

CHRISTCHURCH MODEL AERO CLUB EXECUTIVE 2017 / 18



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CHRISTCHURCH MODEL AERO CLUB (INC)

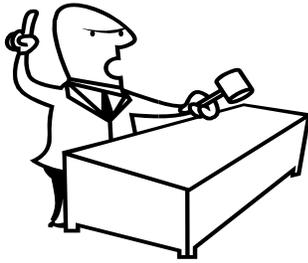
Torque

April 2017



If undelivered please return to P.O. Box 14115 Christchurch Airport





THE PREZ SEZ



Junior / Junior = under 18
Junior = 18 to 60
Senior = 60 to 80
Senior / Senior = 80+
Club perceived age / knowledge

Finally the weather is settling down and looking a little better with 2 good Sundays in a row and this week (23rd) looking like a nice flying club day So come on out and join the fun.

I am happy to announce that Roy Gunner has completed and passed his wings badge, so if there is anyone else out there who would like to complete their wings badge certification- come and see me, ask Roy I am not that tough or scary.

It is amazing the amount of thick green grass currently on the club fields, I have not seen the land that green at the Willows for years, obviously due to the high rainfall of late so our Mower Man will be kept a little busier but it will make the strip great to fly off.

Well done to all of our club members, subscriptions for the current year have been paid in good time and the majority were insured from the start of the new year - April 1st

At the last committee meeting it was discussed and agreed that we would extend the road end of the electric fence out in order that some of the bigger planes and gliders can land safely, once this is completed please do not realign the fence further without consultation with Graham Moffat, any further out and you will start to enter into uneven ground and rocks.

That's it from me, happy flying. Grahame Hart



Richard Matheson's new electric twin sunning its self waiting for the pilot to work up courage to test fly it!!!! Looks nice Richard.

Minutes of CMAC committee meeting, Thursday 9th April 2017, 6B Middlepark Road, Upper Riccarton, 7.30pm

Present: Grahame Hart, Gary Burrows, Paul Chisholm, Trevor Henderson, Ian Harvey, Graeme Moffatt, Stewart Morse, Bruce Weatherall; **Apologies:** Mark Venter

Minutes and notes of last meeting and AGM: Approved; suggested that new membership form be upgraded (action by secretary).

Matters arising: The need for a control line area will be investigated if the need arises and there is interest from the members.

Correspondence In: Card from John Ensoll thanking us for flowers at the passing of his wife Val. Various emails from the Treasurer re who has paid so far and new members. From Membership Secretary of MFNZ with yellow affiliation cards with wrong expiry date. This was preceded by email outlining the mistake. New wings badge completed and needs to be sent off to MFNZ.

Correspondence out: To Andrew Palmer explaining that there was only a limited number of keys available to the field container. Various emails to Membership Secretary of MFNZ giving lists of paid-up CMAC members requiring affiliation.

Treasurer's report: Cheque a/c is at \$768.05 and saving at \$4054.52. Two lots of affiliations sent to MFNZ. Auditor to be paid; farmer for field use and CCC for indoor hire. Cheque for \$120.00 for petrol for mower over the last few months.

Section officers' reports:

R/C Power: Good recent Sunday turnout. Trainer getting good use but now have three available.

Free Flight: Good activity but some problems with aircraft retrieval over the power patch at some wind directions. Fliers need to check conditions and launch from a suitable site on the paddock.

Tomboy: Reasonable day recently but with wild fluctuations in flier's fortunes.

Soaring: Good recent Sunday turnout with 2,4,6,8,10 being flown together with Class H – Radians. Lots of lift with good flight times and not mishaps. Extending the fence around the power patch to cater for larger models (especially 1/3 scale tow planes) was discussed.

Pylon: Recent meeting postponed because of people away and next meeting in Easter also postponed. Next meeting mid May. Website is OK, but more recent and up-to-date photographs required. Please assist by sending to Mark Venter.

AOB:

Committee discussed the new method of getting in subscriptions and sending off affiliate's names to MFNZ. Secretary (and others where appropriate) are to encourage recalcitrant payer to look at getting their payments in ASAP to maintain access to the flying site.

The mud at the field gate was discussed and a member is to be approached who may be able to help in a suitable manner.

Early drone



"That hardly seems fair!"

TOMBOY 2 APRIL 2,4,6,8,10.

Miracles of miracles we finally got to see OBGGGGG finally in the air (more on that later)

The weather as presented by GOD and OBGGGGG was challenging to be sure and this is what was needed to try and sort the men out from the boys (no that didn't happen, as the current trophy holders still came out on top of their respective divisions) NorthWest followed by Southerly curbed some to only flying part of the contest (see results)

A finely tuned landscape artist Dunstan (I've lost 7kg in weight), was first to get his flights in to end up on the top of the 48" division, pity about the lack of landing spots!!!(2 of 5) But comfortably in front, which allowed him to race away to more landscaping.

Reliable Rodway was next with his 48" diesel

Granddad Ensoll was amazed that he came 3rd (4 out of 5 landing spots)

Stew Morse was relegated to last in the 48" class but only 3 tasks completed due the Southerly increasing in strength and found he would not improve his position regardless

36" class division only had one real competitor in John Beresford who only completed 3 tasks but was keeping an eye on his potential opposition in OBGGGGG (and CD) who fortunately only completed 1 task. (OBGGGGG is helping John to sort his TB which seems to have a rearward C of G at 43% the original TB was balanced on the spar 33% I think that OBGGGGG may regret this help!!!! Time will tell)

The 2016 Tomboy trophy was presented to the section winners (and can be seen in the display cabinet at Mason Carters Jewelers in Merivale. John Beresford is that proud to get his name on it. This year may be a different proposition with extra opposition)



Happy winners



The days winner trying to hide its obvious attributes



Granddad Ensoll showing great technique

2,4,6,8,10 con- test			2 April 2017					
Competitor	mod el		2 minute (120)	4 minute (240)	6 minute (360)	8 minute (480)	10 minute (600)	TOTAL
Dunstan	48E	Actual time	118	187	341	414	490	1550
		corrected Time	118	187	341	414	490	1550
		Landing	0	20	0	0	20	40
		Score	118	207	341	414	510	1590
								0
Rodway	48D	Actual time	99	221	345	345	448	1458
		corrected Time	99	221	345	345	448	1458
		Landing	20	0	0	20	0	40
		Score	119	221	345	365	448	1498
Ensoll	48D	Actual time	109	272	310	324	373	1388
		corrected Time	109	208	310	324	373	1324
		Landing	0	20	20	20	20	80
		Score	109	228	330	344	393	1404
Morse	48D	Actual time	142	182	189			513
		corrected Time	98	182	189			469
		Landing	0	0	0			0
		Score	98	182	189			469
								0
Beresford	36D	Actual time	102	146	142			390
		corrected Time	102	146	142			390
		Landing	0	20	20			40
		Score	102	166	162			430
								0
Burrows	36D	Actual time		237				237
		corrected Time		237				237
		Landing		0				0
		Score		237				237

ANY ONE YOU KNOW

- If you give him a penny for his thoughts, you get change back
- One celled organisms out score him in IQ tests
- Got a full 6-pack, but lacks the plastic thingy to hold them together
- Donated his body to science Before he was finished using it

TOMBOY OBSERVATIONS FOR PROSPECTIVE COMPETITORS

- Build model down to weight I.E 48" 21.5 ounces 36" 12ounces (meets 8 ounces/ square foot area rule) it has been observed that the light models are always up there in the results and while there will be conditions that suit the heavier model, they seem to be few and far apart.
- The wing spar original design is lacking in its ability to stop the wing from bowing once the tissue is doped due the increased area on the top with a relatively weak spar. A couple of solutions would be a carbon arrow shaft spar (ala OBGGGGG new 36") or alternatively a built up spar with carbon fibre stiffening followed by a lightweight covering which doesn't exert the tightening strength of doped tissue (of course weight needs to be watched)
- Get the decalge right I think that John Beresford's model may have that problem as it climbs very steeply after launch (may be over elevated) the use of clinos is very advantageous in this situation (OBGGGGG has a couple that can help you in this situation, just ask to borrow them)
- Get the C of G where you like it to suit your flying style but in saying that it must be within the range. (it is very difficult to trim a model properly otherwise) Bill Fergusson has had this experience only to find that he trimmed his model (Ballerina by Peter Miller) as it was only to find out that after an observation by Andrew Palmer that his C of G was to far back, a movement of .75 inch (yes .75 inch now about 30% of cord) forward of its original position, made the model a much better performer. (30% of the mean average cord is a good starting point)

INDOOR REPORT FOR THE 2ND APRIL.

We were a week early this month so Kay and I could go salmon fishing, guess what no salmon but still it was a good break and a great opportunity to do some rubber testing.

The N.C.D. event was F.1.L. We used the opportunity to set the models up as F.1.D's e.g. added weight to 1.4 gram and used only .4 of a gram of rubber. The purpose of this is to learn to manage such a little amount of motor but still get the power necessary to get respectable flight times. Did it work? Well yes and no, Kay's model couldn't handle the torque and my model flew well and climbed in the pattern that is expected from an F.1.D today.

Nev's model as usual flew well but was under powered, next month I expect he will have this sorted that out.

The results were of the best two times. Bill- 15 min 45 sec. Nev-12 min 25 sec. and Kay- 11 min 12 sec.

The next meeting is on the 14th May (Mothers day again!) and the event to be flown is F.1.L

Of course I talk to myself, sometimes I need expert advice.

POOPY PUPPY POOPER SCOOPER REPORTS

- It has been brought to my attention that our English professor believes that his very perfect instructions are being misinterpreted by those who receive them. How can this be ????
- We have another UFO sighting report in unusual circumstances, a Dr in our membership reported seeing 2 red dots flying in formation across the sky only to disappear (it is believed that the wife also saw this phenomenon) the circumstances of this sighting make the sighting a bit suspicious to say the least, it was about half an hour after midnight after the couple had attended a cancer society fund raising function in Rolleston. I leave it to your imagination!!!!!!!

APRIL CLUB NIGHT.

Guest speaker was Gary who did his best to explain and convince us of the benefit to our club of taking part in the various NDC events.

The members were also asked if there was interest in another indoor competition this year at our club nights and for some ideas.

Below are a few that were thought of with my own comments in Italics.

Indoor competition.

Helicopter/vertical flying device.

From internet videos I have seen these models can fly quiet high and for fairly long times and our ceiling is rather low so it might be difficult to restrain the models. The competition would have to be along the lines of a "duration" type event. Power source could be either rubber or string.

Air or rubber powered propeller driven vehicle.

Four wheels. Again, from some of the video clips I have seen these are capable of quite high speeds and distances so could be a problem in our venue. Might have to be "tethered?"

Rubber "Round the Pole" models.

This is another option since we have had the Snappy event in the past and it proved quite popular and we have the space.

"Legal Eagle" models.

Would also have to be tethered as per the Round the Pole option above. See the two links below to read up on this event and the rules.

<https://sites.google.com/site/thermalthumbsofmetroatlanta/free-plans>

<http://www.sebmfa.org.uk/legaleagle.html>

May Club night.

I feel that we should work on these ideas for a competition at our next club night (May) and decide on the most applicable and a set of simple rules so come prepared please. If you have some other good ideas or maybe a "mock up" or demo then bring it with.

SEE the next pages for an example or maybe a reduced scale "Hanger Rat" OBGGGGG

www.youtube.com/watch?v=TtLEY3Rzv1k

www.youtube.com/watch?v=9JfZ3c3-tEI

CLUB NIGHT CHALLENGE

At the last club night it was asked what challenge you attendees would like, out of this discussion was a rubber model that could be flown inside the hall (The Scrappy was suggested but it need a bigger hall than we have) So you can build any rubber model which could be flown in the hall but it must have a plan no bigger than a A4 sheet of paper. I have attached a sample for you to get the idea (Bill Long would like to see more indoor fliers)

This class is an excellent introduction to indoor rubber free flight. To build the model you need some 2mm Depron foam or other. You don't need much as the basis of the model is a piece 200 mm by 100mm, hence F200. The rules state that the wing, tailplane and fin must be cut from a piece that size, the maximum length of the model 200mm and the maximum motor length measured from prop. hook to rear motor hook is 100mm.

You also need to use a Butterfly prop (you can make it don't have to buy it). Don't bother to flatten the foam as it will be curved when it comes off the roll, but use the natural curve to form the airfoil section.

Cut your 200 by 100 blank so that the 200 is straight across the roll and the 100 is on the curve, cut out the bits as shown.

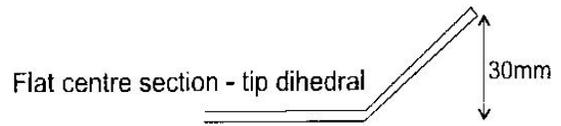
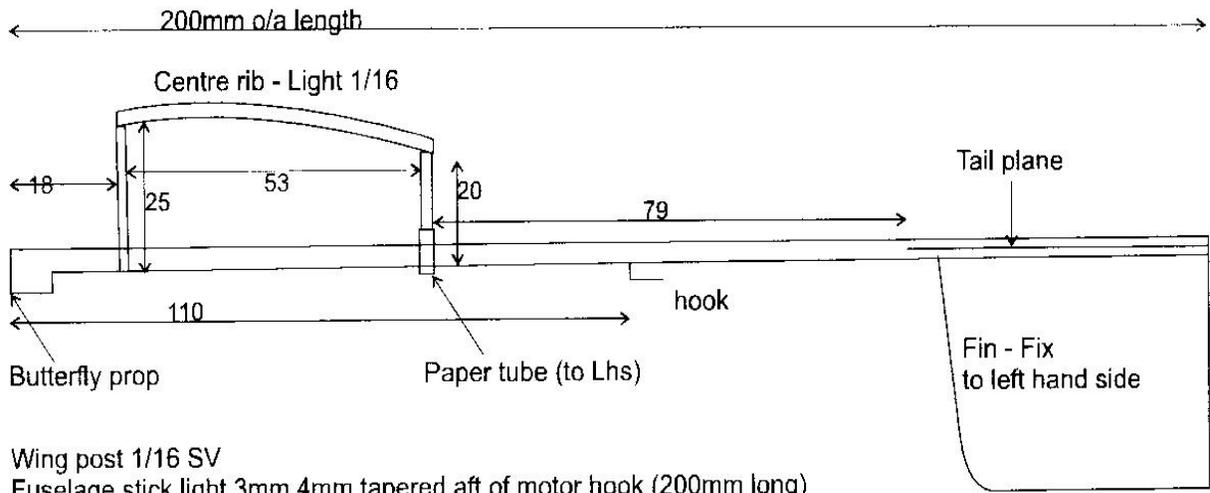
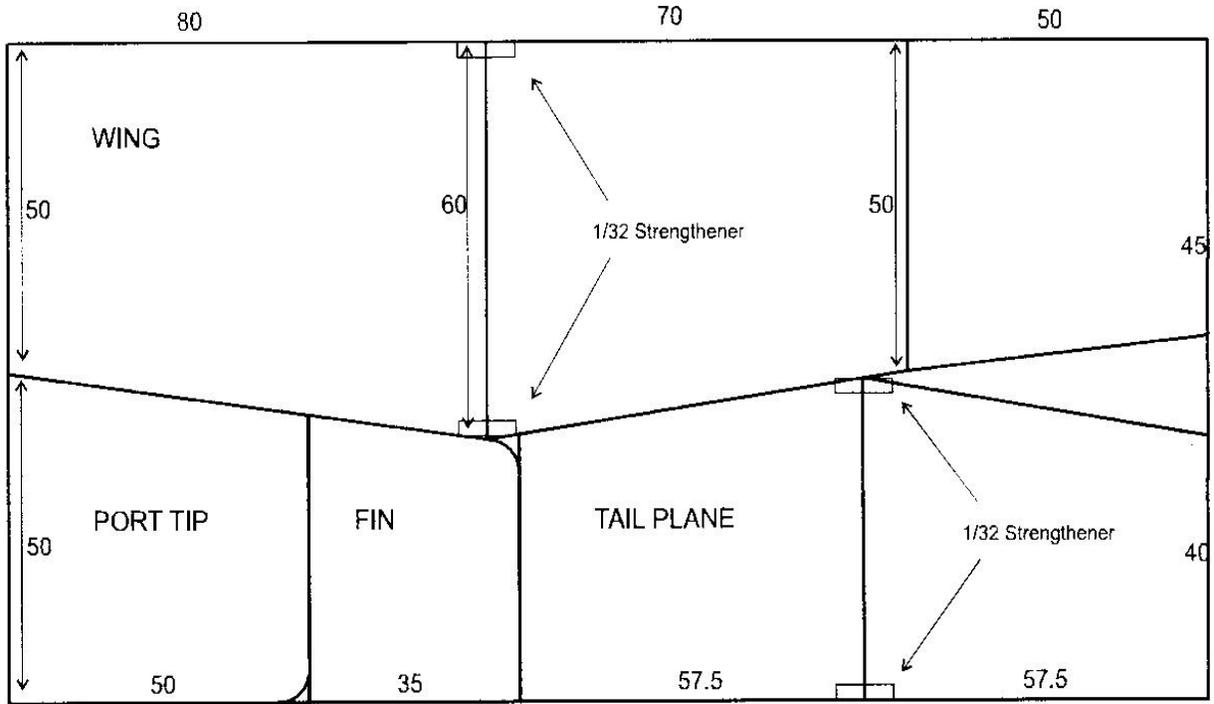
Glue the foam together with Uhu Por, or some fast grab PVA. If you use the latter, use a bit of low tack masking tape to hold the joints until dry. The trickiest bit is forming the dihedral. What you need to do is to cut an arc in the wing centre section and then glue the tip on. Don't try to sand it as you would a balsa wing, the foam tends to crumble. The dihedral is 30 mm under each tip, but it's not really critical, a bit more or less is all right.

The balsa bits should be made from some medium/hard balsa. If you are an RC flyer you will think that this is really soft. I mean about 7 or 8 lb/ cubic foot balsa. (a sheet of 1/32 x 3" will weigh 7 gms, 1/16 will weigh 14 gms, and 1/8 will weigh 28gms.) You can use lighter if you have it and it is stiff enough.

Make the fuselage/motor stick first, the fin and wing posts fit on the port side. Glue wing posts to the left of centre rib first and let them dry. You can use any glue for this, normal balsa cement works well. Make a paper tube by tightly rolling a strip of tissue or light copy paper round a piece of waxed 1/16 square, unroll it and apply glue and wind it up again and hold it until it starts to dry, the push it off. You might have practice a bit, use balsa cement for this. The tube needs to be tight enough to hold the wing post. When you have your tube push it over the rear post and glue the front post and the tube to the fuselage, glue on the rear hook and the prop hanger. The prop just pushes in.

You can glue on the wing now but don't use balsa cement or cyano, UHU is fine, don't forget the strengtheners, they really help. Glue on the tail plane and the fin, use UHU again.

- Grant me the strength to accept the things I cannot change, the courage to change things I can and the friends to post my bail when I finally snap
- Even duct tape can't fix stupid ... But it can muffle the sound.
- Why do I have to press one for English when you're just gonna transfer me to someone I can't understand anyway?



HIGH ASPECT RATIO
FOAM 200 to NORTHERN AREA RULES

FREE FLIGHT 9 APRIL 2017 BY BUDDING TORQUE EDITOR STEW MORSE

A good turnout of people flew a variety of models on a day that once again was hampered by an awkward wind that blew up mid morning.

It was good to see Craig King out having a sort out with his gliders in preparation for a trip to Australia to compete in three contests there.

Likewise, Mr Burrows was to be seen tuning up his new Tomboy to ready it for the next Tomboy round. He also made time to put in flights with his CLG.



John Beresford, Lynn Rodway and Bruce Weatherall flew their rubber models with the following times achieved.

<u>P30</u>				<u>CLG</u>			
John B	92, 84, 68	total	244	Gary B	32, 27, 18, 17, 16, 26	total	136
Lynn	61, 93, 73		227	<u>Coupe</u>			
Bruce W	67, 44, 49		160	Bruce W	56, 63, 44		163

Lynn and Stew M also flew 020 vintage replica with Lynn managing to break his model's tiny prop after an impressive first flight with his 010 powered Kerswap(?). No spare prevented any further flights.

Lynn	64		64
Stew M	39, 25	total	64

MORE FREE FLIGHT BY OUR INTREPID REPORTER MIGHTY MO_SE

A quiet Easter Sunday at the free flight patch with only Lynn, Bruce W and myself on hand.

Conditions were okay early with a cool light southerly blowing until mid morning. Bruce contented himself with trying to trim his Viking. A work in progress still.

Lynn and I put in some CLG times early. The coolish air not providing any help to boost flight times.

1/2A power times were recorded by Lynn and myself with Lynn's usual consistency enabling him to take the day.

<u>CLG</u>							
Lynn	34	26	36	24	34	21	total 175
Stew	22	28	18	33	32	29	total 162

<u>1/2A power</u>		
Lynn	114, 120, 95	total 329
Stew	90, 27, 61	total 178

Aircraft definitions

- **Blackburn Firebrand:** Your wife when you have been concentrating on your building and forgotten to turn the oven off.
- **Bristol Brigand:** Sex maniac

The **Curtiss-Wright CW-1 Junior**, originally named the **Curtiss-Robertson CR-1 Skeeter** is a light sports aircraft produced in the [United States](#) in the 1930s. It had been intended to sell for the price of a mid-range automobile.

The Junior had a top speed of 80 mph, a capacity of a pilot and one passenger, and a range of 200 miles. It could climb to 12,000 feet.



A “Woodys Pusher” built by Evan Bellworthy’s father. A derivative of the above



Nev Robinson’s model of the Curtiss Wright Junior built for our new scale Club Texaco Comp. just got to build the fuel tank. Great job Nev.

NITROMETHANE- to use or not to use as understood by Big T.

Hardly a month goes by without hearing comments like ' I need more nitro in my fuel'.....generally made by someone who believes their engine is not performing too well. An increase in the nitro content is only a small factor in trying to extract more power from your engine. It may in fact decrease the power if other factors have not been considered.

Most of the sport engines are designed generally to run on about 10-15% nitro and anything above that is wasting your money, could also affect the compression ratio, and in a worst case scenario make the engine less user friendly- pre ignition could occur and that's not good either.

The higher the nitro content the hotter the engine will run, and invariably more needle tuning will be required and in a worst case scenario may need a change in heat range of the glow plug....yes, they are generally related. General r/c sport flying sees generally a fuel mix containing between 10-15% of nitromethane- the motors are not running at peak performance so generally the nitro content may have no major effect except helping out on the bottom-end tuning....makes for better idling.

Nitro does give power- but like most things there is a far bigger picture that should be considered, so how does that work. Simply put there is another ingredient in our 'normal' fuel mix and that is called oxygen- very hard to measure the volume, but available free to all of us and a very important component in the subject of power generation.

A typical "standard 'glow fuel would be 10% (15%) nitro, 20 % oil, and 70% (65%) methanol, commonly known as 10% (15%) fuel, but that fuel alone will not produce any power unless mixed with oxygen; and that's why your engine has a carburettor, and for those racing high performance engines they use a venturi- a good description of that is the simple shape of a funnel. The primary purpose of the carby is to mix the right proportions of the two ingredients to at least let the engine run, and with the needle be tuned to get more power.....and that's why there are at least two needles to be adjusted when tuning your engine.

A venturi normally relies on tuned pipe pressure to force feed the engine so for the social flier the use of a venturi opens up another subject for future consideration.

Every engine has a requirement for a specific ratio of fuel, and oxygen- of course there is a chemistry involved and someone many years ago developed the fuel mix that we currently use, and certainly must have understood those oxygen requirements. If you try and run the engine rich (not much air) then the engine may not run at all...we all have experienced that situation.....we call that a flooded engine but be aware that can be caused by a hydraulic. On memory a model engine can burn around 3 times as much nitro to a given amount of oxygen than it can methanol, and yes you guessed right because that is where the power comes from.

The average modeller generally doesn't own a rev counter so therefore he tunes by ear-based on an expected noise level; which to him means more noise more revs, more power- a bit of a myth, however that is good enough for the average modeller as long as he has a good throttle response.

To further confuse the subject many high performance engines DO NOT run with nitro- they are of course different beasts and have been designed specifically for the ultimate in performance which includes such items as exhaust and inlet timing, and perhaps more importantly the compression ratio.....yes they all matter- but without the correct propeller- diameter and pitch they won't perform.

How many different types of clamps do you have??

here is a photo of OBGGGGG's selection (guess which ones are used the most)



Weather Station Phone Number

021 02943562

Operating times Monday to Friday 0600—1300hrs and 1400—1700hrs

Saturday and Sunday 0600—1600hrs

EDITORIAL MANURE. # 149, MANY MORE TO COME

- A plea to all you email people, I have been getting back “unable to send to address” due A) your email account is full or B) not known or C) timed out, please check otherwise I can’t communicate.
- Congratulations to you all for the prompt payment of your club subscriptions (95%) the secretary and treasurer thank you (they may be able to do some flying now)
- With the level of Free Flight activity now happening , the stop bank trees getting taller (causing more turbulence), the wind direction seeming to be more northerly causing the models to drift into the R/C flight path it may be strategic to review the placement our the free flight car parking to cause less disruption. In the past we have operated from by the pylons (southwester), top east corner of the free flight paddock, what do you think????
- Congratulations to Roy Gunner for achieving his wings badge, now he will have to build a Tomboy to have even more fun

OBSGGGG

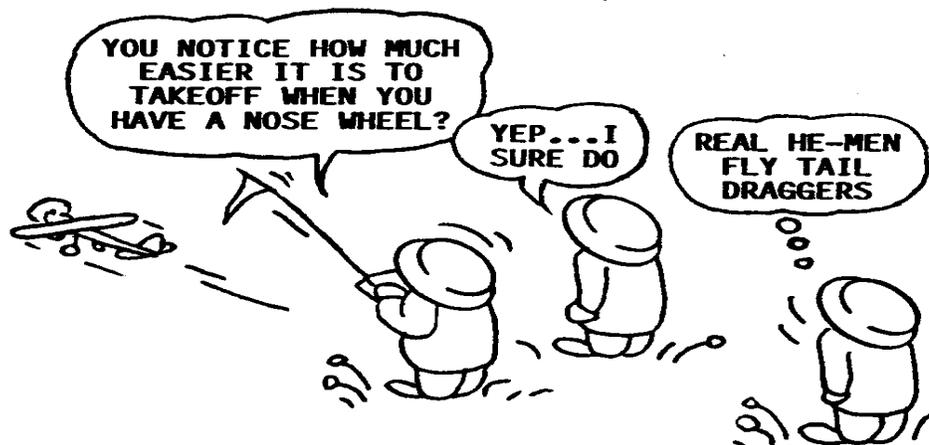


“We really shouldn’t be doing this at midnight on the 1st of April, Alex”

NDC EVENTS FOR MAY

May 2017	27	FF	Open Rubber
May 2017	28	FF	1/2 A Power
May 2017	29	FF	Kiwi Power
May 2017	30	FF	Open Glider
May 2017	31	FF	FAI F1L Indoor Rubber
May 2017	32	FF	Indoor Fuselage
May 2017	69	SOAR	Thermal D (F500)
May 2017	70	SOAR	Thermal B (10 min)
May 2017	114	VINT	FF Vintage Precision
May 2017	115	VINT	FF Vintage Power Duration
May 2017	116	VINT	FF Nostalgia Rubber Duration
May 2017	117	VINT	RC Vintage and Classical Scale Texaco
May 2017	118	VINT	RC Vintage Open Texaco

2-May-17	Tuesday		club night	1900—2100hrs	Condell ave
6-May-17	Saturday	Pylon		1300 -1600hrs	Willows
7-May-17	Sunday		NDC Events	0900 - 1200hrs	Willows
13-May-17	Saturday	Soaring	NDC Events	0900 - 1200hrs	Willows
14-May-17	Sunday	Indoor	NDC Events	1300 -1500hrs	Templeton
20-May-17	Saturday	Pylon		1300 -1600hrs	Willows
21-May-17	Sunday		NDC Events	0900 - 1200hrs	Willows
27-May-17	Saturday				
28-May-17	Sunday		BBQ Day + NDC Events	0900 - 1200hrs	Willows
28-May-17	Sunday		TOMBOY	0900 - 1200hrs	Willows
28-May-17	Sunday	Soaring	NDC Events	1300 - 1600hrs	Willows



JUNE NDC EVENTS

June 2017	33	FF	Hangar Rat
June 2017	34	FF	Indoor Hand Launch Glider
June 2017	35	FF	A1 Glider
June 2017	36	FF	P30
June 2017	37	FF	Coupe d'Hiver
June 2017	38	FF	FAI F1A Glider
June 2017	71	SOAR	ALES 200 Class M (Scoring per 3.13.7)
June 2017	72	SOAR	F3K Tasks B,D,G,H only (total raw scores)
June 2017	73	SOAR	ALES Radian Class P
June 2017	119	VINT	Vintage FF Hand Launch Glider
June 2017	120	VINT	Vintage FF Catapult Glider
June 2017	121	VINT	FF Nostalgia Power Duration
June 2017	122	VINT	FF Classic Rubber Duration
June 2017	123	VINT	RC Vintage Precision
June 2017	124	VINT	RC Classical E Duration

3-Jun-17	Saturday 1300 -1600hrs	Pylon		Willows
4-Jun-17	Sunday 0900 - 1200hrs		NDC Events	Willows
6-Jun-17	Tuesday 1900—2100hrs		club night	Condell Ave
10-Jun-17	Saturday	Soaring	NDC Events	Willows
11-Jun-17	Sunday 0900 - 1200hrs		NDC Events	Willows
11-Jun-17	Sunday 1300 -1500hrs	Indoor		Templeton
17-Jun-17	Saturday 1300 -1600hrs	Pylon		Willows
18-Jun-17	Sunday 0900 - 1200hrs		NDC Events	Willows
18-Jun-17	Sunday 0900 - 1200hrs		Avon Trophy	Willows
24-Jun-17	Saturday			
25-Jun-17	Sunday 0900 - 1200hrs		TOMBOY	Willows
25-Jun-17	Sunday 0900 - 1200hrs		BBQ Day	Willows
25-Jun-17	Sunday 0900 - 1200hrs		NDC Events	Willows
25-Jun-17	Sunday 1300 - 1600hrs	Soaring	NDC Events	Willows

