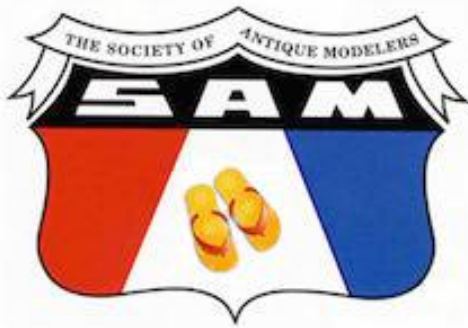


AVANZ NEWS





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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 22 and 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

Vintage Precision
Classical Precision
Vintage IC Duration
Classical IC Duration
Classical 1/2E Texaco *
Tomboy IC

Sunday 19 March

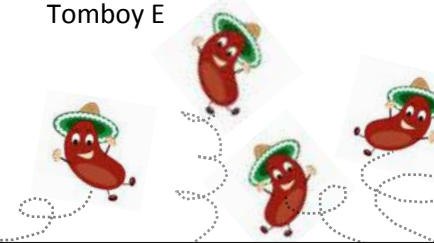
Vintage E Duration
Vintage 1/2A Texaco
Vintage 1/2E Texaco
Vin and CI Scale Texaco **
Vintage E Rubber Texaco

Monday 20 March

Vintage Open Texaco
Vintage E Texaco
Vintage A Texaco
Classical Electric Duration
Tomboy E

* 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

Vintage Precision
Vintage IC Duration
Classical Precision
Classical IC Duration

Day 2

Vintage E Duration
Vintage 1/2A Texaco
Vintage 1/2E Texaco

Day 3

Vintage A Texaco
Vintage E Texaco

Day 4

Vintage Open Texaco
Vintage E Rubber Texaco
Classical E Duration

Vintage FF Event Schedule for 2017 National Championships

Location: Proctor Road

Day 1

Vintage CAT Glider
Vintage Power

Day 2

Vintage Rubber
Nostalgia Power

Day 3

Vintage Glider
Small Nos/Vintage Power

Day 4

Nos Rubber
Nos / Classic Glider Combined
Classic Power / Rubber Combined

Day 5

Precision

Free Flight Event Schedule for 2017 National Championships

Location: Proctor Road

Day 1

FAI Combined

Day 2

Open Combined
Kiwi Power
F1L (eve)

Day 3

Mini Combined
CLG
Aggregate (eve)

Day 4

HLG, TLG
P-30
Hangar Rat, Indoor HLG

Day 5

Kennedy Precision

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 | |

Vintage A Texaco

| | | R1 | R2 | R3 | Total | FO |
|---------------|---------|-----|-----|-----|-------|----|
| 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.

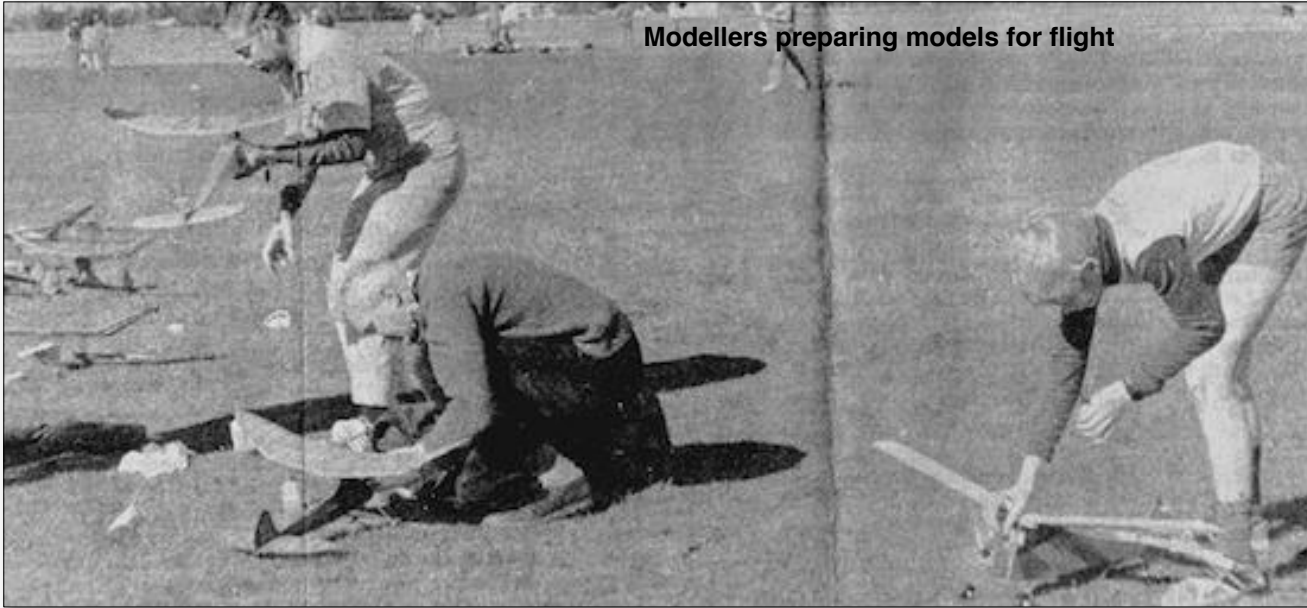


Discussion between *JB* interested parties at the Rally and on other occasions has helped clarify aspects of the model and the one-design event. To ensure all builders are on the same footing, the main points of discussion are given here.

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

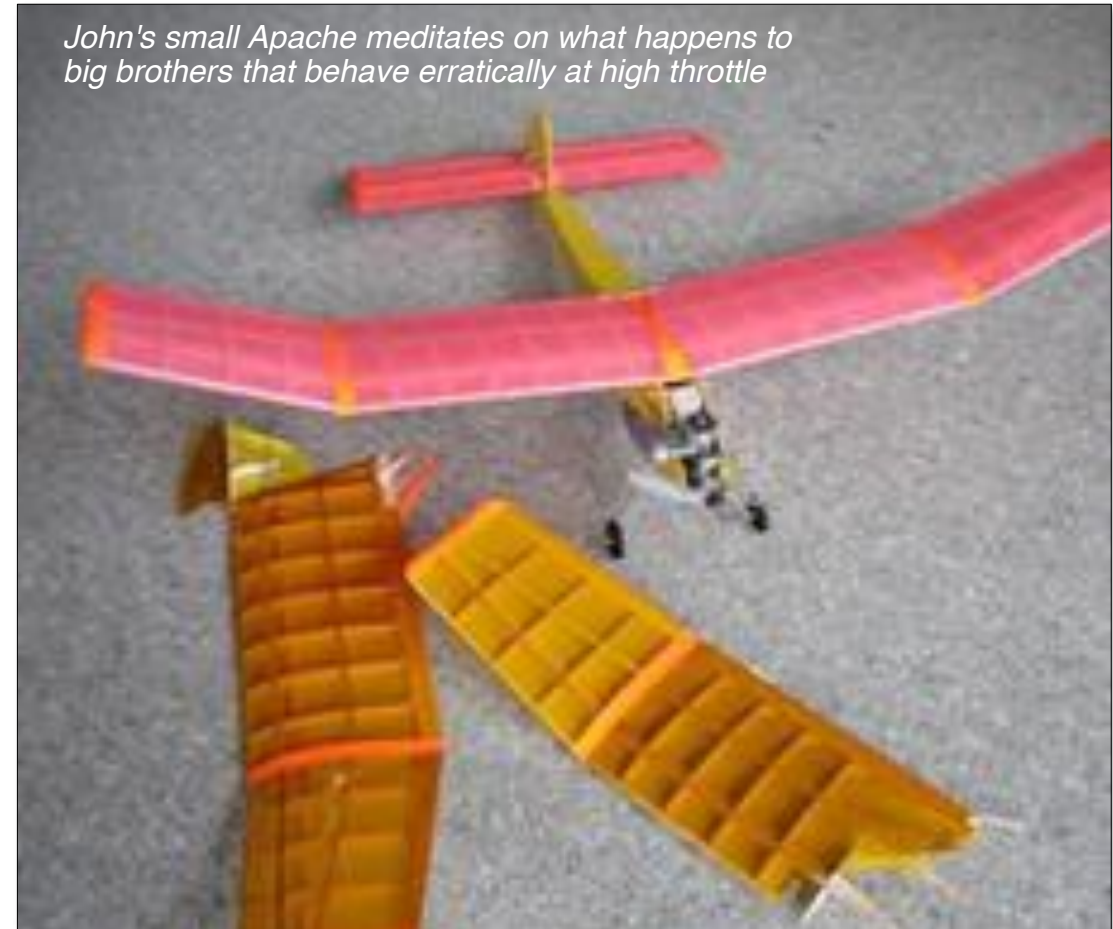


Not much to report regarding flying at Tuakau over the last 7-8 weeks. 2 good days at the beginning of July was about it. The atmosphere and countryside has been very moist and the dammed wind very busy. For a change we ran an indoor meeting at the La Valla complex with Airsail Mantis being the model 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 1/2E and the IC version to 1/2A.

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



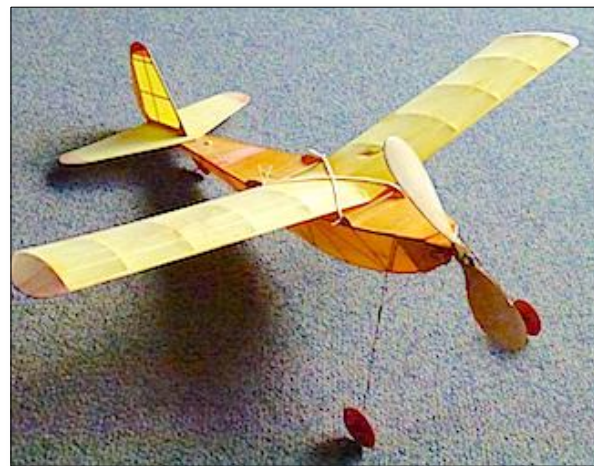
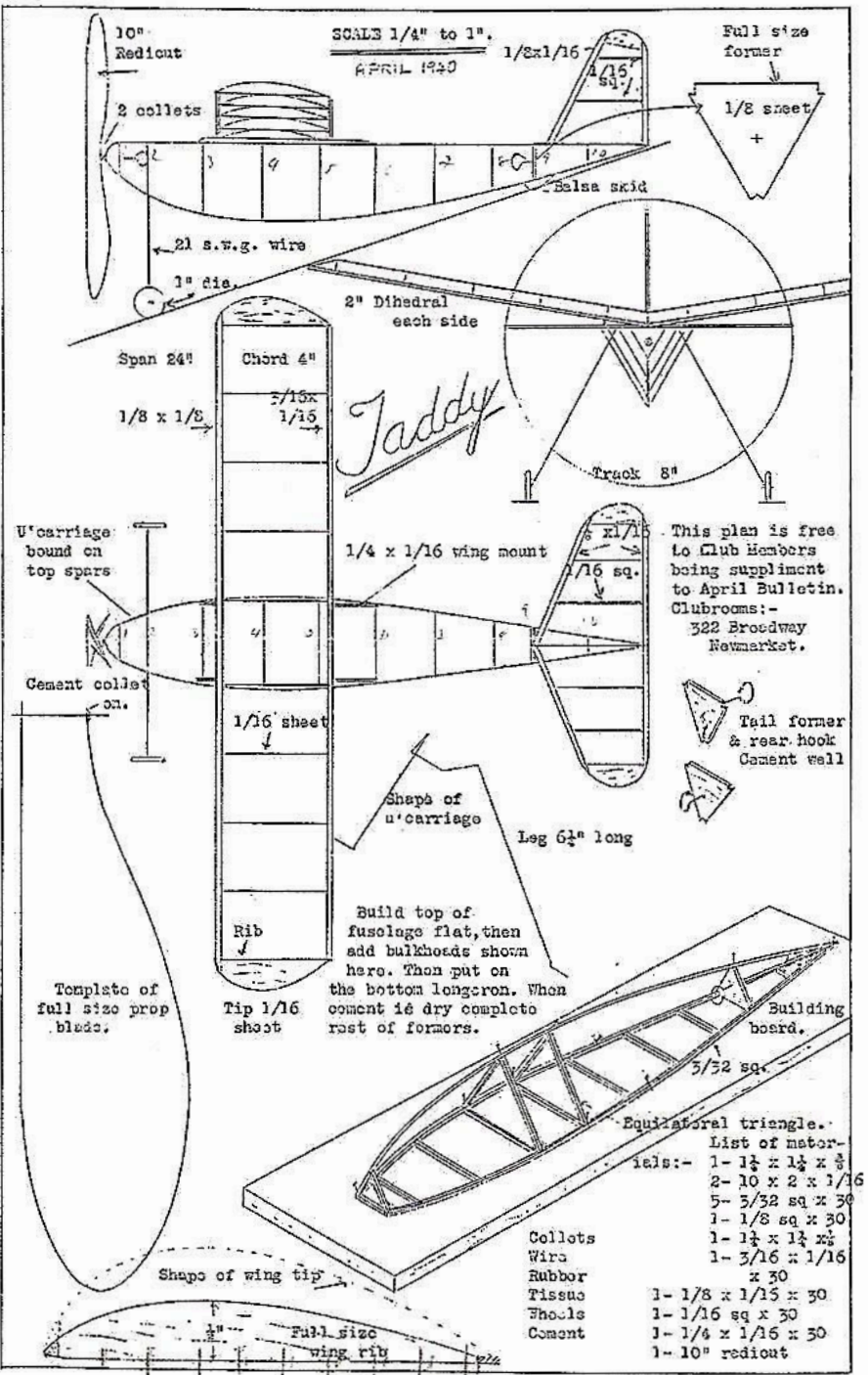
Tyro Major David Gush



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 requiring a 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.

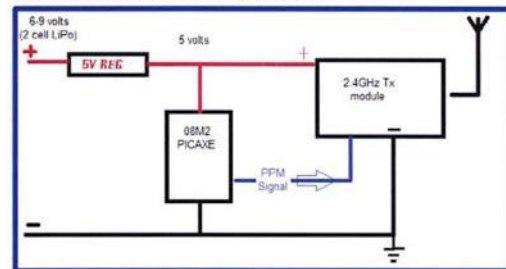
That might be a made up memory, but I decided to make it real in that I would like to get back into free flight and at the same time really enjoy it, just firing up the engine and letting her go and being able to stand back and really enjoy the beauty of it, without the hassles of long trudges to retrieve 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 flyer in serious competition, certainly not in the range of the sport free flyer.

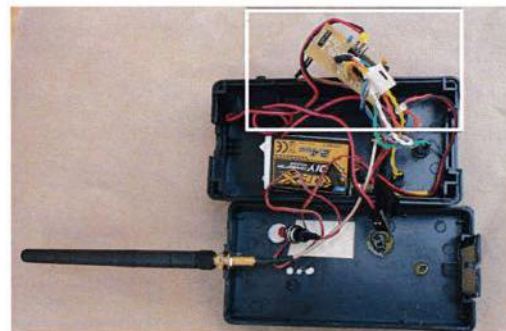
With the advent of cheapo modules from the likes of Hobby King and others it is now really just a matter of getting all the bits and plugging them in. Well a bit of soldering as well if you are up to it, if not then ready made modules are also available.

- 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.

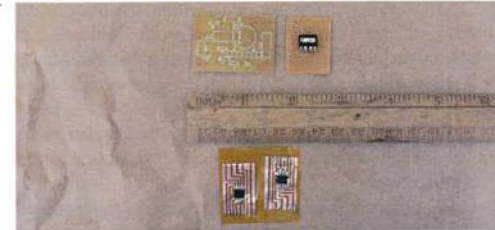
HOW DOES IT ALL HOOK UP?



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.

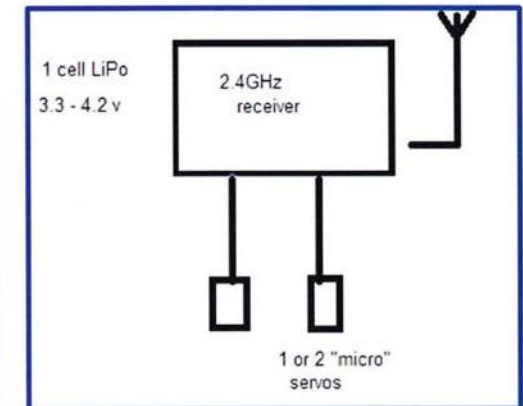


The second photo shows my own board which uses a PICAXE programmable chip, and I can provide info and assistance with these. These chips only cost a couple of \$\$ each so are pretty cheap for what they are capable of.

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.



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 cutoff 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/ACCSTsystems>

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

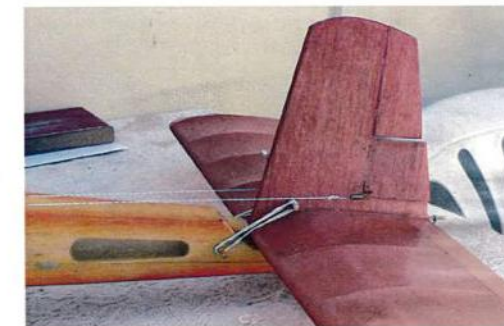
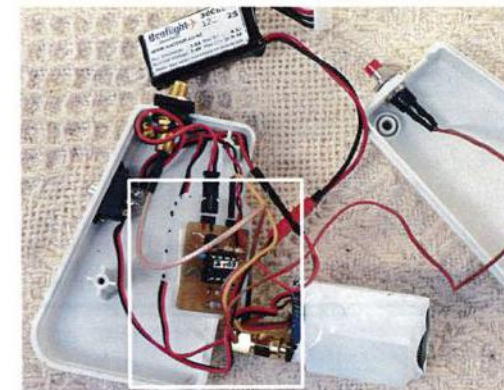
Lots of info from Phil Green's website:

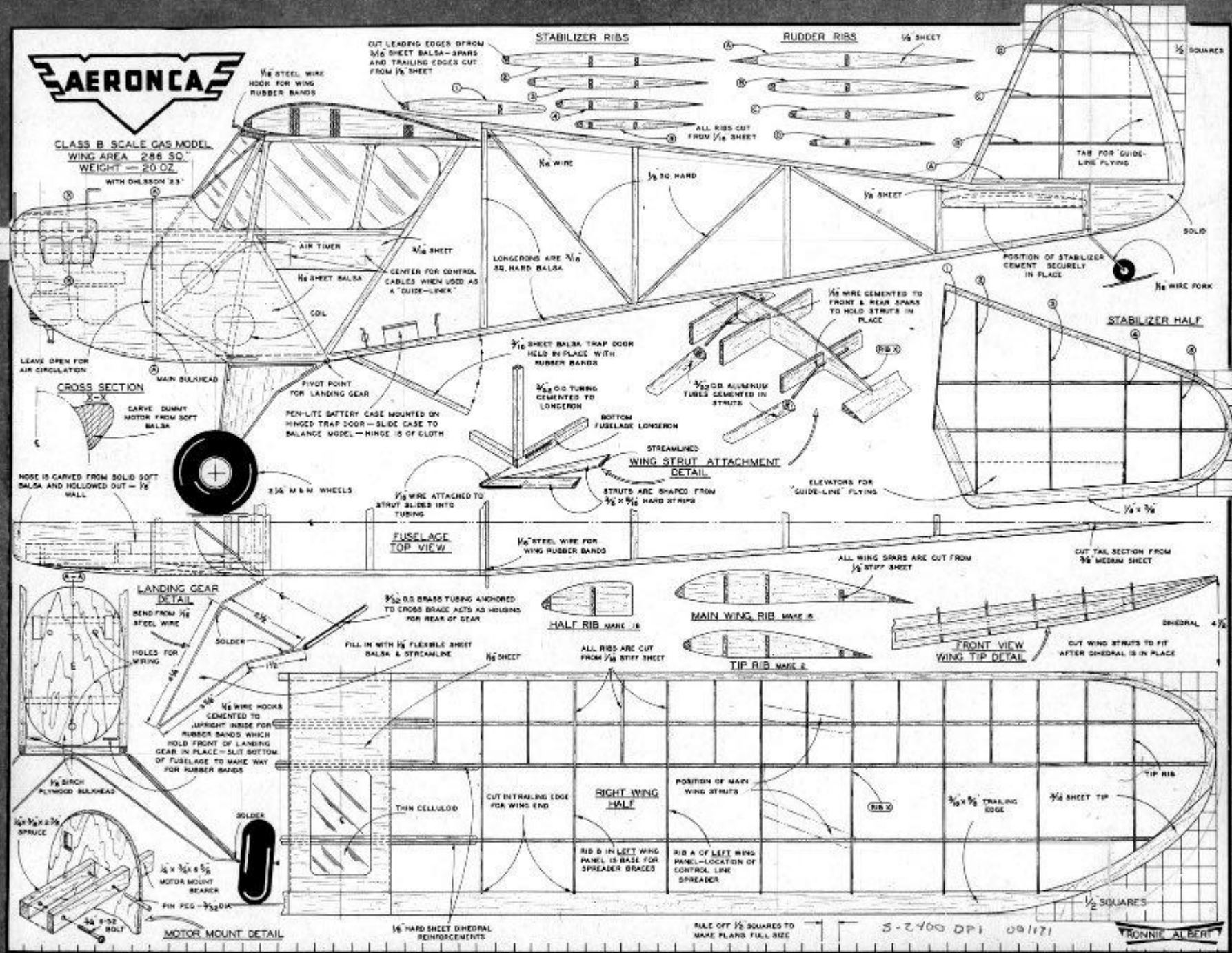
<http://www.singlechannel.co.uk/>

Additional info

<http://www.mindspring.com/~rellis2/rcpattrn/retro.htm>

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





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.

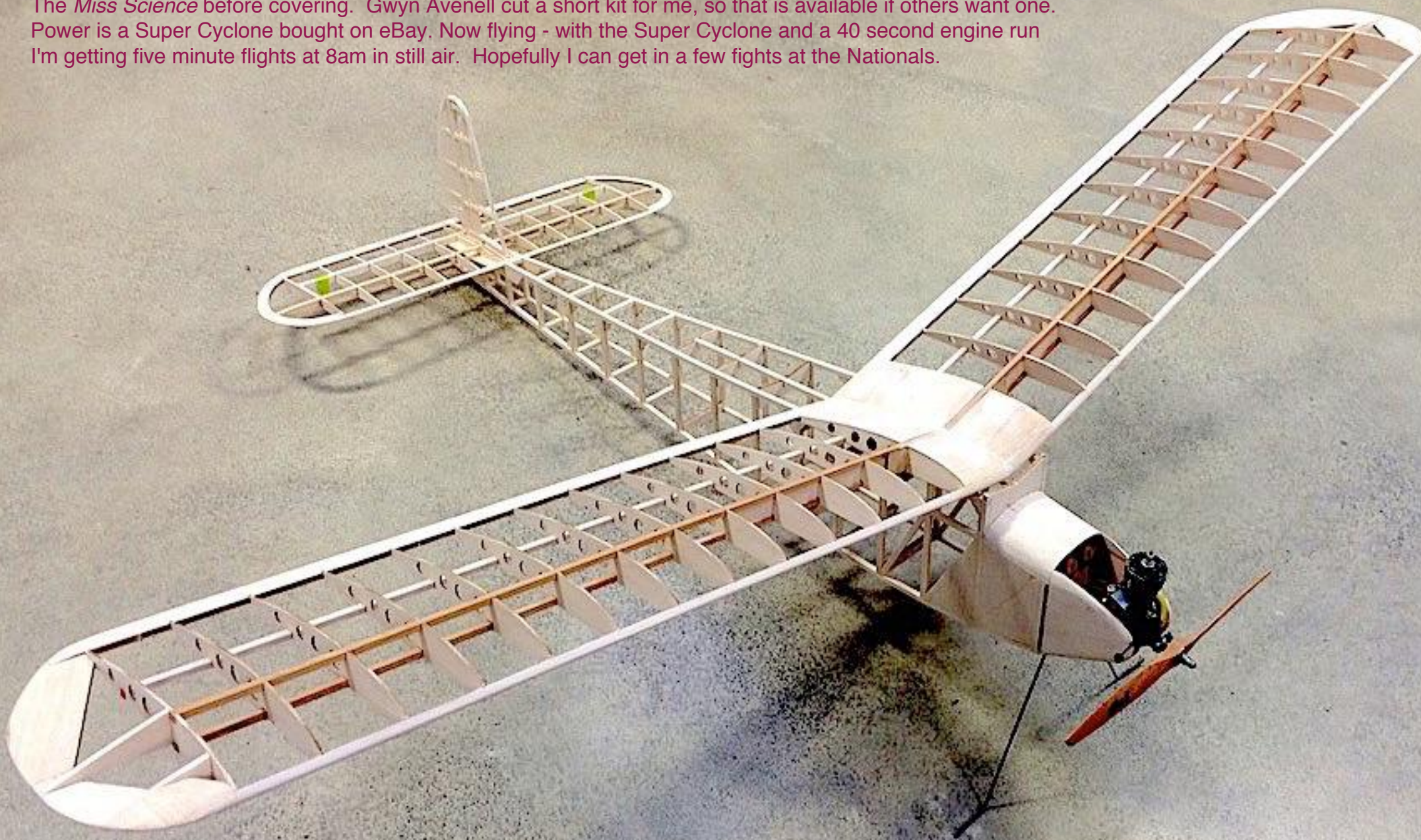


I was intrigued by the 1950 Aeromodeller cover in Issue 150 as it looks very similar to a Keil Kraft Slicker. Would you believe I'm at last revisiting my roots and have built a Super Slicker at 84 inch span? A bit of a step up from my Tomboy. It is radio assist with three channels and powered by a four 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 flutter valve, 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.

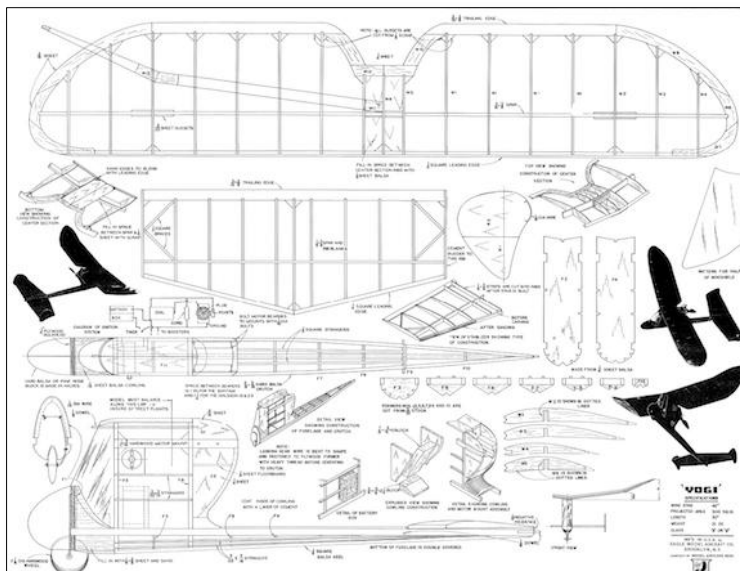
It is a complete aerodynamic nonsense, a pylon model with a pusher prop, and no sweepback. Lack of sweepback means an inordinate amount of ballast to get the CG where it shows on the plan, 6 ounces, to be precise. I suspect the CG is very conservative - my plan is the one that was issued with the kit - 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 bejusus 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.

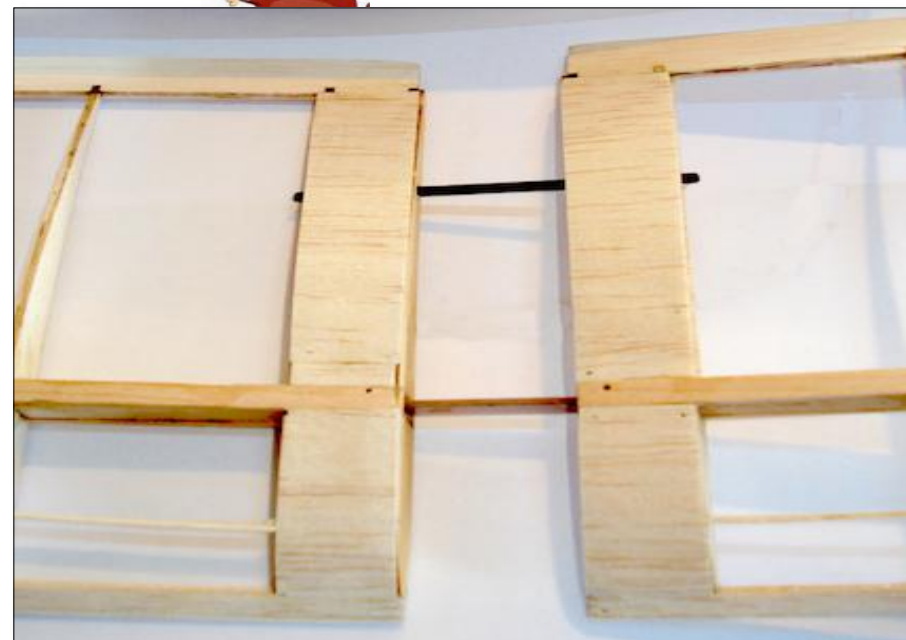
Construction was a breeze with the laser-cut kit. I used spruce spars trimmed 1.5 x 5mm instead of balsa. Prior to glueing the fuselage sides to the various formers, I first sewed a thin wire landing skid to the ply firewall and then added a small ply box to it as an engine mount to achieve the correct 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 2.5mm carbon fibre rod.

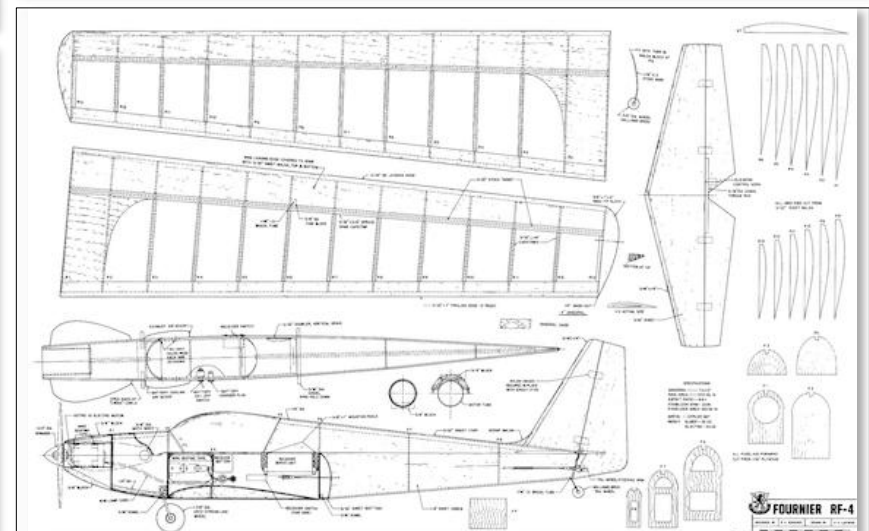
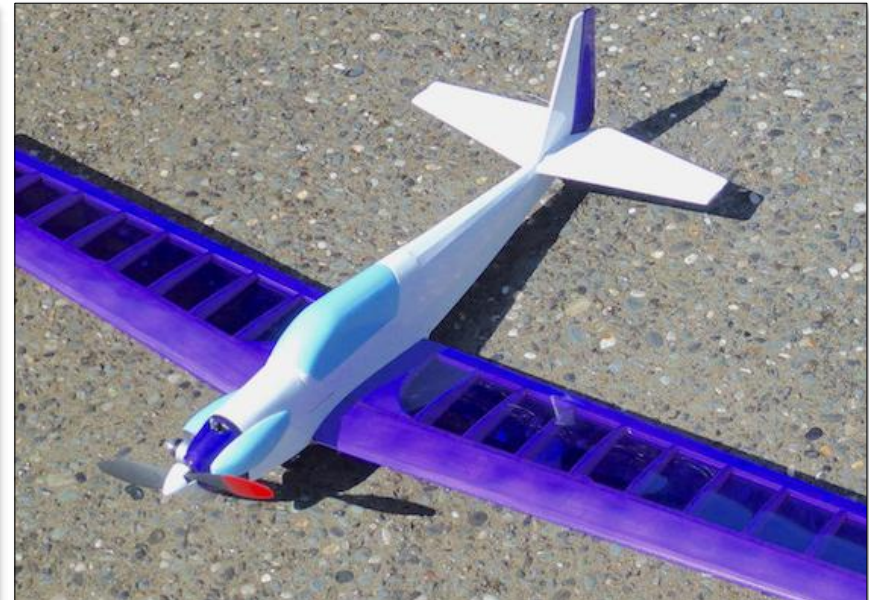
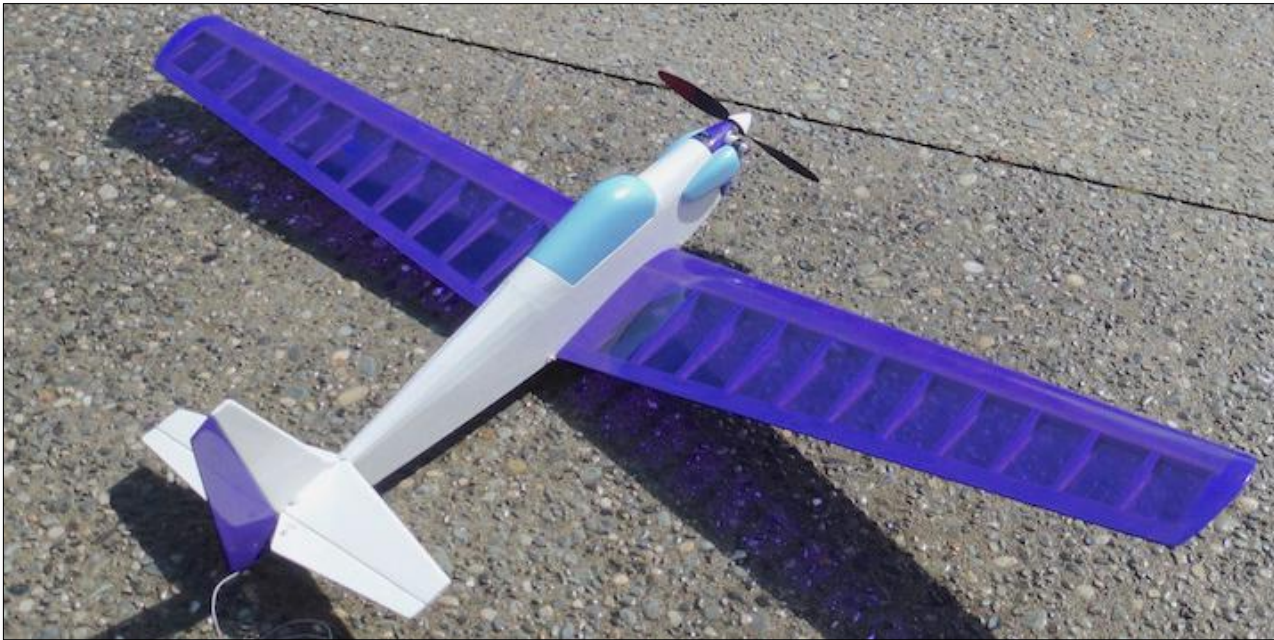
On a maiden flight at the rally at Airsail Pukekawa using an old and rather dubious 360mA 2S battery the model flew very well. *Bring it on!*

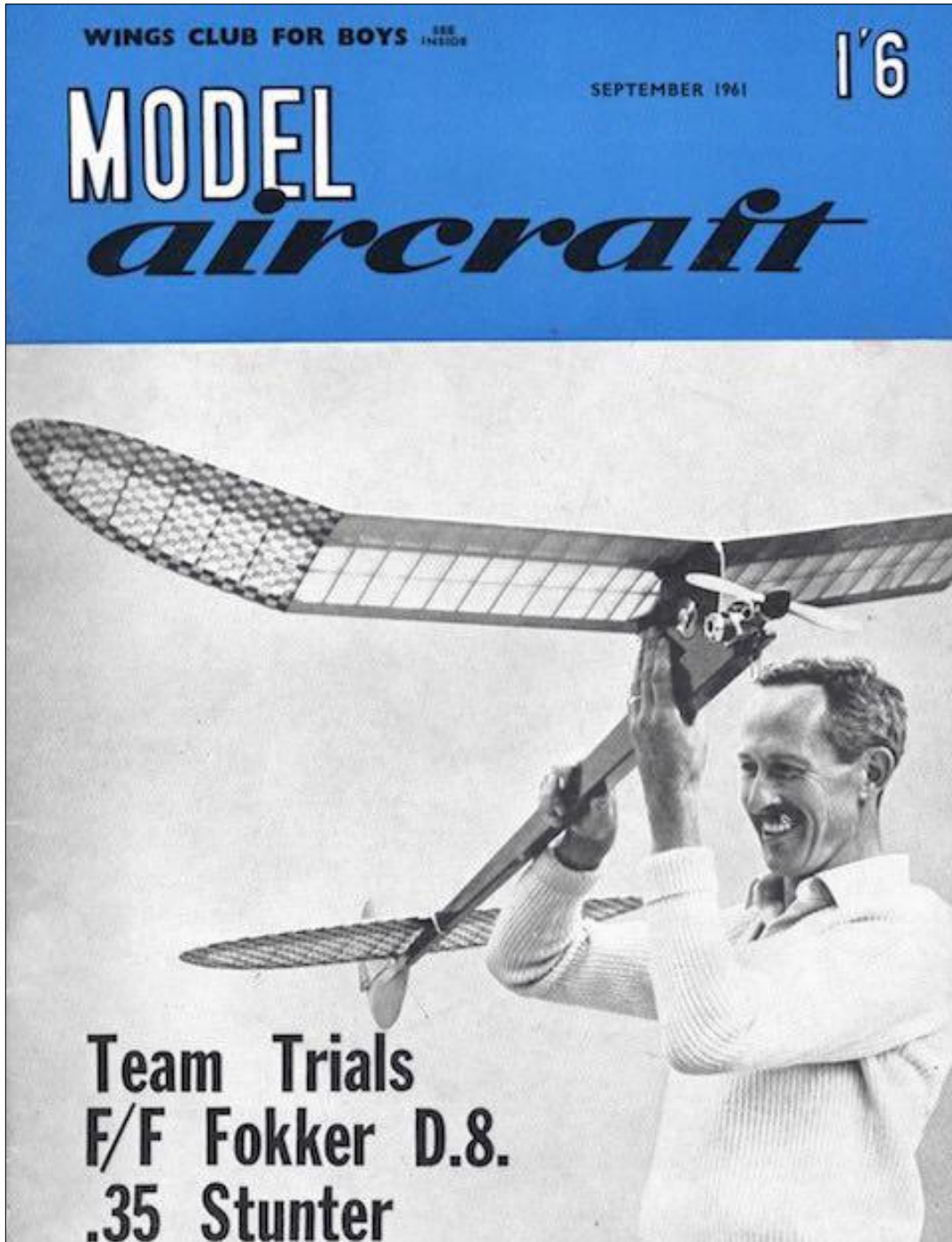




This Fournier RF-4 appeared in the May 1974 RCM magazine and was originally intended for electric with an Astro10 motor - a 42 year old electric model that slots into the last years of our Classical class. Mine is for Scale Texaco and was chosen for its looks, visibility at height, and anticipated glider-like performance. Scaling from 73" to 59" gave 359 sq in and 20 oz minimum weight, good figures for the 1/2A power approach. A completely 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 !







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.

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 | Rally 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

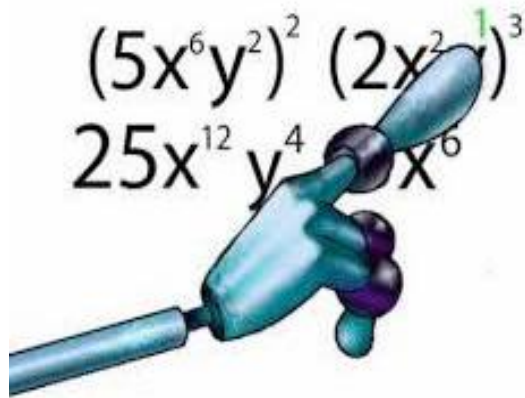
Tomboy IC *2015 R.Anderson 1432*

| | | | |
|------------------|-----------|--------|-----|
| 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

CONTACTS: Moira and Lincoln Vincent
Ph. 07 576 2262 lvincent@xtra.co.nz

Free Flight contest day Indoor flying at Morrinsville

Sunday October 9, 2016

- Hangar Rat • HL Glider
Flown to MFNZ rules
- Push E • Modelair Hornet
Flown to AMAC rules
- F4D Rubber Scale, F4F Peanut Scale
Flown to FAI rules. Refer to link on MFNZ website under Scale FF & CL SIG
- Kit Scale
Flown to rules on MFNZ website under Scale FF & CL SIG

Come and join us

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

Programme: 9.45am Arrive and unpack ready for start time
10.00am Hangar Rat, Push E and HL Glider
Scale static judging until 12.30pm
12.30pm Peanut Scale, Rubber Scale, Kit Scale
3.45pm Prizegiving
3.55pm Hall vacated.

Fliers Entry: \$20.00

Spectators welcome

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