AVANZ NEWS

AVA
ASSOCIATION of VINTAGE AEROMODELLERS

Newsletter of the Model Flying New Zealand Vintage Special Interest Group SAM 55

Issue 145 *September / October 2015*

In this Issue

From the Editor

My thoughts on the Age Bonus Points in RC Precision: This contest usually draws a large entry. Understandably so, as any Vintage Power model with any power plant may be used, and the rules are simple - up to a minute engine run, then land in the circle at three minutes. If that were the whole of it, we would have an easily run contest that tested the skills of judging flight duration and making precise landings.

Except, we have one further rule that awards the flier a bonus for each flight - one second per year that the model used was designed before 1950. The rule seems to exist to encourage building of those very early designs that might otherwise be overlooked in favour of younger, sleeker models. Also, some think that it evens out a difference in performance between models of the early and the late Vintage periods, though I find that a 1936 *RC-1* flies as well as (if not better than) a 1950 *Tomboy* in the Precision task. If performance is not a problem in Precision, what are the perceived issues with age bonuses?

First, the advantage given to older designs by the opening of a safe window before and after the target time of 180 seconds. Like most fliers in RC Precision, I deliberately chose a model that takes advantage of this gift. In my case it was an *RC-1,* which nets a whopping 16 age bonus points. For a "precision" landing this model does not need to land at exactly 180 seconds. Touching down anywhere between 16 seconds before and 16 seconds after the target earns a perfect score in the timed task ... hardly a great test of skill. Sure, there's still the spot landing, but a thirty-two second window makes lining up on the spot a lot easier. Over a three flight contest, the 1936 *RC-1* has a fudge factor of over a minute and a half, while that 1950 *Tomboy* has to hit the 180 task on nose, every time.

Second, the skewing of choice towards models that garner large age bonuses. That this does happen was shown by the listing, in the last News, of Vintage RC models used in competition. There may be fliers who enter contests solely for social reasons, but whether we admit to it or not, if we enter *competitions* we are *competitors* who try their best within the rules to *win* (excuse the *dirty words*). Models are our sporting equipment, and as competitors we will naturally select the equipment best suited to each task. I think the *RC-1* is an unlovely beast but, with the age bonus system as it is, it makes more sense to use such a model rather than an elegant and more advanced design from the later Vintage period.

Competitors in other activities also select their equipment to gain a winning edge, but I cannot think of any other competitive adult task where the goal is adjusted to match the age of the equipment the participant has chosen to use. Giving a golfer larger cups to aim for because he is using grandad's clubs, or widening the goal posts for a soccer player because he is wearing really old boots would be laughable, yet our age bonus rule does something very similar when it awards a sometimes substantial advantage based solely on the age of the equipment we choose to use.

Bernard Scott

Contributors to this issue -

Kenneth Foster	Brian Harris
Maurice Poletti	Tandy Walker
Wayne Cartwright	Rex Bain
Allan Douglas	Allen Teal

On the Cover : John Dowling launches in FF Precision at the Waikato Nostalgia Championships

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Feedback on the Age Bonus in Vintage Competitions

Thanks to Kenneth Foster and Brian Harris for sending their views on the question of the Vintage RC Precision Age Bonuses.

From Kenneth -

When I came back into aeromodelling after a gap of 6 or so years, I intended to concentrate exclusively on electric and Vintage. This was because of the massive advances in electric motors and batteries and my love of building and flying the planes of my youth.

However when I studied the rules for Precision, I was faced with the problem of either building the designs I liked, or being competitive by building pre 1940 designs. As a result I have only dabbled with Vintage.

I thought the objective of the Vintage Sig was to promote the building and flying of the old designs, but as the rules are it only promotes a few well tried designs. The heyday of free flight aeromodelling was between 1950 and 1960. Scrapping the age bonus would encourage the building of designs from this period.

Regards,
Kenneth Foster

From Brian -

Regarding the review of the age bonus rules in the last AVANZ News, I agree with this concept and direction. For Vintage RC Precision, mastering the handling of the chosen model is more important than gaining an age bonus advantage.

The Classical RC Precision approach was at first hard to consider after the benefit of age bonuses in Vintage, but having tried it, I like it. From the CD's perspective, it is much simpler to run with fly-offs being less likely.

I consider a good-handling model is important for both events, and with practice there will be an improvement in piloting skills - which is the real objective of RC events.

Perhaps not allowing time keepers to prompt the flier with the elapsed time could be considered? At present the timer has an important role in the contest. Without him to count down the time the Precision events would be greater tests of the pilot's skill.

Regards,
Brian Harris

Discussion on RC Texaco Scale Rules

The SIG Committee has recently reviewed the current RC Vintage 1/2A Texaco Scale rules. There is currently little interest in this class, yet those who have tried it say that it is a lot of fun.

The Committee feels that RC Texaco Scale may have more appeal if it is opened to a wider choice of motor types and model sizes. Therefore, the Committee has written a draft set of rules for a *replacement class* - not an additional class. Parts of the current 1/2A Texaco Scale rules have been merged with the Open Texaco rules, and some other provisions have been added.

This draft is attached for discussion – it is not yet a firm proposal. The key aspects of this draft are:

1. It allows designs originally flown as any of: power FF, rubber FF, and RC. This is simply to enlarge the pool of eligible designs, but it differs from all our other RC classes. (Think of the rubber designs by Stahl, Mooney, Noonan, and others.)
2. It combines the Vintage and Classical periods. This is also to enlarge the pool of eligible designs – a large number emerged in the 1950s and 60s – especially small IC FF scale designs from the UK. There would be no significant aerodynamic advantage for designs of the Classical period, so combining the two periods makes sense, but it differs in this sense from all our other RC classes.
3. For the same reason, there is no age bonus.
4. The proposal also differs from all other RC classes by allowing any form of control surfaces. This is to enable selection of scale designs that would not be sufficiently controllable in Texaco competition without ailerons or elevons.
5. There is provision for selection from two motor/tank options. One allows retention of the 1/2A set-up, and the other is from Open Texaco. The one derived from Open Texaco has provision for multiple motors. It is thought that the 1/2A option would be at an inherent disadvantage so it is awarded 120 bonus points per flight. This is based on experience that 420 secs is a good time for a scale 1/2A and on the view that even a draggy scale model should make 540 secs under the Open Texaco tank rule. These bonus points may need fine-tuning on the basis of experience.

The following draft rules are for discussion only:

6.7 Vintage and Classical RC IC Texaco Scale (draft)
Purpose: To enjoy IC-powered RC flying with a Vintage or Classical scale model design through managing a limited fuel supply to achieve maximum flight time.

6.7.1 This is a class that combines the Vintage and Classical design periods. Eligible models are built from Vintage or Classical model plans originally intended for IC-powered free flight, or rubber-powered free flight, or IC-powered RC.
The model is a recognisable scale replica of a specific full-size aircraft type.
Plans may be scaled up or down.

6.7.2 A reasonable effort is made to use colours and markings typical of the type of full-size aircraft modelled. There is no restriction on the materials used for colours and markings.

6.7.3 Rules 6.1.1 – 6.1.5, 6.1.7, 6.1.10 and 6.1.11 all apply.

6.7.4 There is no restriction on the flight controls fitted.

6.7.5 Rule 6.1.8 applies for monoplanes.
For multiplanes the minimum wing loading is 6 oz per sq ft.

6.7.6 There are two separate options for motors and fuel tank capacity:
Option 1: Motor is a stock Cox reed valve 0.049 cu in.
Motor may be modified only as follows:
a. Fuel pick-up moved to bottom of tank.
b. Tank vents changed or replaced.
c. Improved needle valve assembly.
d. Addition of muffler.
Fuel tank is a Cox Babe Bee or Texaco Jnr.

Option 2: Motor(s) is (are) of any IC type.
Multiple motors are allowed if specified by the design.
Rules 4.4.3 and 4.4.4 apply to the aggregate capacity of the motor(s).
All motors have an RC operated cut-out, which may be a throttle.
A throttle may be used in flight.
Maximum fuel tank capacity is 0.1cc per 5 sq in wing area, rounded down (eg 504 sq in allows 10cc). The fuel tank is visible to the CD and the contestant is responsible for verifying fuel tank capacity if the CD requests.

6.7.7 Age bonus does not apply.

6.7.8 Landing bonus applies.

6.7.9 Models using Option 1 in Rule 6.7.6 have a bonus of 120 points for each flight.

6.7.10 Score is the aggregate of 3 flights, each scored at one point per second up to 540 with bonuses added up to a maximum of 560.
No points are deducted for exceeding the maximum.

6.7.11 If scores are tied, fly-off has no maximum and the bonuses specified in 6.7.8 and 6.7.9 apply. (For NDC see Para.4.8 Fly-offs.)

National Decentralised Contests

NDC events for each month may be flown on any Saturday or Sunday of that month.

Send results to : *mfnz.recordingofficer@gmail.com*
and Cc to the Editor at : *scott.scott@xtra.co.nz*
(Include the number of the NDC event and your model)

OCTOBER	**Number**	**Event**
FF Vintage	201, 202	HL Glider, CAT Glider
FF Nostalgia	-	
FF Classical	-	
RC Vintage	203	Open Texaco
RC Classical	204, 205	1/2E Texaco, E Texaco

NOVEMBER	**Number**	**Event**
FF Vintage	222	Glider
FF Nostalgia	-	
FF Classical	223	Glider
RC Vintage	225, 226	1/2E Texaco, E Texaco
	227, 224	E Rubber Texaco, Precision
RC Classical	-	

DECEMBER
No NDC events are scheduled for December to allow for Nationals preparation and trimming.

North Island RC Contest/Rally Schedule 2015 / 16

October 24, 25	NNI Contest and Rally	Pukekawa
November 21, 22	NNI Contest and Rally	Pukekawa
January 22, 23, 24	NI Championships	Blackfeet
February 6, 7	Gareth Newton Memorial	Levin
February 20, 21	NNI Contest and Rally	Tuakau
March 24 - 28	Nationals	Carterton
April 23, 24	Vintage and Glider Rally	Cambridge
May 8	Bob Burling RC Fly-in	Levin
May 22, 23	NNI Contest and Rally	Pukekawa
September 11	LNI Vintage RC Champs	Levin

[NNI = Northern Nth Island LNI = Lower Nth Island]

Vintage SIG: JR Airsail Pukekawa RC Vintage and Classical Event October 2015

This is the first event of the NI RC Vintage 2015/16 season

Saturday October 24th
Sunday October 25th
Saturday October 24th
Sunday October 25th

Dates: October 24/25 2015
Times: 9.30am Saturday - 3.30pm Sunday
Venue: 299 Native Rd, Pukekawa (exit SH1 at Mercer, travel along Mercer Ferry Rd toward Pukekawa, take first left into Morrison Rd, then straight ahead onto Native Rd)
Host: John Danks, 09 233 4014, westech@xtra.co.nz
CD: Wayne Cartwright, 07 210 0298, wcartwright@vodafone.co.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 throughout the weekend, subject to the contest landing circle remaining free.

Saturday October 24th
Sunday October 25th
Saturday October 24th
Sunday October 25th

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 a different model being used for each entry.

The Vintage SIG gratefully acknowledges JR Airsail and John Danks for the use of the field.

MFNZ Vintage R/C Tomboy International Postal and Leader Board Competition 2015

The two Postal competitions for R/C IC and E Tomboys are continuing to run throughout 2015.

The prize for the highest score in each class during the year is NZ$50. Entry is free and open to any member of MFNZ or any modeller who is a member of a recognised club overseas. All scores will be posted to the Leader Boards that are published in each issue of AVANZ News.

In response to requested comments received from those who have flown the event in the past, two changes have been made to the rules. The E Tomboy motor battery is now a 180 mah 2 cell LiPo. The flight score for both IC and E Tomboy is now the sum of the best two flights from the three that can be flown.

The rules for 2015 are as follows:

Purpose
To enjoy RC flying (IC and electric) of the Vic Smeed Tomboy in a competition that runs for a full year.

Model

- The model is an unscaled Smeed Tomboy, as published by APS, with 36 inch span wing and small-span tailplane. The model is correct in outline.
- Airfoil sections and dihedral are unchanged.
- Wheel diameter is not reduced and wheels are not of profile or streamlined.
- The fin and tailplane are modified to accept control surfaces within the spirit of the original design. The elevator is included within the tailplane outline.
- The wing has one spar in the location shown on the plan. This spar may be strengthened and increased in depth, provided that it does not touch the upper covering surface.
- Structural material sizes are not smaller than specified. Structure may be strengthened.
- Any type of covering material is allowed.
- The propeller is fixed pitch and has two blades.
- Rudder control is required and elevator control is optional. Motor speed control or fuel cut-off is optional.
- The contestant need not be the builder of the model.

Classes
There are two separate classes:

Tomboy IC
Eligible motors are up to 1cc (0.61 cu. In.) nominal capacity. Maximum fuel tank size is 3cc. The fuel tank is either integral or a separate commercially-available unit.

Tomboy E:
Any electric motor with direct drive is permitted. The motor battery is a 2 cell LiPo with maximum capacity 180 mah. The motor is not restarted after it stops.

Scoring
The score is the sum of the two best flights (in seconds) from the possible three that can be flown.

Launching
The model may ROG or be hand launched by either the contestant or an assistant.

Timing
Timing is undertaken by a timekeeper/witness and starts when the model becomes airborne. The flight ends when the model lands. The flight time is rounded down to the nearest whole second.

Submission of Scores
Scores attained in contests run by the MFNZ Vintage SIG are submitted automatically. All other scores must be submitted by email to the address below. A contestant may submit unlimited improved scores throughout the year.

Scores, and whether the entry is in IC or electric, to the editor: *scott.scott@xtra.co.nz*

Vintage and Nostalgia at the National FF Society Champs

Rex Bain

I stopped off to spectate at the US and NFFS Outdoor F/F Champs at Muncie , Indiana in July on my way to Europe. A fuller report should have appeared in MFW by the time you read this so perhaps a few observations here just on Vintage and Nostalgia.

The Americans have always loved their power duration models but my overall impression was that interest was mainly in the Nostalgia classes as there did not seem to be many Vintage designs in the air. Their cutoff date is 1941 so it is inevitable that many of the modellers who revived Vintage in the 70's and 80's are sadly no longer active.

The current active 'mature' F/F aeromodellers seem to relate better to the Nostalgia period and they were well catered for with multiple power classes from 1/4A (.020) to C (.30). 1/2A Nos Gas for instance had 25 contestants record a time.

Some Vintage Rubber events were not very well supported but the Moffet and Mulvihill classes were.

They fly "Classic Power " (locked down - no movable rudder or tailpalnes) again with multiple motor sizes which was very popular. To me, most of these were really Nostalgia models under another name.

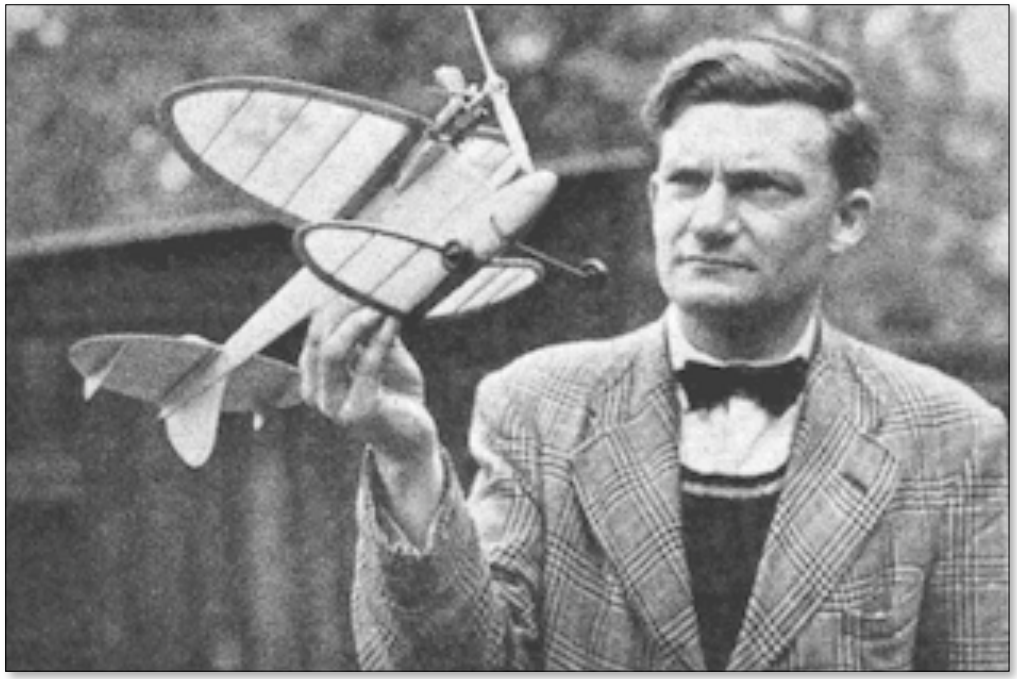
With such a large population, the US has many more aeromodellers in all disciplines to draw from. Many of those competing seem to make these Nats their major event of the year. They enter as many classes as they can and arrive in large vans, often with trailers full of models. Standards were high but all power events fly two minute maxes (Cat111) aligned to correspondingly shorter motor runs. Rubber has an increasing max after the first three. Good F/F fields are apparently now just as hard to find in the USA as the are in the UK and NZ, and for similar reasons. Perhaps it is time we adopted this approach ourselves ?

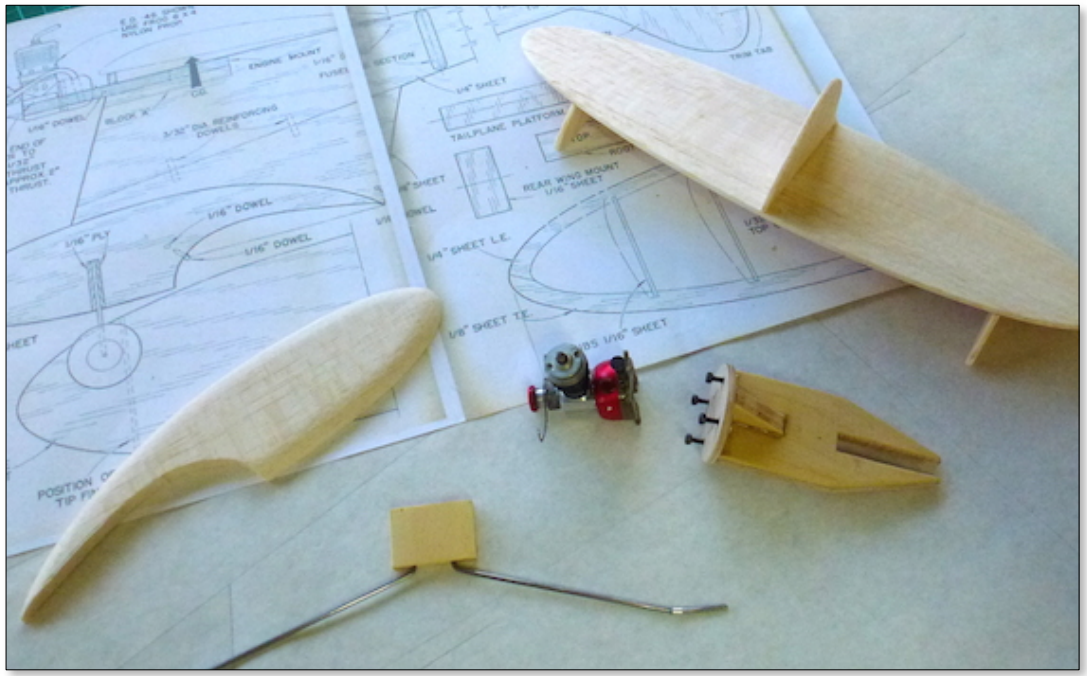
Travel distances would have been significant for most but the highways are good. Jim O'Reilly , for whom I timed , was typical. He had a 750 mile drive from Kansas which looks close enough on a map but it is a two-day trip.

Vintage and Nostalgia at the National FF Society Champs

Rex Bain

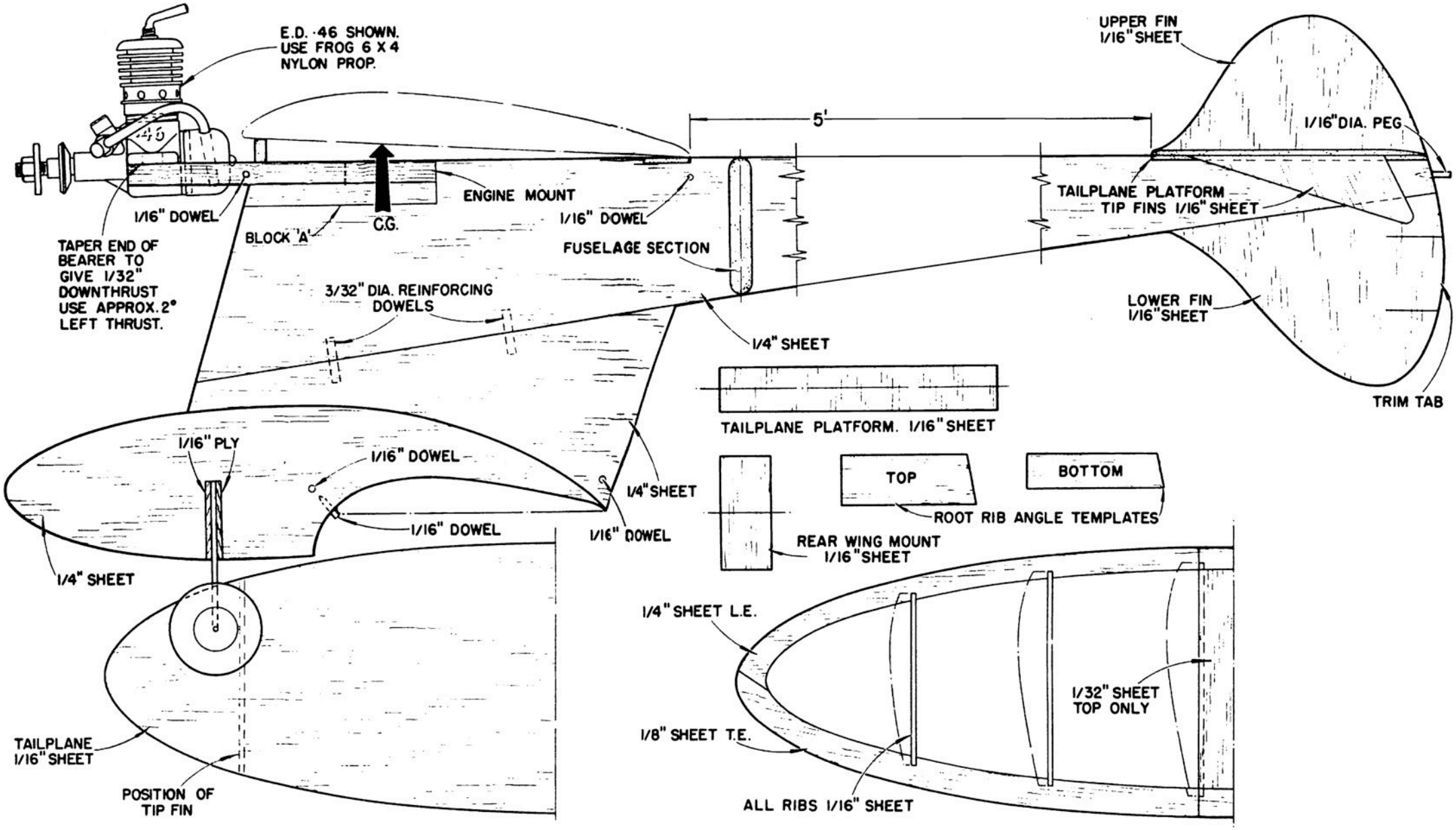
A selection of NFFS Champs photographs from Rex



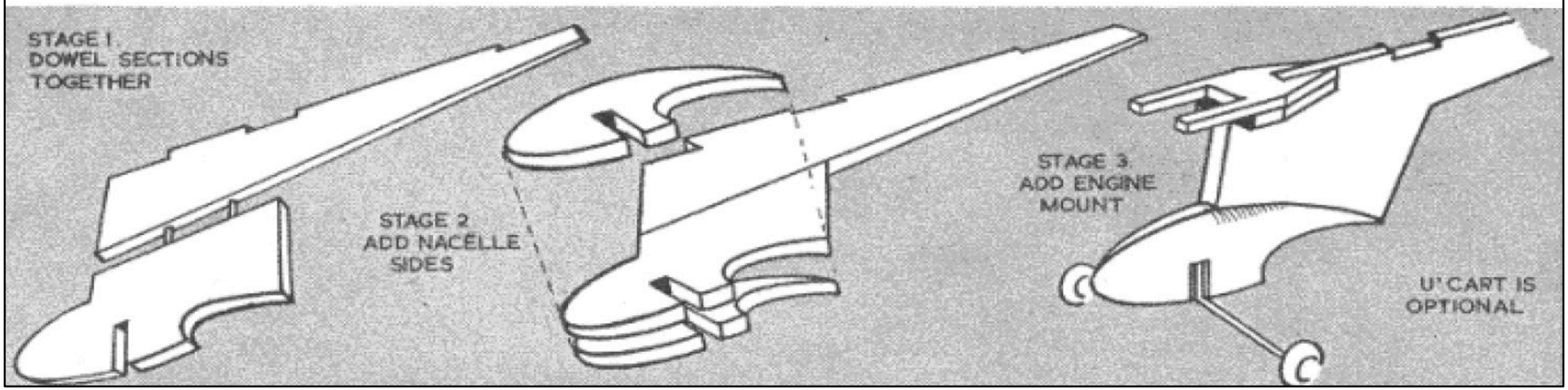


Above: Ray Malmstrom with *Mimi*.

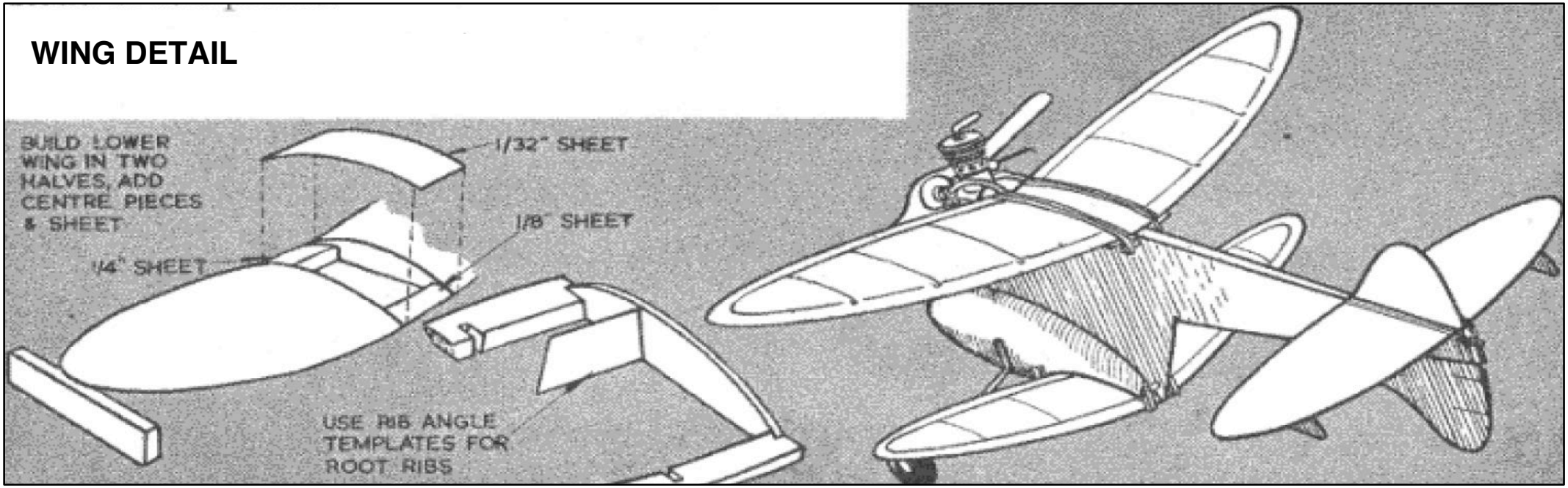
Left and Below: Editor's version of *Mimi* provided comic relief from complex "serious" models. A Cox Pee Wee instead of the diesel shown on the plan, a pilot, and a colour scheme copied from Noddy's car - I think Mr Malstrom would approve.

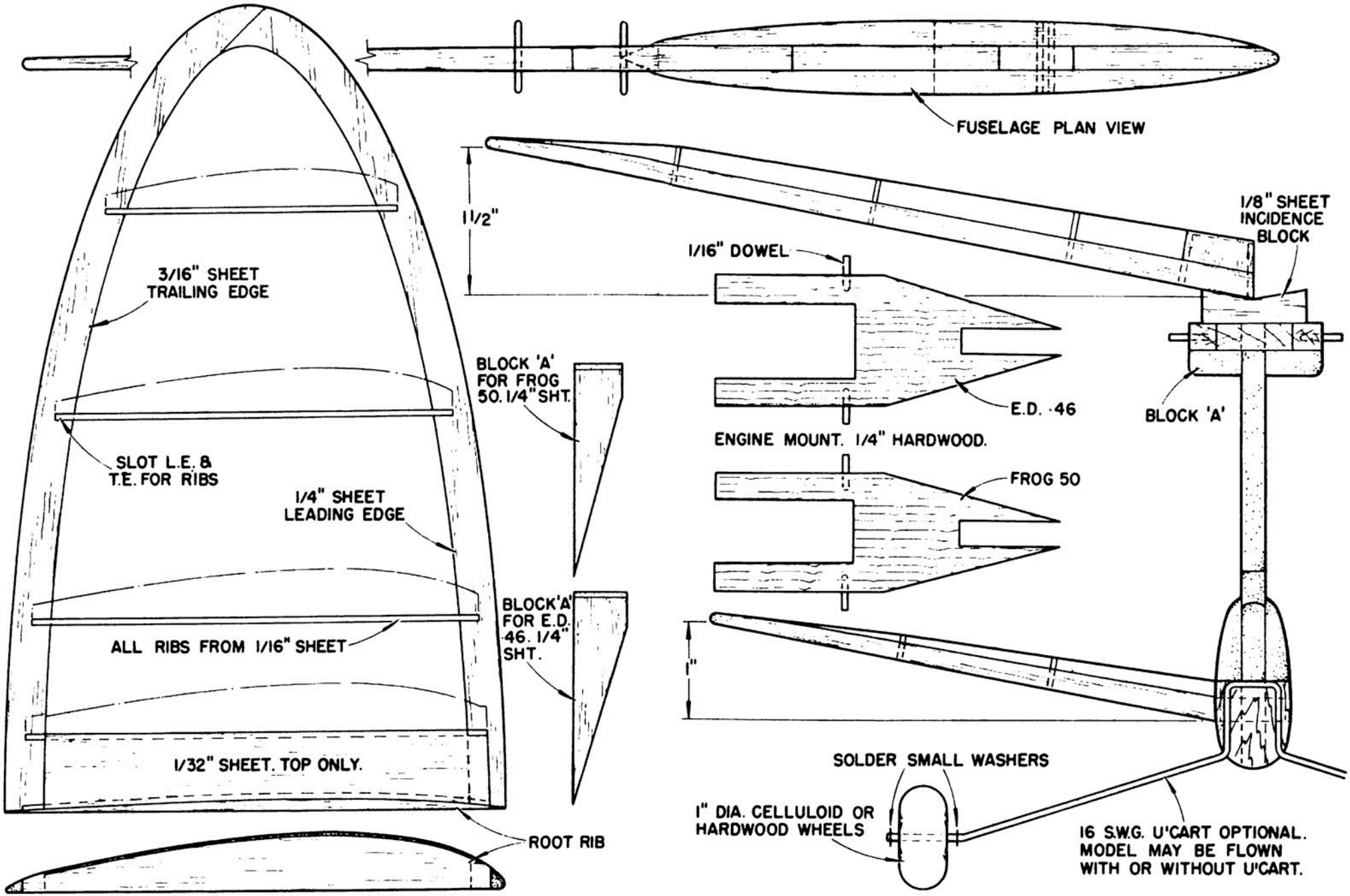

E.D. .46 SHOWN.
USE FROG 6 X 4
NYLON PROP.
UPPER FIN
1/16" SHEET
5'
1/16" DIA. PEG
ENGINE MOUNT
1/16" DOWEL
TAILPLANE PLATFORM
TIP FINS 1/16" SHEET
1/16" DOWEL
BLOCK 'A'
C.G.
TAPER END OF
BEARER TO
GIVE 1/32"
DOWNTHRUST
USE APPROX. 2°
LEFT THRUST.
FUSELAGE SECTION
3/32" DIA. REINFORCING
DOWELS
LOWER FIN
1/16" SHEET
1/4" SHEET
TRIM TAB
TAILPLANE PLATFORM. 1/16" SHEET
1/16" PLY
1/16" DOWEL
1/4" SHEET
1/16" DOWEL
1/16" DOWEL
TOP
BOTTOM
ROOT RIB ANGLE TEMPLATES
REAR WING MOUNT
1/16" SHEET
1/4" SHEET
1/4" SHEET L.E.
1/32" SHEET
TOP ONLY
1/8" SHEET T.E.
TAILPLANE
1/16" SHEET
POSITION OF
TIP FIN
ALL RIBS 1/16" SHEET

FUSELAGE STAGES



WING DETAIL



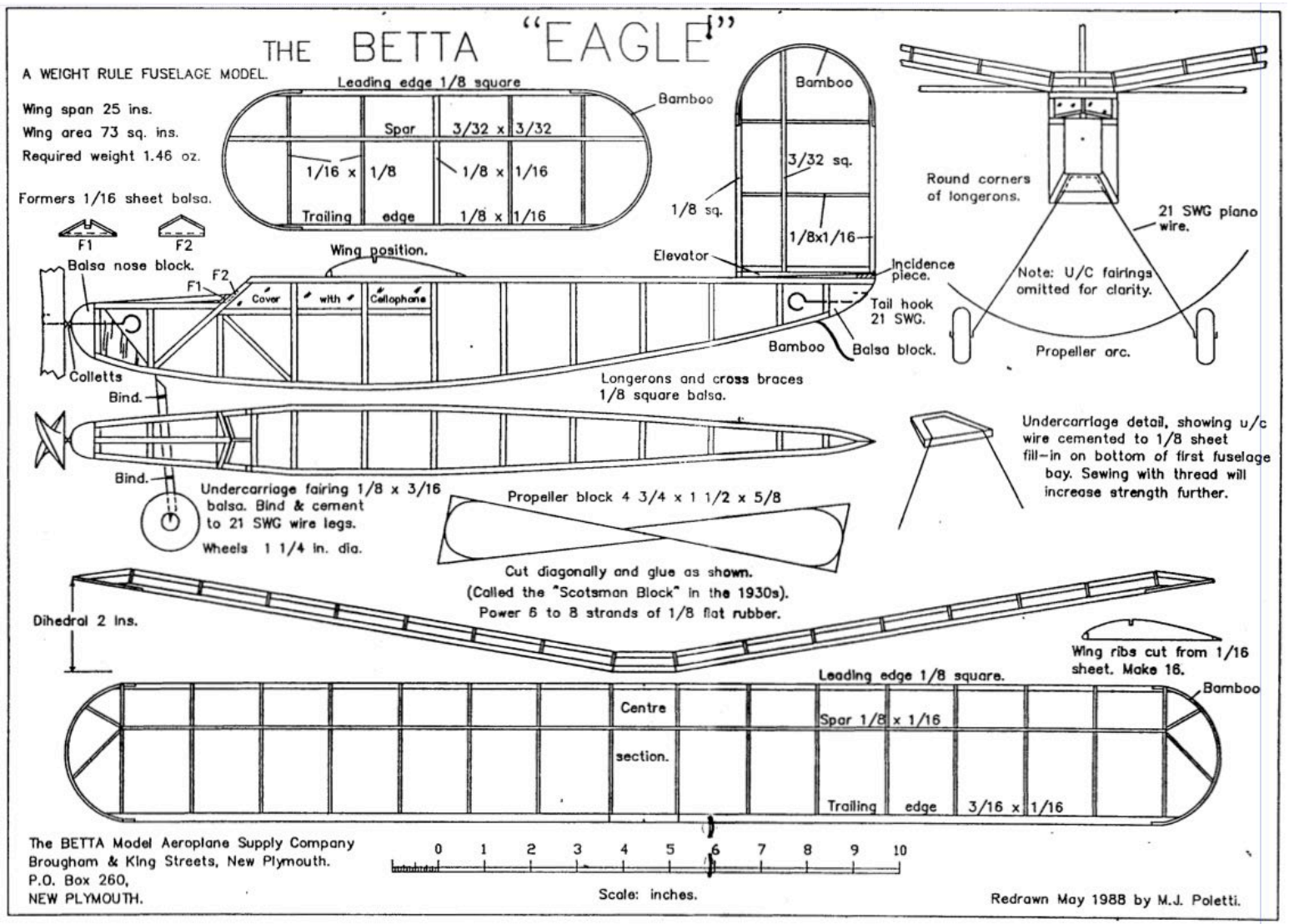

FUSELAGE PLAN VIEW
1 1/2"
1/8" SHEET INCIDENCE BLOCK
1/16" DOWEL
3/16" SHEET TRAILING EDGE
BLOCK 'A' FOR FROG 50. 1/4" SHT.
E.D. .46
BLOCK 'A'
ENGINE MOUNT. 1/4" HARDWOOD.
FROG 50
SLOT L.E. & T.E. FOR RIBS
1/4" SHEET LEADING EDGE
BLOCK 'A' FOR E.D. .46. 1/4" SHT.
ALL RIBS FROM 1/16" SHEET
1"
1/32" SHEET. TOP ONLY.
SOLDER SMALL WASHERS
1" DIA. CELLULOID OR HARDWOOD WHEELS
16 S.W.G. U'CART OPTIONAL. MODEL MAY BE FLOWN WITH OR WITHOUT U'CART.
ROOT RIB

Nothlng is known about the designer of this model, or even when lt was included in the Betta range. From its appearance, it could be an early thirties design, and the address on the plan lndicates that it is certalnly pre-1940 because the Brougham & King Streets address refers to the first Betta shop. The use of bamboo for wing and tail tlps may also indicate that the Eagle was one of the kits that Smithy started his business with in 1935 .

The model itself is quite conventional, but the wing posltion isinteresting, being much further to the rear than perhaps the designer originally intended. Possibly with a lighter tailplane, (compare the sizes of the stabiliser spars with those on the wing) the wing could be moved to a more usual position. However,he model would then not be really vlntage, so I guess part of the charm of these oldies lies in thelr oddlties.

The so-called 'Scotsman block' was quite common in the late thirties, and kept the cost of the model down to a minimum which was pretty necessary in those days. When I was buildlng Betta kits the propeller was usually machlne cut although the plans often showed a drawing of the propeller block. Since these plans had to be cut on a duplicator stencil, it is not difficult to believe that updates were only done when absolutely necessary.

Extracted from notes by Maurice Poletti, previously published in "Slipstream".



TANDY WALKER'S WORK IN PROGRESS

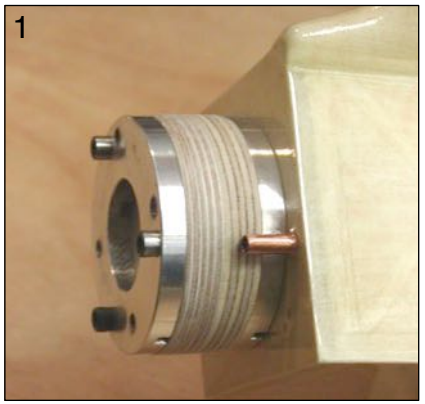
Tandy C. Walker was born in 1934 and has BS and Master's degrees in Aeronautical Engineering from the University of Oklahoma. He has been a registered professional aeronautical engineer in the state of Texas since 1962. He has been a licensed private pilot and was active in the Experimental Aircraft Association. He has been a lifelong modeler for over 70 years and has built and flown control line stunt and combat, free flight, radio control sport, and quarter scale. Since his retirement in 1993, he has been dedicated to building and competing with old timer models in the annual SAM Championships held in Indiana and Nevada on alternate years. Tandy became a SAM life member in July of 2000 and was inducted into the SAM Hall of Fame in 2013. (From on-line biography)

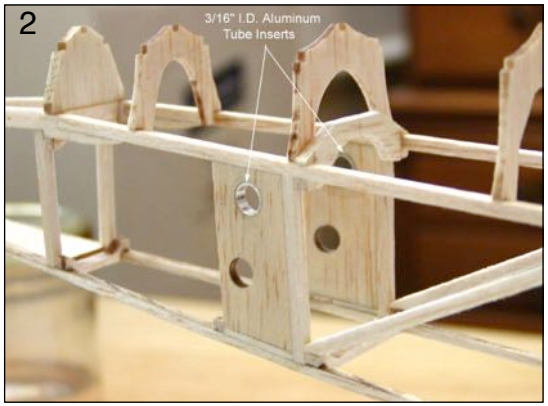
There are plenty of build-logs on the internet, but few like those presented by Tandy Walker. His models are impeccably built with painstaking attention given to even the smallest components. Words like meticulous, exacting, and precise come to mind. Internal details that will never be seen on the completed model are finished as if they will be on full display.

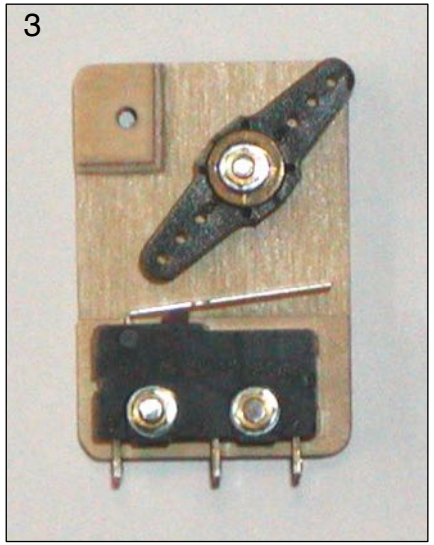
The logs are presented in stages, each one summarising a day's work, with text and photographs explaining all proceedures very clearly. I first came across Tandy's build logs when they had a dedicated web site. This is not available at present, so each project stage is sent out via an email list. The current build is a *Stinson Reliant* which, at the time of writing, has reached stage 60. Fortunately, some past builds have been placed on SAM chapter websites. Google ***SAM 27 Tandy Walker*** for a *Bomber* and *J-3 Cub*. Google ***SAM 15 Tandy Walker*** for the *Cloudster*.

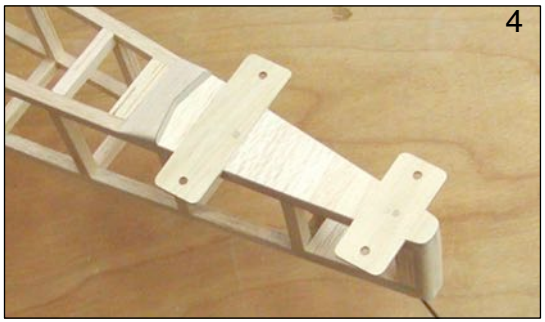
The logs are filled with clever solutions to tricky constructions and with neat ways of achieving ends - many have me wondering why I have never thought of them. To the right are a few examples clipped from the build logs. On the next page is Session 11 from the *Sailplane* construction which shows the effort put into preventing undercarriage wires moving in their mounts (hand up if, like me, you simply re-adjust the wires in their mounts when they are displaced by a hard landing).

Thanks to Tandy for permission to quote from his work. If you wish to be added to Tandy's mailing list for his next project, please advise the editor.



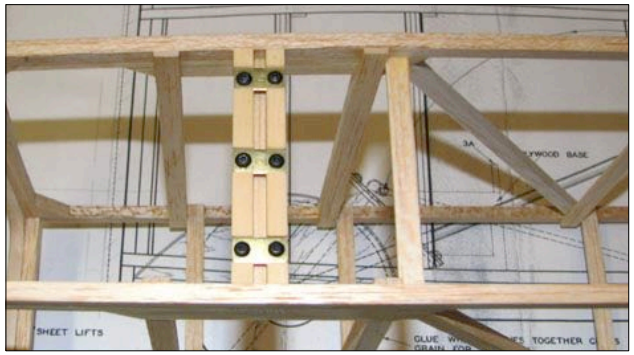






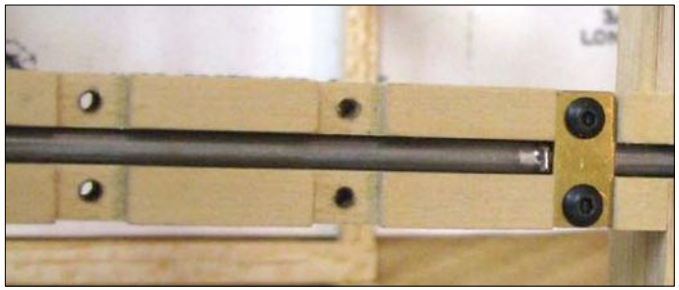
1 Engine mount for the *Bomber*
2 Bushed (!) rubber peg holes in *J-3*
3 Servo operated motor switch
4 Inconspicuous tailplane mounting

I have been doing considerable planning and experimenting on techniques to keep the 1/8" wire landing gear rear strut from sliding sideways in the slotted block shown below. The three brass tabs holds the strut tight in the slot, however a shock load resulting from a hard lnding can and will drive the strut sideways in the slot under the brass tabs.



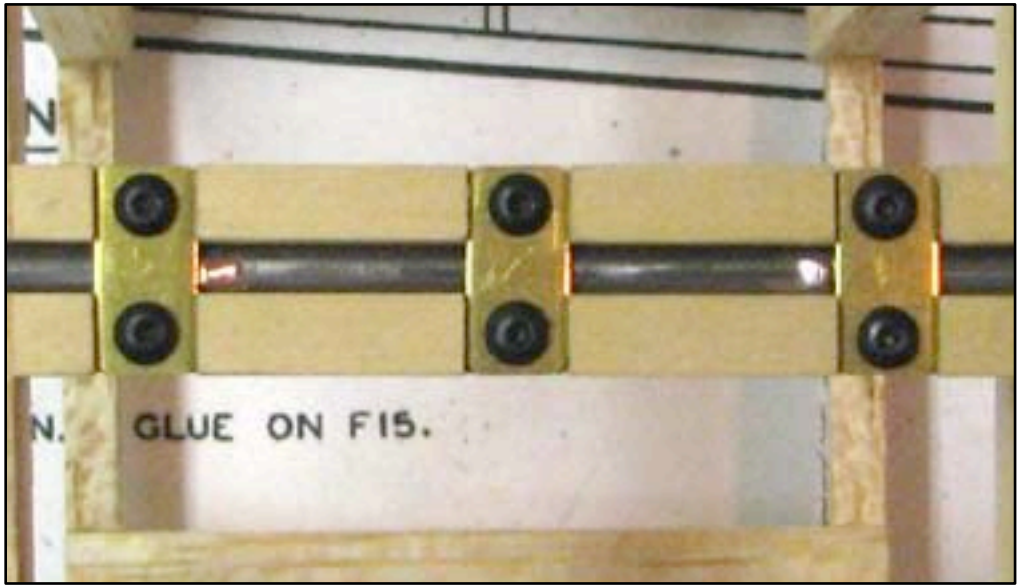
The solution I finally came up with is illustrated in the following test case. First I filed a transverse groove in a piece of 1/8" piano wire with a triangular needle file as shown below, left. Next I laid a piece of 20 gauge copper wire in the groove and soldered it in place as shown below, right. The copper wire was cut off on each end and filed down flush with the edges of the 1/8" piano wire and then rounded off slightly as shown below.

The height of the copper wire is the same height as the brass tabs used to clamp the rear strut in the slotted block. This test case was put into the fuselage's slotted block up against the No. 1 brass tab. As you can see below, this "stop" restrains the 1/8" wire from moving to the right.



After having worked out all of the details on the test case, I marked the rear strut to locate the inside edges of the two outside brass tabs and soldered on two "stops" as shown below. Notice that there is a solder filet on the inside edge of the "stop", but that the outside edge has had the solder filed away.

The picture below shows the landing gear rear strut clamped in the slotted block and restrained from sideways movement by the two "stops" against the inside edges of the two outside brass tabs.



Here is a screen shot of a spreadsheet I made to check that my existing models meet Vintage rules and to optimise the areas and power plants of future models. Inputting the model's wing area at the arrowed cell generates the legal maxima.

The E-Duration section is particularly useful in finding the best battery for an existing model of known area. Alternatively, entering a range of areas makes it easy to zone in on the largest permitted wing area for an IC engine or electric motor / battery combination you want to use .

The Age Bonus section is not linked to the rest of the program and works independently.

This is just a screen shot so it will not "work" in this form. The programme used to assemble the News does not allow attachments, so if you want to try this spreadsheet, contact me and it can be sent in a return email as a Microsoft Excel file. Maybe someone with more spreadsheet skills can refine it so that the initial input can be something other than wing area.

The program does not recognise the NZMAA Model Specification limits, which, for interest are as follows :

Weight: 25KG Engine capacity: 250cc
Voltage: 42V Area: 500 sq. decimetres
Loading: 250 grams / sq. decimetres

(Who in NZ measures anything in square decimetres? Or refers to loading in grams per sq decimetre? Odd that the rules use units that are obscure to local fliers. Looking it up, I find that 1 sq.dm equals 0.107639104 sq.ft, and 1g/sq.decimetre equals 0.32770583 oz/sq.ft - memorise that !)

Model Maximums for NZ Vintage Competitions

ENTER WING AREA	:	**720**	Square Inches
		5.00	Square Feet
VINTAGE R/C (Except E-Rubber)		**40.00**	Ounces
Minimum Model Weight		**1134.0**	Grams
VINTAGE R/C DURATION			
Maximum IC Engine Capacity 2-Cycle		**0.320**	CI
		5.244	CC
Maximum IC Engine Capacity 4-Cycle		**0.533**	CI
		8.740	CC
E-TEXACO		**648**	mAH (2S)
Maximum LiPo mAH		**432**	mAH (3S)
		324	mAH (4S)
E-DURATION			
Maximum LiPo mAH			
Enter Number of Cells:	**6**	**754**	mAH
Enter C rating:	**35**		
E-RUBBER		**648**	mAH (2S)
Maximum LiPo mAH		**432**	mAH (3S)
		324	mAH (4S)
OPEN TEXACO			
Fuel Allowance		**14.4**	CC
		*(Round **down** to full or half cc.)*	
AGE BONUS			
Enter year of plan publication, eg *1944*	**1945**	**5**	Points


AEROMODELLER
APRIL
1949
1/3


AERO
MODELISMO
ESOS 2.50
exija el
ano A-13

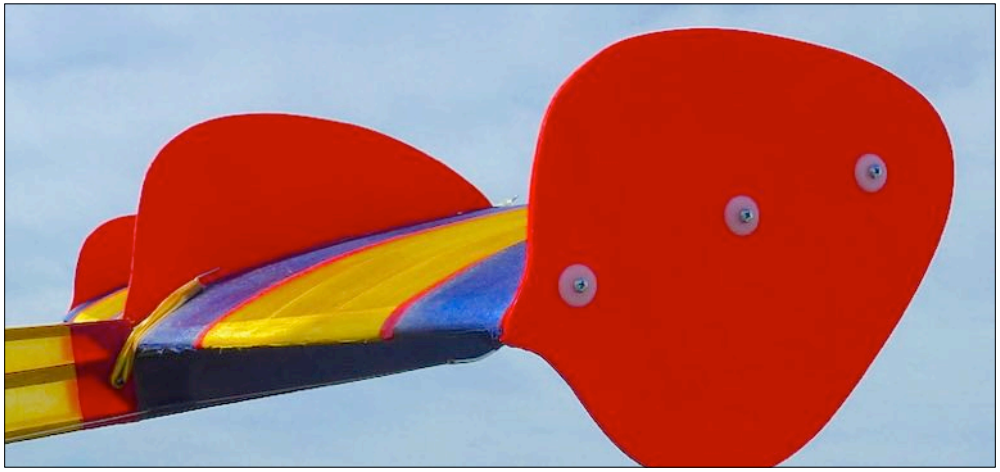
Easier Packing - Tips

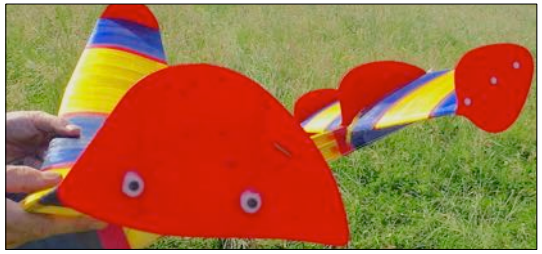
Editor

Packing a coffin of models for transport to a contest, or for storage at home proceeds nicely until you strike a wing that is out of the ordinary. Maybe it is that flat centre section one that that won't nestle neatly with the polyhedral wings. Then, there are those tailplanes with attached vertical stabilizers - so common with Vintage models - that require a packing volume out of all proportion to the size of the tailplane. Whenever possible I build removeable tailplanes, vertical stabilisers that are detachable from tailplanes, two-piece wings, and when a model is particularly bulky with a heavy motor, a detachable firewall so that the motor may be removed quickly for separate packing. All of which take longer to build and add weight, but packing becomes simpler and more compact. The real bonus is that damage to components is greatly reduced both in transit and in storage.

The popular Stratostreak design is a special challenge, having no less than five vertical stabilisers sprinkled over its airframe. I have accepted these problematic protuberances but engine guru Chris Murphy's Stratostreak, spotted at the last Nationals, shows one solution.

Wing tips are fitted with attachment points for their vertical stabilisers (though *winglets* might be a better term) which are easily attached at the field with a couple of light bolts. The same treament for the two outer plates on the horizontal stabiliser. Not sure how Chris handles the centre one, though just a tight push fit between rudder and dual centre ribs has worked for me on other models.





Other ways of making Vintage models easier to transport and of reducing damage were presented in Issue 77, April / May 2004, which is available for download at *http://newsarchives.yolasite.com*

In 1936 the Texas company (Australasia) Ltd presented a Brown Junior motor to the NZMAA to be competed for by New Zealand model aero clubs. The engine was sent to the cormpeting clubs in turn, and the highest duration flight made in accordance with the contest rules was the winner.

Models were limited to a maximum span of 12 feet, and could be free flight, or flown as tethered machines on the end of a line. An ROG take-off was required, but wing-tip assistance was permitted. The engine run was limited by the amount of fuel carried, which was calculated on the basis of one eighth of an ounce of fuel for every pound of all-up model weight. Time-keepers were allowed to use binoculars to keep the model in sight. Of course the contestants had to use the special fuel supplied by Texaco!

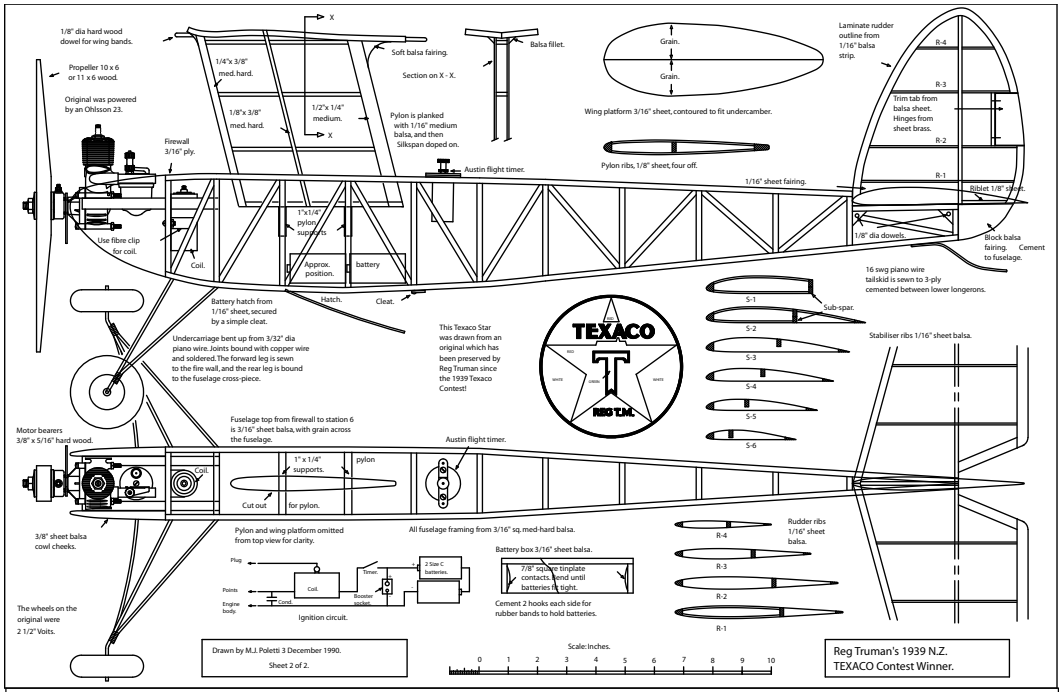
The winning club became the owner of the Brown Junior, and the club member who made the winning flight received a trophy. In subsequent years, the rules for the contest were changed to keep them in line with other gassie contest rules, and whenReg won in 1936, the twenty-second motor run rule was in force.After 1936, the engine competed for each year was a Neu Zealandmade Acme, built by Bert Dacombe in christchurch.

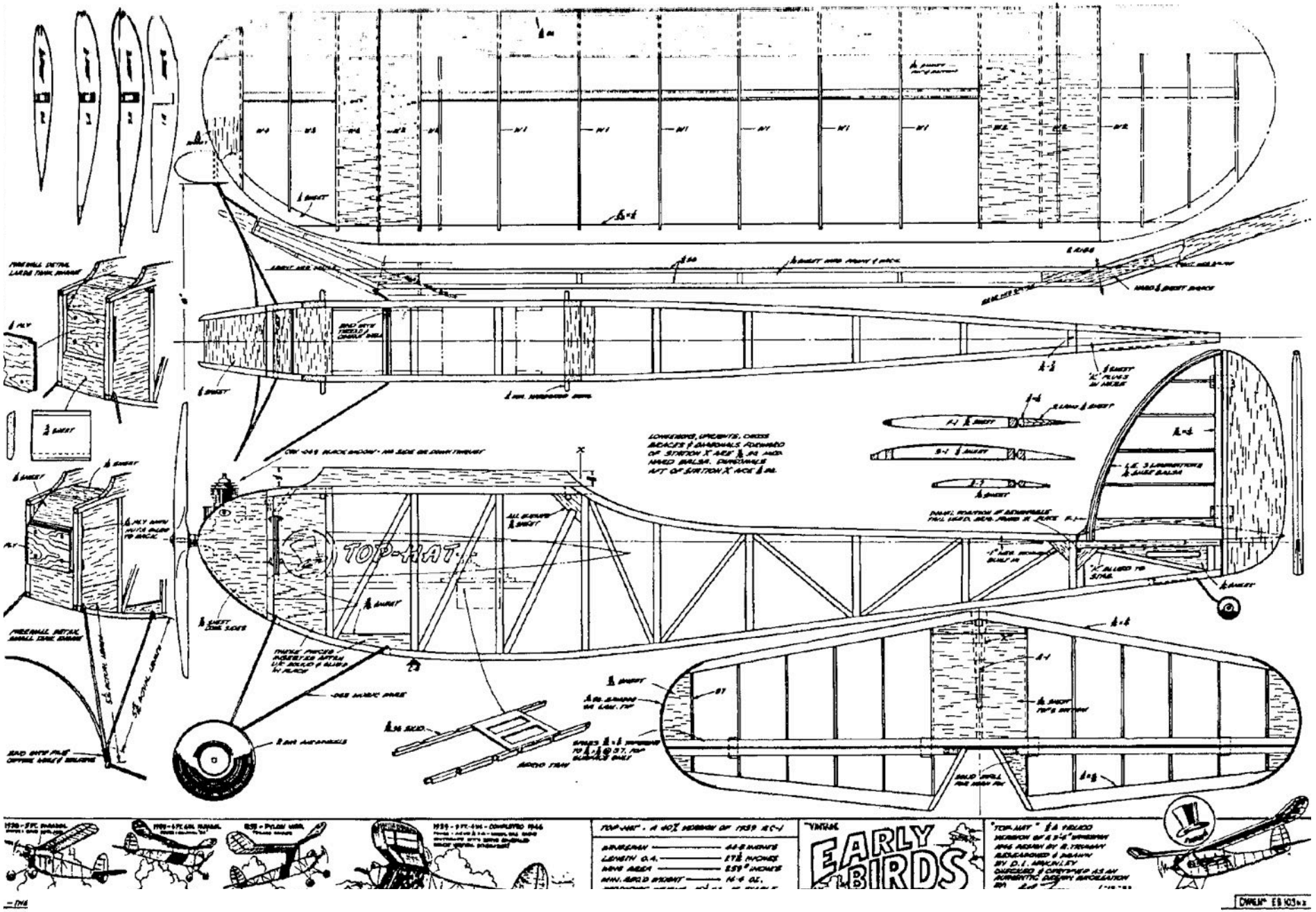
For the record, in 1936 the Brorm Junior was won by A,Mahoney of the Pukekohe MAC, in 1937 the l/4 HP Acne was won by Doug Kennedy of the Aorangi (Oamaru) MAC, in 1938 the Baby Acme was won by Norm Ayers of the Christchurch MAC, and in1939 the l/4 HP Acme was wni by Auckland MAC's Reg Truman with his Ohlsson 23 powered design. The engine he won was later sold by the club, and is now owned by Reis Jones.

Fortunately, Reg has an excellent memory, and has been able to produce an accurate sketch from which a full size plan has been prepared. The biggest problem for Reg was to get the shape of the fin and rudder correct, but after study of a photograph of the original model, he is satisfied that the outline shown is accurate.

Reg has been consulted from time to time in order to clarify some of the details of hls model, and has in nearly every case been able to recall exactly how each part was made and fitted. He has even kept examples of the orlginal Texaco and Power Chief stickers which were provided by the Texas company for the contests.

Extracted from article by Maurice Poletti.





Reg Truman's 1936 *RC-1*, reduced to 1/A Texaco size and re-named *Top Hat.*

VINTAGE PRECISION

Gordon Meads	Lanzo RC-1	1934	Vint Champs	600 + 200
David Gush	Miss Fortune X	1935	Nationals	600 + 199 +200
John Butcher	Miss Fortune X	1935	Nationals	600 + 199 +197
Brian Harris	New Ruler	1940	Nationals	600 + 198
Graham Bradley	Lanzo RC-1	1934	Nationals	600 + 197
Steve Warner	Spook	1940	Nationals	600 + 197
Don Mossop	Bomber	1938	Nationals	600 + 192
Allan Knox	Lancer 45	1940	NDC 8 Jun	600 + 192
Allan Baker	Lancer 72		NDC 28 Jun	600 + 172
Angus MacDonald	Buzzard Bombshell	1941	Nationals	600

VINTAGE IC DURATION

Bernard Scott	Playboy Cabin	1941	Nationals	780
John Butcher	Miss Fortune X	1935	Vint Champs	780
Rex Anderson	Playboy	1941	Nationals	770
Tony Christensen	Playboy	1941	Nationals	770
Allan Knox			NDC	766
Wayne Cartwright	Bomber	1938	Nationals	764
David Thornley	Bomber	1938	Vint Champs	764
Gordon Meads	Lanzo RC-1	1934	Nationals	754
Angus MacDonald	Buzzard Bombshell	1941	Nationals	740
Bryan Treloar	Miss Fortune X	1935	Gareth Newton	732

VINTAGE E DURATION

Brian Harris	Playboy	1941	Vint Champs	960 + 530
Wayne Cartwright	Top Banana	1950	Vint Champs	960 + 403
Allan Knox	Scram	1938	15 Aug	960 + 346
David Gush	Miss Fortune X	1935	Nationals	960 + 215
Keith Trillo	Stardust Special	1941	Vint Champs	950
Bernard Scott	Buzzard Bombshell	1941	Nationals	949
Stuart Lightfoot	New Ruler	1940	Vint Champs	940
Rex Anderson	Anderson Pylon	1937	Nationals	922
Don Mossop	Playboy	1941	Nationals	905
Mark Venter	Comet Cruiser	1938	NDC #152	894

VINTAGE 1/2A TEXACO

Martin Evans	Miss Philly.VI	19--	Nationals	1500 + 597
Allan Knox	Skipper	19--	NDC Feb	1500 + 513
Rex Anderson	Playboy	1941	Nationals	1500 + 283
Mark Venter	Atomiser	1941	NDC Feb	1460
Bernard Scott	Playboy	1941	Nationals	1445
John Butcher	Texaco '39	1939	Tuakau	1400
Allan Baker	Slicker	1948	NDC Feb	1330
Wayne Cartwright	Airborn	1938	Nationals	1240
CharlesWarren	Bomber	1938	Nationals	1211
John Selby	Playboy	1941	Gareth Newton	1195

VINTAGE 1/2E TEXACO

Wayne Cartwright	Arrow Nut	1949	Nationals	1480 + 1554
John Butcher	Miss Fortune X	1935	Vint Champs	1480 + 1416
Keith Trillo	Stardust Special	1941	Tuakau	1480 + 1414
Rex Anderson	Tomboy	1950	Vint Champs	1480 + 1286
Bryan Spenser	Slicker	1948	Vint Champs	1463
Bernard Scott	Tomboy	1950	Nationals	1422
Graham Main	Tomboy	1950	Tuakau	1379
Martin Evans	Brigadier	1941	Vint Champs	1354
Allan Sissons	Coronet	1941	Gareth Newton	1282
David Gush	Tomboy	1950	Nationals	1164

VINTAGE 1/2A TEXACO SCALE

Allan Knox	Chilton		26 July	668

VINTAGE A TEXACO

John Butcher	Lanzo RC-1	1934	Tuakau	1860
Stuart Grant	Simplex	1941	NDC Jun	1840
Charles Warren	So Long	1941	Nationals	1838
Bernard Scott	Simplex	1941	Tuakau	1785
Ian Munro	Simplex	1941	Gareth Newton	1773
Graham Main	Simplex	1941	NDC	1671
Joe Bradbury	Viking	1940	Gareth Newton	1534
Rex Anderson	Cloud Snooper	1940	Nationals	1523
Des Richards	Junior 60	19	Nationals	1376
Graham Main	Simplex	1040	Tuakau	1350
Bryan Treloar	Playboy	1941	Gareth Newton	1230

VINTAGE E TEXACO

Rex Anderson	Kerswap	1942	Tuakau	1860 + 1030
John Butcher	Miss Fortune X	1935	Vint Champs	1860 + 560
Keith Trillo	Stardust Special	1941	Vint Champs	1860 + 535
Angus MacDonald	Eight Ball	1949	Nationals	1860
Tony Gribble	Bomber	1938	Tuakau	1860
Wayne Cartwright	Cruiser	1937	Tuakau	1853
Dave Crook	Bomber	1938	Nationals	1852
Doug Baunton	Miss Arpiem	1938	Vint Champs	1354
Martin Evans	Miss Trenton	1938	Nationals	1074

VINTAGE OPEN TEXACO

Ian Munro	TD Coupe	1936	Nationals	1825
Bernard Scott	Playboy Cabin	1941	Nationals	1492
John Butcher	Lanzo RC-1	1934	Nationals	1340
David Gush	Miss Fortune X	1935	Nationals	1332

VINTAGE RUBBER TEXACO

John Danks	Ascender	1949	16 Aug	1860 + 1270
John Butcher	Gollywock	1944	16 Aug	1860 + 987
David Gush	Rocket Stick	1941	Tuakau	1860 + 866
Wayne Cartwright	Lanzo D	19	Vint Champs	1860 + 863
Doug Baunton	JA Skokie	1938	Vint Champs	1722
Graham Main	KK Gipsy	1946	Tuakau	1547
Bernard Scott	Lanzo Duplex	1937	Nationals	183

CLASSICAL PRECISION

Brian Harris	Humbug	19	Vint Champs	594
David Thornley	Satellite 1000	1972	Vint Champs	590
Don Mossop	Super 60	1961	Vint Champs	571
Graham Main	Gigi	1964	NDC Apr	538

CLASSICAL IC DURATION

Wayne Cartwright	Amazoom	1955	Nationals	858
David Thornley	Satellite 1000	1972	Nationals	857
Bernard Scott	Starduster 600	1959	Nationals	840
Evan Pimm	Tequila	19	Nationals	836

CLASSICAL E DURATION

Don Mossop	Texan FAI	1961	Nationals	900
Bernard Scott	Frisco Kid	1955	Nationals	867
Wayne Cartwright	Nig Nog	1961	Nationals	802
John Warner	Texan FAI	1961	Nationals	761
Graham Main	Gigi	1964	NDC May	760
Brian Harris	Cizek Stardust	19	Nationals	732
Martin Evans	Skymaster	19	Nationals	626

TOMBOY IC and Internation

Rex Anderson	Doonside		Vint Champs	1432
Mark Venter	Doonside		12 Apr	1400
Jack Godfrey	Mills .75		Vint Champs	855
Charles Warren	Mills .75		Tuakau	835
Rex Bain	Mills .75		Vint Champs	755
Sean Currie	Mills P.75		August	595
Lynn Rodway	MP Jet .06		NDC May	592

TOMBOY E and International

Rex Anderson	180 / 2S		Vint Champs	1782
Bryan Spencer	180 / 2S		Vint Champs	1442
Keith Trillo	180 / 2S		Tuakau	1231
Lynn Rodway	180 / 2S		NDC May	1026

VINTAGE POWER

B.Scott	03 Jan	540
R.Anderson	03 Jan	536
R.Bain	03 Jan	530
P.Evans	03 Jan	322
J.Butcher	03 Jan	126
R.Gunner	NDC	70
A.Douglas	14 Mar	13
-		
-		
-		

VINTAGE RUBBER

W.McGarvey	03 Jan	540
D.Sutcliffe	14 Mar	502
B.Scott	03 Jan	468
R.Magill	03 Jan	411
J.Malkin	03 Jan	409
C.Murphy	03 Jan	381
R.Bain	03 May	255
S.Somerfield	03 May	249
A.Graves	03 Jan	246

VINTAGE GLIDER

R.Anderson	03 Jan	369
D.Ackery	03 Jan	344
B.Scott	03 Jan	341
M.Evans	03 Jan	256
P.Evans	03 Jan	198
G.Main	NDC	163
K.Fisher	03 Jan	157
P.Wilson	03 Jan	92
J.Butcher	03 Jan	89
P.Wilson	08 Feb	79

VINTAGE HL / CATAPULT GLIDER

D.Ackery	03 Jan	313
G.Lovejoy	08/02	306
D.Gush	03 Jan	287
R.Magill	03 Jan	286
K.Fisher	03 Jan	283
J.Butcher	03 May	266
P.Wilson	03 Jan	257
H.Butcher	03 Jan	220
D.Richards	08 Feb	239
W.McGarvey	03 May	235

VINTAGE PRECISION

B.Scott	03 Jan	261
S.Somerfield	03 May	249
C.Warren	03 Jan	235
C.Murphy	14 Mar	229
B.Leeves	03 May	223
J.Dowling	03 May	198
S.Wade	14 Mar	179
J.Butcher	03 May	146
A.Graves	03 Jan	143
P.Smith	14 Mar	143

NOSTALGIA POWER

B.Scott	03 Jan	540
R.Bain	03 Jan	528
R.Anderson	14 Mar	340
B.Bonner	NDC	331
S.Wade	14 Mar	301
L.Vincent	03 Jan	135
P.Wilson	08 Feb	88
P.Wilson	03 Jan	37
-		
-		

NOSTALGIA 1/2A / MINIATURE REPLICA

R.Bain	03 Jan	321
B.Scott	03 Jan	281
R.Anderson	03 Jan	221
C.Murphy	03 Jan	137
-		
-		
-		
-		
-		

NOSTALGIA RUBBER

B.Scott	03 Jan	540
J.Malkin	03 Jan	500
G.Lovejoy	03 Jan	412
C.Murphy	03 Jan	335
G.Lovejoy	08 Feb	315
A.Graves	03 Jan	128
R.Yuile	08 Feb	43
-		
-		
-		

NOSTALGIA GLIDER

M.Evans	03 Jan	470
R.Anderson	03 Jan	185
T.Tank	14 Mar	203
B.Scott	03 Jan	165
K.Fisher	03 May	162
-		
-		
-		
-		

CLASSICAL GLIDER

R.Anderson	14 Mar	540
M.Vincent	03 Jan	405
T.Tank	NDC	90
-		
-		

CLASSICAL POWER

R.Bain	14 Mar	540
B.Scott	03 Jan	364
-		
-		
-		

CLASSICAL RUBBER

L.Vincent	03 May	485
-		
-		
-		
-		

FOR SALE

Allan Douglas has an extensive range of modelling goods for sale, including ....

Engines - Vintage, Free Flight, Control Line; Glow, Diesel, CO2, Spark Ignition. These range from parts engines to display condition and new-in-box.

Kits - Keil Kraft and Airsail.

Books - Many of the now-classic volumes by gurus of aeromodelling such as Moulton, Warring, Sparey, Winter and Bowden.

Magazines - Aeromodeller, MAN, Flying Models, American Modeller, Model Builder, AMI, Airborne.
For sale as bulk lots.

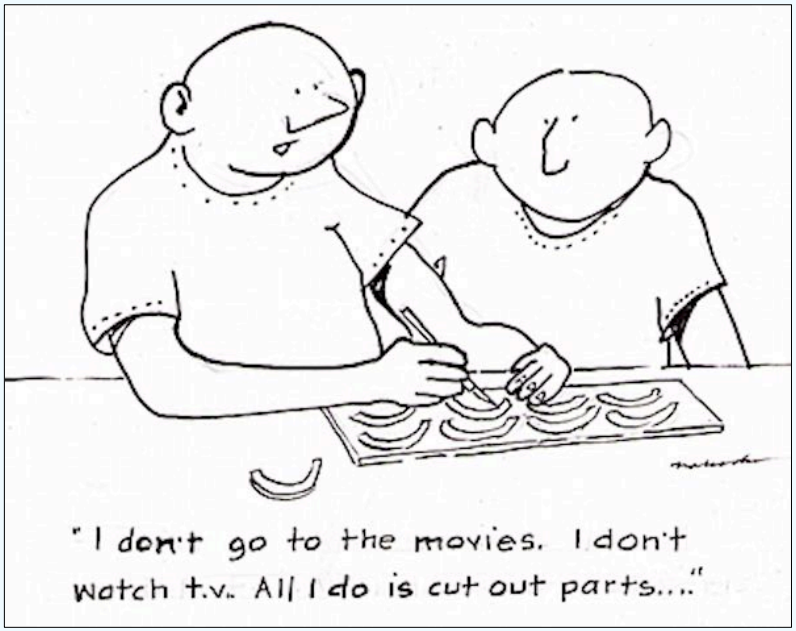
Allan's list will be emailed to NZ subscribers. Note that all prices are exclusive of postage.
Should you want printed lists, these may be obtained from Allan by sending a *self addressed, stamped envelope* to ...

Allan Douglas
15 Emily Street
Gisborne 4010.

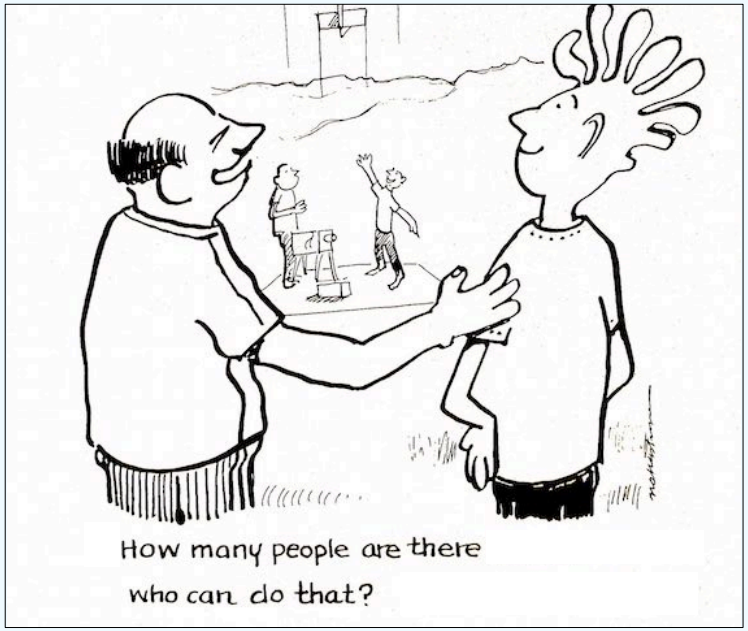
Ph. 06.8685772

From Allen Teal
I am selling an old spark ignition engine and thought someone in the vintage group could be interested. This is an Ohlsson 23 with good compression and has the original tank. With it comes a Marvin Stern deluxe electronic ignition system which saves the points from burning out when the engine stops in flight. There is the required coil and even a spare spark plug (note: there are two plugs in the photo but one is in use elsewhere). This is basically a system ready to go - you just need a model to put it in and a battery for the ignition.

Price for the lot is $250 plus postage.
Contact Allen on 021 434 261



...and yet ...



WANTED for the next issue

A photograph of you and your Tomboy model.

Email to the editor.

MISSING and sadly missed

Emboldened by the positive result of asking for copies of early ***AVA News***, the Editor now launches a small and hopeful (but possibly leaky) canoe into the swift running stream of time ... in search of SIN.

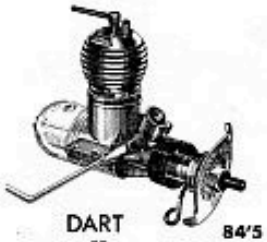
That is, ***South Island News,*** the early free flight bulletin from that isle.

Also sought is ***News of the North***, which was the northern equivalent of SIN.

Copies will be scanned and returned, postage paid both ways. Scans will be made available at no cost.

56 DAVIES-CHARLTON ENGINES

KEILKRAFT

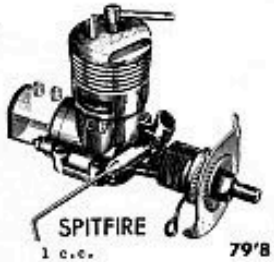


DART .55 c.c. 84'5

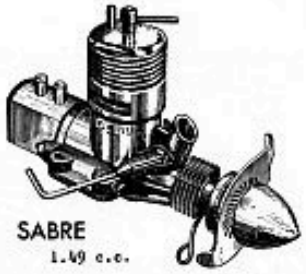
MERLIN .76 c.c. 67'-

SUPER MERLIN .76 c.c. 73'4

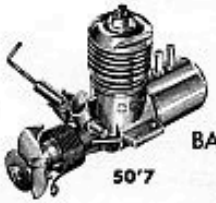
Diesels



SPITFIRE 1 c.c. 79'8



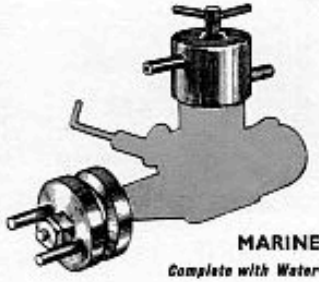
SABRE 1.49 c.c. 84'5



BANTAM .75 c.c. 50'7

Glow motor

BANTAM DE LUXE .75 c.c. 63'10



MARINE ENGINES

Complete with Water-cooled Head & Flywheel

Dart	106'11
Merlin	90'5
Spitfire	101'2
Sabre	106'11

Engine Accessories

SILENCERS
Dart..... 13/3
Merlin 9/6
Spitfire .. 9/6
Sabre 9/6

GLOWPLUGS
EG98 (Short reach for Bantam) 6/-
EG99 Long reach 7/3
EG200 Long reach high perf. 10/10

RADIAL MOUNT (Dart or Bantam) 5/4
RADIAL TANK (Dart or Bantam) 10/8

QUICKLIP CONNECTOR (with lead & plug) 6/1
GLOWCLIP CONNECTOR (clip only)..... 5/6
EXTENDED JET NEEDLE 3/3
EXTENDED COMPRESSION SCREWS 3/3
4 BA x 1½ in.
2 BA x 1½ in.
2 BA x 2½ in.
MOUNTING BOLTS (set of 4 complete) 1/-
CONTROL LINE HANDLE (with adjuster & spike) 9/3
ENGINE TEST STAND 16/7

MARINE ACCESSORIES
Dart Marine Head ... 26/7
Dart Flywheel 10/8
Merlin Marine Head.. 26/7
Merlin Flywheel 10/8
Spitfire Marine Head 24/10
Spitfire Flywheel .. 13/3
Sabre Marine Head .. 24/10
Sabre Flywheel 13/3

58 M.E., Mc COY & P.A.W. ENGINES

KEILKRAFT

M.E. diesels

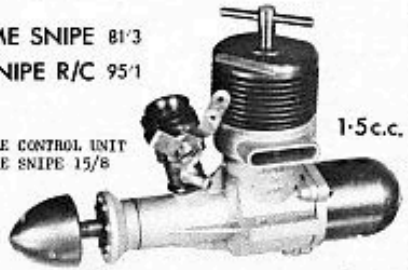
1c.c.

ME HERON 74'4

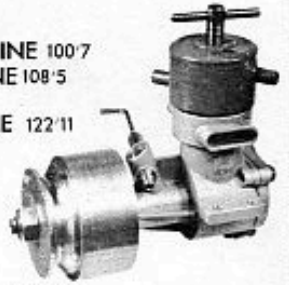
ME SNIPE 81'3
ME SNIPE R/C 95'1

1·5c.c.

THROTTLE CONTROL UNIT for ME SNIPE 15/8



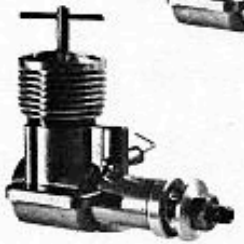
ME HERON MARINE 100'7
ME SNIPE MARINE 108'5
ME SNIPE R/C MARINE 122'11



ME Silencers

ME HERON (pair) 27/2
ME SNIPE (pair) 29/-

P.A.W. diesels



PAW 1·49 ____ 101'2
PAW 2·49 (ball race) ____ 126'6

PAW 19D Combat Special ____ 119'-
PAW 19BR (ball race 3·2c.c.) 135'-

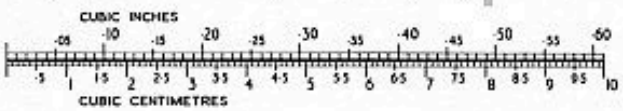
PAW Exhaust Muffler
Gaskets included
PAW 1.49 13/5
PAW 2.49) PAW 19D) 14/9 PAW 19BR)

Mc COY ·049 70'-

glow motor

Engine Capacity Conversion Table

The scale shows the equivalent values of engine capacity in both systems used today, Cubic Inches and Cubic Centimeters. For example, an engine of .30 cu.in. (known generally as a thirty), will be slightly smaller than an engine of 5c.c. capacity.



FFoNZ Notices

TAURANGA OPEN

FREE FLIGHT

Rescheduled

Saturday, November 7th
Buckley's farm, Piako Rd,
Morrinsville.
8.30am to 3pm.

Open Power
Open Rubber
Open Glider
Combined Vintage / Nostalgia /Classic Combined
CLG / CLG / TLG

Contacts: Lincoln and Moira Vincent
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