AVANZ NEWS

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From the Editor

When was that mythical *Golden Age of Aeromodelling*? Tradition puts it in the 1940's for the US, and the 1950's for the Empire. Both these decades may be correct, for these are the years from which we draw a great majority of the model designs we enjoy building.

Originators of the Vintage movement built designs from their younger days - the 1930s and the 1940s. They re-lived their modelling activity of those times, and on the second time round they used the wisdom of age to achieve success with models that had, in their youth, been beyond them. Their choice of models was fitting for them, but how appropriate is it today? Few of today's Vintage modellers were building and flying in the 1930's and 40's, and even into the 1950's many were too busy cutting teeth to play with toy aeroplanes.

Sadly, the Vintage designs we are so in love with are often memories from someone else's past. Now, there is nothing wrong with celebrating the products of a time other than our own (antique collectors and vintage car enthusiasts do it all the time) but it is a fact that very few of us can ever have connections with our Vintage models that are as intimate as those that existed between the first SAM fliers and their re-creations.

Despite this, there are aspects of Vintage models we can enjoy as much as did those who flew them when they were the latest and greatest. First up is their beauty, although looking at my RC-1, this is not a given for all designs. Then there is the way they fly, whether that be a lightning climb or a graceful glide - or both for the skillful.

Most importantly, though, is the construction process. Building with traditional methods is instructive and therapeutic. It poses challenges that keep mind and body agile, and there is satisfaction and pride in the finished product. Along the way we learn that there is no free lunch and getting results requires effort. Whichever era our models come from, the use of traditional techniques keeps alive skills that are not required or considered to be too difficult and too much bother by current aeromodelling trends. Just as, in the Dark Ages, isolated monasteries preserved literary skills (and some rather tasty chutney recipes), so enclaves of traditional modellers around the world today keep True Aeromodelling alive through the current dark age that is ruled by Great Lord Artie Eff.

As keeper of the way, the Vintage community is bonded not only by its choice of subjects, but also by the methods used to build these models. SAM 35 has shown it appreciates the process as much as the product by widening the Chapter's aims from fostering *Vintage* model building and flying to promoting *traditional* model building and flying.

A subtle change of wording, but it recognises the value of traditional building methods, whatever the age of the model, while nicely addressing the many delightful models from 1976 to the present that fall outside Vintage cut-off dates. These are models that use traditional building techniques and are "Vintage" in every respect but birthdate. There has always been the option of building these models, but as they are outside the sphere of most Vintage groups, they are less likely to be tackled.

We do not yet need "post-classical" classes, but acknowledging more recent designs on the basis of their build method rather than design age may lessen the perceived remoteness of traditional building and the Vintage movement, especially to those who are currently being drawn into model flying by the latest fads. At the very least, it would bring current traditional modellers nearer in spirit to those first SAM fliers as we, too, would then be building the models of our youth - models from our personal *Golden Age*.

Bernard Scott

Contributions to this issue from
Mark Venter Mike Mulholland Allan Knox
Allan Baker Wayne Cartwright Rex Bain
Barrie Russell Andrew Palmer Tony Tomlin
Don Mossop Dave Crook Dmitri Zotov

On the Cover *Allan Baker's 1937 Ohlsson Pacemaker Rises Off Water*

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Vale John Selby

30 September 2016 As the bulletin was being sent out, the following email was received from Des Richards:

It is with deep sorrow that I advise that John Selby passed away this morning. John fought cancer valiantly for over a year longer than he was given and was in good spirits when I was speaking with him last week.

SIG Committee Ruling on Playboy Spar Eligibility

The Committee has ruled that the wing of a Playboy Senior may have either two or three spars on the upper front one-third of the wing. This has come about because there is good evidence that two different plans were supplied with the original Playboy Cleveland kit, at different times. One plan shows just two spars. The other, which is earlier and marked 'Original 1940', shows both two and three spars. It is unclear whether this was meant to be interpreted as an option, or it was simply due to clumsy drafting. However, the existence of this plan means that both spar configurations are accepted as eligible under the Vintage Rules.

National Decentralised Contests

A reminder that the following NDC Vintage and Classical events can be flown during the month of October, the scores to reach the Recording Officer by the 14th of the following month.

118 Vintage RC Open Texaco
119 Classical RC ½ E Texaco
120 Classical RC E Texaco

If you're unable to make the Vintage weekend at Thames Blackfeet give NDC a go and see how you compare with the NNI Contest and Rally.

Thames Blackfeet RC Vintage and Classical Event

Dates:	October 22and 23, 2016
Times:	9.30am Saturday - 3.30pm Sunday
Venue:	Torehape Road, Ngatea
Host:	Thames Blackfeet Club (rally) and Vintage SIG (contest)
Contacts:	Rally Paul Evans, 09 479 6378 (In Martin Evans absence)
CD's:	Dave Crook, 07 824 7821, 021 123 6040, chloecat@xtra.co.nz
	Tony Gribble, 09 818 5551, 027 476 3359, agrib@orcon.net.nz

This is a combined contest and rally. All contest classes are flown both days. Contestants fly the classes they wish at any time they choose and rally flying is throughout the weekend subject to the contest landing circle remaining free.

Classes flown to the rules published in the Vintage page of the MFNZ website:

Vintage:	Precision, IC Duration, Open Texaco, A Texaco, 1/2A Texaco E Duration, 1/2E Texaco, E Texaco, E Rubber Texaco
Classical:	Precision, IC Duration, E Duration
Tomboy:	IC and Electric – best two flights of three attempts, with model specifications as published in AVANZ News (180 mah 2S).

Each contestant may make multiple entries in each class, subject to using a different model for each entry.

The Vintage SIG gratefully acknowledges Thames Blackfeet MAC for the use of their field.

Registration fee: Please remember a $5 registration fee is now required for these events. This covers all flying for the weekend. This fee is necessary to meet partially the cost of the donation to the club for use of the field. Since 2012, the full cost of donations to host clubs has been met from Vintage SIG funds, but support from a registration fee is now necessary.

FUTURE EVENTS

RC Vintage Contest and Rally Schedule 2016/2017

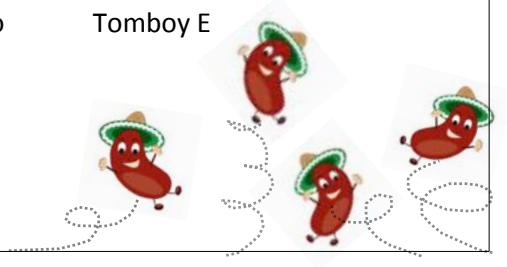
~~September 10, 11~~	~~NNI Contest and Rally~~	~~JR Airsail~~
October 22, 23	NNI Contest and Rally	Blackfeet
November 19, 20	NNI Contest and Rally	Tuakau (TBC)
January 3 - 7	National Championships	Waharoa
February 18, 19	NNI Contest and Rally	JR Airsail
March 18 - 20	NI Championships and Gareth Newton Memorial	Levin
April 22, 23	NNI Contest and Rally	Tuakau (TBC)
May 7 (TBC)	Bob Burling Memorial	Levin
May 20, 21	NNI Contest and Rally	Blackfeet

Event Schedule for 2017 North Island RC Vintage Championships at Levin

Saturday 18 March	**Sunday 19 March**	**Monday 20 March**
Vintage Precision	Vintage E Duration	Vintage Open Texaco
Classical Precision	Vintage 1/2A Texaco	Vintage E Texaco
Vintage IC Duration	Vintage 1/2E Texaco	Vintage A Texaco
Classical IC Duration	**Vin and Cl Scale Texaco ****	Classical Electric Duration
Classical 1/2E Texaco *	Vintage E Rubber Texaco	Tomboy E
Tomboy IC		

* One-design contest using the *Jumpin'Bean model.*

** Introduction of Scale to Vintage contests.



Vintage RC Event Schedule for 2017 National Championships — Location: Waharoa Domain

Day 1	**Day 2**	**Day 3**	**Day 4**
Vintage Precision	Vintage E Duration	Vintage A Texaco	Vintage Open Texaco
Vintage IC Duration	Vintage 1/2A Texaco	Vintage E Texaco	Vintage E Rubber Texaco
Classical Precision	Vintage 1/2E Texaco		Classical E Duration
Classical IC Duration			

Vintage FF Event Schedule for 2017 National Championships — Location: Proctor Road

Day 1	**Day 2**	**Day 3**	**Day 4**	**Day 5**
Vintage CAT Glider	Vintage Rubber	Vintage Glider	Nos Rubber	Precision
Vintage Power	Nostalgia Power	Small Nos/Vintage Power	Nos / Classic Glider Combined	
			Classic Power / Rubber Combined	

Free Flight Event Schedule for 2017 National Championships — Location: Proctor Road

Day 1	**Day 2**	**Day 3**	**Day 4**	**Day 5**
FAI Combined	Open Combined	Mini Combined	HLG, TLG	Kennedy Precision
	Kiwi Power	CLG	P-30	
	F1L (eve)	Aggregate (eve)	Hangar Rat, Indoor HLG	

NNI VINTAGE RALLY Sept 10-11 Airsail Field CDs' Report

A good start to the 2016/17 season despite Saturday being affected by a bitterly cold southerly. While the skies were clear and blue, it was the wind that put a damper on proceedings with winds regularly gusting over 20 kph. It was therefore no surprise there was a lack of motivation and enthusiasm to get started for the dozen or so brave souls that turned up.

Both David Thornley and Bernard Scott managed quite a few flights between them despite the conditions, David having little choice as he was unable to return on the Sunday. One or two others put in flights but the general consensus was to retire to shelter and partake in scones and the BBQ for the remainder of the day gratefully put on by our hosts, John and Sharon Danks.

Conditions on Sunday were excellent. Sunny, little breeze, and as usual lift to be had if you could find it. Sixteen contestants made 40 entries and 113 flights were recorded, the majority of these on Sunday.It was great to welcome David Squires from Tuakau and Graeme Jaine from Tauranga. We hope you both enjoyed the day and experience and we look forward to seeing you on many more occasions.

One of the models emerging for its first outing was Don Mossop's *Jumpin' Bean*. This design was chosen for a one design contest to kick start Classical ½ E Texaco to be introduced at the NI RC Vintage Champs early next year. If you haven't already done so you can read all about it in AVANZ News #150. Don's model drew great interest from those in the process of building one. As with America's Cup yacht secrets, keen eyes were already poring over it and finding ways to improve their own. Don't you just hate being the first Don?

For the first event of the season, some of the flying was a little rusty but that was to be expected. Having said that there were also some very good flights which may qualify as new or improved postings on the leader board. A problem experienced by some was leaving essential items of equipment at home - both embarrassing and annoying but we've all done it and it's just part of aeromodelling.

Now some housekeeping matters:

Don't forget to put your name on every card for obvious reasons. Many scorecard entries were haphazard and difficult to read so please, everyone, give this attention to neatness and the following

1 Record flight times in minutes and seconds, not just seconds.
2 If unsure of your models Age Bonus, leave it out or ask the CD.
3 Make it clear whether you achieved your Vintage Landing Bonus - a tick is good.
4 Read the rules pertaining to the classes you are flying, paying particular attention to how your flight is scored. E.g. While all flight categories have a maximum time for rounds, some also stipulate a time within which you must be down. On occasion flight times were exceeded after the lift and great conditions got the better of fliers. Unfortunately, this is reflected in some final scores.

I again thank John and Sharon Danks for their hospitality, a great atmosphere, and excellent scones and sausages. We can now look forward to next event of the year, at Thames Blackfeet on 22nd and 23rd of October.

Dave Crook and Tony Gribble

Results

		R1	R2	R3	Total	FO
Vintage Precision						
Don Mossop	Bomber	200	200	200	600	177
Doug Baunton	Miss Arpiem	200	200	200	600	
Stuart Lightfoot	New Ruler	200	200	200	600	
Graeme Jaine	Record Breaker	180	200	200	580	
David Thornley	Bomber	200	200	180	580	
Tony Gribble	Stardust Special	195	180	200	575	
Dave Crook	Playboy	200	172	200	572	
David Squires	Gas Buggy	200	200	171	571	
Classical Precision						
David Gush	Tyro Major	199	196	194	589	
Stuart Lightfoot	Humbug	176	128	158	462	
Vintage E Duration						
Tony Gribble	Stardust Special	300	320	320	940	
Don Mossop	Playboy	320	275	320	915	
Stuart Lightfoot	New Ruler	300	279	320	899	
Wayne Cartwright	Top Banana	217	298	257	772	
David Squires	Kerswap	190	225	304	719	
Doug Baunton	Miss Arpiem	142	130	-	272	
Classical E Duration						
Don Mossop	Texan FAI-TON	300	300	300	900	
Classical I.C. Duration						
David Thornley	Satellite 1000	263	261	300	824	
David Gush	Tyro Major	182	236	171	589	
Vintage 1/2A Texaco						
Bernard Scott	Stardust Special	500	500	500	1500	567
Charles Warren	Bomber	472	-	-	472	

		R1	R2	R3	Total	FO	
Vintage A Texaco							
John Butcher	Miss FX	615	620	615	1830		
Bernard Scott	Simplex	609	609	439	1657		
Vintage Open Texaco							
John Butcher	Miss FX	920			920		
Bernard Scott	Playboy	910			910		
Vintage 1/2E Texaco							
Keith Trillo	Stardust Sp	740	740		1480	1502	
Bernard Scott	Bombshell	740	740		1480	1208	
John Butcher	Miss FX	740	740		1480		
Bryan Spencer	Slicker	720	702		1422		
Tony Gribble	Stardust Sp	625	720		1345		
Dave Crook	Playboy	271	231		502		
Vintage E Rubber Texaco							
Keith Trillo	Yonder	620	620	620	1860	1065	
Wayne Cartwright	Lanzo Stick	620	620	620	1860	1047	
Doug Baunton	Skokie	599	554	179	1332		
John Danks	Ascender	#	620	620	1240		
John Butcher	Gollywock	620	620	#	1240		

(# = flight time in excess of maximum time allowed per flight)

Tomboy IC						
Charles Warren	134	113		247		
Tomboy E (180, 2S) (Best 2 of 3)						
Keith Trillo	748	654	895	1643		
Dave Crook	458	633	620	1253		
Bryan Spencer	415	311	418	833		

More photographs of the Rally will be in the next issue

JUMPIN' BEAN

The *Jumpin' Bean* one-design event for the Vintage Champs in March has been gaining traction, with eight models known to be either planned or underway, and rumour hints at another completed *JB* somewhere north of the Bombay Hills. The commonly agreed challenge is getting the running gear neatly into the narrow fuselage, but Don Mossop's *JB,* which was put under close scrutiny at the 11th September Pukekawa Rally by intending builders, shows that it can be done. Thanks to Don for sharing all his "secrets" and for demonstrating how well the design flies in 1/2E form. Don's report on the build process is on page 18.

Discussion between *JB* interested parties at the Rally and on other occasions has helped clarify aspects of the model and the one-design event. To ensure all builders are on the same footing, the main points of discussion are given here.

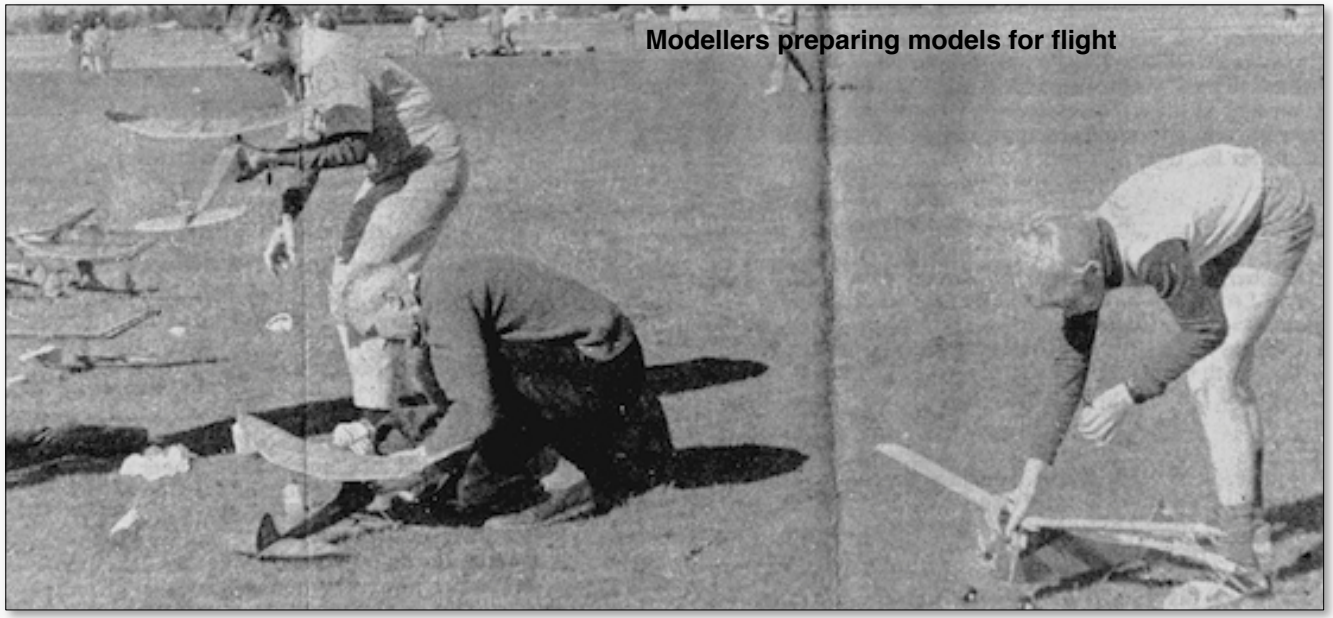
1. Landing skid. The plan position and mounting of the skid is inconvenient as it is in the area most likely to be used for motor battery location. The skid may be relocated to the firewall, and may be replaced with a dual skid or dual wheel undercarriage as allowed by the Vintage rules. Leaving the skid off altogether is another option.

2. Model size. The proposal of the one-design event in Issue 150 mentions a 42" wingspan kit for the *JB* that the Committee arranged to be available from Avetec. This wingspan was chosen to get a wing area that works very well in the Vintage 1/2E event which has the same power rules. Use of the kit is optional and scaling is allowed up to the class maximum of 310 sq in.

3. Battery capacity. Using a smaller capacity motor battery has been suggested to limit the long fly-offs that sometimes occur in Vintage 1/2E. 180mAH, as used in Tomboy, was thought to be the logical choice. The decision on this is to retain the 360mAH size battery as used in Vintage 1/2E to begin with. Performance in Vintage 1/2E has been increasing rapidly and may soon warrant a reconsideration of battery size, at which point Classical 1/2E would be kept in sync if performance in this event is also too high.

4. One piece wing. Allowed, provided the side profile is unchanged. The benefit would be easier access to RC gear.

5. Downthrust. Removal of all motor downthrust has proved to give best performance in Don's model.



Modellers preparing models for flight

Rex Bain of Hamilton launching his Little Zipper in the radio control event

7-foot wingspan Powerhouse by Wayne Cartwright of Palmerston North

Man of the Meeting, Gareth Newton of Palmerston, entered an impressive range of models

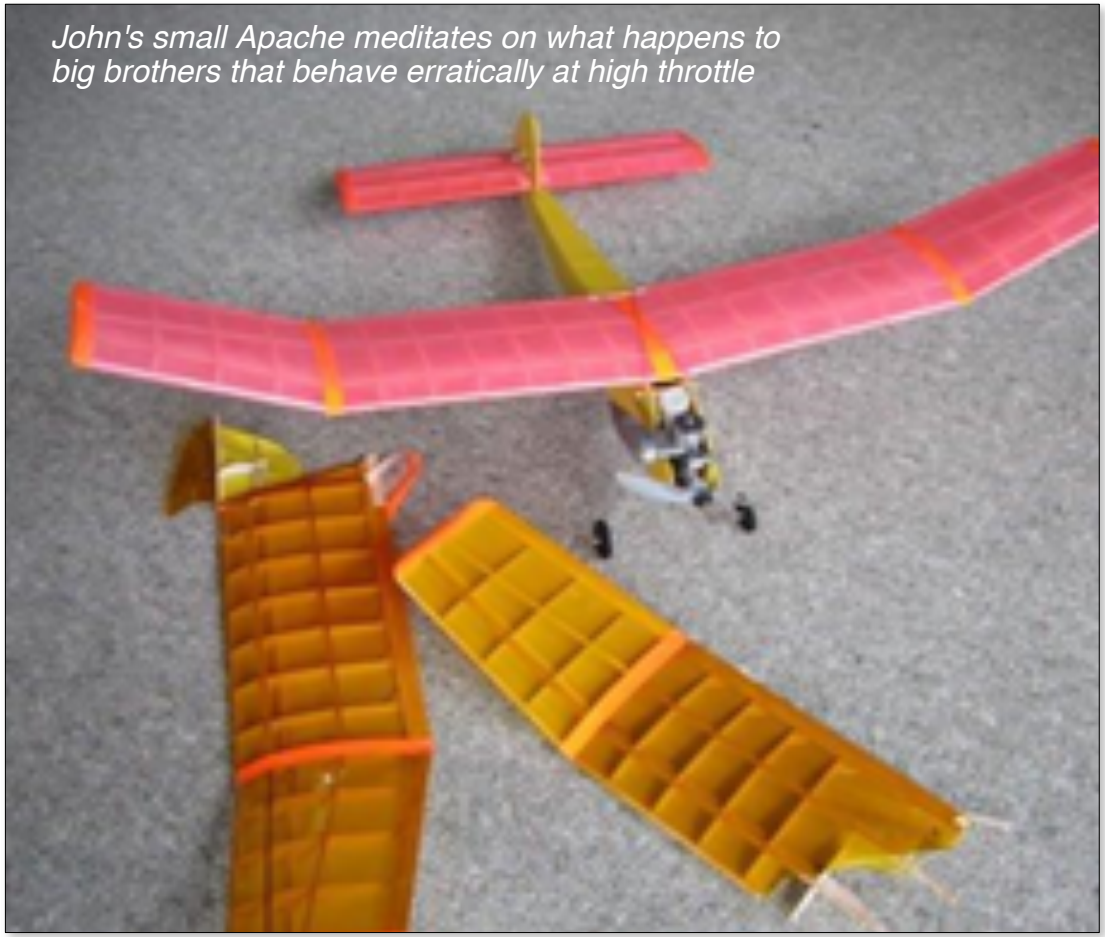
John Butcher

Not much to report regarding flying at Tuakau over the last 7-8 weeks. 2 good days at the beginning of July was about it. The atmosphere and countryside has been very moist and the dammed wind very busy. For a change we ran an indoor meeting at the La Valla complex with Airsail Mantis being the model to build and compete with. A couple fliers from the Auckland club came along with and demonstrated the Model Air Hornet. It will be interesting to see how they compete with the Mantis. We intend to hold an occasional meet in the future and the Auckland club are now running a monthly one at the Drury Hall.

Some building is progressing, plus repairs and modifications. I've just completed a couple of models for Classical, both Apaches, a 1954 design of 40" wing span and 250 sq in. OS.09 powering the IC version and a no-name motor in the electric model - battery Gens Ace 800 3s 20c, around 200 watt. The decision to build small is due lack transportation room with so many competitions now, a larger vehicle is needed. The electric Apache has been tested and found to be virtually unusable over 1/3 power. I might have to convert it to ½E and the IC version to ½A.

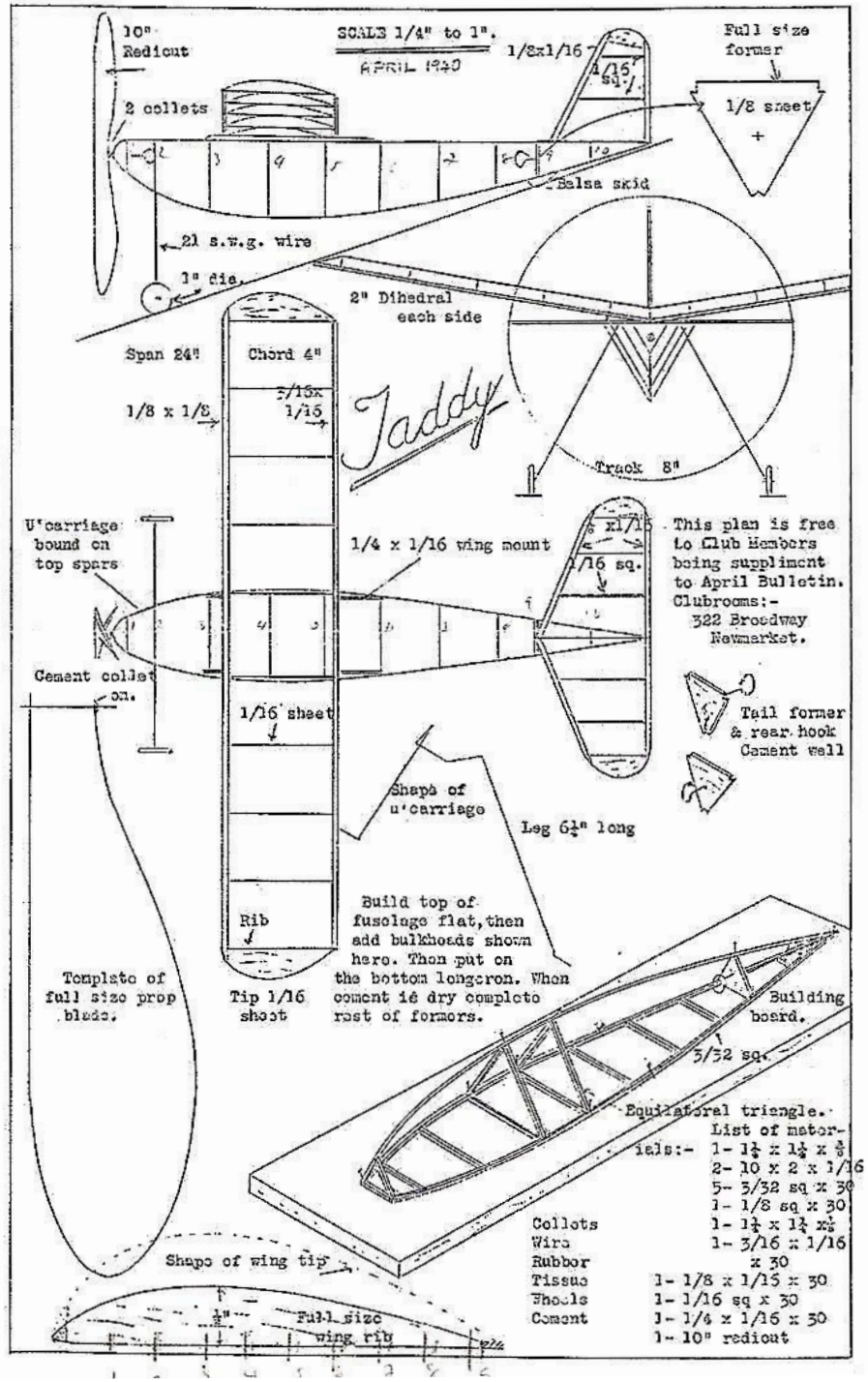
Now the new plan is build a couple of Mini Tyros, not the most competitive model I am sure, but my main objective is to boost numbers flying classical models. The September contest/rally held at the JR airfield was well supported despite Saturday being cold and windy. Sunday was another story, a lot more cheerful with a good turn-out. I counted around 17 fliers. Thanks to Sharon, John, Dave and Tony for couple of fun days.

Cheers,
John Butcher



John's small Apache meditates on what happens to big brothers that behave erratically at high throttle

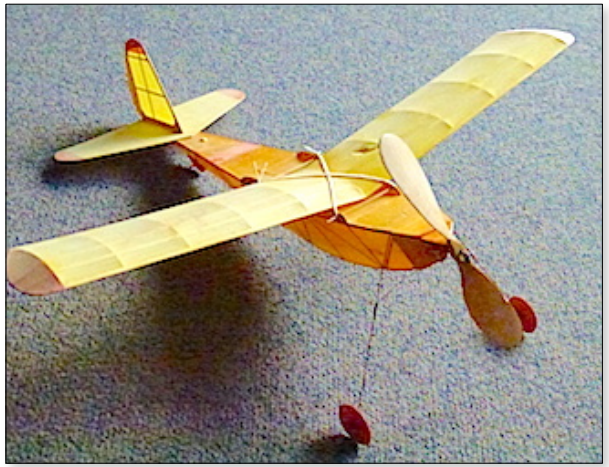
Tyro Major David Gush

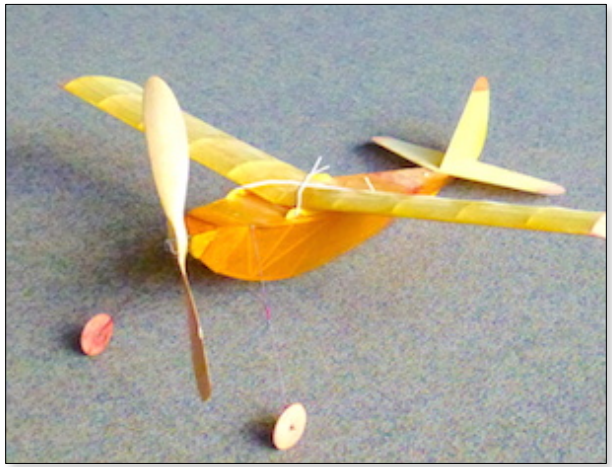


This cute little rubber model was spotted at an indoor meet at Morrisville. Built and flown by Mike Mulholland, it has a real Vintage aura about it. Mike supplied the plan and photographs, as well as the extract below from the AMAC newsletter.

Something rather special this month: a genuine AMAC vintage model, published in the April 1940 issue of the AMAC bulletin. The plan was badly stained and spotted, but thanks to modern photo-copiers, and Liquid Paper, a reasonable copy was finally obtained, and is presented here. Featured only as a "No weight-rule model" in the April Bulletin, the model was described in a little more detail in the May issue as follows:

"Here are some more details of the 'no weight-rule' bus. This model was designed at a recent Construction Evening by Messrs Alexander Downey and Truman, with the following points in mind: ease of construction; low cost: and the ability to give good performance without intricate adjustments. The idea behind this model is to provide a fuselage model that a Novice can build and fly without much previous experience, and it is hoped that success with this model will instil the coming experts with that elusive commodity - CONFIDENCE. To help further with this aim, Club Captain Reg has kindly donated two trophies for exclusive competition with these models, which will henceforth be known by their proper name of TADDY, the first three letters being the initials of the designers. one of these trophies is to be won by the NOVICE who records the HIGHEST AGGREGATE of the TWO BEST TIMES taken at two consecutive meetings which feature comps for this class. The other competition is for the Junior who records the highest time with a TADDY over a period of six months. Any one requiringa plan can obtain one from the Club Rooms."





RC Determalizer

by Mark Venter

As presented in
SAM Speaks Jan / Feb 2015

RELIVING THE GOOD OLD DAYS

Some of my best modelling memories were those great free flight days of my youth. Well, maybe they were not really that great, lots of sore fingers, blood and trimming flights until you eventually got that model to perform as it should, that great climb out and then transition and that perfect floaty glide as it gently climbed away…..until out of sight or, when luck was on your side, so far downwind that it took the rest of the morning to go and retrieve it.

But if I forget the bad memories and concentrate on what was really great I wonder where I went astray. Somewhere somehow I saw RC as the end to all my troubles and left free flight behind except for the odd sortie now & then. I often thought on this and realised that there were indeed great memories, the best being those of flights that were nearly perfect and that landed practically back at your feet, immediately ready for the next flight.

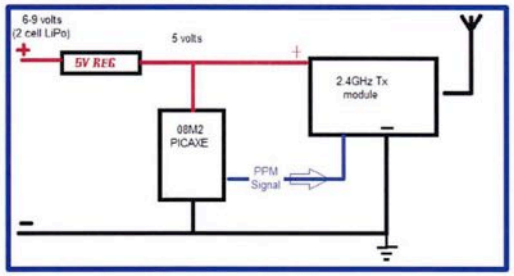
That might be a made up memory, but I decided to make it real in that I would like to get back into free flight and at the same time really enjoy it, just firing up the engine and letting her go and being able to stand back and really enjoy the beauty of it, without the hassles of long trudges to retrieve the models. I would like to get other modellers to do the same. So enough of the waffling and on to the solution. Actually it is a "killing two birds with one stone solution".

One, is to be able to DT the model at will, whether for trimming or if it looked like it was going off in the wrong direction or going to get caught up in a big thermal etc. (This after losing two models due to either mis-setting or mis-triggering of the mechanical DT's – yes, there is no cure for stupidity!) with the additional option of being able to gently "steer" the model back upwind when it drifts away and, two, coming up with a solution that would be in everyone's price range. Commercial RC DT systems are ridiculously priced and only really for the free flighter in serious competition, certainly not in the range of the sport free flighter.

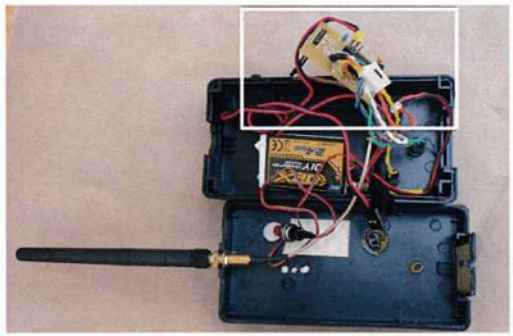
With the advent of cheapo modules from the likes of Hobby King and others it is now really just a matter of getting all the bits and plugging them in. Well a bit of soldering as well if you are up to it, if not then ready made modules are also available.

So what do you need? (see details & sources at the end of this article)
1 - A "DIY" 2.4GHz transmitter. These are readily available for converting xtal radios to 2.4GHz.
2 - An encoder board to suit your preferences.
3 - Battery, either a 2 cell LiPo or 9v battery will do.
4 - 2.4GHz receiver to pair up to the transmitter.
5 - 1 or 2 micro servos.
6 - One or two cell LiPo battery depending on your setup.
7 - 5v regulator for your receiver & servos depending on your setup.

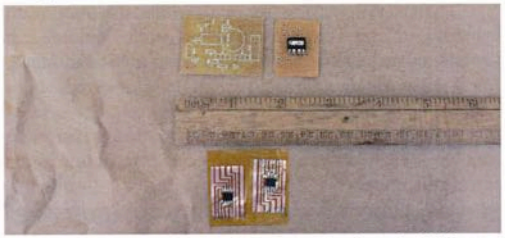
HOW DOES IT ALL HOOK UP?



The DIY transmitter modules (mostly) all require a PPM stream which they would obtain from the transmitter that you would be converting to 2.4GHz, but since we are not doing that we need to provide our own PPM stream. Generally these modules all require a minimum stream of 4 channels, even if we will only be using just the one channel (for example, DT) and we do that with the help of a tiny encoder.

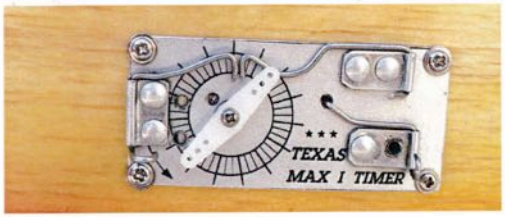


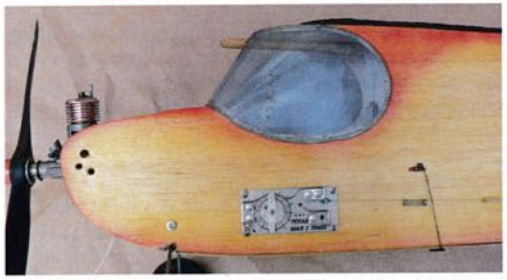
This photo shows the first encoder board I bought from Phil Green in the UK to get going and work things out. This uses a PIC programmable chip which Phil can also provide.



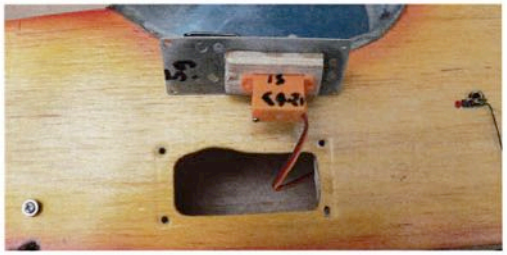
The second photo shows my own board which uses a PICAXE programmable chip, and I can provide info and assistance with these. These chips only cost a couple of $$ each so are pretty cheap for what they are capable of.

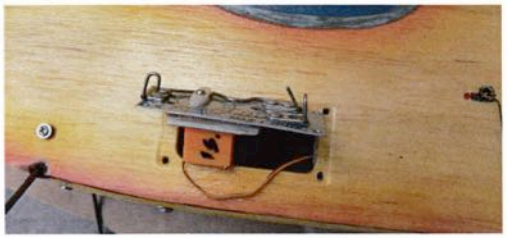
If you want to and can program these chips yourself, you can really do your own thing as to what you want your setup to do. For DT only you only need one channel, i.e one servo, because you drive the servo from one end to the other when you trigger the unit. Alternatively, you can drive the servo from centre to one or both ends on a single channel and the same on a second servo.

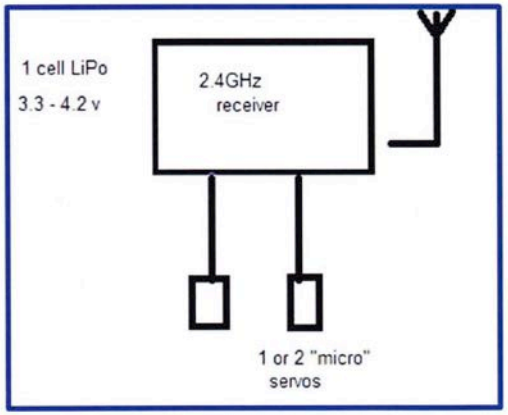




This photo shows a Texas Timer faceplate that I have modified to in fact perform this very function, a single channel that in one direction will trip the fuel cut off and in the other direction will activate the DT via a micro servo.







The onboard system is simplicity itself using only receiver, LiPo, servo(s). These Micro units will work down to around 3.3v or so and therefore are ideally suited to a single cell LiPo.

If you want to use slightly larger servos and feel safer running 5/6 volts, then you could either use a single cell and 5v booster or two cells and 5v regulator. In a big free flight model a few extra grams would not make much difference either way. Up to you.

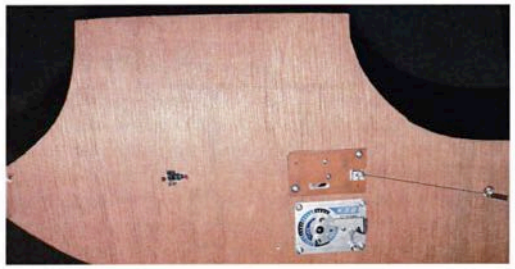
Radio Dethermaliser for Free Flight Models 2

Mark Venter

SIMPLEST SETUP - DT ONLY

This is about as simple as you can get - no buttons or settings. The transmitter is turned on; the receiver is turned on to check they are bound. The transmitter is turned off and left powered off.

When you want to DT you just turn the transmitter on and in a few seconds, once the link has been established, the DT will activate and you can turn the transmitter module off again.



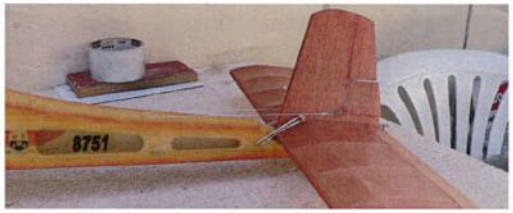
This photo shows this kind of setup in tandem with your average mechanical timer. The mechanical timer can be set as normal and the 2.4GHz unit can be activated at any stage by radio, either triggering the DT on the model.

MORE FUNCTIONAL SETUP - TWO CHANNEL

This setup is only slightly more complex in the programming department and requires two servos, one for the rudder and one for fuel cutoff / DT.

An excellent trick from Phil is that since you need to provide at least 4 channels to the transmitter module and you are only using two, make them reverse. For instance, ch1 & 2 are one direction and ch3 & 4 are reversed.

In this way you simply plug your servos into whichever channels you require to get them working in the correct direction.



This photo shows a closed loop linkage to rudder trim tab and I used a modified Texas Timer faceplate for fuel cutoof and DT. Both servos sit at centre and pushing any of the buttons on the transmitter will drive the servo in the selected direction, so the rudder trim tab is not proportional as such, but will move fully in either direction depending which button gets pressed.

Bear in mind the purpose is not proportional control; that's RC stuff! The purpose is a slight tweaking of the rudder trim tab in either direction to initiate a slight turn in the required direction, be it to get the model heading in a new direction or back upwind etc.

Lets not forget that this is still a free flight model and as such should still go through all the normal free flight actions to perfect its flight characteristics like trimming for power & glide.

If you want proportional control, then you are into the R/C side and obviously no longer have much interest in free flight as such. And of course, if all of the above is too complicated, then you could just use your 2.4GHz radio instead of building your own hand held unit.

One thing to keep in mind, whichever transmitter module you opt for, you will need to use the same brand receivers, some of which may offer better performance (like failsafe) but could also be quite a bit dearer.

Suppliers
Hobby King:
http://www.hobbyking.com/hobbyking/store/__40205__OrangeRX_DSMX_DSM2_Compatible_2_4GHz_DIY_Transmitter_Module.html DSMX/DSM2 Orange transmitter modules.
http://www.hobbyking.com/hobbyking/store/__1119__1117__Radios_Receivers-OrangeRx_Receivers.html
Range of Orange receivers.

FlyDream:
http://www.fly-rc.com.au/?page_id=23
http://www.hyperionaustralia.com.au/?stg=839

FrSky:
http://www.frsky-rc.com/ ACCST systems

Lemon receivers:
http://www.lemon-rx.com/shop/
DSM2 & DSMX - compatible with Spektrum, Orange etc.

Encoder boards & programmed PIC chips
Phil Green philg@talk21.com

PICAXE boards
http://www.picaxe.com/Hardware/Project-Boards/PICAXE-08-Servo-Driver-Board/

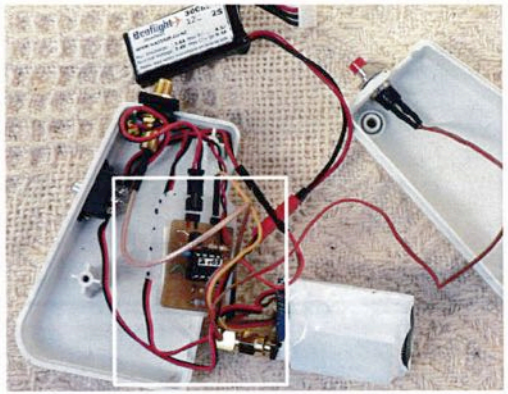
PICAXE chips & info:
Forum - http://www.picaxeforum.co.uk/forum.php
PICAXE Website - http://www.picaxe.com/
http://www.picaxe.com/Hardware/PICAXE-Chips/PICAXE-08M2-microcontroller

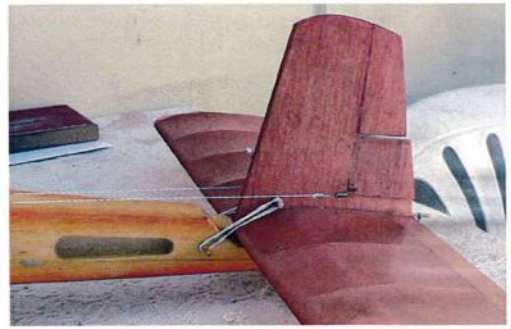
Help with circuits, PICAXE chips & encoder boards – Mark Venter mark.venter@xtra.co.nz

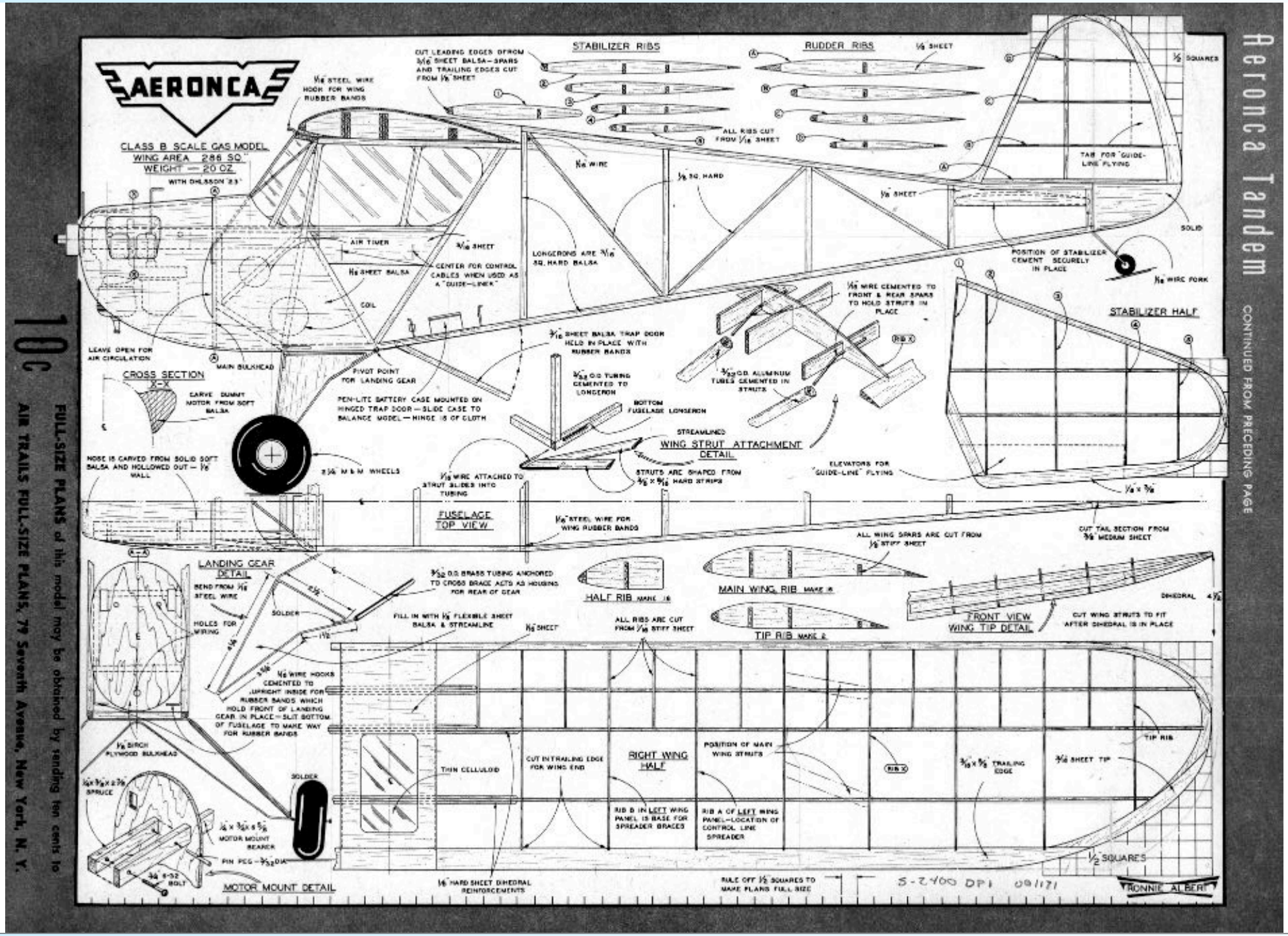
Lots of info from Phil Green's website:
http://www.singlechannel.co.uk/

Additional info
http://www.mindspring.com/~rellis2/rcpattrn/retro.htm

Here are a few more detail photos of the components and finished installations.





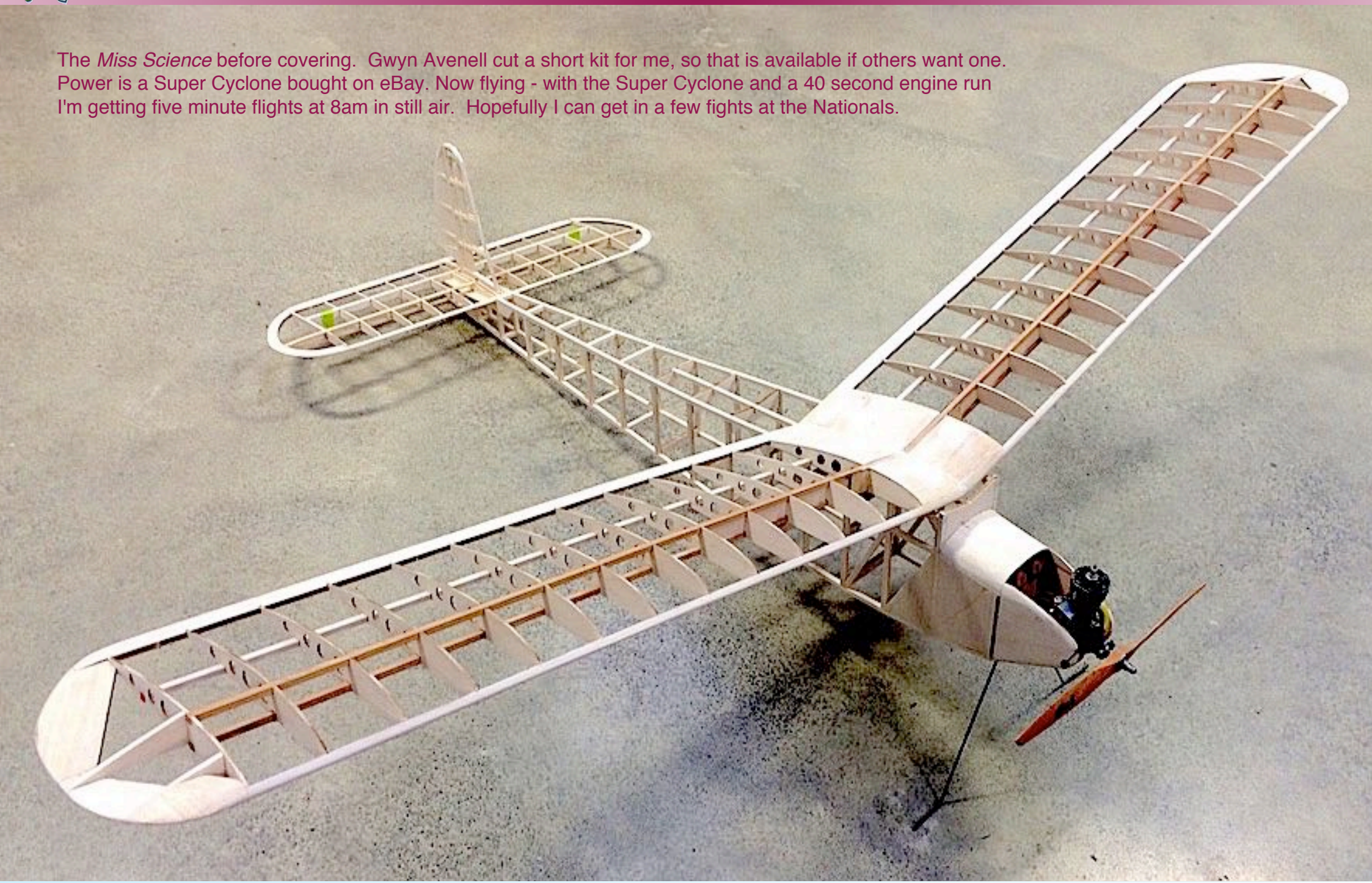

AERONCA
CLASS B SCALE GAS MODEL
WING AREA 286 SQ.
WEIGHT — 20 OZ.
STABILIZER RIBS
RUDDER RIBS
STABILIZER HALF
CROSS SECTION
WING STRUT ATTACHMENT DETAIL
FUSELAGE TOP VIEW
LANDING GEAR DETAIL
HALF RIB
MAIN WING RIB
TIP RIB
FRONT VIEW WING TIP DETAIL
RIGHT WING HALF
MOTOR MOUNT DETAIL
Aeronca Tandem
CONTINUED FROM PRECEDING PAGE
10c
FULL-SIZE PLANS of this model may be obtained by sending ten cents to
AIR TRAILS FULL-SIZE PLANS, 79 Seventh Avenue, New York, N. Y.

WORK IN PROGRESS

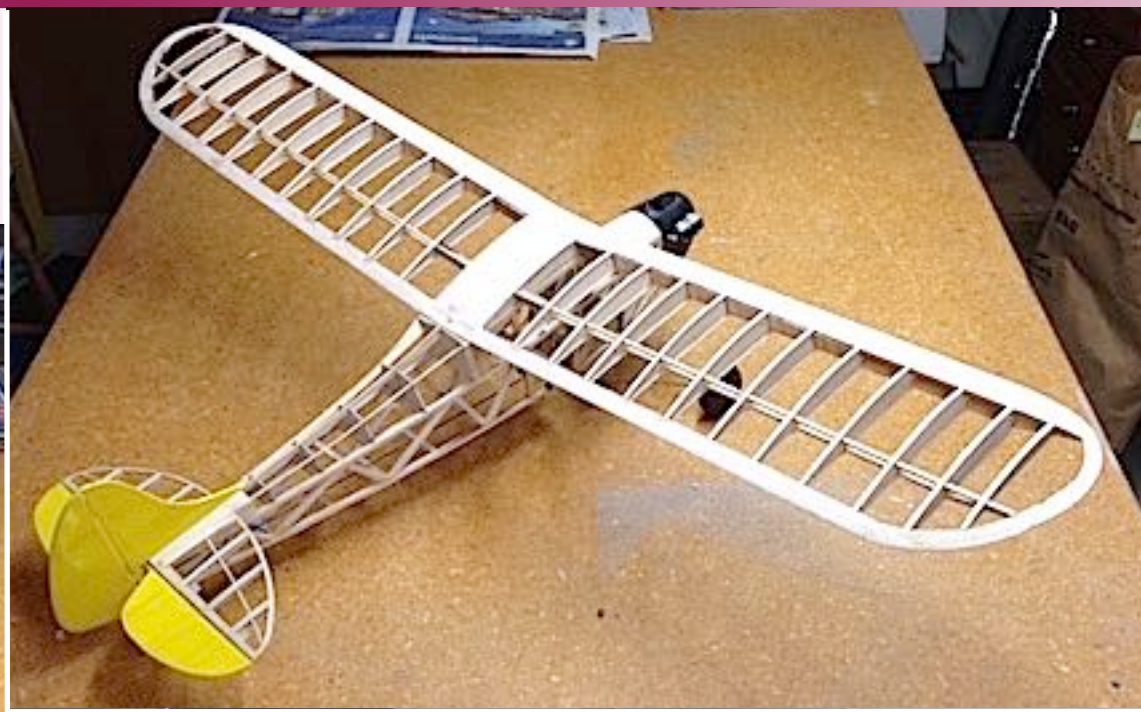
BARRIE RUSSELL

I was intrigued by the 1950 Aeromodeller cover in Issue 150 as it looks very similar to a Keil Kraft Slicker. Would you believe I'm at last re-visiting my roots and have built a Super Slicker at 84 inch span? A bit of a step up from my Tomboy. It is radio assist with three channels and powered by a four cell Lipo driving a G46 - 550kv motor. Initially it "needed" 28 ounces of lead ballast, but after eight test flights during which the CG was moved rearward and the wing incidence adjusted, 18 of these have been removed. More may yet go. Also changed from a 15x8 prop to a 14x6. As the weight came out, the glide improved and is now quite flat - I have to set up for landing a long way out otherwise it flies past and there's a long walk to retrieve.

The *Miss Science* before covering. Gwyn Avenell cut a short kit for me, so that is available if others want one. Power is a Super Cyclone bought on eBay. Now flying - with the Super Cyclone and a 40 second engine run I'm getting five minute flights at 8am in still air. Hopefully I can get in a few fights at the Nationals.



I chose this design because it has many properties of 1930's FF models, and its narrow fuselage means the cross section is not too fat. I've enjoyed the build, and now want to do a big one, maybe up to 72" This one is 288 sq in and weight came out exactly at the minimum 16oz. I'm hoping it will be competitive in 1/2A Texaco as well. The covering is Solite which goes on very well, is fuel proof, and does not distort light stringers.

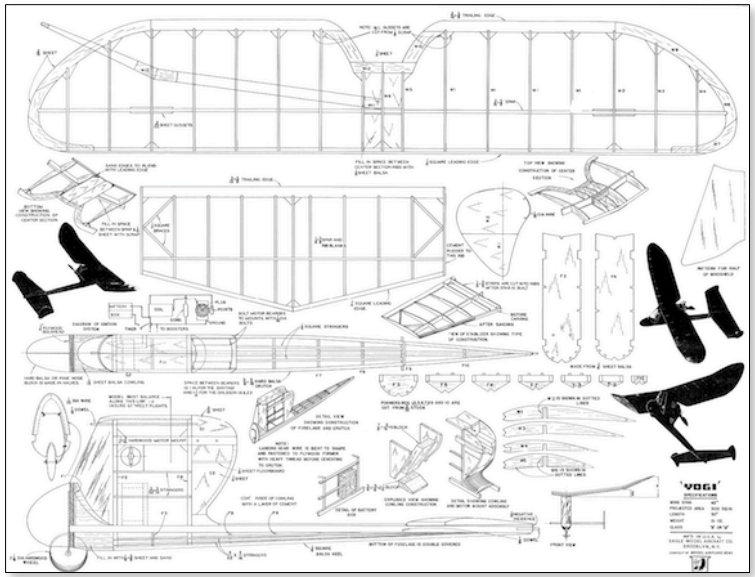


Here are a couple of pics my latest vintage model, a *Yogi*. Beautiful it isn't, but there is no chance of mistaking it for another aircraft in the air. It was the bees knees in 1943, winning most of the competitions in the USA. I first saw one when I was about 11 years old. It has been on my 'to build' list for a long time now. Refurbishment of my second Elfin BR 1.8 diesel was the incentive I needed - as it has a fluttervalve, it isn't necessary to carve a reverse pitch prop, and as it has ball races, there is no need for a steel shim behind the thrust washer.

It is a complete aerodynamic nonsense, a pylon model with a pusher prop, and no sweepback. Lack of sweepback means an inordinate amount of ballast to get the CG where it shows on the plan, 6 ounces, to be precise. I suspect the CG is very conservative - my plan is the one that was issued with the kit - so reducing the ballast progressively will be part of the trimming process. Failing that, an ultra-light tail should help a bit, together with some surgery to move the engine forward an inch or so. Sounds like it's becoming a bit of a project.

The back of the 'cabin' is effectively a 10 square inch airbrake. The prop is working in disturbed air, which won't help either. I've cheated as much as I can, by sanding the bejasus out of the rear fairing block: the true original is like an old-fashioned yacht spoon counter stern. (Didn't work well on yachts either). The disrupted airflow probably accounts for the need to change from the original single fin to the twin fin layout.

I suspect that all that drag resulted in a steady climb, rather than anything spectacular. At that time, that was exactly what was needed, in preference to a screaming spiral dive. Once up, it could catch thermals with the best of them.



The engine is no slouch. It turns a Master Airscrew 8 x 4 at 11,400, equivalent to 0.17 BHP, and even in its current overweight form, the thrust-weight ration is close to 1:1. As soon as the rain stops, I'll be able to test fly. Someone should tell it that this is the dry season!

Best regards
Dmitri

Jumpin' Bean *Classical 1/2E Texaco Build Notes*

Bernard's suggestion to encourage Classic 1/2E Texaco entries by way of a one-model build in the AVANZ New 150 (July/August 2016) stimulated me to "have a go". Especially so as Bernard had made an arrangement with Gwyn Avenell of Avetek Ltd to supply laser-cut parts which removed most of the tiresome fiddly bits at a very reasonable charge. The original *Jumpin' Bean*, designed by Peter Wyatt as a 36" wingspan free flight model (Aeromodeller, Jan. 1955), has been scaled up to a 42" wingspan to provide a wing area of about 225 square inches.

The laser-cut parts from Avetek Ltd were accurate and easy to separate. It was obvious from the outset however that it was going to be a real challenge to fit everything in, and to achieve the suggested CG. It was also clear from the plan that *Jumpin' Bean* would have a very fragile wing and fuselage without some modifications.

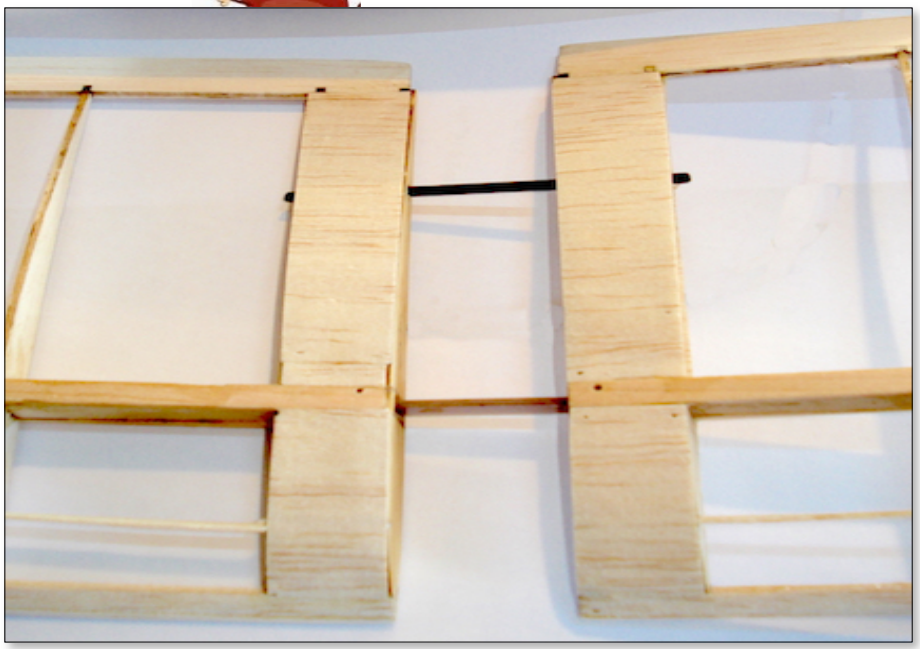
Construction was a breeze with the laser-cut kit. I used spruce spars trimmed 1.5 x 5mm instead of balsa. Prior to glueing the fuselage sides to the various formers, I first sewed a thin wire landing skid to the ply firewall and then added a small ply box to it as an engine mount to achieve the correct prop position with a zero degree thrust-line. A removable cowl was made from 0.4mm ply to make it easier to gain access to the motor and ESC.

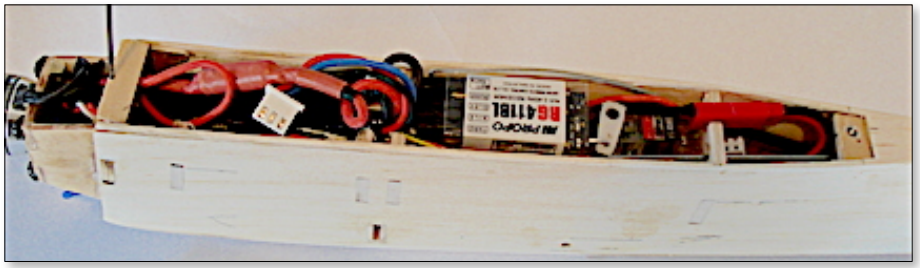
Given the limited space available within the fuse, it seemed sensible to decide early on where the servos should go and plot the route of control linkages. I use thin braided polyester for a pull-pull to the rudder and fine piano wire running through small holes in the fuselage formers for the elevator.

The fuselage around the area where the stabiliser is mounted is very fragile and easily broken, especially when the model drops from your hands to the floor!. I strengthened this area by applying a doubler of 0.4mm ply to the 1.5mm balsa sheet each side of the fuselage at this point. I also "beefed up" where the stabiliser is attached to the fuselage by adding triangular shaped balsa strips each side.

The tongue which secures the wings to the fuselage I made from 1.5mm fibreglass circuit board, and the peg which locates the wings at the correct incidence of 2 degrees is 2.5 mm carbon fibre rod.

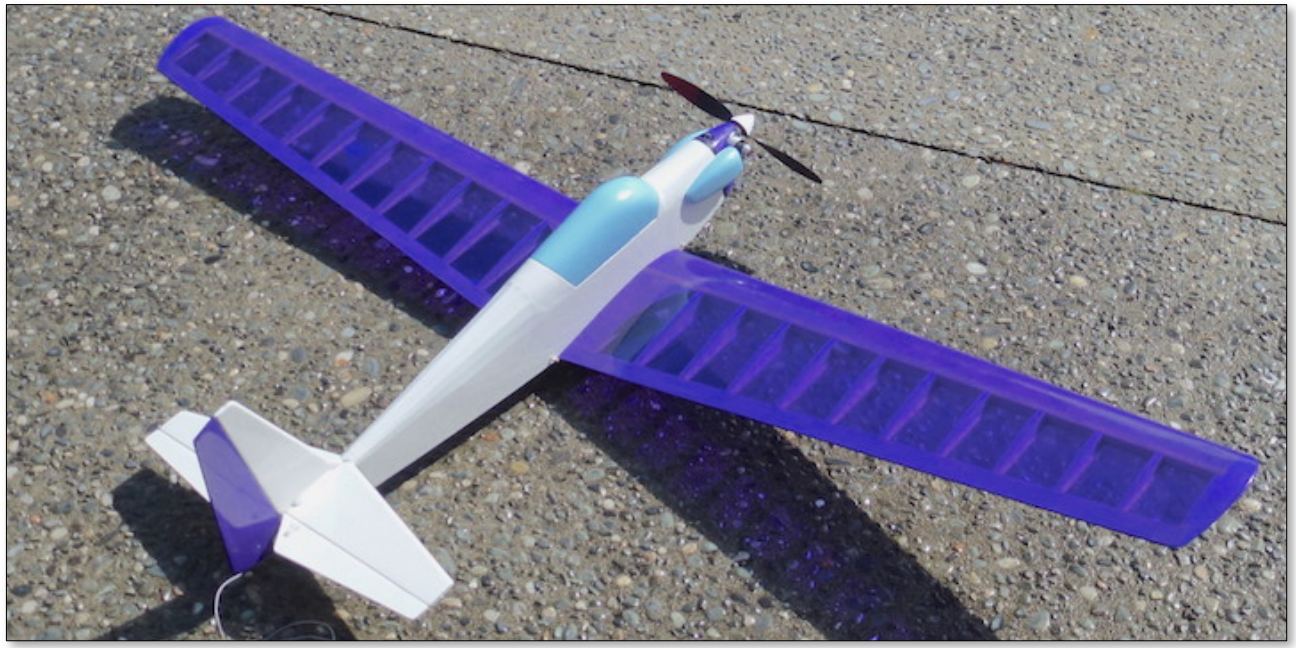
On a maiden flight at the rally at Airsail Pukekawa using an old and rather dubious 360mA 2S battery the model flew very well. *Bring it on !*

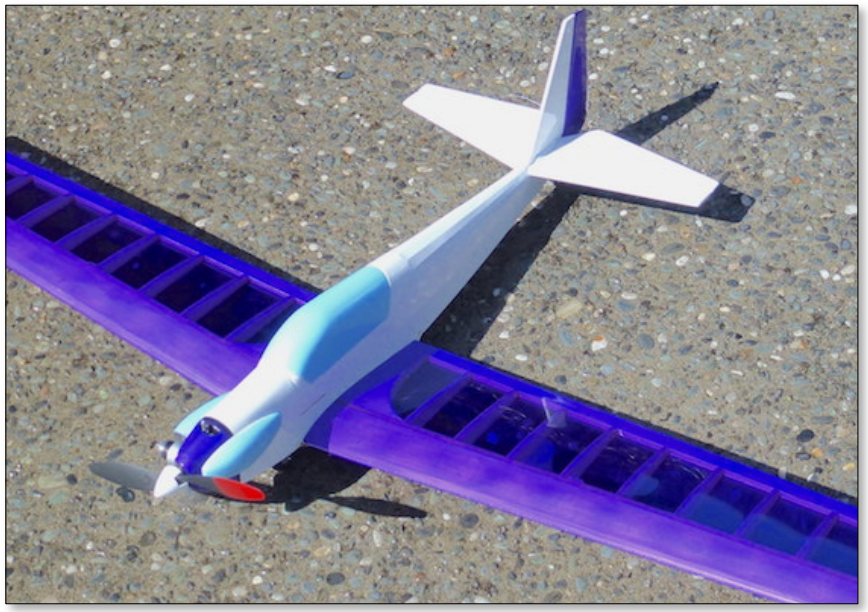


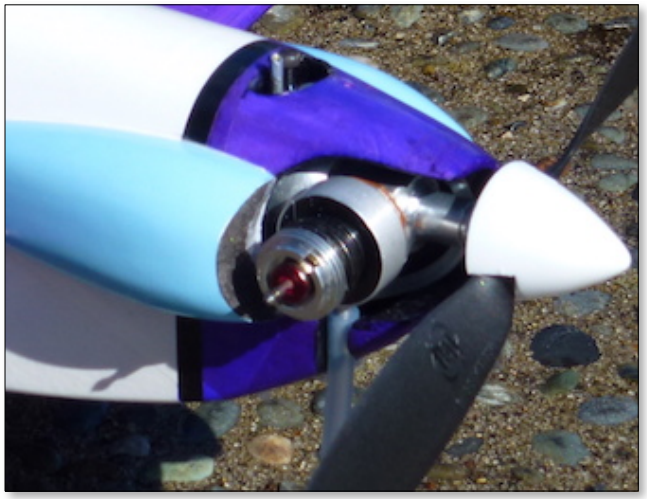


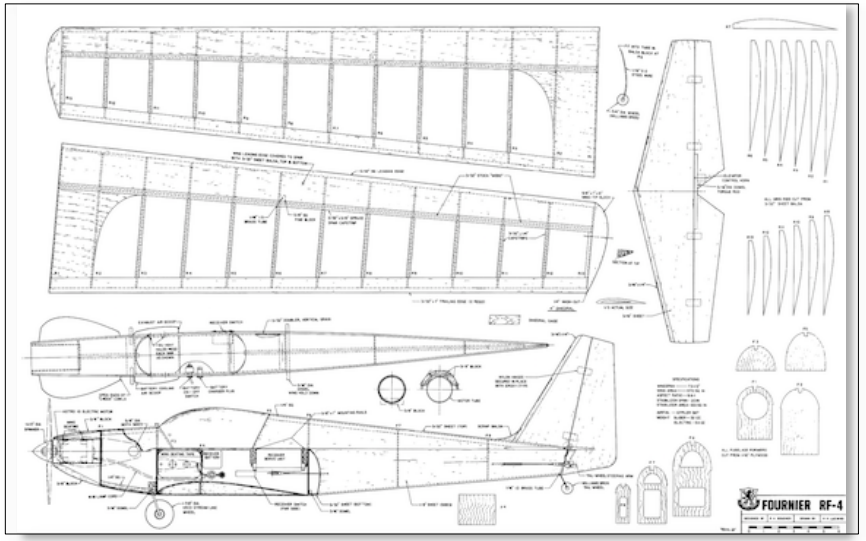
This Fournier RF-4 appeared in the May 1974 RCM magazine and was originally intended for electric with an Astro10 motor - a 42 year old electric model that slots into the last years of our Classical class. Mine is for Scale Texaco and was chosen for its looks, visibility at height, and anticipated glider-like performance. Scaling from 73" to 59" gave 359 sq in and 20 oz minimum weight, good figures for the 1/2A power approach. A completly enclosed inverted engine was tried, but runs were inconsistent. Horizontal engine mounting is more reliable, if less streamlined. The model built lightly, so 2.5 ounces of ballast is needed. Finish was kept age-appropriate but the iron-on film has given a rather too modern appearance - my usual Polyspan / dope approach would have been better suited. A lesson learned was: don't try to cover pink foam with film - its melting point is well below the film's shrink temperature.

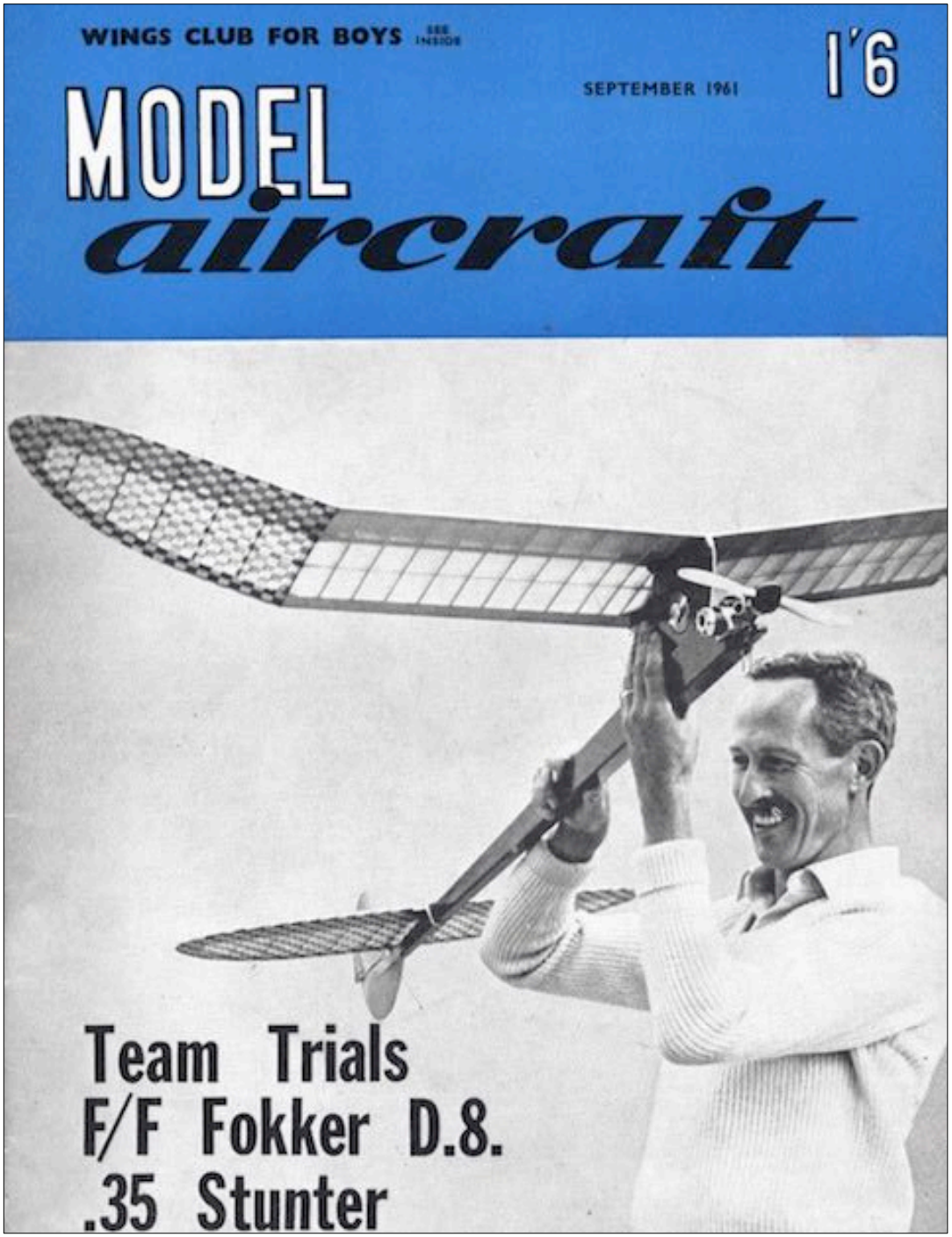
Later ... Two test flights and two crash landings on 20th Sept showed the model to be extremely twitchy and unstable. Some more trimming sessions are called for with this one !










WINGS CLUB FOR BOYS
SEPTEMBER 1961
1'6
MODEL
aircraft
Team Trials
F/F Fokker D.8.
.35 Stunter

Anno VI - N. 1
Roma, 5 Gennaio 1936-XIV
C. C. Postale
L'AQUILONE
settimanale di aeronautica per i giovani
DROGHERIA
MAITROIANNI ALBERTO
DIZIONARIO AERONAUTICO ILLUSTRATO: - ATTERRAGGIO LUNGO -

1913 .... Members of the long-dominant Honourable Order of the A-Frame surrender all but their impeccable dress sense on taking sight of a new-fangled compressed air job.

RC LEADER BOARD 1st October 2016

New results in red. Leader Board records in blue.

Vintage Precision *B.Harris, G.Meads, P.Hall, A.Knox 800*

1=	Brian Harris	Bomber	Tuakau	600 + 200
1=	Allan Knox	Lancer	NDC 104	600 + 200
3	Don Mossop	Bomber	Nationals	600 + 199
4=	John Butcher	Miss Fortune X	Tuakau	600 + 197
4=	Stewart Cox	Playboy	NDC 104	600 + 197
6	David Crook	Playboy	Nationals	600 + 193
7	David Gush	Miss Fortune X	NDC 104	600 + 191
8	Graham Main	Miss Trenton III	Nationals	600 + 171
9	Stuart Lightfoot	New Ruler	Champs	600
10	Doug Baunton	Miss Arpiem	Rally Sept	600

Vintage IC Duration *2014 R.Anderson 1308*

1	Bernard Scott	Playboy Cabin	Nationals	780 + 447
2	Allan Knox	Cumulus	Nationals	780 + 333
3	John Butcher	Miss Fortune X	NDC March	780 + 311
4	David Thornley	Bomber	Nationals	780
5	Stuart Grant	Playboy	NDC 109	773
6	Rex Anderson	Playboy	Nationals	721
7	Gordon Meads	Playboy Senior	Tuakau	695
8	David Gush	Miss Fortune X	Tuakau	663
9	Stewart Cox	Playboy	Nationals	636
10	Brian Treloar	Airborne	NDC 108	608

Vintage E Duration *2014 B.Harris 1512*

1	Allan Knox	Scram	NDC 109	1174
2	Tony Gribble	Stardust Special	Rally Sept	940
3	Don Mossop	Playboy	Nationals	924
3	Bernard Scott	RC-1	Nationals	915
4	John Butcher	Miss Fortune X	Nationals	902
5	Keith Trillo	Stardust Special	Champs	901
8	Stuart Lightfoot	New Ruler	Rallt Sept	899
6	John Warner	Playboy	Nationals	870
7	Rex Anderson	Anderson Pylon	Nationals	833
9	Davis Crook	Bomber	Nationals	805
10	Brian Harris	Bomber	Tuakau	800

Vintage 1/2A Texaco *2016 J.Butcher 2290*

1	John Butcher	Miss Fortune X	Nationals	1500 + 790
2	Bernard Scott	Stardust Special	Nationals	1500 + 777
3	Allan Baker	Slicker	Nationals	1494
4	Rex Anderson	Playboy	Nationals	1378
5	Keith Trillo	Skipper	Nationals	1377
6	Allan Knox	Skipper	NDC 112	1333
7	John Selby	Playboy	Nationals	126
8	Charles Warren	Bomber	Rally Sept	472
9	Martin Evans	Miss Philadelphia IV	Champs	239
10	John Ryan	?	NDC 83	210

Vintage 1/2E Texaco *2016 K.Trillo 3188*

1	Keith Trillo	Stardust Special	Nationals	1480 + 1708
2	Bernard Scott	Bombshell	Nationals	1480 + 1325
3	Rex Anderson	Tomboy	Nationals	1480 + 1235
4	Wayne Cartwright	Arrow Nut	Champs	1480 + 1163
5	John Butcher	Miss Fortune X	NDC April	1480 + 995
6	Dave Crook	Playboy	Nationals	1480 + 933
7	Bryan Spenser	Slicker	Rally Sept	1422
8	Tony Gribble	Stardust Special	Rally Sept	1345
9	Martin Evans	Brigadier	Champs	1324
10	Mike Rice	Tomboy	Nationals	1182

Vintage A Texaco *2016 A.Knox 3169*

1	Allan Knox	Lancer	Nationals	1860 + 1309
2	John Butcher	RC-1	Nationals	1860 + 12
3	Charles Warren	So Long	Nationals	1860 + 755
4	Allan Baker	Scorpion	Nationals	1852
5	Ian Munroe	Simplex	Nationals	1849
6	Bryan Treloar	Airborne	Nationals	1840
7	Rex Anderson	Cloud Snooper	Nationals	1698
8	Bernard Scott	Simplex	Rally Sept	1657
9	Graham Main	Simplex	Nationals	1521
10	John Selby	Turner Special	Nationals	836

Vintage E Texaco *2012 W.Cartwright 3325*

1	Keith Trillo	Stardust Special	Champs	1860 + 694
2	Wayne Cartwright	Cruiser	Champs	1860 + 573
3	Rex Anderson	Kerswap	Champs	1860 + 369
4	David Crook	Bomber	Nationals	1860
5	John Butcher	Miss Fortune X	Champs	1855
6	Allan Knox	5-Foot Gas	NDC 107	1853
7	Doug Baunton	PB-2	Champs	1698
8	Rex Anderson	Kerswap	Nationals	1651
9	Bernard Scott	Bombshell	Champs	1616

Vintage E Rubber Texaco *2016 J.Butcher 3117*

1	John Butcher	Golliwock	Tuakau	1860 + 1257
2	Keith Trillo	Yonder	Rally Sept	1860 + 1065
3	Wayne Cartwright	Lanzo D	Rally Sept	1860 + 1047
4	Doug Baunton	JA Skokie	Champs	1600
5	John Danks	Ascender	Rally Sept	1240

Vintage Scale Texaco *2016 A.Knox 947*

1	Allan Knox	Chilton DW1	NDC 105	947

Vintage Open Texaco *2014 J.Butcher 3320*

1	John Butcher	Lanzo RC-1	Champs	1836
2	Bernard Scott	Playboy Cabin	Nationals	1760
3	Allan Knox	Lancer 45	Nationals	923
4	Ian Munroe	TD-Coupe	Nationals	601
5	John Selby	Turner Special	Nationals	575

Classical Precision *2016 B.Harris 598*

1	Brian Harris	Humbug	Champs	598
2	David Gush	Tyro Major	Rally Sept	589
3	Graham Main	Gigi	Tuakau	581
4	Don Mossop	Madcap	Nationals	563
5	Bernard Scott	Frisco Kid	Champs	550
6	Stuart Lightfoot	Humbug	Rally Sept	462
7	David Thornley	Satellite 1000	Champs	351
8	John Warner	Spook	Nationals	343

Classical IC Duration *2014 D.Thornley 1103*

1	David Thornley	Satellite 1000	Rally Sept	834
2	Bernard Scott	Raider	Champs	797
3	David Gush	Tyro Major	Rally Sept	589

Classical E Duration *2014 B.Harris 1217*

1=	Don Mossop	Texan	Rally Sept	900
1=	Bernard Scott	Frisco Kid	Champs	900
3	Brian Harris	Humbug	Tuakau	844
4	John Warner	Texan	Nationals	729
5	Graham Main	Gigi	Champs	621
6	Wayne Cartwright	Nig Nog	Champs	242

Classical 1/2E Duration

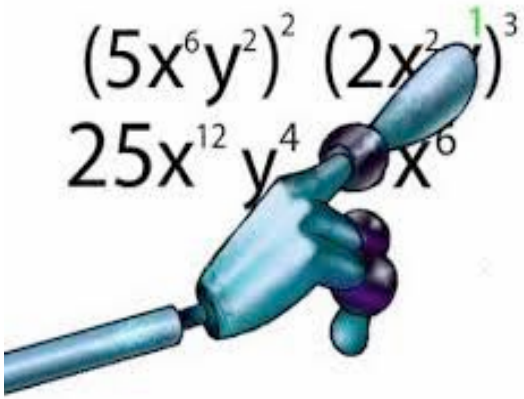
Tomboy IC *2015 R.Anderson 1432*

1	Graham Main	Mills .75	Champs	651
2	Keith Trillo	Mills .75	Tuakau	476
3	Charles Warren	Mills .75	Tuakau	194
4	Rex Bain	Mills .75	Tuakau	82

Tomboy E *2014 S.Grant 1935*

1	Keith Trillo	180.2S	Champs	1609
2	Dave Crook	180.2S	Champs	1069
3	Graham Main	180.2S	Champs	942
4	Bernard Scott	180.2S	WFFC	845

New results in red. Leader Board records in blue.



Vintage Power *R.Bain, B.Scott 540*

1 Lynn Rodway	Playboy Junior	NDC #97	309

Vintage Rubber *W.McGarvey, A.Koerbin 540*

1 Bill McGarvey	?	NDC 78	180

Vintage Glider *2013 R.Anderson 427*

1 Rex Anderson	Oderman	Nationals	331
2 Stephen Wade	Lulu	Nationals	195
3 Stewart Cox	Lulu	Nationals	186
4 John Butcher	Sky Roamer	Nationals	97

Vintage / Nostalgia Small Power *2016 B.Scott 353*

1 Bernard Scott	Dixielander	Nationals	353
2 Rex Bain	Shaboom	Nationals	334
3 John Butcher	Kerswap	Nationals	164

Vintage Precision *2014 G.Burrows 411*

1= Dave Jackson	Kerswap	NDC 96	270
1= Bernard Scott	Shadow	Nationals	270
3 Charles Warren	Tomboy	Nationals	246
4 Bruce Weatherall	Request	NDC 96	214
5 Stewart Morse	Tomboy	NDC 96	199
6 Lynn Rodway	KK Bandit	NDC 96	177
7 John Selby	Simplex	Nationals	176
8 John Butcher	Sky Roamer	Nationals	155
9 Roy Gunner	President	NDC 96	93
10 Alwyn Graves	Clini	Nationals	18

Vintage Catapult Glider *2012 J.Butcher 339*

1 Des Richards	Hervat	Nationals	288
2 John Butcher	Mayne	NDC 101	261
3 Ron Magill	?	NDC 101	253
4 David Gush	?	NDC 101	232
5 John Selby	Hervat	Nationals	207
6 Daniel Warner	Mite	Nationals	184
7 Charles Warren	Hervat	Nationals	180
8 Ray Cordell	?	NDC 101	175
9 Peter Wilson	Whirly	Nationals	174
10 Josh Warner	Mite	Nationals	170

Nostalgia Power *R.Bain, B.Scott 540*

1 Rex Bain	Jaysbird	Nationals	540
2 Bernard Scott	Dixielander	Nationals	469
3 Stewart Morse	Stomper	NDC 98	256
4 Lynn Rodway	Stomper	NDC 98	195
4 Rex Anderson	Ramrod	Nationals	139

Nostalgia Rubber *W.McGarvey, B.Scott 540*

1 William McGarvey	Hipperson	Nationals	540
2= Paul Squires	Max Maker	Nationals	525
2= Bernard Scott	Flip Flop	Nationals	525
4 Chris Murphy	?	NDC 81	343
5 Alwyn Graves	Clini	Nationals	17

Nostalgia Glider *2015 M.Evans 470*

1 Stewart Cox	Mad's Dream	Nationals	398
2 Bernard Scott	Aiglet	Nationals	322
3 Rex Anderson	Sans Egal	Nationals	295
4 Bruce Bonner	Inchworm	NDC 100	256

Classic Rubber *2015 L.Vincent 485*

1 Paul Squires	?	NDC 82	408
2 Chris Murphy	?	NDC 82	100

Classic Power *2015 R.Bain 540*

Classic Glider *2015 R.Anderson 540*

Photograph by Tony Tomlin
Sticks and Tissue #117

Free Flight Notices

TAURANGA OPEN FREE FLIGHT

Saturday 5th November 9am to 2pm
at Piako Road
$10 entry includes a *koha* to the landowner

Open Power, Open Rubber, Open Glider. All 3x180
If entries are low, the Open classes may be combined
HLG / CLG / TLG Combined
MINI Combined

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