

BULLETIN OF THE AUCKLAND MODEL AERO CLUB INC. EST. 1928 July 2015



Martin Evans had a lot of fun flying his electric APS Tom Thumb at Karaka (see report on p.10).

NZ REGISTERED MAGAZINE





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

Editorial - Ah . . . De Havillands [again]

I am sure that most of us have some memories of DH Tiger Moths large or small, in our lives. As a youngster, I lived beside the farm of well know aviation identity, Sid Lister in Milford near Temuka in the South Island, as I noted in my June 2014 editorial, and one of my childhood memories was of his yellow Tiger, Canadian Hood and all, swooping low over the paddock not far way on finals, engine throttled back and of the soft bump as it arrived.

There have been many attempts at scale plans of the Tiger Moth but many of the free flight versions were over simplied like the Mercury kit or had outlines changed as in the APS power plan. To be fair, the outline of the DH fin in particular, has its fair share of subtleties and this can easily look wrong. Brian Crocker's Tiger plan designed some years ago followed one of the better 3 views, compromising only in the use of a flat-bottomed wing section.

This month's Slipstream includes an excellent article by Mike Mulholland on his small rubber powered Tiger Moth built as a prototype of the new Avetek kit. The kit is an impressive production and in its pre-production phase has already won praise. Mike has applied his usual thoroughness to detail in the way that he has approached building the model and I am sure that scale modellers will enjoy his useful advice and learning of the techniques that enabled Mike to produce the superb model seen in his article.

Stan Mauger

Indoor flying at Morrinsville Sunday October 11, 2015

Venue:	Westpac Stadium Hall, 21 Ron Ladd Place, Morrinsville		
Programme:	9.45	Arrive and unpack ready for start time	
	10.00	Hangar Rat and Push E run concurrently, ending at 12.30pm	
	12.30	Peanut Scale, Indoor Open Rubber Scale F4D, Kit Scale	
	3.50pm	Hall vacated.	
Entry cost:	\$20.00		

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 August 2015 Slipstream is July 23

Monthly Club Night - Mike Fairgray reports

1-6-15

Those present were Ricky Bould, Guy Clapshaw, Paul Evans, Mike Fairgray, George Fay, Angus Macdonald, Stan Mauger, Bill McGarvey, Brendon Neilson, Geoff Northmore, Bryan Spencer, Don Spray, Michael Taylor, Keith Trillo, Charles Warren and Keith Williamson.

Bryan Spencer reminded members that it was twelve months since Trevor Martin passed away and he has sold all of his kits but still has engines to go. He also holds a stock of Trevor's hand selected balsa for sale.

Keith Trillo reported on the club's display at the recent airshow at Ardmore held on the previous Sunday. Although the day got off to a poor start weather-wise, the airshow still attracted a reasonable crowd. Members brought along a good cross section of models (44 in all) but the interest was not as strong as last time due to the drop in numbers attending. Stan Mauger would like to see more participation in indoor profile scale as it was an easy to build and a simple class to fly. Don Spray had more of Trevor Martin's folders packed full of plans. Don is the custodian of Trevor's folders, which hold a vast range of plans and "how to articles". Don also has a vast collection of full sized plans, so contact Don if you are looking for a plan.

The night's theme: Indoor Models.

Stan Mauger had brought along his indoor profile scale model which was under construction. A look in the box showed finely cut profile ribs and other parts which will eventually be made into an indoor profile scale Curtiss Owl. Angus Macdonald had a Nesmith Cougar peanut scale model which was over 40 years old, built from some good three views and still competitive, proving that indoor models are a good investment if you are looking for an alternative to outdoor models.

George Fay had a 2012 calendar which was made up by his son-in-law, with each month having a high quality photograph of a model aircraft. Some of the photos were of the models entered by members who attended the 2011 Trans-Tasman scale event. Don Spray's indoor Luton Minor was constructed from an Aerographics kit. It had had its first flight at the last indoor night and looks very promising. Don's models are well finished and this one was no exception.

Keith Trillo's offering, while not indoor, was still an impressive looking model. The model, a Yonder, a 1940's design, had a weight of 19 ounces which was a remarkable achievement considering its size. The model has been covered with Modelspan, is R/C and electric powered. The servo controlling the elevator was installed at the rear of the model fully concealed with an ingenious setup so that even the pushrod and connections were hard to see. Also on show was a new MP Jet .040 Diesel made in the Czech Republic and purchased for the princely sum of US\$77.00.

Bryan Spencer had a selection of indoor scale R/C models including a profile Cub, an Auster, a Parkzone Sukhoi, Flyzone Playmate and an original Vapor. He pointed out that a simple and reasonably cheap way of obtaining an indoor receiver/servo combo (called a brick) was to buy a ready to fly model such as the Sukhoi, have some fun flying it and

when its flying days were over take out the R/C components and use these in an indoor model of your own. Damaged models can often be found on Trademe and are a lot cheaper than buying a new model. Some have a six channel brick which can also be used to operate ailerons.

You can always rely on Michael Taylor to bring along an interesting assortment of model aircraft related books. Tonight he had Ron Warring's *Model Gliders*, a 1946 copy of *Model Flying Boats, History of Model Aircraft* by C E Bowden, Cox 50th Anniversary catalogue, Ben Buckle Old Time Plan Service catalogue, an early Airsail brochure and finally a programme for the 1939 Air Display at Mangere. Ricky Bould had a Peanut Bucker Jungmeister a German Trainer, a Veron Comper Swift, and Ol' Ironsides an early home build aircraft. All are well proven flyers.

Mike Fairgray can always be relied on to bring something to the table from his large collection of models, although he said that he was thinning out his collection, with six of his rubber scale models finding a new home after being posted on Trademe. The purchaser had a unique use for the models, which did not include flying them. He was building a wind tunnel for his son's school project on proving how an aircraft flies. He was achieving this visually by suspending the model in the wind tunnel and injecting smoke so it showed how the wing shape gave lift. What models he had over would be suspended in his son's room and perhaps a future modeller would be born!!! His models tonight were a KK Luscombe Silvaire, Druine Turbulent, Modelair Rearwin Speedster and an Auster. Mike received the good natured comment of "when are you going to fly some of these models?", for as we know, Mike would rather build than fly.

Even though it was a long weekend there was a good muster and on looking around there were several groups engaged in discussions, both prior to and after the close of the table, concerning several of the models brought along tonight. As usual it was time for coffee and biscuits and a look through the aviation magazines that Mike Fairgray had brought along free to a good home. Mike is thinning out his model aviation magazine collection as well.



Above: Bryan Spencer brought these two Flyzone Playmates, supporting the evening's theme.







Top: Bryan Spencer's Vapor, a regular indoor RC flier (left) and Keith Williamson's Push E, a regular Balmoral flier.

Centre: Bryan's indoor trio including Parkzone Sukhoi Su-26 RTF indoor model and Auster and Piper profile models for RC Scale.

Left: Stan Mauger hopes that the start on his own -design profile Curtiss Owl may enthuse others to join him in flying this indoor event.

Right: Don Spray's nicely built Aerographics Luton Minor is now at trimming stage.





Top: One of the many tidily built small rubber scale models by Mike Fairgray, this FW190 found a new home before the end of the meeting. *Above:* More from Mike's hangar, including Modelair Auster Autocar, KK Luscombe Silvaire, Modelair Rearwin Speedster and Druine Turbulent.





Top: Keith Trillo's beautifully built Yonder, a 1940s design given a new leash of life in E Rubber.

Above: More nostalgia, in the form of books by well known British writers on aeromodelling, Ron Warring and Col Bowden, from Michael Taylor's collection.

Karaka Diary - Keith Trillo

7-6-15

Weather was forecast for moderate winds in the morning which didn't eventuate until midday. Arriving at our regular field, Angus Macdonald spied a lake in the lower part of the field, so we moved to the Karaka Sports ground where Paul and Martin Evans and Ross Northcott were already flying. This resulted in eight members present plus the arrival of John Butcher and David Gush from Tuakau who flew E rubber models - a Gollywock and Rocket by Verdi.

Although the surface wind was light, the upper wind was moderate, Paul Evans's Voltimer got downwind and it was a bit of a struggle to get it back. Martin Evans had a lot of fun flying his electric Tom Thumb and doing take-offs from the road. Brendon Neilson and Charles Warren flew IC Tomboys and Charles also flew his own design Two Metre glider. Angus Macdonald, Ross Northcott, Bryan Spencer and Keith Trillo flew timed flights that are shown below. Flying was interrupted at times by showers, resulting in taking shelter in vehicles.

Results

1/2 E Texaco			E Tomboy	
1. B. Spencer	8:26	Slicker	1. K. Trillo	7:19
2. R. Northcott	7:23	Lanzo Bomber	2. B. Spencer	6:03
E Texaco			3. A. Macdonald	5:06
A. Macdonald	8:44	8 Ball		



Above: The gathering on the Karaka Sports ground.



Above: Bryan Spencer hard at work with Ross Northcott timing.



Above: Paul and Martin willing a downwind Voltimer to come back.

Practice night at Balmoral - Stan Mauger

25-5-15

The idea of inserting a practice night between our cycle of regular competition evenings, proved to be a great opportunity for some relaxed flying and a chance to fly a variety of models or concentrate on trimming. It was great to see models that were not catered for with competition classes, like the lightweight models flown by Keith Trillo. Keith had both the Bruce Keegan Grebe and Trevor Martin Kiwi trainer, flying very nicely. It was also an opportunity for him to bring out his own lightweight models. His Mini Stick at 7" span and Mini Mini Stick at 3.5" span were great fliers, stooging around the hall at a very slow pace. Star of the evening had to be his Twin Pusher, a superb flier. His Peanut Fike was also up for a couple of flights. John Swales had two Piper profile models that are reliable fliers and a Bruce Keegan built Hangar Rat. He mixed flying these with taking great photographs of the evening's flying, some of which are used opposite.

Don Spray took the opportunity to trim out his new Aerographics Luton Minor. With ample wing area, this is a great choice for an indoor rubber subject. Chris Groves enjoyed flying his Hangar Rat and his somewhat faster flying Modelair Hornet. Angus Macdonald flew both his Modelair Auster and his forty year old Peanut Nesmith Cougar. Both are now well flown and trimmed models so not surprisingly, they flew well. Angus spent the rest of the evening assisting others to trim their models, including help to Stan Mauger to get his Bruce Keegan-built Hangar Rat fairly well trimmed out and also Don with his Luton Minor.

Geoff Burgess and John Swales found time around the free flight models to get in some indoor RC flying. John flew his Parkzone Aeronca Champ RTF. Geoff also flew a Parkzone Champ as well as his lightweight and slow flying Ember.

These relaxed practice nights have proved to be worth slotting in between competition nights and are now part of the indoor monthly flying cycle of events at the Balmoral Hall.



Above: Don Spray setting up his new kit Scale Luton Minor for some trimming flights.



Upper: Keith Trillo showing the winding method on his Trevor Martin Kiwi Trainer.







Top: (left) Keith Trillo's twin pusher floated by in lazy circuits of the hall. Also of light balsa and film covered construction, Keith's Mini Stick and Mini Mini Stick (right).

Centre: (left) The tiny motor on Keith's Mini Mini Stick. (Right) John Swales flying his Bruce Keegan Hangar Rat.

Left: Chris Groves brought his Mini profile Copland Wakefield and Hangar Rat.



Trimming for NSW Scale F/F Champs - George Fay

On a crisp, sunny calm mid-week morning, George Fay and Don Spray headed to Hoteo for a spot of serious trimming for the forthcoming NSW Free flight Scale Champs in Richmond Australia, in July. On arrival we found the conditions were absolutely superb! Sunshine and not a breath of wind greeted us. The only disadvantage was that the grass in the paddock was really damp, which did not help the tissue on the models. We had both rubber and power models to fly.

First up was Don with his Frog powered Heinkel 46. For some reason it dropped a wing and went in quite heavily, breaking the crankshaft on the engine – bad luck! However, his Zlin Cmelák flew superbly, with the Webra Piccolo ticking over nicely as it did wide left-hand circuits of the field, landing on the far western side of the farm and requiring quite a lengthy retrieval.

George had some engine problems to begin with, with the PAW 1.5 in his P-39 Airacobra. It was difficult to start, but once it warmed up it was okay. The engine power was a bit inconsistent, however. After several flights, the PAW eventually came on song. On the last flight everything came together, with the Airacobra flying in wide left-hand circles at a good height. Landing was a breeze. It came down flat and not too fast and the knock off wings stayed intact.

Don's rubber powered Zlin Cmelák has all the right credentials to be a good flier. With a bit of help with the trim, the model flew superbly and was 'stable as' . . . With a longer motor and extra turns it should really go.

George did not have much luck with his two twin rubber model, the FW187 and the B-25 Mitchell. After a couple of launches both models would require a bit more trimming, so that curtailed his rubber flying for the day.

Apart from Don's mishap with his Heinkel he had a good day and was pleased with how his two Zlins performed, as was George with his P39 Airacobra.

Look out Aussie, here we come!

Postal Plan Scale Competition 2015 Now under way

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.

This Tiger Moth - Mike Mulholland



This Tiger Moth, the second of my two prototypes for the Avetek kit, was actually an unplanned baby. It came about when Gwyn asked me if I would build another set of wings and tail surfaces purely for photographic purposes to supplement the on-line instruction manual. Inevitably I then got asked to build another fuselage to test the revisions Gwyn had made to some of the parts. You can guess the rest!

As the model was never intended to be finished and flown, no particular care was taken to keep the weight down, however, Gwyn has done a good job of wood selection for the kits and I am pleased to say that this model, fully painted and detailed and with a heavier gauge undercarriage came in at 50g - only 3g heaver than my original.

I had promised myself that the next Tiger I built (number 8 of the various sizes I have built over the years) would be Rob McNair's beautiful ZK-AUD and so it had to be. AUD has been restored by Rob to be a more practical aeroplane to operate and maintain and it has several unusual features for a Tiger that add scale character. One is that Rob has fitted a Fox Moth style exhaust system to "take the bark" out of the Gypsy Major. Another is the lack of visible rib stitching and small number of inspection patches (Phew!) and then of course there is that finish. Gloss black. Straight as a die with no ripples and difficult to replicate convincingly in a small scale.

My approach in this case was not to put every possible detail in but to look at the photo I intended to put in front of the scale judges and see what would be conspicuous by its absence. As a general principle I go nuts around the nose and cockpit area and less so towards the back – after all it has to fly! This model was an excellent opportunity for me to practice various scale techniques that I have been experimenting with recently. The major satisfaction of this sort of model, is successfully meeting the challenge of creating scale features that are convincing but don't weigh much.



Paint

The model was airbrushed entirely using Tamiya acrylic paints thinned with IPA. Isopropyl is thinner than water and airbrushes lighter and nicer. The black was their standard black (not the flat or semi-gloss that they also do). I buffed this to a nicer gloss using tiny amounts of car polish on a soft tissue and cotton bud for the hard to reach bits.

The fuselage lettering was taken directly from a photo of the original and masks were cut using Tamiya masking sheet (good stuff). These were sprayed with Tamiya Gold. The wing lettering was cut from pre-painted Esaki and glued on with thinned RC56 canopy glue, which being latex does not pull the tissue when it dries.

The model features a separate rudder but I did not build separate ailerons or elevator as the build was for the kit instructions. The usual way to show these features is to use a lining pen but this never looks real. If you look at a real aeroplane the gaps are very small and the presence



of separate parts is suggested more by the light on them. High points are light and lower points are darker. It's actually very subtle. I stuck lengths of Tamiya masking tape to a plastic sheet and cut 2mm strips using a steel rule. I put these on the wing and tailplane where the rear spars and control surface spars would be, with a 1mm gap in between, also over all rib positions and where nose ribs should be too, for good measure. I then lightly airbrushed Tamiya 'Smoke' over the whole wing. 'Smoke' is a kind of clear translucent charcoal – If they had called it 'Shadow' that would be even more descriptive, with two passes chord-wise in between ribs and one pass elsewhere. This enhances the fabric 'sag' between ribs or gives the appearance of it where the model uses a flat plate, and gives the definite appearance of separate control surfaces.

Struts and flying prop were painted woodgrain using the following technique – base coat of Tamiya Desert Yellow. Then very dry dry-brushed Tamiya red brown enamel to represent grain. Finally Tamiya Clear Orange which gives a nice varnish effect. The exhaust system was sprayed with MR Hobby 'Steel Red' and then dry brushed with Tamiya red Brown enamel, more so towards the manifold for a realistic oxidised look.

I owe a great deal to the plastic modelling fraternity and to John from Modelair in particular who has patiently explained these techniques to me and advised the best paint colours to use. If you want to see how these techniques are done really well by experts don't look at my Tiger Moth but do have a look in the display cases at Modelair!

Markings

I made some of my own waterslide transfers for this model and the process is worth describing as it shows that you can do most things with a bit of thought. Three different images were needed.

1. De Havilland wing strut logo. This was simple and demonstrates the basic process. The logo was available on the Internet – a simple Google search gets you what you need. All I had to do was reduce the logo in Microsoft Word to about 5mm across. With these little decals I print the image on a piece of A4 paper, then tape a piece of clear decal paper over the image and feed it through the printer again. A quick spray of decal bonder (though pretty much any kind of clear works) and you have a decal. I actually copied the image multiple times and did about 10 at once so I would have spares to allow for stuffups and friends who might be keen.

2. Wheel covers. The wheel covers on AUD are black with a gold DH logo. Printing a black DH decal is one thing and would be as described above but how do you do gold, and make it the same gold as the painted registration lettering? I started by cutting the wheel discs from thin celluloid using a circle cutter and sprayed them Tamiya Gold. I then cut circle masks of a slightly smaller diameter and sprayed silver. At this point



I now have a gold disc with a fine silver outline (representing the edge of the wheel rim on the real aircraft). I then made a negative of the black DH wheel logo to print on clear decal paper which resulted in a clear DH on a black background. This was then applied to the gold wheel cover resulting in, a perfect black disc with gold lettering showing through.

To make the negative I blew the logo up to a large size filling an A4 sheet so that I could carefully and accurately cut out the DH letters. I then sprayed the rest of the bits black and stuck them back on a fresh piece of white paper. Now I have a large white DH in a black circle. When scanned back into the computer and reduced to the correct size this looks razor sharp. Again I made plenty all at once to allow for stuff-ups and for my friends and associates.

3. Tiger Moth star logo. This is complex on AUD as the logo is a silver star with a black moth superimposed on it. It also has the words "The DH" and the moth's antennae in black on the silver star and words TIGER MOTH in silver on the black body of the moth.

Again, I found the logo on the Internet (though in the wrong colours) and blew it up until it filled an A4 sheet. I carefully cut out the words TIGER MOTH and then cut our the moth parts, sprayed them black and glued everything on a fresh piece of white paper, scanned and reduced as I have already described.

The silver star was carefully cut from pre-painted Esaki tissue and glued in place using my trusty RC 56 canopy glue. The decal was then applied over the top of the silver star resulting in a perfect rendition with silver TIGER MOTH lettering and black elsewhere.

Scale details

A number of very simple but effective materials and techniques were used on my version of AUD to create the small details that make the model.

Strip Styrene. Evergreen produce a wide range of strip styrene in different sizes and sections. Modelair has a good selection. In particular there is .025" and .030" rod which I used for items such as the pitot tubes, exhaust bracket stays, fuel line (painted Tamiya Copper) fuel shut-off linkages and engine head studs. Used judiciously this material adds little weight and really looks the part. It is also flexible and resists damage.

Thin card or paper. Still a good option for small fittings such as the tailplane strut brackets, pitot bracket, strut attachments, fuel shut-off bellcrank, tailskid brackets etc. AUD has 3 little clamps that attach the fuel tube and fuel shut-off bellcrank to the port cabane



struts. Each of the clamps has a rubber inner where it goes around the strut. This was one of the really obvious features in the judges photo and needed to be reproduced. I did this by gluing a 2mm strip of prepainted black Esaki tissue on first and then a 1.2mm strip of pre-painted silver photocopy paper over the top. The effect is very realistic.

Paper tubes. Paper tubes are a lightweight option for scale and/or functional features. I used paper tubes for the tank fuel gauge, engine push rod sleeve, venturi,

and all rigging turnbuckles. I make paper tubes using esaki tissue rolled around a suitable mandrel - usually a piece of wire. This can be a bit fiddly on small sizes such as the turnbuckles which were rolled around 24swg wire. Rather than try and glue them all the way I roll my tubes first and then use a tiny amount of aliphatic to seal the end and stop them unravelling. When dry I then slide the tube almost all the way off and carefully 'paint' it with thin cyano. When the tube is dry you can slide it back onto your mandrel and give it a rub with wet and dry if it needs to look like metal. The bigger the gauge the easier it is to make longer tubes but down at the smaller end I find that under 2" in length is easier to control. Tidy up ends and cut to length by rolling with a knife or razor blade.





Vacuum forming. The kit comes

with vacuum formed wheels, oil tank and corrugated fuel tank skins. I also used vacuum forming to produce corrugated skins for the sides of the tank, a tailskid shoe, airscoop, undercowling overflow pipe fairing, and fuel tank sump. For production purposes the kit mouldings are ABS but I have found that the thin clear plastic sheet used for presentation covers gives better definition and is exactly half the weight, though trickier to work with.



If this article has enthused you to build this model, this superb kit is now available, directly from Avetek - Ed

D-Day Display at Ardmore - Stan Mauger

31-5-15

The Club once again put on a static display in the Warbirds Hangar at Ardmore, this time for the Warbirds D-Day Open Day. Present were Angus Macdonald, Stan Mauger, Mike Mulholland, Don Spray, Keith Trillo and Charles Warren. About the same number of models were provided as at the last display there and a sufficient cross section of aeromodelling interests were represented to create interest to viewers. Younger children soon arrived when Charles Warren started his MP Jet side-port diesel. They also lingered on the RC flight simulator. Keith Trillo spent time showing the controls of his foamie indoor 3D RC model to children [and others]. It was great to see waves of people coming through between the Warbird aircraft displays. A number of older visitors admitted to having built model aircraft years ago and clearly enjoyed seeing them again while others were interested in hearing about building and covering models. Stan Mauger had a 'live' covering demonstration – his APS Terrier wing - in progress at an end table.

Appreciation is due to those who came to put up and man the stand. Special thanks to Keith who also coordinated the display. There were several expressions of interest in the activities of the Club and it would be great if membership applications follow these. Regardless, the promotion of aeromodelling to the public has value in itself.







Right:

Keith Trillo giving this youngster some hands on experience on the controls of Keith's indoor RC model.



MIMLOCT Sunday August 2, 2015 (Memorial Mass Launch of Cloud Tramps)

Plans for the Cloud Tramp were published in the October 09 Slipstream, or are available from the Editor • It's not too late to start building one of these simple models.

Calendar

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

KARAKA						
Sundays Karaka Steward	Tomboy Extravaganza (for Club points) Flying can take place between 10am and 2pm (9am to 3pm for gliders and other silent models) NOTE 1/2A Texaco is included in the Karaka/Tuakau Programme. NDC events *could also be flown. Keith Trillo 09 298 4161 027 4607180					
	careith@hotmail.com					
ΗΟΤΕΟ	NDC events including P30, Vintage FF Hand Launched and Catapult Glider, Nostalgic FF Glider Duration, F/F Precision, *Vintage RC Precision,1/2A Power, and Open Glider.					
Hoteo Steward	Paul Evans	479-6378	z	ply@xtra.co.nz		
AKA AKA						
Saturdays & Sundays	Intending fliers should phone Brett Naysmith to confirm that there will be flying.					
Instructors	Grant Domigan	and Brett Nay	rsmith			
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 Balmoral						
Monday July 27	Push E, Kit Scale [7.30-10pm] - for Club points					
Ellerslie Tuesday July 14	Michael Park S Indoor radio fly		m)			
Tuesday July 28	Indoor Radio S Full Scale classe - for Club points	es [7.00-10pm		le, Simple Scale and		
Indoor Steward	Bryan Spencer	570-5506	bspence	er@xtra.co.nz		
Domain						
August 2	MIMLOCT World Cloud Tramp memorial at 4.00am					

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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 Mrs Jeanette Northmore, 20 Larsen Road, Panmure 1072, Auckland

NEXT CLUB MEETING AND NATTER NIGHT

Monthly club meeting 7:30 PM

Monday July 6, 2015

ASME Clubrooms, Peterson Reserve, Panmure.

Theme: Sports models and model aero engines

Items for the table: Models, plans, engines, photographs etc

Trading table: Buy, swap and sell

Visitors or intending members welcome