

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



Don Spray being awarded the Credgington Trophy by contest organiser Bill Dennis, for the top place in the Scale Flying Only event at the May BMFA Nationals.

NZ REGISTERED MAGAZINE



# 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 Charles Warren's Tomboy, seen at Karaka. Photo: Ricky Bould

# Editorial – This month

I actually mean last month! June has been a very full month of flying for various club members. The Club's Morrinsville Day has come and gone and those involved can look back on it with positive reflections. Philosophically, reaching out to modellers outside the immediate club by hosting a northern event like this has merit. As has already been observed (although it is worth restating), these events help to generate interest in the classes flown and help us personally to improve our flying skills and building in a similar way to larger Nationals events, in fact some of the indoor classes have been better supported than at the Nationals. Hopefully support for this event will increase and make it even more successful.

Further afield, several from the club attended the BMFA Free Flight Scale Nationals at Barkston Heath. A report in this month's Slipstream provides details of this most enjoyable event. It should be added that these trips to overseas events are demanding in cost and personal organisation, but the contact with others in one's same flying discipline is invaluable and the experience is most rewarding. All of us would encourage others with interests in any championship event to travel to contests if at all possible.

No sooner have some scale fliers unpacked than they are off again to Richmond, near Sydney for the NSW State Champs for free flight scale. My accounts of these events are undoubtedly well known as I have written about them often. The flying site is magic, a turf farm, no less, and the weather amazing. After probably six straight years of calm weather – a free flight scale modeller's dream – will it be just as wonderful again this weekend? We will tell you on our return.

Elsewhere, as I gaze out my window signs are that there may be more lovely calm winter weather. Let's hope so.

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 August Slipstream is July 28

#### Photo credits

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

# Monthly Club Night - Mike Fairgray reports

#### 5-6-17

Present were Gwyn Avenell, Mike Fairgray, George Fay, Tony Hill, Bill McGarvey, Mike Mulholland, Brendon Neilson, Geoff Northmore, Arthur Pearce, Bryan Spencer, John Swales Keith Trillo, Charles Warren Keith, Williamson and visitor Peter Harrison.

Don Spray, Stan Mauger and Ricky Bould were away in England visiting and competing in the British Scale Free Flight Nationals. Early reports were that Don Spray (rubber) and Stan Mauger (Power) came first in their events. With Ricky away, Charles presented the table and John Swales stood in for Stan as photographer.

Theme for the night was E Rubber and Electric. Only four models on the table. George Fay has refurbished his Scale rubber Curtis Robin. As well as a general tidy up, extra scale details have been added. He said that the flexible nylon line used to mount the propeller blades into the hub was allowing them to wobble, so flight times and performance was not great. He had constructed a new removal nose assembly and carved a wooden prop with a finer pitch. Better performance has been achieved with this change.

Keith Trillo had along his Outdoor Tractor and 1940 Yonder. There was some serious competition and "one upmanship" between a number of flyers competing in the class with larger versions of the models being built so that a longer flight can be achieved. Due to the increase possible in wing loading this allowed for a larger motor and battery to be used. E Rubber has no minimum weight. Watch this space for a larger Yonder to appear to be flown in the next Nationals.

Brendon Neilson had a pile of plans free to a good home. Charles Warren gave some insight into the diesel fuel mixture he was using. It consisted 1/3rd Fuelite (\$12.00 from Mitre 10) 1/3rd oil and 1/3rd kero. He also added a shot of ether from a can of diesel boost.

Arthur Pearce had the latest Flight Path magazine which had an interesting article on Nevil Shute who was an English novelist and aeronautical engineer and aviator who spent his later years in Australia. See https://en.wikipedia.org/wiki/Nevil\_Shute for more.

Mike Fairgray had been converting his IC Tomboy to Electric and the finished model was on the table. It looked great covered in film. The red was Solarfilm and blue Litecover. A new wing had been built due to hangar rash and the hardest thing in the conversion had been covering the model with the tail and fin in place as they were always getting in the road. Mike also had a servo tester which he demonstrated allowing for the checking of servos prior to installation. There were three tests. 1 manual, by turning a knob to ensure good overall travel, 2 centralising the servo and 3 the servo travelled automatically from left to right like a windscreen wiper. Before you go flying the tester can also be used to test the ESC making sure that throttle function works correctly and test flying control surfaces to determine how much movement is available or if there are any problems with control functions. The cost for this tester varies between \$8.00 and \$15.00 watch the video on https://www.youtube.com/watch?v=3BvXXBCqqfc.







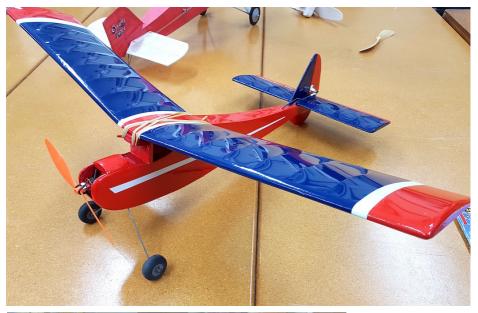
For the theme of the evening, Keith Trillo had brought his Outdoor Tractor, *Top* and 1949 Yonder, *Above*. 18

**Upper left:** Mike Mulholland's beautifully carved propellor for his Borel Morane rubber scale model.

*Lower Left:* Expertly carved props for rubber models by Bill McGarvey.

Photos: John Swales Mike also had along a selection of DVD's for consideration to be used at a film evening. Mike Mulholland floated the idea of having club members attend the soon to be released film of Churchill which would be followed by a social evening at Mike's home. Members supported this as it would make a great social event. Further information would be sent to members as soon as arrangements have been finalised.

So ended another club night.





Above:

Now set to fly, Mike Fairgray's newly covered Tomboy.

*Left:* George Fay has been experimenting with propellor design for his Curtiss Robin.

# Aka Aka Diary - Charles Warren

On a sunny calm day in mid May Brendon and Charles gave Lloyd a ring and arranged to fly on the farm at Miro Road. The strip was in fine condition , rabbit holes filled and grass mown, thanks to Lloyds care and attention.

Charles was using his new low ether brew for his diesels. This brew replaces 50% of the usual proportion of ether with "Fuelite" which is readily available in hardware stores and is sold as a paint thinner and a fuel for certain types of camping stoves. It starts and runs the motors just as well as his usual brew which has about one third ether and is a considerable cost saving. Charles flew his F/F Tomboy first. It has MP jet 0.6cc up front and a clockwork timer operating a tip up tail D/T whose action really surprises died in the wool R/C flyers especially when it operates when the motor is still running! However a Tomboy does not seem to mind how it comes back to earth in damp winter conditions it is immediately ready for another flight.

Next Brendon had two successful flights with his high wing 40 powered trainer using Lloyd's neatly prepared strip for take offs and landings and then we moved on to flying our Radians which were able to gain height in some weak thermals and we each had about three Radian flights. There was not enough wind for the ridge to produce significant lift. Finally Charles flew his R/C Tomboy the Bodo Mills in it is still running-in but engine runs are gradually improving. His SE5a was not flown that day as the inverted cowled PAW 55 is reluctant to start at present and needs to come out of the cowling for some attention. A successful day's flying with no damage to any airframe.



# Auckland Wins the Cloud Tramp Challenge

# - Stan Mauger

Auckland Club members should be justifiably proud of the result of the first Peterborough – Auckland Cloud Tramp Challenge [PACT]. We have triumphed this time, making flying

to the early start and in less than ideal flying conditions all worthwhile. The final result of New Zealand 1242 and Peterborough 1121 was announced at a small gathering of AMAC and Peterborough MFC fliers at the May UK Nationals at RAF Barkston Heath. But let us not be complacent, I hear on good authority that the PMFC are full of resolve to win back the trophy that they have generously created and awarded to us for the recent event. We must keep honing our flying skills and fly this class during the year to be in top form for next year's challenge. There is a full and entertaining report on the Peterborough MFC Cloud Tramp flying in the June Sky Larks edition of the PMFC Magazine. Go to www.peterboroughmfc.org



Under the *Club* heading, go down to *magazine*.

**Right:** The handsome new trophy created by The Peterborough MFC for on-going PACT Challenges. **Below:** PMFC's Brian Lever awarding the trophy to Ricky Bould on behalf of AMAC



## Morrinsville Indoor Free Flight Events Day - Stan Mauger

The day failed to attract quite the numbers this time, with a few of the regulars away but there was nevertheless some great flying. It was great to have Dan Walker and Dave Jackson join us this time. Understandably cool temperatures are to be expected at this time of the year and the hall stayed cool throughout the day. For many of us that meant increasing rubber size in models to gain to required power.

Hangar Rat attracted most entries in the free flight morning part of the programme and Kit Scale in the afternoon. In Hangar Rat Dave Jackson defied the cool conditions making a respectable time of 388 seconds for his two best flights. Hand-launched glider attracted only a couple of fliers. It would be good to see more starters in this event. Modelair Hornet has now established itself as a fun class, with such an easy to build model and also straightforward trimming.

Kit Scale drew enough fliers to provide good competition. Keith Trillo's Spirit of St Louis was a worthy winner, as a good flier and beautifully built model. Peanut Scale

Was a contest between Dan Walker's Lacey and Keith's Fike, with the flying score used as the tie-breaker. Both Stan Mauger and Ricky Bould would have liked a few more to come and join them in Open Rubber Scale. Perhaps next time!

It was great to see models using the space of the stadium and a relief for many, to see very little wall-banging during the day. The Westpac Stadium truly is a great venue and I encourage any indoor fliers who have not been down to experience it, to come and join us. The next meeting is Sunday October 8. Please bookmark this. We would love to see you either as a flier or a spectator.

A special thank you to judges and to Dave Jackson for the photographs overleaf











*Top left:* Keith Williamson's Hangar Rat getting away nicely.

**Top right:** Dan Walker made a good flight time to achieve second in Hangar Rat.

*Centre:* Ricky Bould allowing his Modelair Hornet to wind down.

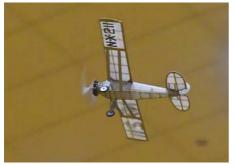
*Left:* Bill McGarvey, hard at work on his Hangar Rat.



*Above:* Angus Macdonald's No6 Hangar Rat going for height.

**Below:** Ricky Bould Luscombe Sedan off on another smooth flight.









**Above left:** Keith trillo's Spirit of St Louis, winner of Kit Scale.

**Above right:** Stan Mauger's Fleet Canuck making lazy circuits of the stadium.

*Left:* Dan Walker got top static points for his beautifully built Lacey in Peanut Scale.

Photos P.10-11: Dave Jackson

### Results

#### Hangar Rat

<ol> <li>D. Jackson</li> <li>D. Walker</li> <li>A. Macdonald</li> <li>K. Trillo</li> <li>R. Bould</li> <li>K Williamson</li> </ol>	388 274 259 257 247 89	U		
Hand Launched Glider	Total bes	st 2 flights		
1. D. Jackson 2. D. Walker	54.19 50.89	st 2 nigrite	,	
<b>Modelair Hornet</b> (Target time 30 seconds)				
1. K. Trillo 2. W. McGarvey 3. R. Bould	29.31 31.59 31.03	30.00 30.72 27.93	31.19 33.16 33.50	
F4D Indoor Rubber Scale		27.90	55.50	
1. S. Mauger 2. R. Bould	Static 295 173	Flying 401 434	Total 627 547	Fleet Canuck Comper Swift
F4F Peanut Scale	Static	Flying	Ranking	
<ol> <li>K. Trillo</li> <li>D. Walker</li> <li>A. Macdonald</li> <li>R. Bould</li> <li>(*Flying decides tie-breaker</li> </ol>	40 51.5 38.5 43.5	74.77 67.13 55.03	2/1* 1/2 4/3* 3/4	Fike Lacey Nesmith Cougar Fike
Kit Scale	Ctatio	Fluing	Total	
<ol> <li>K. Trillo</li> <li>D. Walker</li> <li>A. Macdonald</li> <li>S. Mauger</li> <li>R. Bould</li> </ol>	Static 180 140 124 48 36	Flying 47 53 51 57 37	Total 227 193 175 105 73	Guillows Spirit of St Louis Modelair Auster Modelair Auster KK Cessna Veron Luscombe Sedan

Total best 2 flights

# Peterborough Ferry Meadows Day - Stan Mauger

One of the nice things about getting to the UK Nationals was that it afforded an opportunity to also join the Peterborough Model Flying Club at their afternoon flying on the following Friday. This was a regular weekly flying time at the park that the club uses at Ferry Meadows, in Peterborough. At this time of year the grass was long enough to be kind to models and as the park is used by other organisations, it was an interesting bonus to have the sounds of distant music as the afternoon got under way.

Several free flight events were scheduled including 36" Hi Start Glider, Cloud Tramp, P20 and Hand launched glider. These brought a variety of models with information on some in the captions overleaf. These classes all suited the park space. Ricky Bould had brought his KK Elf and had fun flying this with the club.

It was great to see pure free flight flying in a relaxed atmosphere. Light rain brought flying to an earlier close than scheduled, which was a pity, but this was still an enjoyable afternoon of flying. A special thank you to Brian Waterland and others of PMFC for your hospitality and welcome.



*Above left:* Bert Whitehead with Peter Gibbons winding PG's Cloud Tramp.

**Above right:** Brian Lever discussing the finer points of his Cloud Tramp with Dave Rumball (originator of Peterborough 36 inch Hi Start Glider).



Top left: Brian Lever eying the weather before releasing his P20.

**Top right:** Bert Whitehead with his own design Bostonian, Manic De-Pressant, which initially Dutch rolled badly but he cured this with a sub fin. Has a 6 inch prop, 6 gm motor.

**Above left:** Pete Adams setting up his own-design P20. Basically a scaled down P30 with rolled fuselage (very common in PMFC after a club night teach in). Four strands of 3/32". Model weighs 30 gm, the minimum allowed. Was winner on the night.

Above right: Graham Gostick with his P20.



Above: Mick Page with P30 surrounded by just the vegetation for test glides.





*Top:* Brian Waterland winding his FA Moth rubber model

Above: Ricky Bould with KK Elf.

Left: Veron Cirrosonic built by John Brown with two discus launch RC gliders in the background. They are Tony Beckett's F3Kc by Chili, and an xxLite, now owned by Jon Whitmore

# FF Scale at the BMFA Nationals - Ricky Bould

These were held over the May Bank Holiday weekend at RAF Barkston Heath near Grantham.

#### Aeromodeller/Model Aircraft Flying Only

This event is for models from published free flight scale plans. It was won by Mike Smith with his Martinsyde Elephant. Not far behind him were Mike Kelsey with his SE5a and Gareth Tilson's Bird Dog. Pete Fardell followed with an enlarged Hollandair Libel. Phil Smith had an 'entertaining English Electric Wren, the likes of which seems to follow a challenging flying pattern whomever seems to build it. Despite the strong winds the top fliers all recorded respectable scores.

#### Kit Scale

Flying is judged on the model's ability to fly to a target time. Eighteen people competed, so it was a large field. Gareth Tilson's KK Piper Family Cruiser flew well enough to take first spot, Ivan Taylor's Auster flies indecently being one of the better flying KK 3/6D designs. Pete Fardell flew his enlarged Guillows Fairchild in this class and it handled the conditions well.

#### The Credgington Trophy

This is a flying only event. There were many great flights. Andy Sephton's BE2 flew sedately. George(?) Foster's Jet provost was amazing and flew super smoothly. Gareth Tilson's Lancaster was impressive in the air until one of the motors cut and then the flight pattern was compromised. Billy Henshaw's APS Stösser, a previous winner flew fast and steady, but Don's Spray's Puss Moth's flights were really lovely and gave him a good lead. He was surprised, but justifiably delighted to win the event.

**Results - top places** A complete list of results can be found on: http://www.scalebmfa.co.uk/ {click on Scale FF Nationals - 27 & 28 May 17 - results]

#### Aeromodeller/Model Aircraft Flying Only

1. M. Smith	Martinsyde Elephant	410
2. M. Kelsey	SE5a	365
3. G. Tilson	Cessna Bird Dog	340
4. P. Fardell	Hollandair Libel	300
Kit Scale		
1. G. Tilson	KK Piper Family Cruiser	14 (Total difference)
2. I. Taylor	Auster	15
3. P. Fardell	Guillows Fairchild 24	16
4. G. Foster	KK Cessna	25

#### Open Scale Flying Only - Credgington Trophy,

1. D. Spray	DH Puss Moth	457
2. B. Henshaw	Focke Wulf Stosser	415
3. P. Fardell	Fairchild Ranger	410
4. G. Tilson	Avro Lancaster	407



**Right:** Mike Smith with his winning Martinsyde Elephant, which he designed for Aeromodeller. Bill Dennis is seen recording the moment.

**Lower:** Gareth Tilson's Eric Fearnley-designed Cessna Bird Dog getting away. Mike Kelsey is looking on.

*Inset:* Mike Kelsey's SE5a.









**Above:** Don Spray's winning DH Puss Moth in 'Flying Only' Scale event.

**Above:** Don looking over George Foster's electric fan-powered Jet Provost.

**Lower:** Ricky Bould's Avetek Tiger Moth getting away from the launch in Kit Scale.







**Above:** Stan Mauger's Power scale Auster C4 Antarctic seen between flights.

*Left:* Mike Smith tuning the Mills in his highly detailed Sopwith Snipe.





**Above:** This view shows off the beautifully made five-blader on lan Taylor's impressive Spitfire flown in Rubber scale.

*Left:* Ricky Bould tuning the AM10 in his AOP9 for power scale.

Photos p18-19: Stan Mauger

#### Evening scale events

CO2/electric, Rubber Scale and Power scale, for the Super Scale Trophy, were run in calm conditions.

#### CO2/Electric

With a high static score, Gareth Tilson and Charlie Newman were in a good position to do well and their flying scores put them in first and second spots, respectively. Not too far behind were and Stephen Glass with his impressive electric SAAB J29 and Ricky Bould's Comper Swift, the latter achieving an ROG that helped his flying score.

#### **Rubber Scale**

Andy Sephton's Lacey floated around slowly making an excellent flying score and with high static marks won this event. Richard Moore had worked hard on his Nieuport and it was pleasing to see him achieve second with his model. Bill Dennis made third with a lovely Hawk Moth that achieved a high static score. He was followed by Ivan Taylor's impressive Spitfire. The first four paces were fairly closely grouped. Don Spray's Puss Moth once again flew very well in the ideal conditions.

#### Power Scale for the Super Scale Trophy

Stan Mauger had the flight of the day in this event to take the lead, aided by a good takeoff. Mike Smith's superbly detailed Sopwith Snipe was an exercise in perseverance but all the work did enable him to get a reasonable flight in the end. Andrew Hewitt's Bristol Scout took third place. It looked great in the air and is a well-detailed model.

#### Results - top places CO2/Electric

1. G. Tilson	DH Cirrus Moth	2834
2. C. Newman	RWD8	2207
3. S. Glass	SAAB J29	2205
4. R. Bould	Comper Swift	2169

#### **Open Rubber Scale**

1. A Sephton	Lacey	3040
2. R. Moore	Nieuport	2863
3. B. Dennis	DH Hawk Moth	2843
4. I. Taylor	Spitfire	2737

#### Power Scale - Super Scale Trophy

1. S. Mauger	Auster C4	3177.5
2. M. Smith	Sopwith Snipe	3069
3. A. Hewitt	Bristol Scout	2776
4. M. Kelsey	AW FK8	2523.5

A complete list of results can be found on:

http://www.scalebmfa.co.uk/ [click on Scale FF Nationals - 27 & 28 May 17 - results]

# Druine Turbulent - Part Two (By Allen Teal)

Well, as you can see here, a little more progress has been made on this model. I previously mentioned that I had made a solid centre section. Reason has prevailed in the quest of weight saving and I have made up a new section using formers and covering with very thin balsa sheet. It seems firm enough and I am sure it will stand up to the test of an encounter with a wall!

I have also added little riblets to the leading edge to maintain aerofoil integrity.

Most Turbulents have a rather complicated undercarriage made up of three arms leading down to the wheel axle each side. After some research I found that some models just have one solid leg each side so for ease of construction and for weight saving, I have used this layout. Also, the aircraft has a tailwheel but I have opted for a light wire ending in a tail skid, again to keep the tail end light.

I spent over an hour trying to form a very small fairing from balsa which was to fit just behind the top stringers and on top of the tailplane leading edge and either side of the forward portion of the fin. Just when everything was looking like it was coming together it all split and fell apart. Oh joy! I have a very lightweight filler produced for modellers and have now formed the fairing from this material. It may not look as nice but once covered no one will know . . . until you read this!

The colour scheme is where I am now turning my attention and I have decided on a mid-blue fuselage, tailplane and fin, with wings and rudder in white. I have some transfer paper which I will use for some lettering and trim yet to be decided and designed.



As she sits here weight is 10.5gms or approximately 0.35oz. There will be the added weight of tissue, windshield, rubber and prop assembly but I am happy with it thus far. Have been really enjoying this build.

However, everything comes to a grinding halt again as we make a visit to see grandkids and family in Wellington and then embark on another overseas work assignment, this time in Thailand.

# The next Indoor Free Flight Morrinsville Day Sunday October 8, 2017

Hangar Rat • HL Glider • Push E • Modelair Hornet
F4D Rubber Scale • F4F Peanut Scale • Kit Scale

Westpac Stadium Hall, 21 Ron Ladd Place, Morrinsville

Contact Stan Mauger 09 575 7971, stanm09c4@gmail.com for more information



Organised by the Auckland Model Aero Club Inc in conjunction with the Scale Free Flight & Control Line SIG

# Radio Modeller Free to a good home

I have dozens of issues of this magazine, plus sundry other Aeromodelling titles from the 80s up until 2000s. Some have free plans. If you are interested call me on **575 7971** 

Stan Mauger



# Calendar July

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

<b>KARAKA</b> Sundays	<b>Tomboy Extrava</b> Flying can take pl (9am to 3pm for g	lace between 10a gliders and other	am and 2pm silent models)
NDC RC Vintage events	RC Vintage and RC Classic Pred		
Karaka Steward	Keith Trillo 09 298 4161 027 4607180 careith@hotmail.com		
ΗΟΤΕΟ	Call the field steward if you would like to go up and do some free flight and vintage flying there.		
NDC FF & Vintage	Aggregate and Open Glider, Nostalgic Glider Duration (also see Karaka RC list).		
Hoteo Steward	Paul Evans	479-6378	ziply@xtra.co.nz
ΑΚΑ ΑΚΑ			
Saturdays & Sundays	Intending fliers should phone Brett Naysmith to confirm that there will be flying.		
Instructors Aka Aka Steward	Brett Naysmith Brett Naysmith 09	9 235 8803	brejo@xtra.co.nz
		200 0000	
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		, ,
INDOOR EVENTS Ellerslie Tuesday July 11	Michael Park So Indoor radio flyin		
<b>Drury</b> Monday July <b>31</b>	Drury School Ha Practice night (7.3		
Morrinsville Sunday October 8	Westpac Stadium Indoor free flight events (see notice opposite)		
Indoor Steward	Bryan Spencer	570-5506 bsp	encer@xtra.co.nz

#### 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	drlmspray@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 Fairgrav. 3 Kanohi Tce Mangere Bridge 2022, Auckland

#### NEXT CLUB MEETING AND NATTER NIGHT

Monthly club meeting 7:30 PM

#### Monday July 3, 2017

ASME Clubrooms, Peterson Reserve, Panmure.

## Theme: Bring your favourite model aircraft

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

#### Trading table:

Buy, swap and sell

#### Visitors or intending members welcome