

FIGURE 93. CORRECT LAUNCHING OF ENDURANCE TWIN-PUSHER



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COMMITTEE NOTICES

Vintage SIG Report to MFNZ Combined SIGs Meeting 2017

Another good year for the Vintage SIG. The Vintage SIG has had another year of good participation in RC competition flying. Entries were again strong in the NNI regional contest series and at the Nationals. The North Island RC Vintage Championships were held for the first time in SNI, at Levin, and had encouraging entries and enjoyable flying. Interest in Vintage competitions in the SNI is now strengthening. The Top Ten Leader Board scheme continues strongly and is one of the key reasons for the solid interest in competition flying. A Board for each class runs for the calendar year and is then cleared and begins afresh. Entries in Vintage FF have been steady. NDC participation still needs a lot of encouragement.

2017 Nationals The 2017 Nationals were successful for the SIG, with a strong entry despite the generally windy conditions. However, the Waharoa Domain site for RC Vintage only barely met safety requirements under these rough westerly conditions. A site for Vintage on the airfield is proposed for the next Nationals at Matamata.

Six Day Schedule at the 2018 Nationals After consulting with SIG Members, the FF SIG, and the Nationals Manager, it has been decided that the Vintage Schedule at the 2018 Nationals will extend for six days, with separate periods of three days for each of FF Vintage and RC Vintage. This will remove the unfairness that has prevailed for many years due to FF Vintage and RC Vintage events being scheduled at the same times. FF Vintage flying will commence on Registration Day (Day 0) and continue on Days 1 and 2. RC Vintage on Days 4, 5, and 6.

Completion of RC Vintage Expansion Plan
RC Classical 1/2E Texaco, RC Classical E Texaco, RC Vintage

and Classical Scale Texaco will be flown on the Nationals for the first time in 2018. The addition of these classes to the Nationals schedule completes the plan for major expansion of RC Vintage and Classical classes that began in 2011 and which has accounted for most of the growth of the SIG over the last six years.

Rules Re-formatted During the year the Committee re-formatted and edited the Vintage Flying Rules, incorporating a revised Code of Practice. This has greatly improved access to the rules and their readability.

AVANZ News The SIG's newsletter is now published more frequently and has received international recognition and praise for its content and graphic design.

AVANZ Plans Service The Plans Service is now entirely electronic as a result of a huge task completed over several years as part of the international Co-op Plans archiving project.

Contribution to Traditional Methods The SIG is always mindful that it supports a wider contribution to aeromodelling through providing opportunities for application of traditional building approaches, materials, and skills. Vintage is one of the few categories of model flying in which this is still necessary.

Strong Committee The SIG continues to be served by a strong and enthusiastic committee – Bernard Scott, Rex Bain, Allan Knox, Graham Main, Mark Venter, Don Mossop, Dave Crook, and Tony Gribble. I thank them all for another year of excellent work.

Wayne Cartwright
Chair and Secretary, Vintage SIG
04/07/2017

On the Cover:

Essential advice from "Complete Model Aircraft Manual" published in 1933

Logo:

The extinct Moa bird - see Miscellaneous page

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Dick Twomey's ditty about the FROG brand, which appeared in the last issue, generated a couple of responses in kind, one to do with ageing, and the other praising Dick's model design output. In the interests of reputation and personal safety, it is not intended to disclose the authors of these tenuous literary attempts.

In Appreciation of a Certain Model Designer :

Forsooth, the Bard from the land of Mauritius,
Writing and designing, his work's been propitious.
From those wonderful years of stick, glue and tissue,
When we eagerly awaited the next Aeromodeller issue.
Forsooth again: the Rebel I just had to build,
And then a Leprechaun, passion fulfilled.
Well nearly, I might build another, you see
'cos they don't last forever 'tween sky, land and sea.
Hats off to you, Dick Twomey, for your contributions
To the pleasure of modellers across many nations.



Lament of the Ageing Aeromodeller :

You're sixty-five, the Gumment says, and so deserve a pension.
Slow down and rest, is what is best -
that is their contention.

But I still build as if I'm young, I hope that's not pretension.
I don't feel old, but alert and bold -
not ready for detention.

This "Old Age" thing, I'll have you know, could simply be invention.
The single trouble, that bursts my bubble -
is related to retention.

They claim I'm "old", but I have to say
.. oops .. I need to pee, is there a toilet down this way??

John Selby at Levin MAC next weekend.

Fly whatever Vintage and Classical you like, but focus is on competition.

Hot drinks and lunch. \$2 sausage and \$5 Burger off the BBQ.

Dinner in Levin Saturday evening if folks are keen.

I will CD. Flying starting at 0900 both days.

Allan Knox 021747950

North Island RC Contest and Rally Schedule 2017/2018

September	23 and 24	Blackfeet
October	21 and 22	JR Airsail
November	18 and 19	Tuakau
December	Clear	
January	Nationals	Carterton
February	24 and 25	JR Airsail
March	24 - 26 NI Champs	Tuakau.
April	21 - 22	Blackfeet
May	19 - 20	JR Airsail

Tuakau Model Aero Club (Inc)				
Results of the Vintage/Classical Event 30 July 2017				
PRECISION	Vintage & Classical combined			
Name	Model	Score	F/O	Place
Rex Anderson	Miss FX	200		1 st
Gordon Meads	RC1	199	195	2 nd
Dace Gush	Miss FX	199	192	3 rd
David Squires	Crowbar	196		
John Butcher	Miss FX	195		
Dave Crook	Playboy	176		
Keith Trillo	Tomboy	199	DNFly	
DURATION	Vintage / Classical IC & E combined			
Name	Model	Score	F/O	Place
Tony Gribble	Stardust Special	895		1 st
Keith Trillo	Stardust Special	664		2 nd
Gordon Meads	Playboy Snr	510		3 rd
David Squires	Kerswap	447		
Rex Anderson	Playboy Snr	318		
John Butcher	Miss FX	255		
E TEXACO	Vintage & Classical combined			
Name	Model	Score	F/O	Place
Keith Trillo	Stardust Special	1456		1 st
John Butcher	RC1	721		2 nd
Dave Crook	Lanzo Bomber	708		3 rd
David Squires	Miss FX	404		
½ E TEXACO	Vintage & Classical combined			
Name	Model	Score	F/O	Place
Keith Trillo	Stardust Special	1248		1 st
Dave Crook	Tomboy	791		2 nd
Tony Gribble	Jump'n Bean	756		3 rd
E TOMBOY				
Name	Model	Score	F/O	Place
Keith Trillo	Tomboy	547		
E RUBBER				
Name	Model	Score	F/O	Place
John Butcher	Gollywock	1035		



When Su died of cancer on 19th July, she was at home where she wanted to be. I was with her, but then there were not many times, good or bad, when we were not together. We met forty-six years ago and were married for forty-three of those.

After a false start in teaching, Su moved into librarianship where she quickly proved herself an innovative thinker, rising to become manager of eight libraries in Auckland and five in Hamilton. Her challenges to library traditions often started quite literally at ground level with her designs for the many new Auckland libraries that were built under her direction. These libraries gained local and international recognition, being hailed as exemplars of 21st century libraries and for their radical, purpose-designed architecture. They were no longer mere repositories of information - they became vibrant social centres, not waiting passively for readers to drop by but reaching into the community and drawing new and current library users alike into the literary events and services that Su developed.

Su's Socialist convictions guaranteed these services were available to everyone at all levels of society without restriction or cost. Whether a library user was housebound, very young or very old, an immigrant with language difficulties, or a member of a needful minority, Su created programs to meet their individual needs and delivered them in a caring manner.

This was not always an easy task considering the cosmopolitan nature of big cities and the intricacies of Council funding.

Su provided a consultancy service for NZ libraries that wanted to follow her lead, and shared her skills at library conferences in the UK, Canada and USA.

Most readers will remember Su not for her librarianship but for her loyal presence on competition flying fields. Our first Nationals together was at Ngatea in 1985. Back then it was more a camping holiday than a contest, but as the years passed, we took on more and more classes, peaking at 27 events at a recent Nationals. This level of participation needed methodical preparation and timetabling, but with Su as timekeeper, pitcrew and general hand, it became possible and we were able to do well. Su did not build or fly models, she was on the field only for my benefit, but she did have some favourite events. Indoors it was F1D, in FF it was Miniature Replica and PAALoad, and in RC it was Vintage 1/2A Texaco.

At our last big-effort Nationals, we together managed to collect several Championship cups. In recognition of Su's part in these and many previous wins, I engraved the trophies with our names as joint winners, confident that anyone who knew Su would approve of this breach of protocol.

Bernard Scott

Like all Vintage events, the Tuakau event held on 30 July was a laid back relaxed affair. Those travelling north from Hamilton wondered what they may have been in for as thick fog blanketed the Waikato early morning and thoughts of standing around for a couple of hours, hands in pockets waiting for the sun to break through came to mind. That was not to be and upon arrival at Tuakau there was nothing but blue sky and very little cloud. Still cold mind you but what a great day this was going to be.

The format was slightly different to how normal Vintage Rallies and Events are run in that there were no qualifying rounds. You simply went for broke with unlimited flight times except for Precision of course.

I have to admit it was nice to blow out the cobwebs and get some flying done. I personally used the day as a bit of a test session and interchanged various batteries and props. With so many events in which to fly you couldn't stand around all day waiting for those thermals to materialize, they came in the afternoon so it was straight into it. Precision seems to come up naturally first as it's not thermals you are seeking and with Rex Anderson scoring the perfect 3 minutes zero and a landing on his first flight the rest of us thought why bother. As it was Rex took the honours and went home with a kit to build courtesy of Gwyn Avenell of Avetek who donated the prizes of both a Jumpin Bean and a Glowworm.

Tony Gribble on the last flight of the day in E Duration didn't want to come down and in doing so his fine efforts awarded him a Glowworm kit after a flight of some 14 minutes in E Duration. Also in the afternoon Keith Trillo didn't want to come down in E Texaco which resulted in a 23 minute flight for him and a prize to go with it.

Thanks to the Tuakau club for running the event outside the normal Vintage calendar, choosing a fantastic day, terrific field and providing a superb BBQ lunch. Well done. Also thanks to Gwyn from Avetek for the kind donation of the prizes

Dave Crook



The weather gods were all on our side for a change for our vintage and classical event on Sunday 30th July it made for a very pleasant affair. The afternoon conditions were excellent with some unexpected thermal activity and some long flights were recorded in both duration and E Texaco. One 14 min plus flight was recorded in duration and a 23 min plus in E Texaco the concept of flying unlimited times rather than qualifying flights and then an unlimited flight seemed to be well received. Competition numbers were down a little but we will definitely run another similar event. Those who were not able to attend missed a great day's entertainment. Many thanks to those who attended both fliers and helpers alike and special thanks to Gwyn Avenell of Avetek Ltd for his kind donation of a Jumpin Bean kit as one of our prizes.

John Butcher



Above, then Clockwise:

Playboy & Tomboy - Dave Crook.

Playboy - Rex Anderson.

Gwyn Averill.

A wee bit of wind.

Even they serve who sit and wait.

Playboy & RC1 - Gordon Meads.

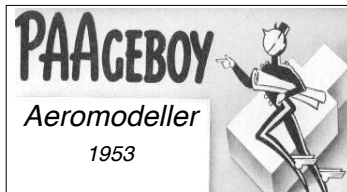
David Squires.

Center:

Benny Boxcar & Guru - Tony Gribble

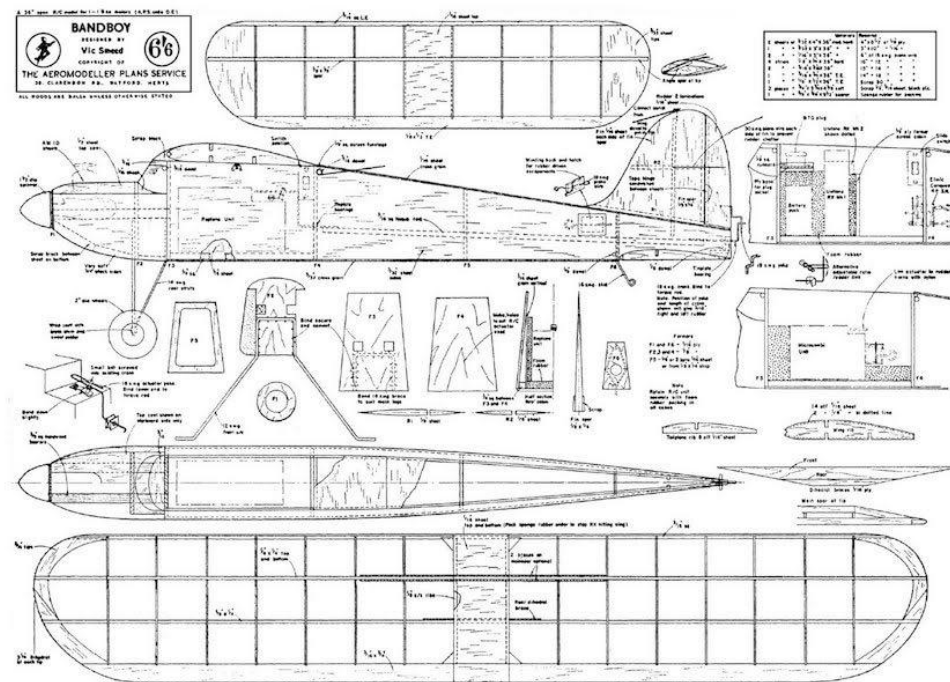
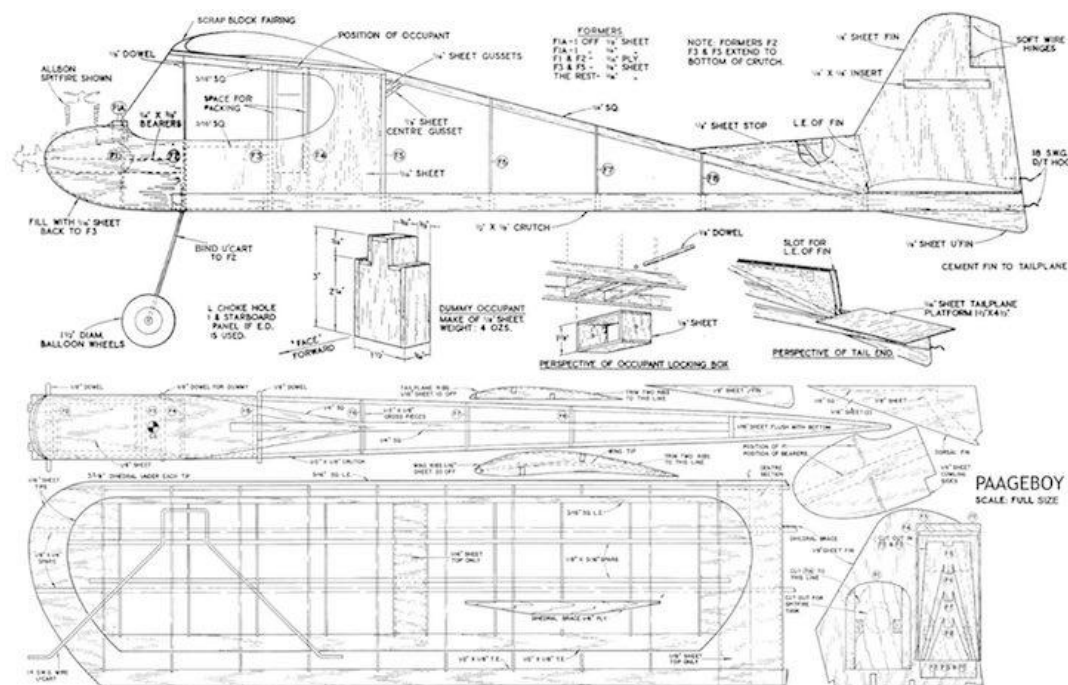


The *Tomboy* is recognised throughout the aeromodelling world : here are two of the Smeed boys who are less well known.



PAAGEBOY
Aeromodeller
1953

The cabin area of the *PAAgeboy* has a *Tomboy*-ish look, but the rest of the model is purpose designed for the weight lifting PAAload task with minimal yet rigid structure that is quick building. Remove the payload weights and *PAAgeboy* climbs in a most un-*Tomboy*-ish manner. For free flight, *PB* fits into the Nostalgia period and for this use, despite the fixed appearance of fin and strakes, a clever dethermaliser that also ensures fin alignment is shown on the plan. Enlarged a little, *PB* would do nicely in RC Classical Precision and be a pleasantly different entry for either of the RC Classical Duration classes.



For the chap looking for a small, handy sized, second radio model to take along as a “spare”, *Bandboy* fills the bill admirably. If you want a model to do upward inverted tail-first flick half-rolls there are other designs which might make a better showing, as the combination of dihedral, wing and tail sections, moments and areas used in *Bandboy* add up to an easily trimmed (but lively) sport flying model- in fact, it makes a rugged little sportster for free flight if you are no radio fancier.

Empty weight of the completed model is nearly 16 ozs., and it is suggested that radio weight, if carried, is limited to 8 ozs., giving a wing loading of approximately 16 ozs/sq. ft. Half a pound of radio covers the Reptone unit, and this is about as small a model as will comfortably carry this one—piece outfit. Alternative installations are shown on the plan, and those with a little experience will soon find that the trapezoid fuselage cross section will obligingly accommodate quite sizeable equipment, always remembering the advisability of keeping a weight limit, while still retaining apparently slim lines.

From the first SAM 35 Yearbook of 1982 comes this description of the start of formalised Vintage aeromodelling in NZ

THE OLD TIMER movement was fairly slow to catch on in New Zealand, and it was not until 1970 that some progress was made. Before then, individual modellers had built the occasional model, and in July 1967 the Wellington MAC. held a competition for rubber models designed before January 1951. Just three models were entered - a *Class D Stick* from a 1945 Model Airplane News by John Malkin, a *Pinocchio* from the Model Aviation series by Brian Roots, and a *Raff V* from the Aeromodeller by the writer. On a cold, calm day in (mid-winter the *Raff V* won with flights of 107, 163 and 157 sec.

At the 1970 Nationals, two Christchurch modellers arrived with vintage spark-ignition models. Interest generated by these models was high, and provided the impetus around which the vintage movement developed. At the time, the New Zealand Model Aeronautical Association (NZMAA) was seeking suitable means of celebrating the 25th Nationals which were scheduled for 1972. A Vintage fly-in was suggested as being appropriate to illustrate the progress of aeromodelling, and the idea was accepted.

There was to be a duration event flown to a 20 second engine run, and was a fun event, without any competition points being allotted. Eight models turned up, including a *New Ruler* with an Ohlsson 60 ignition, a *Little Vagabond* with spark ignition, a *Comet Clipper* with an Ohlsson, and an *Air Trails Sportster* with a Mills 1.3.

The success of the 1972 event led to the incorporation of Vintage events in the Nationals

programme proper from 1973. Rules were also established in 1973 and while they have been refined, and additional events have been added, there has been little change to the basic concept. The cut-off date in all events is January 1, 1951, allowing any design published before that date.

In Power, the emphasis is on precision, not duration, because of the small fields available in New Zealand, and the comparative difficulty in obtaining suitable engines. The object is to obtain a flight time as close as possible to two minutes. Any flight which results in a duration under two minutes loses points at the rate of one per second out of a total of 120 points. But if the flight exceeds two minutes, points are deducted at the rate of two per second, and this provides an equal number of points in an unequal time span above and below the target time of two minutes. This achieves the aim of a virtual three-minute maximum to make things consistent for timers. It also provides a heavier penalty for exceeding the target time, thus causing the flyer to err on the side of caution. In addition to the flying points, bonus points are also given for the age of the design, one point for each year back from 1951. On top of this, an engine bonus is given, 50 points for a vintage spark ignition, and 25 points for diesel or glow engines, but at the moment these points are under review.

.020 Replica was introduced a few years ago as a duration event, and at present there is a strong move to introduce an event for R/C Assist. By contrast with the main Power event, Vintage Rubber and Glider are flown as duration events, and

this approach has been accepted as being suitable for New Zealand conditions" Over the past few years there has been an average of 15 entrants in Vintage Power at the Nationals, , about eight to ten in Rubber and two or three in Glider, while .020 Replica normally attracts about a dozen entries.

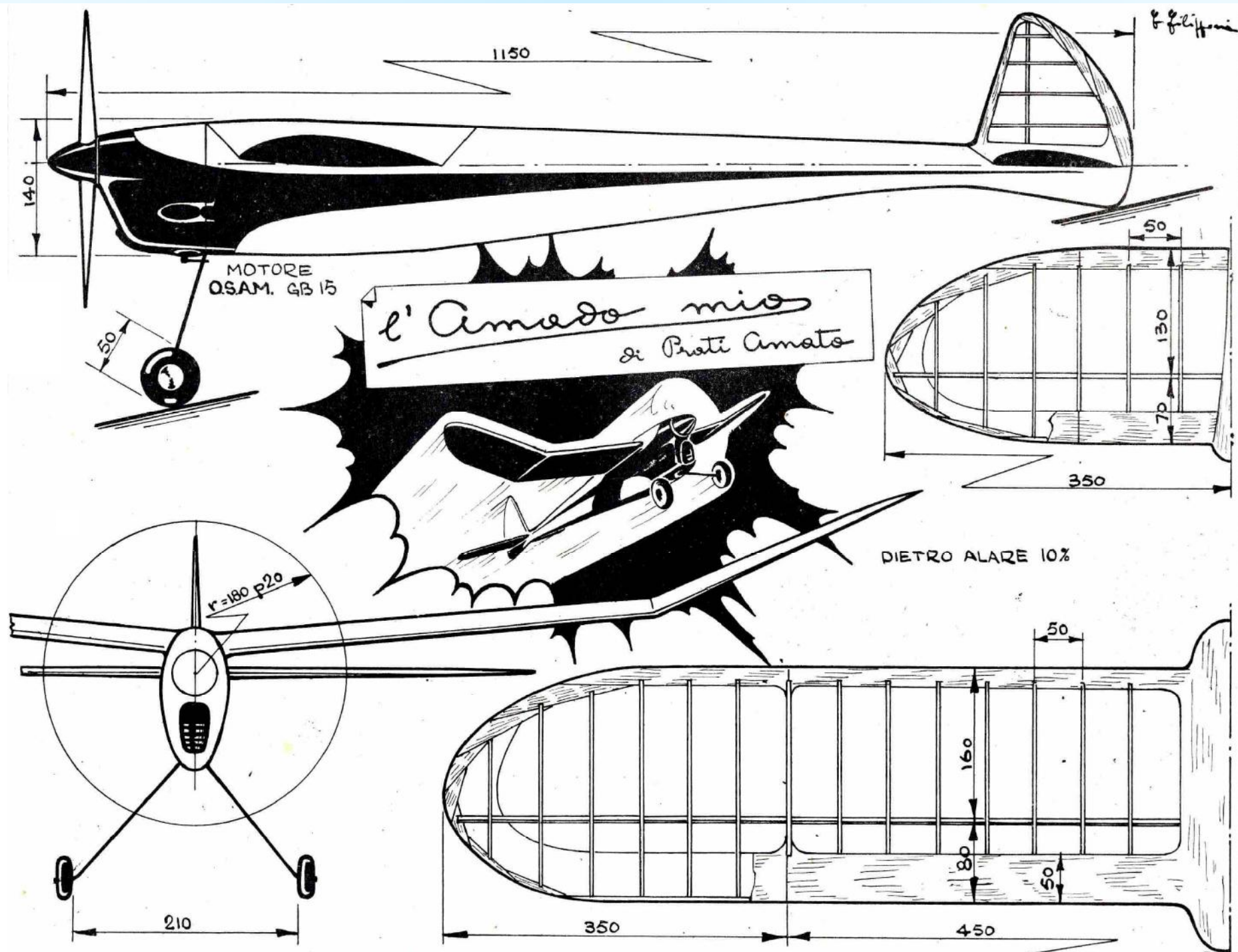
At the 1982-83 Nationals held at Hastings, entries compared generally with the above figures, although there was a surprising upturn in Glider by comparison with previous years. Conditions were perfect - warm and sunny with light drift. Rubber had eleven entrants who posted times, with designs ranging from a 1939 *Korda Wakefield* to a *4QG* tractor stick model. Seven flew in Glider, again with a variety of designs, from a *Satuto* to a *Struck Tailless*. Power and .020 were flown in overcast conditions. Twelve flew in Power with four ignition models and eight diesels. Only four flew in .020, which was a decrease from previous years.

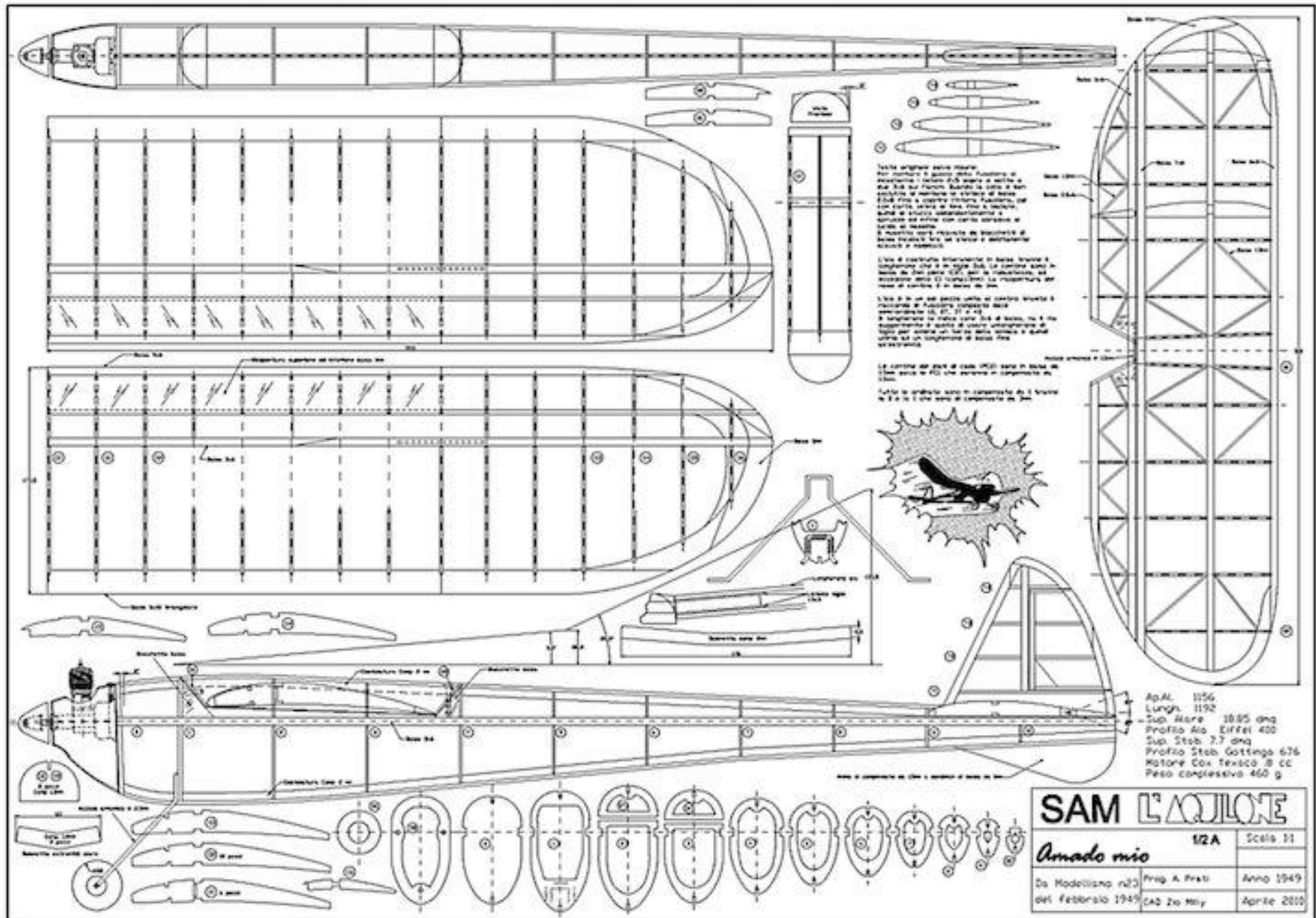
New Zealand modelling tends to revolve around the annual Nationals, held over the Christmas/New Year period. It is the only time all modellers can get together, and the Nationals are a barometer to the general state of interest in any particular event. In addition to the Nationals, various rallies are held during the course of the year, and these events can attract almost as many models as fly at the Nationals.

Thus, while Vintage got away to a slow start in New Zealand, it is healthy, with the primary emphasis on having fun. And isn't that what the movement is all about?

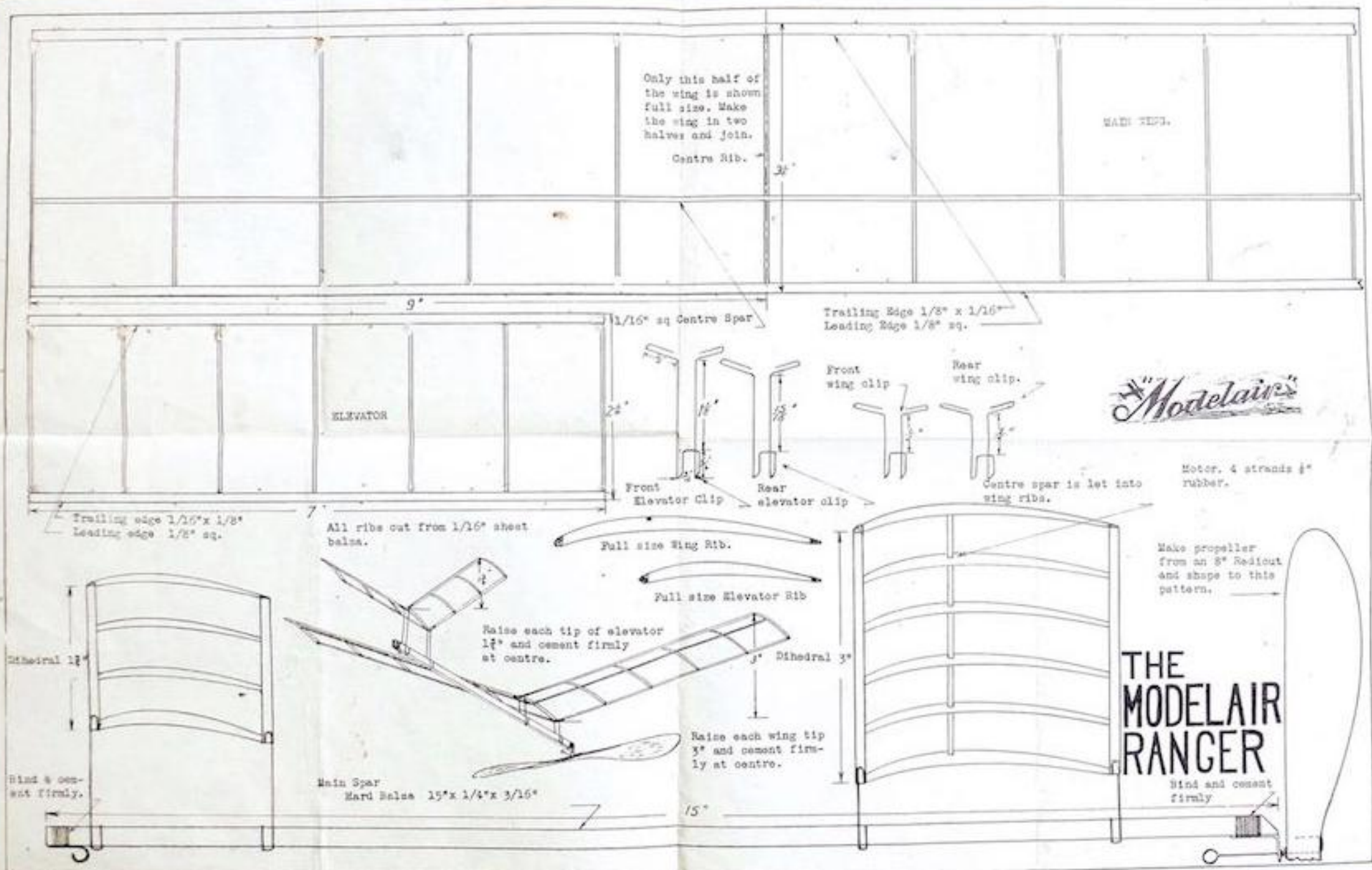


From Alan Knox: Trevor Glegau is a WMAC club mate and has just finished a 3 year build of a *KK Falcon* based on Buckle Kit. He had to make a lot of parts and correct the plans. The Falcon is based on the much older Ben Shereshaw designed *Cloud Cruiser* but with a bigger fin. It is a big beast at 96 inch span. Trevor finished it with doped heat shrink film and sealed with butyrate dope as it is 4 Stoke petrol powered. Saito 60 I think. It has a Open Texaco tank as well as a clunk so hopefully we will see it in competition. It will look wonderful in flight I'm sure, and is nicely built.

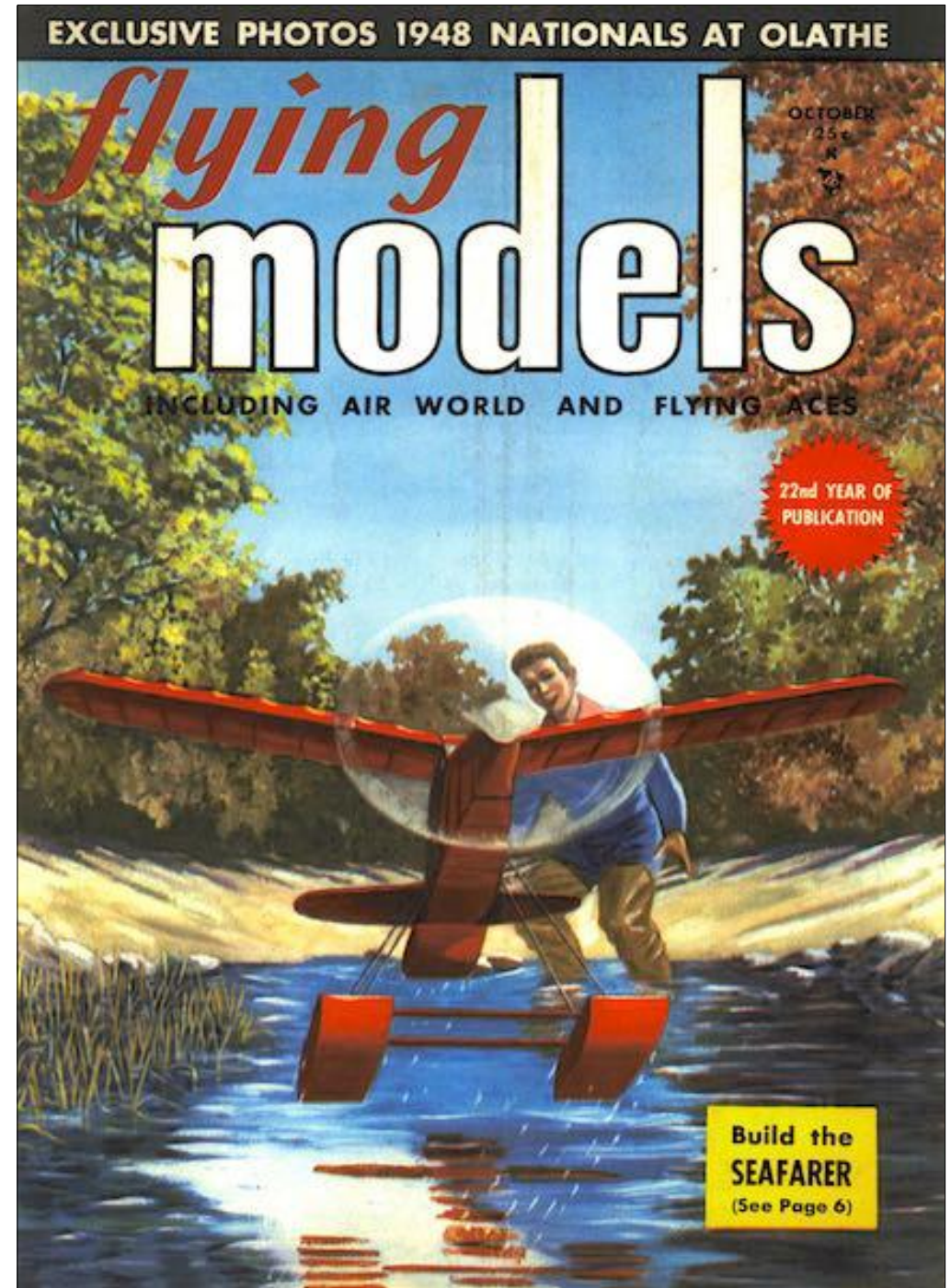




MODELAIRE RANGER



COVER STORIES



The Saqqara Bird is an artefact found in Egypt near the Saqqara Pyramid in 1898. It resembles a bird and has been the topic of many debates and explanations. It is made of wood and estimated to be about 2200 years old. Though its shape resembles a bird, it also resembles a modern airplane with the head of a bird. Furthermore, the hieroglyphs on the model airplane read 'The Gift of Amon' (god of wind and air), and three papyrus found near the artefact mentioned the phrase 'I want to fly'.

All these characteristics sparked Dr Khalil Messiha, the physician who discovered the artefact in 1898, to speculate that the ancient Egyptians first made it as a model of an aircraft they either built or witnessed. He claimed that the Saqqara Bird had aerodynamic qualities and that the only thing missing from the bird was the tail wing stabilizer with which, he speculated, it would have been capable of flying. To support his claims, Messiha built a balsa wood model and added the tail, and said that the model indeed could fly. In 2006 an Aviation and Aerodynamics expert also constructed a replica of the Saqqara Bird and tested its aerodynamics in a wind tunnel, but without the tail. The result was that it could produce four times its weight in lift.

However, another attempt to test the flying capabilities of the Saqqara bird performed in 2002 by glider designer **Martin Gregorie** produced different results. He created a balsa wood model and his conclusions were that without a tail stabilizer it was unable to fly, and even with the tail the performance was disappointing, suggesting that it was probably meant to be a toy. Mainstream archaeologists support that the artefact is nothing but a model of an bird that by coincidence resembles a glider. And although its function is unknown, most of them agree that it was a part of a mast-head that was used on sacred boats.



John Butcher showed me the article in a recent Airborne magazine written by their engine guru on the use of Shellite as a substitute for ether in model diesel 2 strokes. I decided to try it out. I found a couple of old DC engines (blue top 1cc and red top 1.5cc) and an old DC engine stand. I shopped around and found "Fuelite" in Mitre 10 mega store which is the same as Shellite and Pegasol and differs from White Spirits. Fuelite is sold as a paint solvent and a fuel for a certain type of camping stove. It has very low octane rating and ignites on compression, ie it would cause pre-ignition "pinking" in a modern high compression petrol engine.

I mixed 2 parts kerosene, 2 parts degummed castor oil (Benol brand), 1 part ether and 1 part Fuelite then added 2% Amsol Cetane Boost (so this was about 16% ether and 16% Fuelite). This brew worked well each of the DC engines started easily with a couple of chokes and a swift flick or two. Compression and needle valve settings were adjusted for optimum revs. The fuel economy seemed very good and the engines did not over heat and were easy to restart. I later tried it in my Bodo Mills .75 which is not yet fully run in and it started and ran well and if anything seemed better than my standard brew which uses 30% ether. I will mix a brew with 1 part kero, 1 part castor oil, and 1 part Fuelite then add 2 % Cetane boost and try that and see how it compares for ease of starting. I have not bothered to check engine revs as most of us are interested in economy and convenience rather than all out power.

Charles Warren

The latest aeromodeller has an article on ether-less fuels by Brian Winch, although he makes an error in suggesting using conventional diesel in one of his brews (actually attributed to Bay Lennox), but this will not work. The correct mixture is 3 parts kero, 1 part 'Fuelite', and two parts oil. I can't get castor to mix well with this combo but it seems to work if I give it all a good shake up before using. I find 2% of ignition improver settles the engine down just the same as for ether. Could this be the way of the future? Certainly cheap enough.

Allan Baker

Brian Winch's Fuel Mix Experiments

	Fuel Mix	Result/RPM
1	1:1:1 - oil, ether, kerosene	7,820
2	3 parts kerosene 1 part Shellite 2 parts oil	7,820
3	2 parts kerosene 1 part nitro methane 1 part Shellite 2 parts oil	8,431
4	1 part kerosene 1 part nitro methane 2 parts ether 2 parts oil	7,898
5	1 part kerosene 1 part nitro methane 1 part ether 1 part Shellite 2 parts oil	7,982



DIESEL CETANE BOOST

OTHER PRODUCTS, FUEL ADDITIVES

Raises the cetane number of diesel fuel up to seven points for maximum horsepower, increased fuel economy and easier starts in all diesel engines. AMSOIL Diesel Cetane Boost makes no sacrifices; it is purpose-built for diesel owners who demand maximum results.

From: \$20.50

SIZE



At the village fete, Albie and Sybil had got quite the wrong idea when Bertie told them to fetch the Twin Pushers, and Billy, just a simple local lad, was quite overcome when Lady Banksworthy dismounted and offered to fetch his model on her eventer.

RC LEADER BOARD to 1st September 2017

New results in red. Leader Board records in *italics*.

Vintage Precision 2017 Allan Knox 800

1. Allan Knox	Lancer 45	Bob Burling	800
2. Don Mossop	Bomber	Nationals	799
3. Tony Chistiansen	Playboy	Blackfoot	798
4. John Ryan	Simplex	Nationals	797
4. Brian Harris	Bomber	Nationals	797
4. David Gush	Miss FX	Feb Rally	797
4. Graham Main	Miss Trenton 3	Feb Rally	797
8. John Butcher	RC-1	Blackfoot	793
9. Stuart Lightfoot	New Ruler	Blackfoot	793
10. Bryan Treloar	Airborne	Bob Burling	759

Vintage IC Duration 2014 R.Anderson 1308

1. Rex Anderson	Playboy	Nationals	780
2. Allan Knox	Cumulus	Champs	773
3. Bernard Scott	Playboy	Champs	770
4. Tony Chistiansen	Playboy	Blackfoot	759
5. David Gush	Miss Fortune X	Tuakau	751
6. David Thornley	Bomber	Champs	696
7. Bryan Treloar	Airborn	Champs	693
8. David Thornley	Bomber	Nationals	671
9. Warner Summerton		NDC 128	630
10. Bob McGrath	Bomber	Champs	629

Vintage E Duration 2014 B.Harris 1512

1. Brian Harris	Bomber	Nationals	960
2. Allan Knox		Champs	914
3. Stuart Lightfoot	New Ruler	Feb Rally	880
4. Keith Trillo	Stardust Special	Champs	856
5. Bernard Scott	RC-1	Champs	848
6. Tony Gribble	Stardust Special	Feb Rally	832
7. David Squires	Kerswap	Nationals	812
8. Wayne Cartwright	Top Banana	Nationals	803
9. Stuart Hubbard	Cloudster	Champs	709
10. Doug Baunton	PB-2	Champs	707

Vintage 1/2A Texaco 2017 A.Knox 2580

1. Allan Knox	Skipper	NDC 101	2580
2. Bernard Scott	Stardust Special	Champs	2274
3. Rex Anderson	Playboy	Tuakau	1303
4. John Ryan	Simplex	Nationals	1030
5. Keith Trillo	Skipper	Champs	633

Vintage A Texaco 2016 A.Knox 3169

1. Allan Knox	Lancer 45	NDC 112	3132
2. John Butcher	Miss Fortune X	Tuakau	1860
3. Bernard Scott	Simplex	Champs	1852
4. Bryan Treloar	Airborne	NDC 112	1844
5. Ian Munroe	Simplex	Bob Burling	1838
6. Graham Main	Simplex	Tuakau	1179
7. Rex Anderson	Cloud Snooper	Nationals	1173
8. David Squires	Miss Fortune X	Nationals	592

Vintage Open Texaco 2014 J.Butcher 3320

1. Allan Knox	Lancer 45	Champs	1852
2. Bernard Scott	Playboy Snr	Champs	1849
3. Bob McGrath	Bomber	Champs	1480
4. Ian Munroen	TD-Coupe	Champs	1380

Vintage 1/2E Texaco 2017 K.Trillo 3415

1. Keith Trillo	Stardust Special	Champs	3415
2. Wayne Cartwright	Arrow Nut	Tuakau	2739
3. John Butcher	Miss FX	Tuakau	2402
4. Allan Knox	Lancer 38	Champs	2387
5. Tony Gribble	Benny Boxcar	Feb Rally	2292
6. Rex Anderson	Tomboy	Nationals	1770
7. Dave Crook	Tomboy	Feb Rally	1476
8. Bernard Scott	Bombshell	Champs	1467
9. Bryan Spencer	Slicker	Tuakau	1383
10. Angus MacDonald	8-Ball	Tuakau	1241

Vintage E Texaco 2012 W.Cartwright 3325

1. John Butcher	RC-1	Tuakau	2560
2. Allan Knox	5 Foot Gas Model	NDC 113	2442
3. Keith Trillo	Stardust Special	Feb Rally	2584
4. Rex Anderson	Kerswap	Nationals	1860
5. Doug Baunton	PB-2	Feb Rally	1838
6. Wayne Cartwright	Cruiser	Tuakau	1772
7. Tony Gribble	Bomber	Feb Rally	1718
8. Dave Crook	Bomber	Feb Rally	1142
9. David Squires	Miss Fortune X	Nationals	462
10. Angus MacDonald	8-Ball	Feb Rally	264

Vintage E Rubber Texaco 2017 J.Butcher 3480

1. John Butcher	Gollywock	Feb Rally	3480
2. Wayne Cartwright	Lanzo Stick	Tuakau	3290
3. Keith Trillo	Yonder	Feb Rally	3088
4. John Butcher	Gollywock	Nationals	2700
5. Doug Baunton	Skokie	Nationals	1507
6. John Warner	Moth	Nationals	1208
7. Graham Main	KK Gypsy	Feb rally	1142

Classical Precision 2016 B.Harris 598

1. David Squires	Crowbar	Feb Rally	593
2. Brian Harris	Humbug	Nationals	575
3. John Warner	Eliminator	Nationals	574
4. Barrie Russell	Popsie	Champs	523
5. Bernard Scott	Raider	Champs	519
6. Don Mossop	Madcap	Nationals	514
7. David Thornley	Satellite	Champs	510
8. Jonathon Shorer	R6-B	Champs	502
9. John Butcher	Mini Tyro	Nationals	325

Classical IC Duration 2017 D.Thornley 1150

1. David Thornley	Satellite	Champs	1150
2. John Butcher	Mini Tyro	Nationals	6

Classical E Duration 2014 B.Harris 1217

1. Don Mossop	Texan	Nationals	900
2. Brian Harris	Humbug	Nationals	860
3. Dave Crook	Dixielander	Tuakau	835
4. Bernard Scott	Frisco Kid	NDC 107	810
5. David Squires	Crowbar	Tuakau	565
6. John Warner	Eliminator	Nationals	433
7. John Butcher	Mini Tyro	Nationals	96

Classical 1/2E Texaco 2017 B.Scott 2864

1. Jonathon Shorer	Jumpin' Bean	Champs	2751
2. Tony Gribble	Jumpin' Bean	Tuakau	2824
3. Bernard Scott	Jumpin' Bean	Champs	2600

Vintage Scale Texaco 2017 A.Knox 2232

1. Allan Knox	Megow Cub	Bob Burling	2232
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Tomboy IC 2015 R.Anderson 1432

1. Keith trillo		Champs	1116
2. Bryan Treloar		Champs	770

Tomboy E 2014 S.Grant 1935

1. Keith trillo		Champs	1411
2. Angus MacDonald		Blackfoot	880
3. Bryan Spenser		Tuakau	872
4. Jonathon Shorer		Champs	852

CATAPULT GLIDER		2012	<i>J.Butcher</i>	339
1. David Ackery	Vartanian	Nationals	229	
2. Ron Magill	Mayn	Nationals	199	
3. David Gush	Mayn	Nationals	198	
4. Paul Lagan	Hervat	Nationals	184	
5. John Butcher	Hervat	Nationals	179	
6. Daniel Warner	Ignotum	Nationals	112	
7. Kyla Fisher	Hervat	Nationals	86	
8. Bernard Scott	Vartanian	Nationals	30	

VINTAGE FF POWER		<i>Bain / Scott</i>	540
1. Rex Anderson	Stratostreak	Nationals	5

NOSTALGIA FF POWER		<i>Bain / Scott</i>	540
1. Bryce Gibson	Dixielander	Nationals	226
2. Peter Wilkson	Dixielander	Nationals	158
3. Rex Bain	Near Miss	Nationals	5

VINTAGE FF GLIDER		2013	<i>R.Anderson</i>	427
1. David Ackery	Cumulus	Nationals	360	
2. Rex Anderson	Odeman	Nationals	246	
3. Kyla Fisher	Nord 2	Nationals	127	
4. John Butcher	Skyroamer	Nationals	56	

SMALL POWER		2016	<i>B.Scott</i>	353
1. Rex Anderson	Stratostreak .020	Nationals	276	
2. Bernard Scott	Dixielander .049	Nationals	264	
3. Rex Bain	Shaboom	Nationals	229	
4. John Butcher	Kerswap	Nationals	40	

NOSTALGIA FF RUBBER		<i>McGarvey / Scott</i>	540
1. William McGarvey	Arcanus	Nationals	360
2. Bryce Gibson	Obscurus	Nationals	92

VINTAGE FF RUBBER		<i>McGarvey / Koerbin</i>	540
1. Bryce Gibson	Airsail Ascender	Nationals	67

NOS / CLASSIC FF GLIDER		2015	<i>M.Evans</i>	470
1. Moira Vincent	Kiwi 2	Nationals	199	

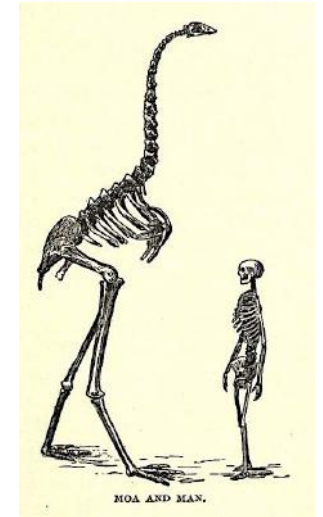
PRECISION		2014	<i>G.Burrows</i>	411
1. Bernard Scott	Tomboy	Nationals	139	
2. John Dowling	KK Pirate	Nationals	135	
3. John Butcher	LuLu	Nationals	132	
4. Peter Wilson	Tomboy	Nationals	128	

https://www.youtube.com/watch?v=R6_4HwjzCc

That's some brother you got, Bunny. Three hours flicking without a sign of life THEN he tells me it's not a diesel !!



ICON 160 MOA Nine species of flightless birds endemic to New Zealand. The two largest species, *Dinornis robustus* and *Dinornis novaezelandiae*, reached 3.6 m in height with neck outstretched, and weighed up to 230 kg. When Polynesians settled New Zealand around 1280 CE, the moa population was around 58,000. The moa were the only wingless birds lacking even the vestigial wings which all other ratites have. They were the dominant herbivores in New Zealand for thousands of years, and until the arrival of the Māori were hunted only by Haast's eagle. Moa extinction occurred around 1300 due to overhunting



Young Jamie Spragg used to fly control line models to impress the wee girlyies, but now he found that bike tricks made so much more impact.