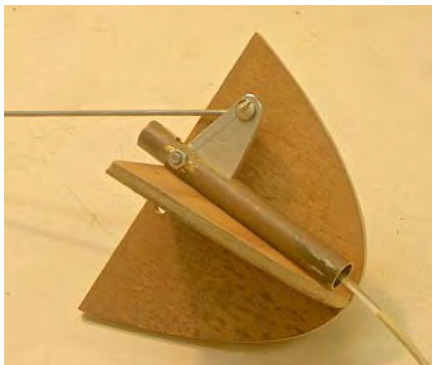
Now, rigid enough to remove from the board, the formers and stringers for the other side were fitted. Wheel wells and push-rods for rudder and elevator were installed.



The full size has an unusual mounting of the one-piece tail-plane into a slot in the front of the fin. Design here (mainly cut and try) required sufficient strength to survive the normal flight loads plus a certain amount of 'hangar bash'. The tailplane is of fairly normal construction but the 'knuckle' hinge line is slow and sometimes exasperating to get working smoothly.



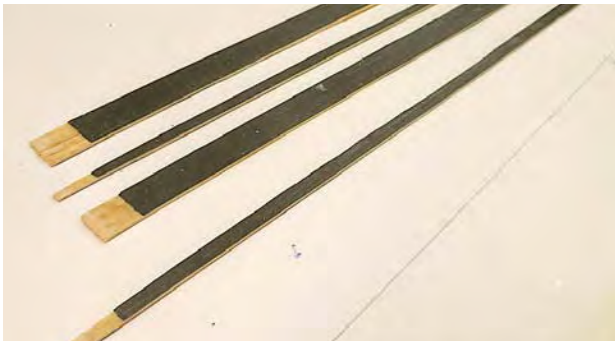
A removable nose containing the tow release mechanism will permit nose weight to be adjusted for test gliding then fixed for final finishing. Straight tapered wings are a natural





for a foam core, balsa skin and a good strong spar. The cores had to be of two pieces as the foam cutter could handle only up to 1.2m. These then had to have a piece cut out of the middle to accept the tapered spar.

This starts off with a piece of 1.5mm sheet balsa 2.4m long and 50mm wide. The 4 tapered cap strips are drawn on the balsa which is then turned face down. Uni-directional carbon fibre is then epoxied on the top of this to about 1mm thick



(laminating epoxy—not epoxy adhesive). In about 3 hours, (depending on the day's temperature), the epoxy will be set enough to turn it over and using a long straight-edge and new sharp blade, cut to the design lines.



The web is vertical grain balsa with the cap strips epoxied top and bottom with the 1.5mm balsa outermost. (For ease of finishing to the foam core thickness). The wing joiner is a length of 25mm x 3mm alloy bar. The wing tubes are fibreglass wrapped around the bar. First layer = tissue, then Glad Wrap narrower than the tissue so that it does not touch the alloy, then wrap and epoxy about three layers of 3oz. glass. The tubes are fitted into the root of the spar at the correct dihedral angle. Laying up large areas of 1.5mm sheet requires a number of good end to end joints with a 10 to 1 taper. The photo tells the story pretty well. A piece of sheet metal was taped to the work board. Another piece was taped to allow it to flap over the top of the wood which was then sanded to a taper with the two pieces of sheet metal controlling the angle.

Tune in again when large areas of foam have been covered with aliphatic PVA.



NEXT MONTH!

Indoor flying at Morrinsville

Sunday October 8, 2017

Highlight the date in your diary!

- **Hangar Rat** • **HL Glider**

Flown to MFNZ rules

- **Push E** • **Modelair Hornet**

Flown to AMAC rules

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

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

- **Kit Scale**

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

Come and join us

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

Programme: 9.45am Arrive and unpack ready for start time

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

12.30pm Peanut Scale, Rubber Scale, Kit Scale

3.45pm Prizegiving.

3.55pm Hall vacated.

Fliers Entry: \$20.00

Spectators welcome

Contact Stan 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

Calendar **September**

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 silent models) Aggie and Cloud Tramp flying.

NDC RC Vintage events **Vintage 1/2A Texaco, Vintage A Texaco.**
(also see Hoteo FF list).
Aggregate trimming

Karaka Steward

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

HOTEO

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

NDC FF Vintage events F1B Rubber, F1A Glider, Nostalgia 1/2A/Min Replica, FF Classic Power Duration **(also see Karaka RC list).**

Hoteo Steward

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

AKA AKA

Saturdays & Sundays

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

Instructors

Brett Naysmith

Aka Aka Steward

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

CONTROL LINE

As advised

Control line flying
Intending fliers should phone Stan Mauger to confirm where and whether there will be flying.

C/L Steward

Stan Mauger 575 7971 stanm09c4@gmail.com

INDOOR EVENTS

Ellerslie

Tuesday September 12

Michael Park School Hall

Indoor radio flying (7.00-10pm)

Drury

September 18

NOTE EARLIER DATE

Drury School Hall

Kit Scale, Push E, (7.30 - 10pm)
- *For Club points.*

Indoor Steward

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

Morrinsville

Sunday October 8

Westpac Stadium Hall

Indoor free flight and scale classes (see notice opposite)

OFFICERS OF AUCKLAND MODEL AERO CLUB INC.

| | | | |
|-------------------|-----------------|-------------|---------------------------|
| Patron | Angus Macdonald | 575 7232 | angusmac@xtra.co.nz |
| President | Ricky Bould | 478 8949 | unimec@ihug.co.nz |
| Secretary | Mike Fairgray | 636 8439 | amacsecretary@outlook.com |
| Treasurer | Mike Fairgray | 636 8439 | amacsecretary@outlook.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 | drilmspray@xtra.co.nz |
| | Charles Warren | 09 238 9430 | cpwarren@ps.gen.nz |

Club subscriptions

NZMAA Affiliation is mandatory for Club flying

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

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

Intending members with current NZMAA affiliation pay only the AMAC sub

Please make payments to

The Treasurer Auckland Model Aero Club

Mike Fairgray,

3 Kanohi Tce Mangere Bridge 2022, Auckland

NEXT CLUB MEETING AND NATTER NIGHT

Monthly club meeting

7:30 PM

Monday September 4, 2017

ASME Clubrooms, Peterson Reserve, Panmure.

Theme: Indoor models for Morrinsville

Items for the table:

Models, plans, engines, photographs etc

Trading table:

Buy, swap and sell

**Visitors or intending members
welcome**