

AVANZ NEWS



Newsletter of the Model Flying New Zealand Vintage Special Interest Group

SAM 55





In this Issue

From the Editor

Committee Notes

Future Events

Event Reports

- NI Vintage Champs

NZ Vintage Rubber

- Dragonfly Special 1935

Nostalgia Power

- Junior M

Work in Progress

- Dave R's Big Tomboy

Cover Stories

Rethinking 1/2A Texaco

A Kodak Moment

It's too far to go the Nats !

The Engine Column

- American .049 motors

Vintage Rubber

- Talisman 1950

- Sporty 1949

Classical Power

- Helicanth 1959

Leader Boards

Miscellaneous

Micro-Avionics RC

Bargain Basement

FFoNZ Notices

From the Editor

Much of AVANZ News content comes from readers who are willing to share their knowledge, interests, mistakes, building projects, and specialised skills. This is how it should be: a publication is relevant only if it addresses its readers' interests, and what better way to ensure this than to have the reader influence content? Sharing experience in an article may seem to be a simple affair that has no deep ramifications, but the reality is very different - it would not be excessive to claim that shared experiences are the building blocks of our hobby.

Imagine the aeromodelling skill level you would have peaked at if you had not been able to freely dip into a vast resource of shared knowledge. Model building is no different to any other specialised area. We can see through the complexities of our tasks only by standing on the shoulders of those who went before us. But, no, that is not quite true ... we can see through the complexities of our tasks by standing on the shoulders of *those who shared their knowledge*.

In aeromodelling, the greatest sharer of all has to be Frank Zaic. Eighty-two years on from the first one, his Yearbooks remain unsurpassed resources in the search for that special Vintage design, and his diligent, practical approach to aeronautical research still sets the standard for today's experimenters. They were not money-spinners, but were labours of love by a modeller who loved sharing information.

On the Cover

Charles Warren, alias The Gloved One, tweaks the PAW on his A-TeXaco model.

Someone so willing to share is in direct opposition to that all too common occurrence, the individual who jealously guards what he knows for fear of losing a competitive or commercial edge. No direct criticism of this trait appears in the Yearbooks, although the prefix to the 1957-58 volume, reproduced in this bulletin on page 3, hints at a sad awareness of such hoarding of knowledge - knowledge that, in all likelihood, did not originate with the hoarder but was gleaned without cost from those less self-serving.

Proficient modellers amass reservoirs of facts, skills, and attitudes in their minds. The value of this accumulated wisdom becomes poignantly obvious when the modelling community loses one who has been a willing sharer. We owe a great deal to those modellers who, while they were still able, allowed access to their store of experiences, and in doing so helped others progress in our hobby.

The Committee will recognise the important role of contributors to AVANZ News with an award, to be presented at the AGM on 28th March, 2016. The recipient will be decided by a poll of readers. Details can be found on page three.

Bernard Scott

Contributors to this issue -

Wayne Cartwright Graham Main Bill McGarvey
Chris Murphy Graham Lovejoy Dave Crook
John Butcher

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Best Contribution to AVANZ News, 2015

Readers can make an email vote to determine who will receive this accolade.

Readers includes anyone who receives AVANZ News directly by email or who obtains copies that are distributed by other means.

The judging criteria are open, just briefly mention the reason for your choice - even a single word will do eg. Helpful / Entertaining / Presentation / etc.

Last day for voting is 1st March, 2016.

Email votes to the Secretary, Graham Main, at

gramain@xtra.co.nz

Please include

Article

Author

Issue #

Reason for choice

All back issues of AVANZ News to end of 2015 are now available on Mark Venter's magazine archive site -

<http://newsarchives.yolasite.com/>

Past, Present and Future

All of the pleasures and joys that we experience while we build and fly model airplanes are being handed to us by those who were here before us.

All of the knowledge that we may find in this book we will take for our own, and feel that it is our right to do so. It truly is our right, if at the same time we assume the responsibility of eventually adding to the sum total of human knowledge. How could a fountain stay alive if we all dipped our cups in it and no one took care that water will continue to flow?

Pity the man who will take and use the knowledge gathered by others and does not contribute his own. He will miss one of the finest feelings of life, the glow that comes from bringing light into a corner that has been dark since time began.... And that which he holds so tight to himself will eventually be rediscovered someday, someplace by someone else.

*May, 1958
Clifton Heights, Pa.*

Frank Zaic

Tuakau RC Vintage/Classical Rally and Contest

Dates: February 20/21 2016

Times: 9.30am Saturday to 3.30pm Sunday (flying permitted until dusk on Saturday and early morning Sunday.)

Venue: Tuakau Domain Recreational Reserve, Alexandra Redoubt Rd (off River Rd), Tuakau

Host: Tuakau MAC

Contacts: Tuakau MAC John Butcher, 09 236 9722
Contest 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.

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 different model(s) being used for each entry.

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

Registration fee: Regrettably, it has become necessary to begin charging \$5 registration at 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 cost of donations to host clubs has been met from Vintage SIG funds, but support from a registration fee is now necessary.

 24th-28th March 2016	
VINTAGE FREE FLIGHT	
	<i>day</i>
Vintage FF Catapult Glider	1
Vintage FF Power	1
Vintage FF Rubber Dur	2
Nos FF Power Duration	2
Vintage FF Glider Duration	3
Small Nos/Vintage Power Dur	3
Nos Rubber Duration Vintage	4
Nos FF Glider Duration	4
Vintage FF Precision	5
Classic FF Duration Combined	5
VINTAGE RADIO	
Vintage RC Precision	1
Vintage RC IC Duration	1
Classical RC IC Duration	1
Classical Precision	1
Vintage RC E Duration	2
Vintage 1/2A RC Texaco	2
Vintage 1/2E RC Texaco	2
Vintage RC A Texaco	3
Vintage RC E Texaco	3
Vintage RC Open Texaco	4
Vintage RC E Rubber	4
Classical RC E Duration	4

National Decentralised Contests

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

NDC: Send results to mfnz.recordingofficer@gmail.com

Leader Boards: Send to the Editor scott.scott@xtra.co.nz
Please use the form that was emailed to you.

FEBRUARY

#79	Vintage	FF Power Duration
#80	Nostalgia	FF Power Duration
#81	Nostalgia	FF Rubber Duration
#82	Classic	FF Rubber Duration
#83	Vintage	RC 1/2A Texaco
#84	Vintage	RC E Rubber Texaco

MARCH

#85	Vintage	RC IC Duration
#86	Vintage	RC E Duration
#87	Vintage	RC Open Texaco
#88	Classic	RC IC Duration

APRIL

#89	Vintage	FF 1/2A / Min. Replica
#90	Classic	FF Power Duration
#91	Vintage	RC 1/2A Texaco Scale
#92	Vintage	RC 1/2E Texaco
#93	Vintage	RC A Texaco

North Island RC Contest/Rally Schedule 2015 / 16

February 20, 21	NNI Contest and Rally	Tuakau
March 24 - 28	68th Nationals	Clareville
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]

Invitation by Society of Antique Modellers of Australia
SAM CHAPTER 1788



to the
34th Oldtimer Championships
at
CANOWINDRA
EASTER
23rd March to 28th March, 2016



PROGRAM - 2016

Wednesday 23 March

Setup Day, Control line Sport Flying and RC Trimming Bogwood

Thursday 24 March

7am: Free Flight - Vintage Power (MAAA Rules + R/C DT) Power Ratio, 3cc tanks Bogwood
9.30am to 11.30am: SAM Champs Model Scrutineering. Bogwood
1pm: R/C Oldtimer Glider. Bogwood
1pm: Control Line Rally. Phantom and Champ Racing. Bogwood
4pm: R/C Cabin/Sports Model (designed before 1960) Scramble - 30 minutes to new rules Bogwood

Note: No other R/C Flying on Thursday.

Friday 25 March

Model Scrutineering and Registrations - 8.30am to 10.30pm
(Otherwise by appointment with Dave Brown or Committee Member) Bogwood

9am: Control Line Rally, Phantom and Champ Racing Bogwood
10.30am: R/C Nostalgia Bogwood
12.30pm: Lunch Bogwood
1pm: R/C 1/2A Texaco Bogwood
8pm sharp: SAM 1788 Annual General Meeting at the CWA Hall, Blatchford Street, Canowindra.
(Lucky door Prize)

Saturday 26 March

9am: R/C Gordon Burford Event. Bogwood
12 Noon: Lunch. Bogwood
12.30pm: R/C Oldtimer Texaco. Bogwood
6.30pm: BBQ, Buy, Sell & Swap Meet. Bogwood

Sunday 27 March

9am: R/C '38 Antique. Bogwood
12 Noon: Lunch. Bogwood
12.30pm: R/C Duration. Bogwood
6.30pm: Presentation Dinner and Raffle Canowindra Services & Citizens Club
93 Gaskill Street, Canowindra.

Monday 28 March

9am: R/C Standard Duration Bogwood
12 Noon: Lunch Bogwood
12.30pm: R/C 2cc Duration Bogwood

CLOSING DATE FOR ENTRIES 21st March, 2016

Send Entries to: Dave Brown
Entries Co-Ordinator
31 Lane Street
WALLERAWANG NSW 2845

Direct all Enquiries to Dave Brown - Telephone Home: 02 6355-7298 Mobile: 0402 868 568



34th SAM 1788 Oldtimer Championships
CANOWINDRA
23rd March to 28th March, 2016
Competitor Details and Entry Form

Name: SAM No: MAAA No:

Address: Postcode:

Phone No: (home) (work) (mobile)

Email Address:

FUN EVENTS

(Please tick events - No entry fees)

..... Free Flight Vintage Power
..... C/L Rally
..... C/L Phantom/Champ Racing
..... R/C Scramble Freq:

R/C OLDTIMER EVENTS Frequency

(Please tick Events and supply Frequency)

..... Oldtimer Glider
..... 1/2A Texaco
..... Nostalgia
..... Gordon Burford
..... Oldtimer Texaco
..... '38 Antique
..... Duration
..... Std. Duration
..... 2cc Duration

COMPETITORS OFFICIAL STATEMENT OF AGREEMENT:

I agree to abide by the R/C Oldtimer Rules as set out in the MAAA Inc. Official Rules, 2013, and any local rules or requirements laid down by SAM 1788. I agree to compete in a sportsman-like manner and to accept the Contest Director's decision in any contentious matter arising out of the conduct of this Championship. I am a fully paid up member of an MAAA Inc. affiliated club and a financial member of a SAM Chapter.

A VALID MAAA CARD MUST BE PRODUCED AT REGISTRATION.

SIGNED: SAM CHAPTER:

ENTRY FEES and DINNER TICKETS

** BBQ and Presentation Dinner Tickets
must be pre-paid for catering purposes

BBQ Tickets** @ \$20 each \$

Presentation Dinner Tickets**
..... @ \$25 each \$

Donation to Local Hospital \$ 5-00

EVENT ENTRY FEES:
(Maximum Event Fees \$50 - Juniors are Free)

No. of Events @ \$10 \$

TOTAL FEES \$

(Cheques payable to SAM 1788)

Note: For the BBQ and presentation dinner, if you have any special dietary requirements could you please let me know in advance so as I can inform our caterer.
Please email me at: grantandmary7@gmail.com or telephone: 02 6241 1320.

CLOSING DATE FOR ENTRIES 21st March, 2016

Send Entries to: Dave Brown
Entries Co-Ordinator
31 Lane Street
WALLERAWANG NSW 2845

Direct all Enquiries to Dave Brown - Telephone Home: 02 6355-7298 Mobile: 0402 868 568

Report from the CDs

This was a successful event that used a three-day format with a schedule of classes to be flown each day. The weather was fine and very hot on all three days, with light to moderate variable breezes. Lift was mainly light and hard to find but there were stronger thermals on the third day.

17 people registered, made 69 entries, and recorded 204 flights. Entries were strong in Vintage Precision (14), Vintage E Duration (10), Vintage IC Duration (7), Vintage E Texaco (7), and Vintage 1/2E Texaco (7). The 4 entries in the new Classical Precision class showed that this has the potential to become popular. Some of the flying was a bit rusty, probably due to this being the first competition since last May. The highlights of the event included the fly-offs in each of the three Electric Texaco classes – all very closely contested.

Congratulations to Bernard Scott who is Vintage Champion for 2016. John Butcher took second and Keith Trillo third. All three demonstrated persistently excellent flying. It should be noted that Keith won five of the six events that he entered – a memorable performance.

Our thanks to all who took part in this event – the flyers and the timekeepers/helpers – especially everyone's willingness to cope with the baking-hot conditions.

Wayne Cartwright and Dave Crook

NI RC Vintage Championship 2016

First	Bernard Scott	70 points
Second	John Butcher	60 points
Third	Keith Trillo	50 points

Events

		R1	R2	R3	Total	
Vintage Precision						
1	Stuart Lightfoot	<i>New Ruler</i>	200	200	200	600
2	David Thornley	<i>Bomber</i>	200	187	200	587
3	Bernard Scott	<i>Lanzo RC-1</i>	197	184	200	581
4	John Warner	<i>Record Breaker</i>	200	181	190	571
5	Brian Harris	<i>Bomber</i>	170	200	200	570
6	Rex Anderson	<i>Trenton Terror</i>	188	180	200	568
7	John Butcher	<i>Miss Fortune X</i>	200	166	200	566
8	Gordon Meads	<i>Lanzo RC1</i>	200	165	200	565
9	Graham Main	<i>Miss Trenton III</i>	174	200	188	562
10	Tony Gribble	<i>New Ruler</i>	174	185	200	559
11	Doug Baunton	<i>Miss Arpiem</i>	166	200	166	532
12	Charles Warren	<i>So Long</i>	154	155	200	509
13	Martin Evans	<i>Trenton Terror</i>	180	183	200	563
14	Keith Trillo	<i>Tomboy</i>	163	164	166	493
Classical Precision						
1	Brian Harris	<i>Humbug</i>	199	200	199	598
2	Bernard Scott	<i>Frisco Kid</i>	179	193	178	550
3	Graham Main	<i>Gigi</i>	199	147	193	539
4	David Thornley	<i>Satellite 1000</i>	172	6	173	351
Vintage IC Duration						
1	Bernard Scott	<i>Playboy Cabin</i>	260	260	260	780
2	Rex Anderson	<i>Playboy Snr</i>	250	260	187	697
3	Gordon Meads	<i>Playboy Snr</i>	171	220	260	651
4	John Butcher	<i>Miss Fortune X</i>	260	255	0	515
5	David Thornley	<i>Bomber</i>	182	206	119	507
6	Charles Warren	<i>So Long</i>	37	213	109	359
7	Wayne Cartwright	<i>Bomber</i>	138	0	0	138



Graham Main / Gigi



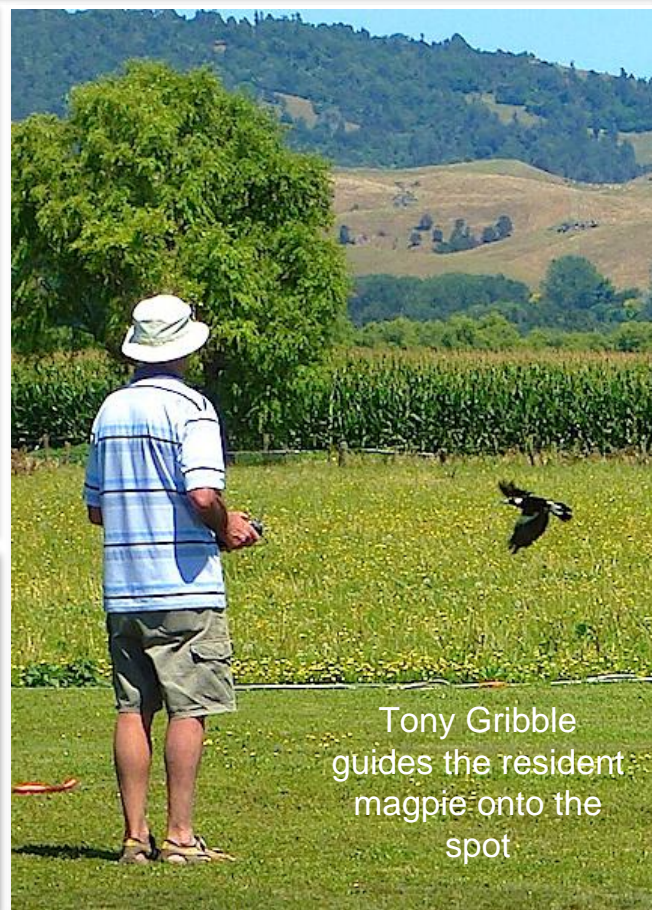
Brian Harris / Humbug



Two of the RC-1's present -
cowled and uncowed



Doug Baunton / PB2



Tony Gribble
guides the resident
magpie onto the
spot



Wayne
and Judy
Cartwright
in E-
Duration



What
utes are
really for

Vintage E Duration		R1	R2	R3	Total	
1 Keith Trillo	<i>Stardust Special</i> 508 sqin. 800, 3S, 40C	310	320	271	901	
2 John Butcher	<i>Miss Fortune X</i> 600 sqin. ???, 3S, 20C	229	320	320	869	
3 Rex Anderson	<i>Anderson Pylon</i> 580 sqin. ???, 3S, 30C	313	178	320	811	
4 Stuart Lightfoot	<i>New Ruler</i> 560 sqin. 1350, 3S, 30C	310	177	320	807	
5 Brian Harris	<i>Bomber</i> 460 sqin. 1000, 4S, 25C	152	312	283	747	
6 Tony Gribble	<i>Stardust Special</i> 712sqin. 1000, 4S, 25C	120	310	285	715	
7 Bernard Scott	<i>Lanzo RC-1</i> 460sqin. 1300, 3S, 20C	272	207	159	638	
8 Wayne Cartwright	<i>Top Banana</i> 900sqin, 1100, 5S, 35C	164	187	238	589	
9 John Warner	<i>Playboy</i> 510 sqin. 1000, 3S, 20C	231	197	145	573	
10 Doug Baunton	<i>Miss Arpiem</i> 596sqin. 2200, 3S, 20C	94	77	0	171	
Vintage E Rubber Texaco		R1	R2	R3	Total	Fly-off
1 Keith Trillo	<i>Yonder</i> 272 sqin. 240, 2S, 25C	620	620	620	1860	777
2 Wayne Cartwright	<i>Lanzo D</i> 335 sqin. 300, 2S, 25C	620	620	620	1860	741
3 John Butcher	<i>Gollywock</i> 290 sqin	620	620	620	1860	0
4 Doug Baunton	<i>JA Skokie</i> 272 sqin, 240, 2S, 25C	445	535	620	1600	
Classical IC Duration		R1	R2	R3	Total	
1 Bernard Scott	<i>FAI Raider</i> ASP 25	300	291	206	797	

Vintage 1/2A Texaco		R1	R2	R3	Total
1 Bernard Scott	<i>Stardust Special</i>	500	448	500	1448
2 John Butcher	<i>Miss Fortune X</i>	390	382	456	1228
3 Martin Evans	<i>Miss Philadelphia IV</i>	163	176	0	239
Vintage 1/2E Texaco		R1	R2	Total	Fly-off
1 Keith Trillo	<i>Stardust Spl</i> , 206 sqin	740	740	1480	1175
2 Wayne Cartwright	<i>Arrow Nut</i> , 216 sqin	740	740	1480	1163
3 John Butcher	<i>Miss FX</i> , 216 sqin	740	740	1480	1040
4 Bernard Scott	<i>Bombshell</i> , 226 sqin	740	740	1480	1028
5 Martin Evans	<i>Brigadier</i> , 306 sqin	584	740	1324	
6 Tony Gribble	<i>Stardust Spl</i> , 306 sqin	456	598	1054	
7 Dave Crook	<i>Playboy Snr</i> , 309 sq in	740	286	1026	
Tomboy IC		R1	R2	Total	
1 Graham Main	Mills .75	305	346	651	
2 Keith Trillo	Mills .75	146	135	281	
Tomboy E		R1	R2	Total	
1 Keith Trillo	180, 2S	1043	566	1609	
2 Dave Crook	180, 2S	620	449	1069	
3 Graham Main	180, 2S	472	470	942	
Open Texaco		R1	R2	Total	
1 John Butcher	<i>Lanzo RC-1</i>	920	916	1836	
2 Bernard Scott	<i>Playboy Snr Cabin</i>	353	501	853	
Vintage A Texaco		R1	R2	R3	Total
1 John Butcher	<i>Lanzo RC1</i> , PAW 19	616	620	616	1852
2 Bernard Scott	<i>Simplex</i> , OS 20FS	537	443	452	1432
3 Rex Anderson	<i>Cloud Snooper</i> , OS 20FS	428	526	384	1338

Vintage E Texaco		R1	R2	R3	Total	Fly-off
1 Keith Trillo	<i>Stardust Spl</i> 511 sqin. 450, 2S, 25C	620	620	620	1860	694
2 Wayne Cartwright	<i>Cruiser</i> 643 sqin. 550, 2S, 25C	620	620	620	1860	573
3 Rex Anderson	<i>Kerswap</i> 401 sqin. 360, 2S, 20C	620	620	620	1860	369
4 John Butcher	<i>Miss Fort.X</i> 600 sqin. 540, 2S, 25C	620	615	620	1855	
5 Dave Crook	<i>Bomber</i> 742 sqin. 610, 2S, 20C	612	620	620	1852	
6 Doug Baunton	<i>PB 2</i> 570 sqin. 500, 2S, 25C	458	620	620	1698	
7 Bernard Scott	<i>Bombshell</i> 328 sqin. 270, 2S, 15C	620	620	376	1616	

Classical E Duration					
1 Bernard Scott	<i>Frisco Kid</i> 684 sqin. 1100, 3S, 35C	300	300	300	900
2 Graham Main	<i>Gigi</i> 290 sqin. 800, 3S 25C	152	169	300	621
3 Wayne Cartwright	<i>Nig Nog</i> 623 sqin. 1300, 4S, 35C	242	0	0	242



E-Rubber Texaco flyoff. L-R: Messrs Cartwright, Trillo and Butcher



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
NI RC Vintage Champion 2016																	
	VP	CIP	VICD	VED	VERT	CLICD	V1/2A	V1/2E	TomIC	TomE	OT	VAT	VET	CIED	Total		
Stuart Lightfoot	10			7											17		
David Thornley	9	5	6												20		
Bernard Scott	8	7	10	4		5	7	7			5	6	4	7	70		
John Warner	7			2											9		
Brian Harris	6	8		6											20		
Rex Anderson	5		9	8								5	8		35		
John Butcher	4		7	9	6		6	8			6	7	7		60		
Gordon Meads	3		8												11		
Graham Main	2	6							6	5				6	25		
Tony Gribble	1			5				5							11		
Doug Baunton				1	5									5	11		
Charles Warren			5												5		
Martin Evans							5	6							11		
Keith Trillo				10	8			10	5	7				10	50		
Wayne Cartwright			4	3	7			9						9	37	5	
Dave Crook								4		6				6	16		

News from Tuakau

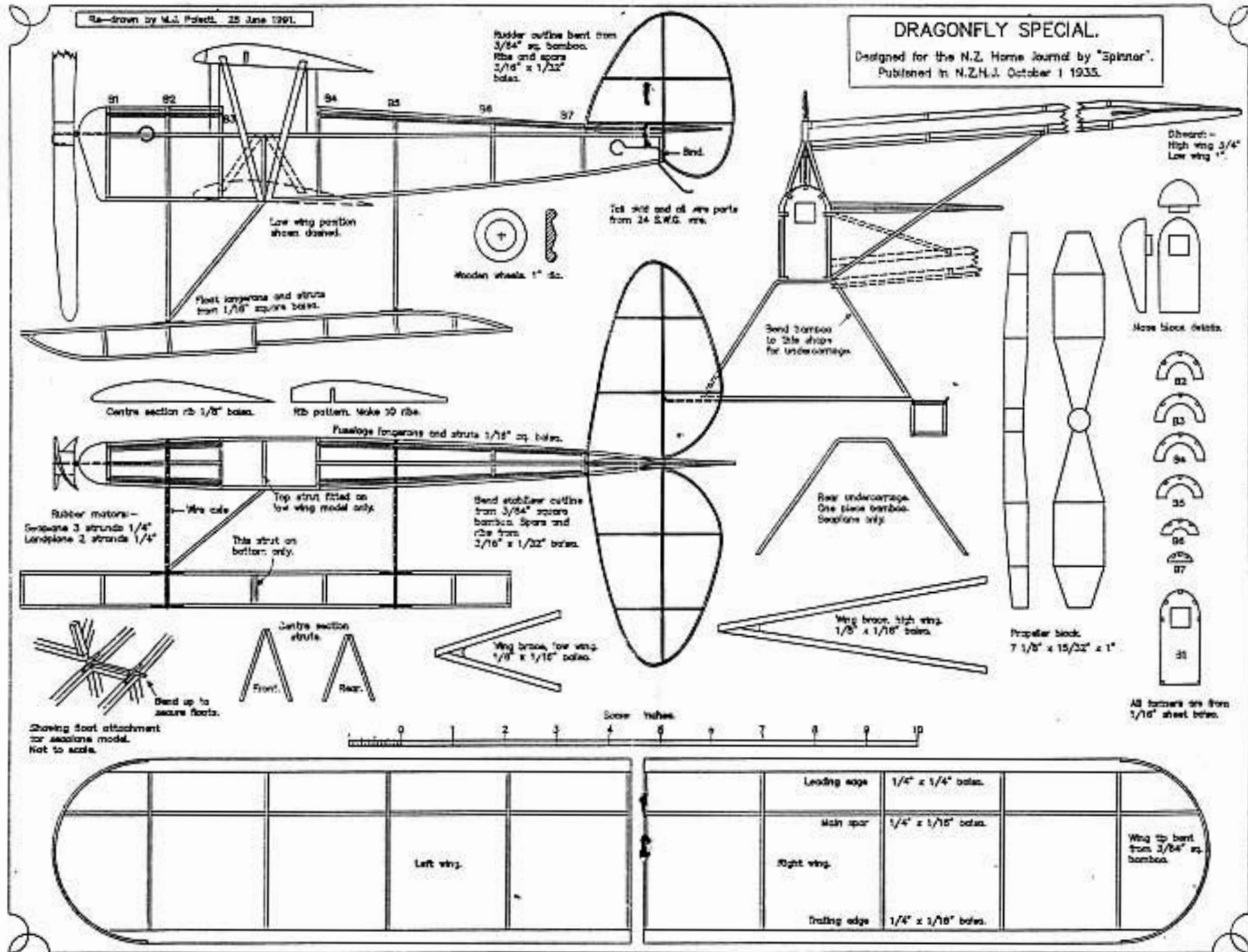
John Butcher

The 3 day North Island RC vintage competition was a total contrast to the North Island free flight competition. Little wind and melting temperatures making for very tiring days, but fairly good flying conditions. Saturday remained hot and calm all day with nearly everyone suffering at least one dud flight per event. Not sure if it was due to variable lift conditions or brain fade. One thing of note was the low times achieved in the Electric Texaco events with all winning times well below previous fine weather times. A good and cheerful crowd turned up for the first day events, about 16 competed. Sunday and Monday were just as sunny except the sea breeze came in around 2pm. The same as Saturday - very low times on the electric fly offs. Noticeable was the lack of qualifiers for a fly off in Vintage precision. Congratulations must go to Stuart Lightfoot for the clear win. It was very good to see Doug Baunton come up from New Plymouth to compete. Doug made his first max with his new E Texaco model and with some fine tuning should make quite a few more. Thanks to Wayne Judy and Dave for running a smooth trouble free event. Also to Martin and Paul for the excellent state the strip was in, I reckon it was the best it's ever been.

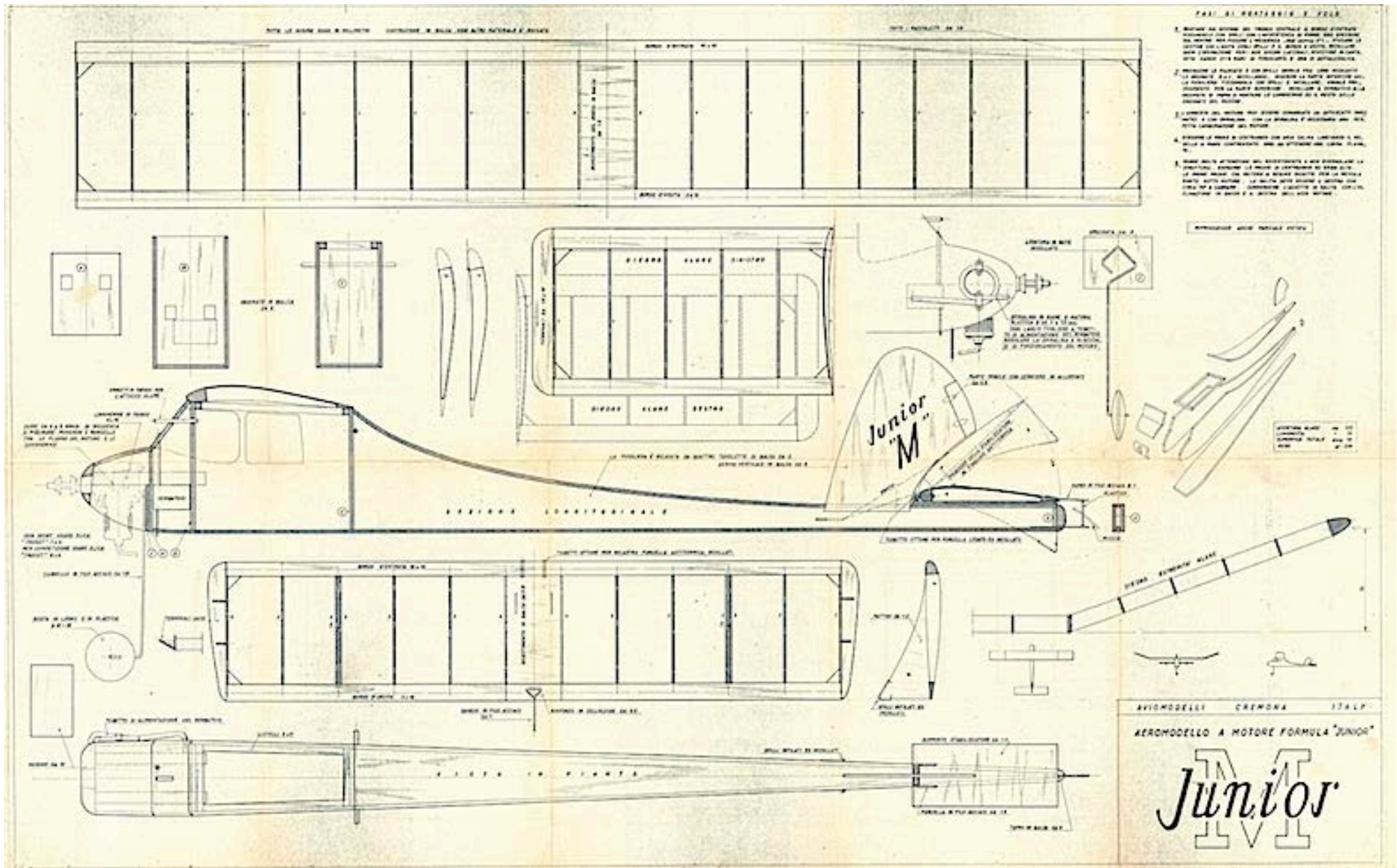
PS All due respect to Bernard Scott, he is a hard man to beat. (Team-work, John. Would never be possible without Su as my ever-ready support person. Bernard)

Inconspicuous, yet still accessible internal linkages used Martin Evans' models. So much cleaner than having draggy horns and clevises dangling in the wind !





Thanks to Graham Main for information on this Italian cutie. At the original 47 inches wingspan it would make a quick and easy entry for FF Nostalgia 1/2A, Aggregate at 80%, or add RC for Classical Precision.





WORK IN PROGRESS

Dave Richardson updates his 200% Tomboy project for the large Mills replica made by Vince Keats.

Well, the truth is that when you get to a certain age you tend to look around for something new and fresh to build and the options get fewer all the time. This saga really started in 1987 when ex aeromodeller and engineer extraordinaire Vince Keats decided to add to his already substantial model engine collection by making a twice size Mills .75. He took a standard Mills engine apart and faithfully duplicated each part twice size. The result is an engineering masterpiece and the engine runs beautifully on a 14x6 prop. The swept volume works out at around 5.8 cc (x2 stroke by x2 bore). For the crankcase, Vince carved a wooden plug and cast the mould in aluminium.

When I first saw it I said to Vince "How would it be if I made a twice sized *Tomboy* for it and get it airborne?" Vince replied that he had only made it for his collection and he preferred it to just remain on display. Over the years whenever I saw Vince I would remind him of my offer to make a *Tomboy* and he always politely declined.



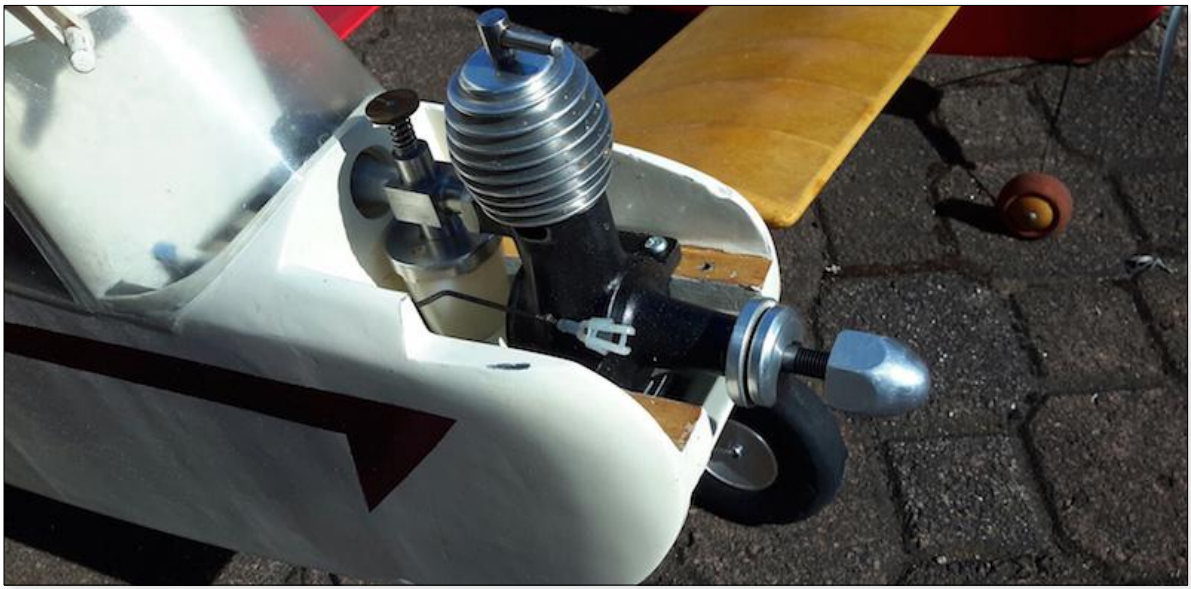
Then in late 2015 I had the chance to ask him once again and this time, to my astonishment and delight, he agreed - must be another age related thing! So where to get some enlarged plans? I put some feelers out and Allen Teal from Auckland came to the rescue. Allen had made four double sized *Tomboys* over the years and very generously gave me the plans. So, arming myself with 3/8 square balsa for the fus longerons and ideas for beefing up the wing I set to work. By mid January I had it finished. As an aside, if anyone has wondered why I have previously focussed more on scale models, it is simply because the colour scheme is ready made. When I comes to deciding on a colour scheme for a sport model I have absolutely no imagination! In the finish I settled on a vintage-looking maroon and cream with a *Tomboy monica* on the wing in case anybody didn't recognise it.

I appreciated Vince's loan of the Mills, but I was always mindful that it might not last forever. So I made provision to install an ASP .35 (the Mills equivalent) for testing and fun flying.

Dave Richardson.



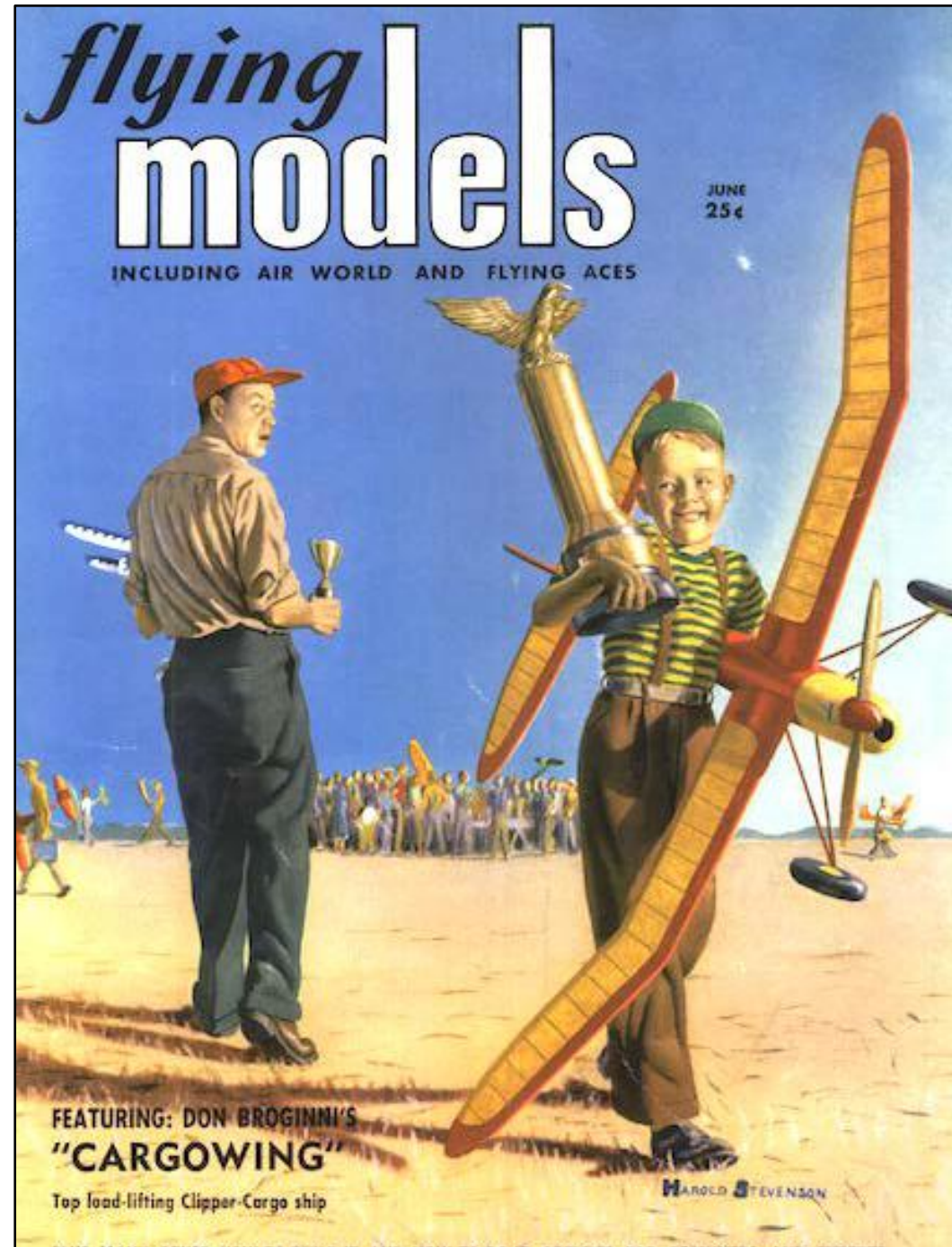
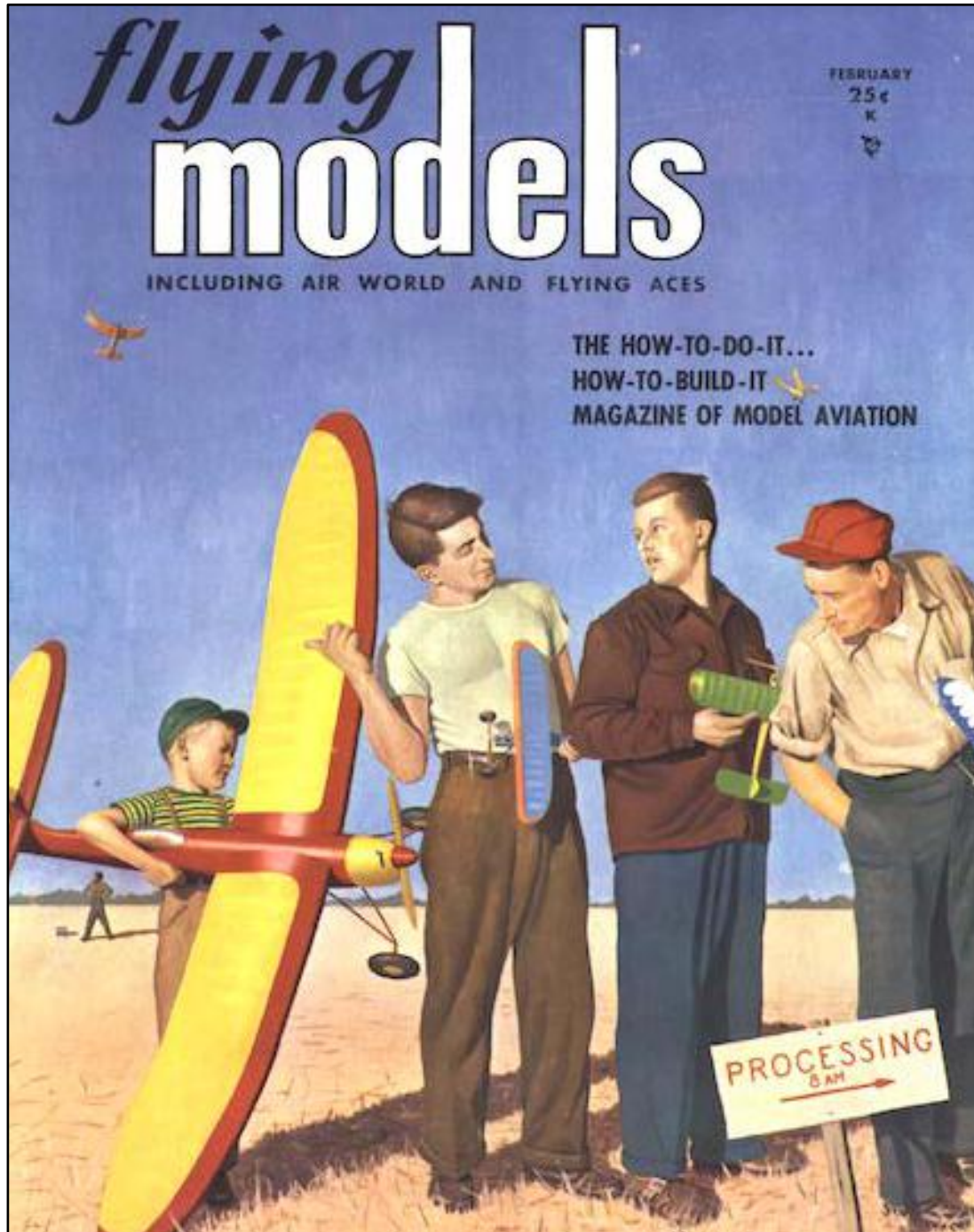
WORK IN PROGRESS



X2TB on the flightline at the Bob Burling event where flew well



Engine maker, Vince Keats



In 1990, I flew for SAM 55 in the International 1/2A Texaco Postal Competition, reported in the third AVA Newsletter of that year. The 8cc tanks and 15 minute maximums of the time made keeping models in sight more difficult than it is today, even allowing for aging eyesight. My flight report commented on this, and suggested a bigger model might be the answer.



The 1/2A I used was built close to the widely recommended 300 sq inches and 50" wingspan. This was what a Cox .049 was considered best capable of hauling up, and in our often breezy weather this size model does very well. A 7x4 turning 9000 rpm takes it up through the roughest weather to eye-straining height. This approach served me well, especially when the change to 5cc tank and 8-minute maximum rules lessened the visibility problem, so a larger model never came about. Besides, it seemed ungracious to retire the *Playboy* when it was performing so well, and building for the many new classes was already filling my time.

Motivation for a larger model came from reading *Duration Times*, the journal of SAM 1788. Discussion of 1/2A Texaco techniques featured letters from readers, and of particular interest was correspondence from Mark Venter. Mark's approach was extreme compared with accepted

practice but his results were astonishing, calling into question many of our long-held beliefs and assumptions. Mark was getting engine runs of unprecedented duration, obtained through careful engine preparation, larger than usual propellers, and fuel with very low nitro and oil content. Not everyone was comfortable with all of this as it went against what had been drummed into us about Cox engines and, predictably, there was a little opposition, although this was only on theoretical grounds. Those who actually experimented with the approach had good results. Mark's letters appear in *Duration Times* #148 and reader reactions are in issue #149. The elements of Mark's approach to 1/2A are :

Extra head shims, APC 9x4 prop, 0-5% Nitro, 5% castor oil, standard Cox head, 2-slit ported cylinder, 4400 RPM. (5-6 minutes on 5cc tank)

I started working incrementally towards this set-up and found that extended engine runs with adequate thrust were achievable. Importantly, there was no loss of reliability. If anything, runs became more consistent. The hardest part was shrugging off the dogma, learned over the years, that dictated what we could and couldn't expect of our .049s - they couldn't turn large props, or run slowly, or operate safely with less than 18% oil - wrong, wrong and wrong. I have not reached Mark's extremes and experimenting is ongoing but the set-up below gives pleasing results. Lower oil content has been found to be adequate at the low revs involved, and also seems to make motors easier to start and tune.

4 head shims (there are two thicknesses of these - using 2 thick and 2 thin allows fine-tuning), balanced 9x3.8 SF prop, 7% Nitro, 10% Oil (SuperTechniplate - 80% synthetic, 20% Castor), standard Cox head, 2-slit cylinder, Cox muffler, 4800 RPM. (5+ minutes on 5cc tank)

Some SF (*Slow Fly*) props are unbalanced as received. Correct this, as lack of balance causes shorter, inconsistent runs. I use a Cox muffler which extends the run a little and makes the motor bearable at close range. Note that NZ rules do not prohibit the making of a custom muffler, but if using a Cox product, the permitted muffler is shown below on the left. The Cox item on the right does have a muffling effect, but is primarily a throttle, which rules out its use.



Longer engine runs confirmed the need for a bigger model as it is ineffective to circle under power, killing the climb just to stay in view. A 55" span *Stardust Special* gives a visual target 12% wider than the *Playboy*, enough for a noticeable improvement in visibility at height. Area and required weight are increased only slightly due to its narrow chord. It flies well, but needs more attention on the glide than the *Playboy* which pretty much looks after itself. Next 1/2A Texaco model ... maybe going up to 60" wingspan?



A Kodak Moment from the 1960 US Nationals

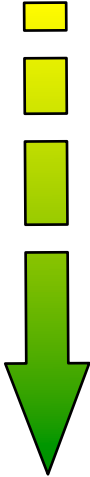


One in a million. Imagine trying to plan a shot of the rubber job just at the time the motor lets go. Our sympathies go to Art

Frost of St. Louis, but how about Mrs. Frost at the other end. Art tells us that because of the heat motor broke at 60% of turns.

So, You think it's Too Much Effort to get to the Nationals?

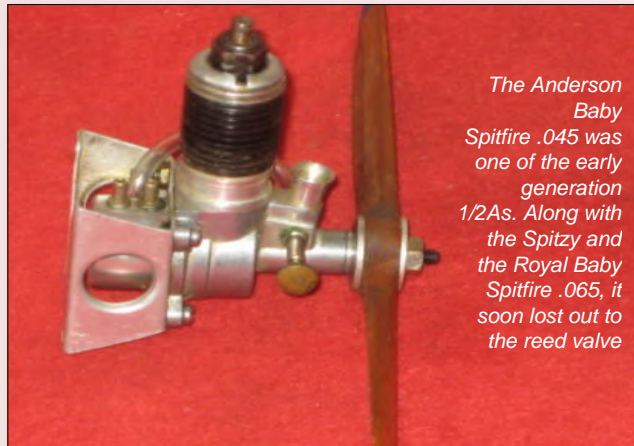
From the bulletin of SAM 270 in Perth comes evidence that distance is no stumbling block to keen Vintage Modellers. 4 Modellers, 41 Models, 8000 kilometres. Makes the trip to Clareville seem like a Sunday jaunt.



The journey begins with the packing and shipping of our models by road freight to Sydney the week before we set off. 41 aircraft were packed into timber crates and sent by road freight to a fellow aero modeller who's business is located in the outer suburbs of Sydney who has a warehouse and fork lift to unload the gear ready for us to collect. We then set off a week later at midnight by air and make the 5 hour flight from Perth to Sydney, arrive at 6am local time (time difference of two hours) coffee, regroup and taxi to the hire car company to pick up a large van suitable to transport our crates. A quick visit to one of our larger hardware stores for a shade shelter, chairs and bits and pieces then the 1 hour drive to collect our crates. Once collected a further 5 hours' drive to the country town of Canowindra central NSW.



Returning to the subject area of the first column of this series, it's time to revisit those 049s again, specifically in the era of their peak popularity during the mid to late 1950s and early 1960s when a bewildering array of 1/2A engines appeared on the market. Established 1/2A engine manufacturers expanded their ranges while existing manufacturers attempted to cash in on a lucrative toy and modelling market by expanding their existing ranges to encompass new small displacement engines. There were also a few rank outsiders who attempted to enter what seemed to be an insatiable demand for small cheap IC models and the engines that powered them.



The Anderson Baby Spitfire .045 was one of the early generation 1/2As. Along with the Spitzzy and the Royal Baby Spitfire .065, it soon lost out to the reed valve

As events would have it, it wasn't quite that simple. The cut-throat nature of the market at the wholesale and distributor level, particularly in the US, saw prices cut to as low as \$2.95. Many manufacturers left the 1/2A engine sector, or dropped out completely, as the 50s moved into the 1960s, leaving the 1/2A market in the hands of a small number of major players, largely Cox, WenMac and Herkimer (OK) in terms of market share. Among the well-known names to get 'burnt' by the fierce competition were respected manufacturers such as K&B, Atwood, Ohlsson and Rice, Holland, Fox and OS.

These were not fly by night enterprises but generally larger manufacturers with well-established ranges, producing quality products.



WenMac from 1952 - the design went through to the 1960s. Early models had pull cord starters, changing to the enclosed "Rotomatic" spring starter in 1957. Production in 1964 was 6000 engines per day.

The failure was not one of quality, generally speaking, but of failing to understand the nature of this sector of the market, relative to production economics and final selling



The Baby Mac was McCoy's first 1/2A offering and was quickly followed up by several other 049 models.

price. While 1/2A engines may be smaller than most and generally simpler in structure, the raw material costs are not particularly different to much larger engines. If anything, the machining and fits have to be even more precise to ensure easy starting, adequate wear and a reasonable operating life. The market would not pay more than \$2.95-\$4.95 for a sport 049 and not much more than \$6-\$7 for a factory tuned special - and few manufacturers could break even at these prices.



McCoy also experimented (as did OK) with diesel versions of their 1/2A motors. They used O-ring sealed contra-pistons which lacked the "feel" of conventional lapped diesels but which worked well enough in practice

The target market was predominantly impecunious 10-14 year old kids, starting out in C/L and F/F, usually purchasing with pocket money and flying on parks and school grounds. At the other end, parents and relatives purchasing RTF models (largely C/L) as birthday or Xmas present-at a reasonably premium price. The purchaser quite often was without any modelling background and the recipient often likewise.

The RTF's which looked so attractive in their packaging and were heavily hyped and promoted proved heavy and underpowered. They flew poorly, and were easily damaged in crashes as they were often made from injection moulded plastics. Naturally this meant a not only market for replacement airframe parts, just as occurs today with some lower cost RTF electric sport models, but also a ready market for cheap kits and plans suitable for engines rescued from the now defunct RTF models.

But it wasn't just planes - there were boats with inboard and outboard, air-cooled and water cooled options, and there were cars, prop driven or direct drive. The potential market was measured in millions. In the mid 1960s (probably the peak of the market) WenMac 049s were being manufactured at the rate of 6000 engines a day, a potential annual rate of over two million (though I doubt that was often achieved). Cox likewise was manufacturing several thousand engines a day.

Cox Thermal Hopper 049, here on homemade mount, was introduced in 1953. The later Space Hopper 049 arrived in 1959



This column deals with the various US offerings which appeared over the era-while the next will look at the UK and further afield.

Our first column looked at the genesis of the 1/2A engine category, starting with the tiny K&B Infant of late 1948. This

started the ball rolling and was followed in 1949 by Herkimer with their OK Cub 049 and Anderson with the Baby Spitfire 045. In 1950 came K&B and Atwood with their respective 049s. Notable is that all were existing engine manufacturers with well-established ranges and extensive production capacity. OK was known for their Super 60, .29 35 and smaller engines; Mel Anderson for his Spitfire; K&B for their various Torpedo engines; and Bill Atwood for his Atwood Champion. Venturing into this new arena posed less of a financial risk to established firms than to a manufacturer with no previous experience or market exposure.

Mid 1950s Allyn Sky Fury 049 which was also made in .060 and .074 displacements. It was the basis for the twin in the next photograph.

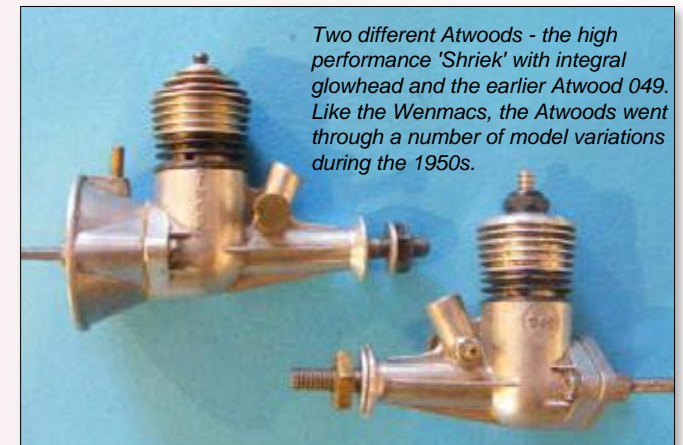


When the market proved unexpectedly robust, what followed was more or less a stampede as other manufacturers leap into the 1/2A area desperately seeking their share of what seemed to be a lucrative pie. Cox in 1952 (though Cox had been involved on the periphery earlier through his model car engine offerings); McCoy-with several models including diesels; Holland with several 049 models culminating in the superb Hornet 049 and 051 models. Even Ohlsson and Rice, by now a fading force as their spark motors did not transition well to glowplug operation and tended to blow the cylinders off when run as glowplug engines, got into the act with an 049



model in several variants both aero and marine. From the mid-50s on a new name. Allyn, appeared with a range of aero and marine glowplug motors with cylinder capacities of 049, 06 and 074. The 06 was never offered as single cylinder aero unit, only as an aero or marine in-line, alternate firing twin of .12 capacity. The inline twins were .099, .12 and .15 displacement depending on whether the 049, 06 or 074 cylinder units were used. Small, and light for their size, they were interesting technical achievements, but outclassed performance-wise by equivalent displacement single cylinder engines.

Two different Atwoods - the high performance 'Shriek' with integral glowhead and the earlier Atwood 049. Like the Wenmacs, the Atwoods went through a number of model variations during the 1950s.



Meantime, as with other areas of business, mergers, demergers and transfer of personnel went on. K&B merged with Allyn, Holland merged with Dynamic, Bill Atwood went to work for LeRoy Cox as his chief designer, Anderson and O&R gradually faded from a market which by the late 1950s was awash with 1/2A engines. The struggle for market share had resulted in retail prices as low as \$2.95! At pricing levels like this, only large volume sales made any kind of return. Some manufacturers retreated from the sector. Cox and AMF ('Wenmac'), attacked it head on with a continuously developed and improved range; OK continued to produce the same basic model with sporadic attempts at improvements; K&B merged with Aurora plastics and targeted the RTF/RTR 'toy' market from the late 50s, whilst maintaining their mainstream larger engine range for the 'serious' modelling market.

Curiously, one of the biggest names, Fox, stayed aloof and did not enter the 1/2A market until 1961, and whilst producing one of the best 049s of the era- in the form of the Fox 049 FAI Special of 1964, ceased production after barely a year. This engine was resurrected in the 1990s by a non-OEM seller. Having contracted to supply large

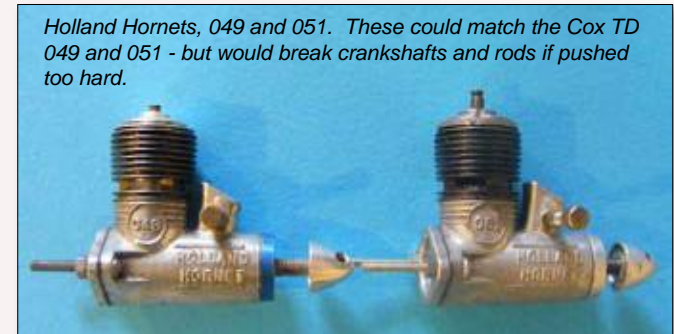


The very powerful Fox 049 FAI Special, only available in 1964. Similar in appearance to the Fox 049 but virtually every component, including the crankcase, was different. This example is fitted with a Galbreath radial mount.

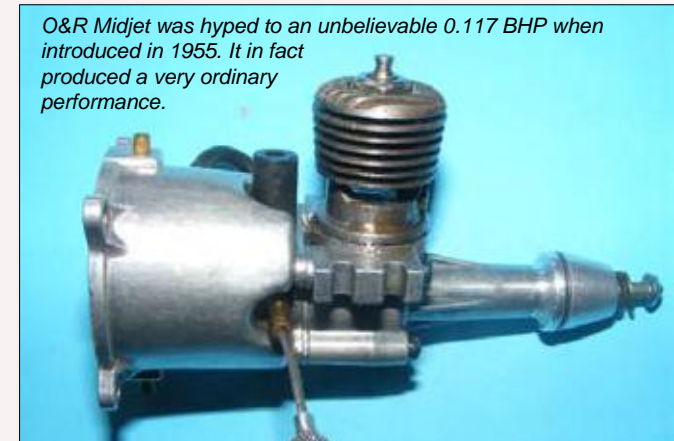
numbers of engines for Comet's range of RTF models Fox (and OK) were badly hit financially when Comet went bankrupt with large bills to suppliers unpaid. Fox managed to recover some stock from the debacle and machined the cases to remove the Comet logo before selling them-which is why many of the Fox 049 and 07 engines bear no identifying logo (see photos). K&B produced both the Tornado 049 and 06 'diaphragm' valve engines for Aurora RTF models. These were innovative designs with easy starting yet surprisingly good power. Later came the Stallion 049 - of equally good power but expensive to produce, and hence it didn't last long.

1961 was a momentous year-Cox introduced the Bill Atwood Tee Dee engines in .010, .020, .049 and .15 ranges - the .051 and .09 came slightly later. All set new standards for quality and performance and delivered a king hit to the market that few other manufacturers could cope with, and none compete with. Cox was now the dominant manufacturer in the 1/2A market both in quality and quantity, a dominance that was to last for over 30 years until the early 1990s.

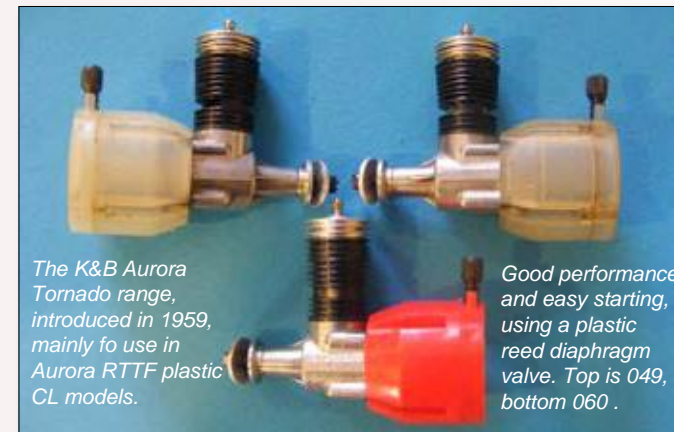
Several trends became apparent in the US 1/2A market as it evolved. Sport engines tended to be largely reed valve, while competition engines were front induction. The RTF 'toy' market generated the need for easy starting and with it spring starters - either the manual Cox style spring, or the automatic enclosed Wenmac and McCoy 049 type (also used on some versions of the K&B Stallion 049). Integral fuel tanks and radial mounts became the norm as well, also being offered as accessories for beam mount engines. Experience showed that the integral element glowhead was superior to the separate glowplug in these small sizes and by the late 1950s virtually every 1/2A engine on the market used an integral plug glowhead. History proves they were right, as anyone who has tapped out a burnt out glowhead to take a normal plug will testify - an instantly loss of up to 2000rpm on the same prop and fuel.



Holland Hornets, 049 and 051. These could match the Cox TD 049 and 051 - but would break crankshafts and rods if pushed too hard.



O&R Midjet was hyped to an unbelievable 0.117 BHP when introduced in 1955. It in fact produced a very ordinary performance.



The K&B Aurora Tornado range, introduced in 1959, mainly fo use in Aurora RTTF plastic CL models.

Good performance and easy starting, using a plastic reed diaphragm valve. Top is 049, bottom 060 .

The 1950-1965 American 1/2A era produced a number of milestones, many of which influenced small model engine design and contributed to the direction aeromodelling was to take. They popularized both C/L and small F/F models, as well as underpinning a number of competition classes such as PAA-Load, 1/2A power, Mouse racing and 1/2a Proto speed.

* 1952 : Reed valve induction in the Cox Space Bug and its subsequent adoption by a large number of manufacturers in the UK, Europe and Japan.

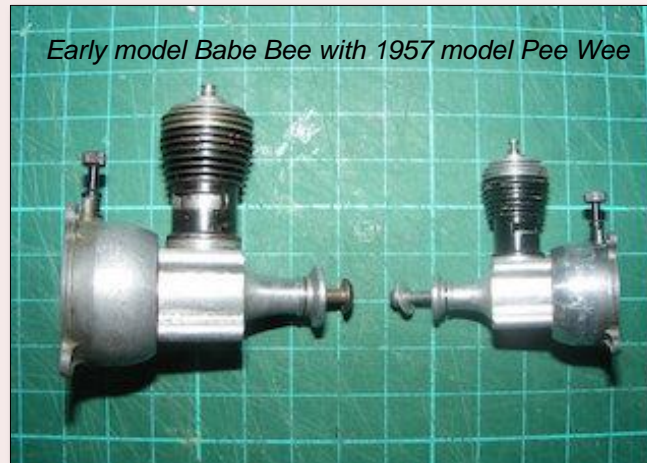
* 1956 : The Cox Babe Bee whose production in the millions over the next 40 years brought C/L. F/F and latterly small R/C models within the affordable reach of nearly everyone.



* 1957 : The Pee Wee 020. This miniature Babe Bee with a performance equal to the earlier 049s heralded in another quantum jump in model miniaturization. Unlike the earlier K&B Infant, the Pee Wee could fly a small C/L or R/C model with authority.

* 1950-60 : The Holland Hornets proved that you could equal Cox in the power stakes, albeit at the risk of engine self-destruction if pushed too hard.

* 1961 : The Cox Tee Dee series were revolutionary both for their design, their production quality, and their power output. Immediately become the most powerful engines available in their size class, and in the case of the .010 and .020, holding this position unchallenged for the entire time they remained in production.

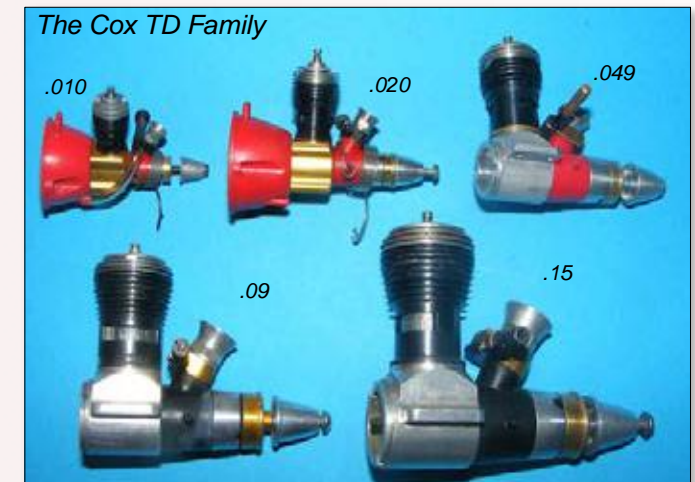


In terms of numbers, there was no comparison. Cox manufactured in the millions and was still able to maintain fits and quality until almost the end of production in 1996. Likewise-and largely unnoticed, OK engine manufacture also exceeded the million mark, though their quality was never in the same league as Cox and their advertising very low key. The secret to Cox's success was several fold:

- The extensive use of extrusions and billet stock rather than castings enabled continuous automatic production
- Manufacture using automatic screw and precision grinding machines keeping consistent tolerances
- Manufacture under tightly controlled conditions of temperature and humidity
- Component matching using air gauge testing, eliminating selective and batch grading of parts

Ironically, it was only when Cox ventured into the large engine market in the late sixties, where these precision techniques could not be similarly applied, with the

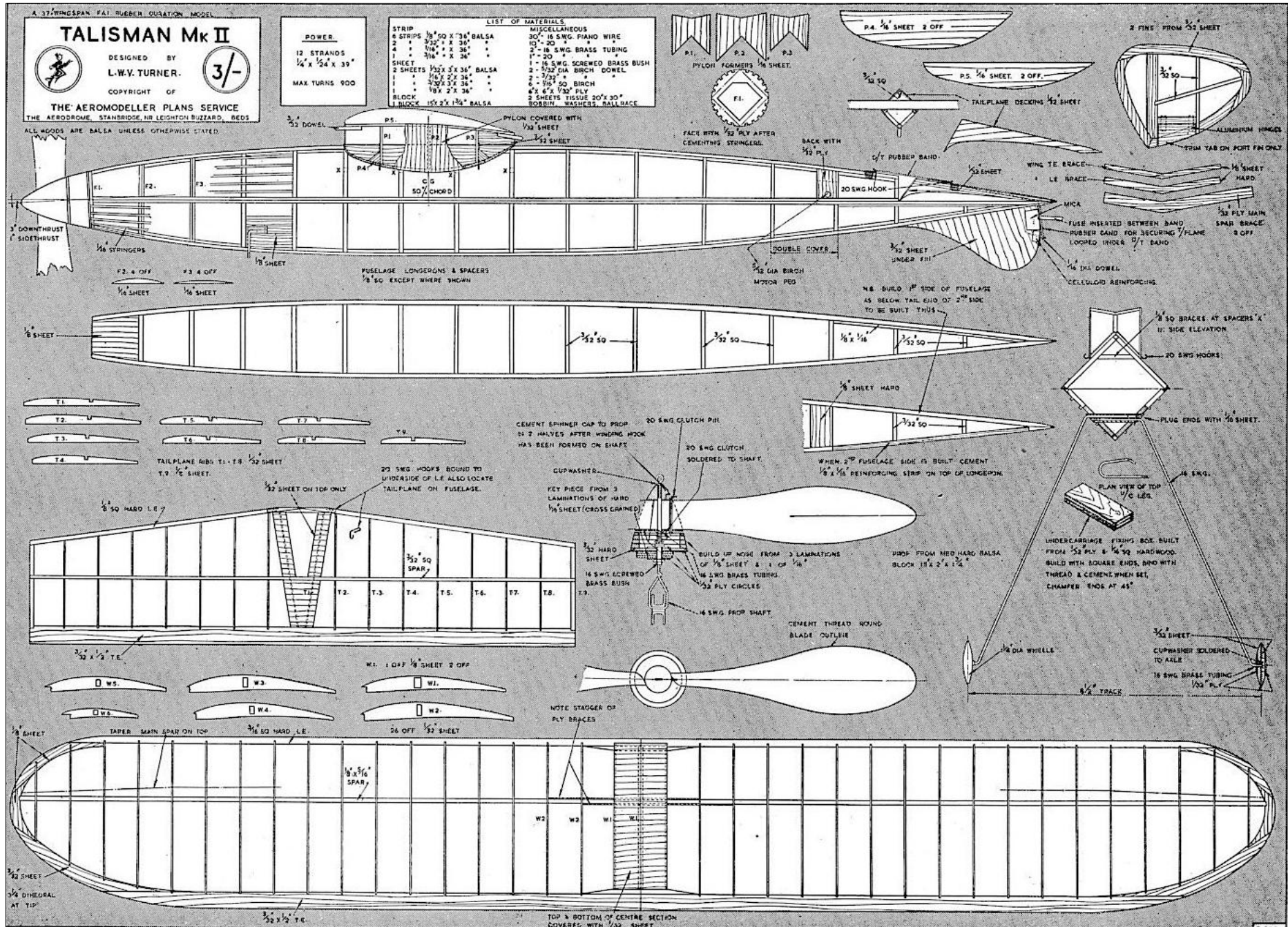
'Concept 35 and 40' front and rear induction engines that they badly miscalculated. These very innovative designs never made it on to the market through a combination of production cost and manufacturing difficulties. They did learn from the experience and produced the very good Cox Conquest in 1976, though this 'borrowed' many of the design features of the 1973 Taipan .15 Goldhead engine. Even then Cox paved the way for others by using a sintered iron piston, though this itself gave some problems and was not continued with (again ironic as many top AAC and ABC engines from Russia now use hi silicon alloy pistons which can only be produced by sintering).



In the next column we'll look at what was happening in other parts of the world over a similar period.

Thanks, again, to Chris for sharing another slice of his encyclopedic knowledge of the model engine world. The photographs in these articles are taken and provided by Chris and are, almost exclusively, of engines in his collection.

Editor.



I have always liked twin fins, vee dihedral, and spinnered diamond fuselages. The layout looks clean both visually and aerodynamically. I have built three *Talismans*, the first in 1952 at age 12. I found I had "bitten off more than I could chew" in the construction department. The airframe was within my capabilities but the propeller assembly wasn't. I substituted a single blade folder from a deceased model and went down to Grant's paddock full of high hopes. To my consternation, with the fins as drawn, the model was directionally unstable and untrimmable. I suspect that some sort of scaling error has crept in between the designer's sketches and the draftsman's plan. To fix the problem a third fin was added to the tailplane centre and while this worked it did nothing for the appearance of the model. At that stage I was terrified of breaking the rubber and shredding the fuselage so never put more than 340 turns on my one and only motor. The model would do a sedate 75 seconds every time. My abiding impression of model No.1 was that I had fallen down in the prop building department and should build another to get it right.

Model No.2 was built in 1954 when I managed to build the prop assembly more or less to plan. Once again the model needed a third fin to get any sense out of the flight pattern. A sudden diving turn to the right into the ground would happen quite often without the added fin area. I was never able to evaluate that model because on the second of its trimming flights at Rukuhia grass runway (now Hamilton International) at the 1954 Waikato Champs the model contacted light lift and cruised away toward the "Narrows" and Waikato River never to return. To say I was a bit peeved is an

understatement. 40 years went by during which I set up house in Auckland and acquired a Myford lathe. Tube winding had been introduced also and these 2 events will be loosely connected if model No.4 ever comes along. The plan shows propeller finished outlines but no block dimensions. I used Vern Grays Moffet block dimensions but instead of a straight leading edge and flare on the rear I chose a straight



Trailing edge and flare on the front. Having the lathe meant I could assemble all the spinner and noseblock laminations firmly glued together and glue on a chuck stub in place of the noseblock. With 1/64 ply facings and a soft balsa division between spinner and noseblock I could mount the whole thing in the lathe, drill a hole for the brass tube bushing and support the spinner on a tail mount centre. It was then a simple matter to shape the whole, part off the spinner, and scoop out the clutch recess. (I have roughish drawings of the layup available to anyone contemplating building the model).

On No.3, I determined to use only tip fins and increase the area to get a stable flight pattern. This took two goes and in the process I changed the rather weak and warp prone built up construction for light 1/16 sheet with a clear non-shrink finish. Final fin area is 11.6 square inches against the plan 8.4 square inches. I added the area to the top of the fin leaving the shape below the tail underside as shown on the plan.

The original model used 12 strands of 1/4 x 1/24 rubber 39 inches long (presumably Dunlop) taking 900 turns. In looking back over my notes I see that the main problem I have had with No.3 is stuffing enough turns into a tube small enough to fit down the fuselage nose aperture. (1 inch O.D.) I use 16 strands of 3/16 Sport rubber 36 inches long corded to fuselage length. This should take 970 turns but I can only get about 800 on before the tube is full of knots. The model does about 3min in neutral air and the motors last well at 80% turns. If there is ever a No.4 model I would widen the nose aperture to about 1 1/4 inches square and match it at the rear anchor. This would allow a larger tube and

either a bigger motor or more turns on the existing one. Some recontouring of the fuselage profile would be needed as a consequence.

The *Talisman* is a compact Wakefield size model which still flies steadily after 20 years, even with a freewheeling prop.

Main geometry :

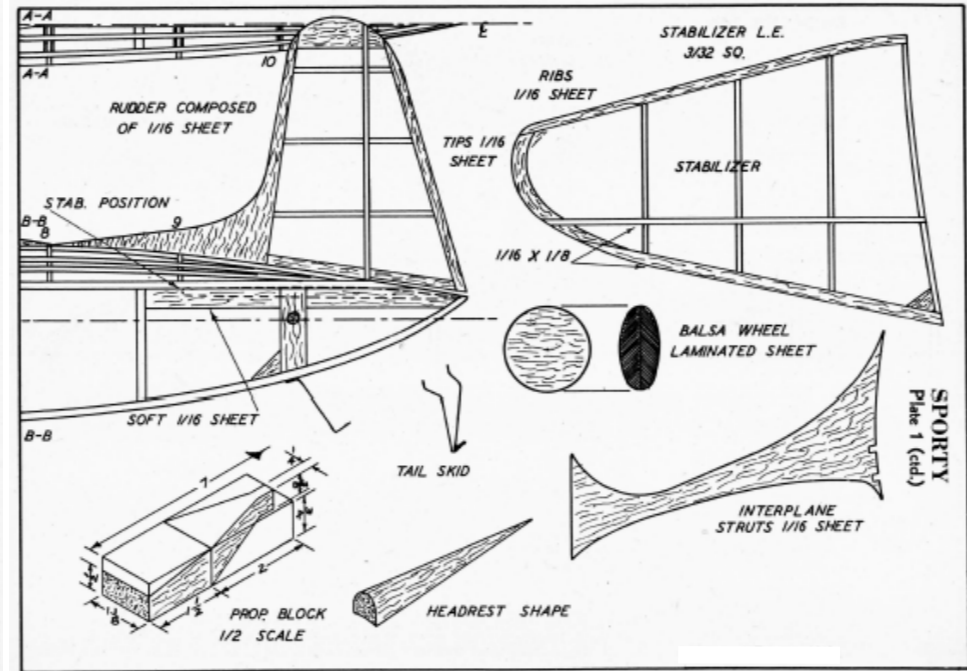
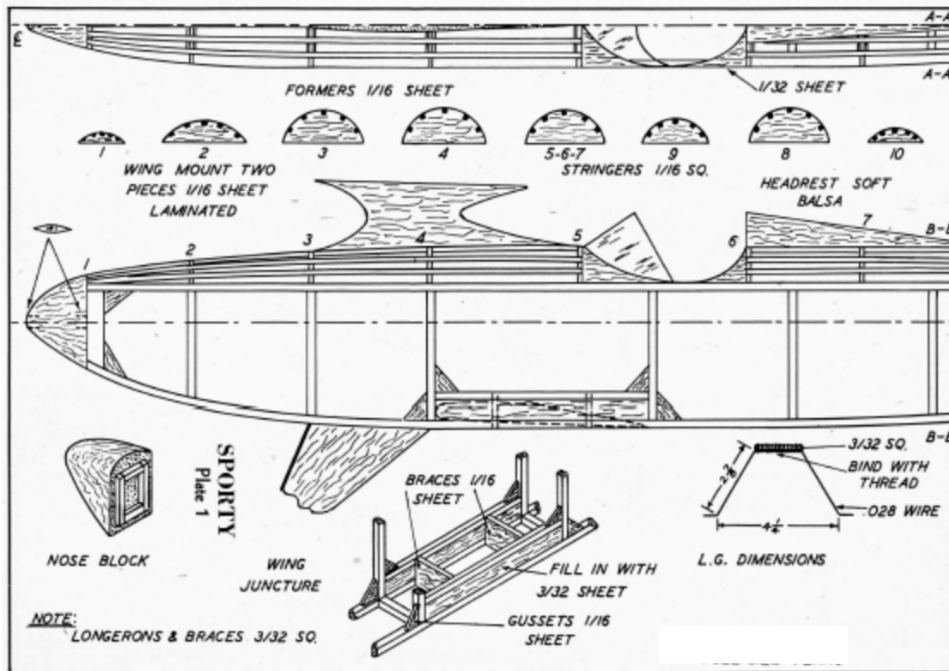
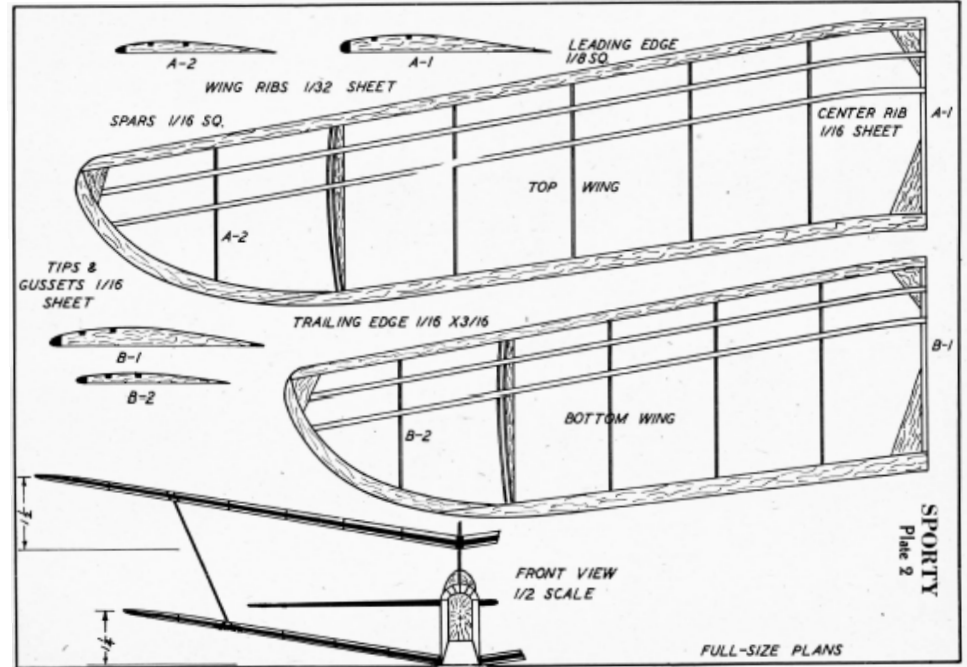
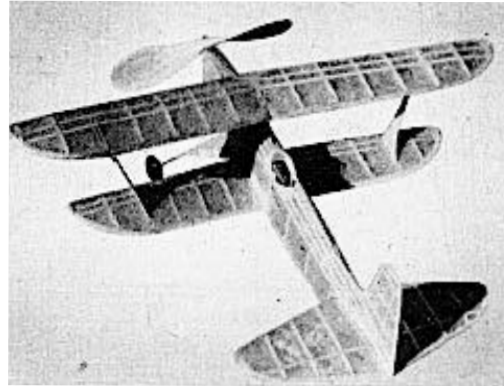
Elliptical tips 1/16 washout; Right hand main panel flat; Left hand main panel 1/16 washout; Tail flat; Trim tab 1/32 right; Thrust line, Wing incidence, and CG as per plan.

"Tired of run-of-the-mill rubber jobs? Then build this realistic biplane" urges the designer.

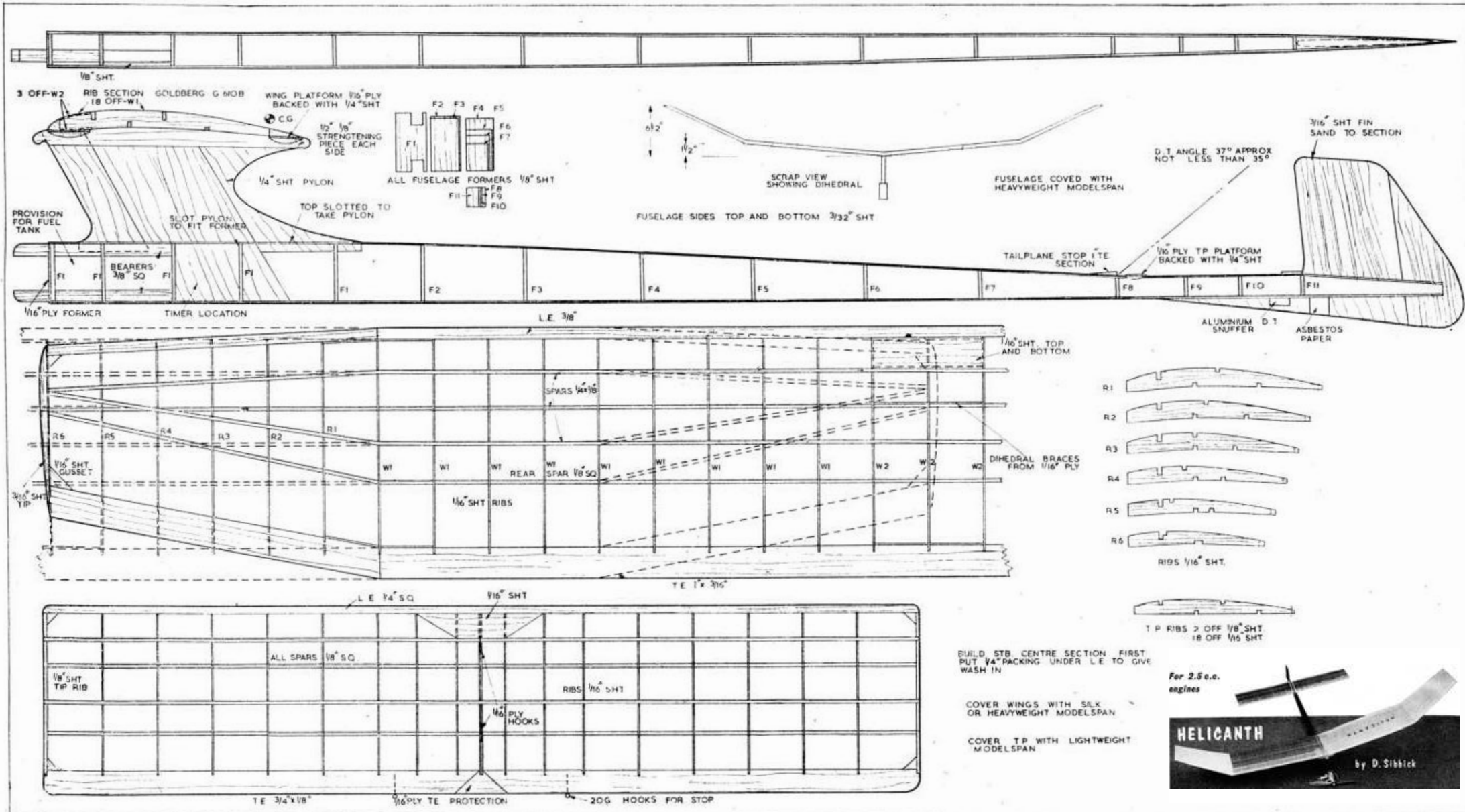
The wing tips hint at Fairey Swordfish, and the rudder outline might be from a 1930's cargo plane - scale it isn't, but it looks like it could be a great fun-flyer.

Perhaps the type of Vintage model to build in between the more demanding contest designs? No engine runs, maxes, or spot landings to worry about, just the thrill of a little rubber model wafting around on a calm evening.

Thanks to Graham Lovejoy who found the *Sporty* and provided the references.



An attractive but rarely built British design for FF Nostalgia Duration or conversion to RC Classical Duration



VINTAGE PRECISION

G.Meads	Lanzo RC-1	1934	Vint Champs	600 + 200
D.Gush	Miss Fortune X	1935	Nationals	600 + 199 +200
J.Butcher	Miss Fortune X	1935	Nationals	600 + 199 +197
B.Harris	New Ruler	1940	Nationals	600 + 198
G.Bradley	Lanzo RC-1	1934	Nationals	600 + 197
S.Warner	Spook	1940	Nationals	600 + 197
D.Mossop	Bomber	1938	Nationals	600 + 192
A.Knox	Lancer 45	1940	NDC Jun	600 + 192
A.MacDonald	Buzzard Bombshell	1941	Nationals	600
J.Danks	Gas Buggy	1939	Nationals	600

VINTAGE IC DURATION

B.Scott	Playboy Cabin	1941	Nationals	780
J.Butcher	Miss Fortune X	1935	Vint Champs	780
R.Anderson	Playboy	1941	Nationals	770
T.Christensen	Playboy	1941	Nationals	770
A.Knox			NDC	766
W.Cartwright	Bomber	1938	Nationals	764
D.Thornley	Bomber	1938	Vint Champs	764
G.Meads	Lanzo RC-1	1934	Nationals	754
A.MacDonald	Buzzard Bombshell	1941	Nationals	740
B.Treloar	Miss Fortune X	1935	Gareth Newton	732

VINTAGE E DURATION

B.Harris	Playboy	1941	Vint Champs	960 + 530
W.Cartwright	Top Banana	1950	Vint Champs	960 + 403
D.Gush	Miss Fortune X	1935	Nationals	960 + 215
K.Trillo	Stardust Special	1941	Vint Champs	950
B.Scott	Buzzard Bombshell	1941	Nationals	949
S.Lightfoot	New Ruler	1940	Vint Champs	940
R.Anderson	Anderson Pylon	1937	Nationals	922
D.Mossop	Playboy	1941	Nationals	905
A.Knox	Scram	1938	NDC Apr	896
J.Butcher	Miss Fortune X	1935	Vint Champs	839

VINTAGE 1/2A TEXACO

M.Evans	Miss Philly.VI	19--	Nationals	1500 + 597
A.Knox	Skipper	19--	NDC Feb	1500 + 513
R.Anderson	Playboy	1941	Nationals	1500 + 283
M.Venter	?		NDC Feb	1460
B.Scott	Playboy	1941	Nationals	1445
J.Butcher	Texaco '39	1939	Tuakau	1400
A.Baker	Slicker	1948	NDC Feb	1330
W.Cartwright	Airborn	1938	Nationals	1240
C.Warren	Bomber	1938	Nationals	1211
J.Selby	Playboy	1941	Gareth Newton	1195

VINTAGE 1/2E TEXACO

W.Cartwright	Arrow Nut	1949	Nationals	1480 + 1554
J.Butcher	Miss Fortune X	1935	Vint Champs	1480 + 1416
K.Trillo	Stardust Special	1941	Tuakau	1480 + 1414
R.Anderson	Tomboy	1950	Vint Champs	1480 + 1286
B.Spenser	Slicker	1948	Vint Champs	1463
B.Scott	Tomboy	1950	Nationals	1422
G.Main	Tomboy	1950	Tuakau	1379
M.Evans	Brigadier	1941	Vint Champs	1354
A.Sissons	Coronet	1941	Gareth Newton	1282
D.Gush	Tomboy	1950	Nationals	1164

VINTAGE A TEXACO

J.Butcher	Lanzo RC-1	1934	Tuakau	1860
S.Grant	Simplex	1941	NDC Jun	1840
C.Warren	So Long	1941	Nationals	1838
B.Scott	Simplex	1941	Tuakau	1785
I.Munro	Simplex	1941	Gareth Newton	1773

G.Main	Simplex	1941	NDC	1671
J.Bradbury	Viking	1940	Gareth Newton	1534
R.Anderson	Cloud Snooper	1940	Nationals	1523
D.Richards	Junior 60	19	Nationals	1376
B.Treloar	Playboy	1941	Gareth Newton	1230

VINTAGE E TEXACO

R.Anderson	Kerswap	1942	Tuakau	1860 + 1030
J.Butcher	Miss Fortune X	1935	Vint Champs	1860 + 560
K.Trillo	Stardust Spec.	1941	Vint Champs	1860 + 535
A.MacDonald	Eight Ball	1949	Nationals	1860
T.Gribble	Bomber	1938	Tuakau	1860
W.Cartwright	Cruiser	1937	Tuakau	1853
D.Crook	Bomber	1938	Nationals	1852
D.Baunton	Miss Arpiem	1938	Vint Champs	1354
M.Evans	Miss Trenton	1938	Nationals	1074

VINTAGE OPEN TEXACO

I.Munro	TD Coupe	1936	Nationals	1825
B.Scott	Playboy Cabin	1941	Nationals	1492
J.Butcher	Lanzo RC-1	1934	Nationals	1340
D.Gush	Miss Fortune X	1935	Nationals	1332

VINTAGE RUBBER TEXACO

D.Gush	Rocket Stick	19	Tuakau	1860 + 866
W.Cartwright	Lanzo D	19	Vint Champs	1860 + 863
J.Butcher	Gollywock	1944	Tuakau	1860 + 721
D.Baunton	JA Skokie	19	Vint Champs	1722
G.Main	KK Gipsy	1946	Tuakau	1547
B.Scott	Lanzo Duplex	1937	Nationals	183

CLASSICAL PRECISION

B.Harris	Humbug	19	Vint Champs	594
D.Thornley	Satellite 1000	1972	Vint Champs	590
D.Mossop	Super 60	1961	Vint Champs	571
G.Main	Gigi	1964	NDC Apr	528

CLASSICAL IC DURATION

W.Cartwright	Amazoom	1955	Nationals	858
D.Thornley	Satellite 1000	1959	Nationals	857
B.Scott	Starduster 600	1959	Nationals	840
E.Pimm	Tequila	19	Nationals	836

CLASSICAL E DURATION

D.Mossop	Texan FAI	1961	Nationals	900
B.Scott	Frisco Kid	1955	Nationals	867
W.Cartwright	Nig Nog	1961	Nationals	802
J.Warner	Texan FAI	1961	Nationals	761
G.Main	Gigi	1964	NDC May	760
B.Harris	Cizek Stardust	19	Nationals	732
M.Evans	Skymaster	19	Nationals	626

TOMBOY IC and Internation

R.Anderson	Doonside		Vint Champs	1432
J.Godfrey	Mills.75		Vint Champs	855
C.Warren	Mills.75		Tuakau	835
R.Bain	Mills.75		Vint Champs	755
L.Rodway	MP Jet .06		NDC May	592
B.Leeves	Mills.75		03/05	224

TOMBOY E and International

R.Anderson	180 / 2S		Vint Champs	1782
B.Spencer	180 / 2S		Vint Champs	1442
K.Trillo	180 / 2S		Tuakau	1231
L.Rodway	180 / 2S		NDC May	1026

FINAL FREE FLIGHT LEADER BOARD for 2015



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
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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
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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
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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
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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
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CLASSICAL GLIDER

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

R.Bain	14 Mar	540
B.Scott	03 Jan	364
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CLASSICAL RUBBER

L.Vincent	03 May	485
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Mr FRANCIS BIRTLES, portrayed here in lifelike SEPIA, anticipating the FORTHCOMING NATIONALS begs to inform FREE FLIGHTERS that HE and HIS sturdy VELOCIPEDA may be hired for the PURPOSE of LOCATING and RETRIEVING wayward models at a MODEST FEE, all with FULL ASSURANCE that these tasks will be performed with the UTMOST DILIGENCE by Mr BIRTLES, an EXPERIENCED PRACTITIONER of the velocipedal arts, HIMSELF.



Laser Cutting Service from Avetek Limited

Gwyn Avenell of Avetek Ltd offers a new service that could be of interest to many Vintage builders. He is able to laser-cut ribs, curved pieces and formers from balsa or ply. He needs (preferably) a good-quality pdf or a reasonable print of a plan, either of which he can scale to any size you wish. He will modify wood sizes to the sizes we have available in NZ.

The short-kits that he supplies are essentially equivalent to the ones available from Bob Holman and Belair, but on a custom basis. Gwyn will also assess the strip (balsa/spruce) and sheet required to complete the model and provide a pack of these materials if you wish. This service is, of course, available for any balsa/spruce/ply design – not only vintage

Contact Gwyn at aveteknz@gmail.com or 09 298 4819 to arrange a quote for your project – the short-kit with or without a pack of strip and sheet.

FOUND ... and FOUND AGAIN



Issues of **South Island News** sought for scanning have now been obtained, but not without some postal rigmarole. Copies sent by Chris Murphy on 9th December went astray in the pre-christmas postal mayhem and did not turn up until 25th January. In the meanwhile, the editor of SIN, Paul Lagan, was able to supply most issues. These have been scanned and are available in PDF format. Send a USB drive or SD card of at least 2GB and a SAE to the Editor at the address on the cover.

Upgrade your Radio Gear before the Nationals

(Note: These are early publicity photographs. The latest **fully-insulated** transmitter casing now means that gloves, a getaway horse, and coy posing are no longer requirements of safe operation).

"WHY
HORSE
AROUND...

... WITH ANYTHING LESS
THAN THE
FINEST?"

AVAILABLE AT YOUR DEALER, OR ORDER DIRECT
\$395.00 COMPANY STORE
CALIF. RESIDENTS ADD 4% TAX. Sorry, No C.O.D.'s.
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inc.

PROVEN RELIABILITY (and a price under \$400)

AVAILABLE AT YOUR DEALER,
OR ORDER DIRECT
DEALER INQUIRIES INVITED

MICRO-AVIONICS, INC.
346 E. FOOTHILL BLVD. ARCADIA, CALIFORNIA

ACCESSORIES

ALUMINUM (See Tubing and Wire):

Sheet aluminum .006 in. thickness.....	6 in. x 4 in.....	ea.	\$0.05
.006 in. thickness.....	12 in. x 12 in.....	ea.	.20
.006 in. thickness.....	12 in. x 24 in.....	ea.	.40
.010 in. thickness.....	6 in. x 4 in.....	ea.	.06
.010 in. thickness.....	12 in. x 12 in.....	ea.	.25
.010 in. thickness.....	12 in. x 24 in.....	ea.	.45

BALSA:

Balsa wood varies considerably in density and grade. Formerly balsa trees grew wild but now it is cultivated giving a much better grade. We handle grade A from the cultivated stock.

SHEETS

1/32 in. x 2 in. x 36 in.	ea.	\$0.10
1/16 in. x 2 in. x 36 in.	ea.	.10
1/16 in. x 3 in. x 18 in.	ea.	.12
1/8 in. x 2 in. x 36 in.	ea.	.15
1/8 in. x 3 in. x 18 in.	ea.	.15
3/16 in. x 2 in. x 36 in.	ea.	.18
1/4 in. x 2 in. x 36 in.	ea.	.25
1/2 in. x 3 in. x 24 in.	ea.	.35

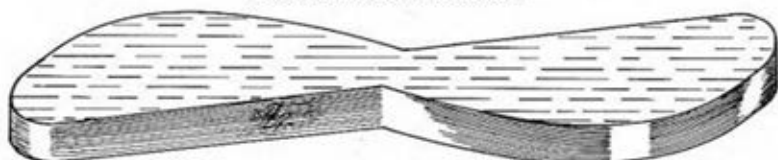
PROPELLER BLOCKS

We have arranged the propeller blocks according to pitch. For twin-pushers and where power is required use low pitch. For general outdoor models use medium pitch. Order high pitch for indoor duration models. Order by number.

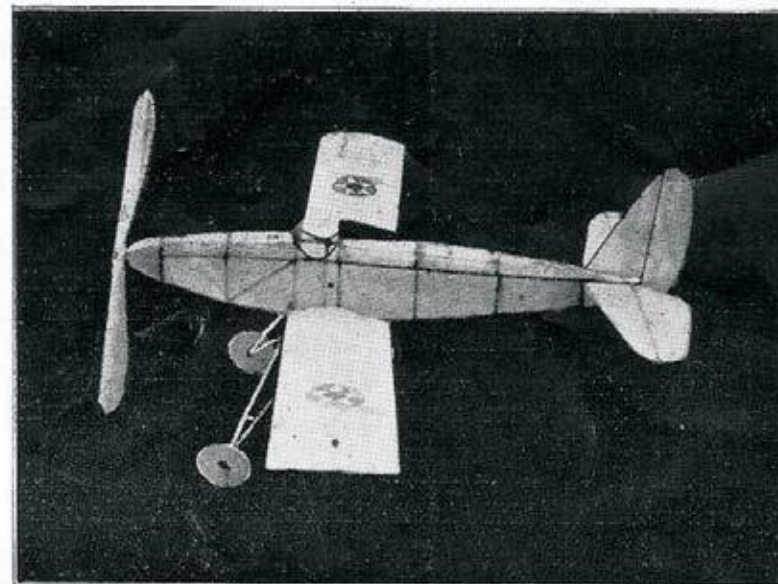
Length	LOW PITCH			MEDIUM PITCH			HIGH PITCH		
	No.	Size	Price	No.	Size	Price	No.	Size	Price
6"	1	1/2"x3/4"	3c	2	1/2"x3/8"	2c	3	5/8"x3/8"	3c
7"	4	3/8"x3/4"	4c	5	5/8"x3/4"	4c	6	3/4"x3/4"	5c
8"	7	3/4"x1 1/4"	6c	8	3/8"x1 1/4"	6c	9	3/8"x3/8"	5c
9"	10	3/8"x1 1/4"	7c	11	1 1/8"x1 1/4"	7c	12	3/8" x 3/8"	6c
10"	13	3/4"x1 3/8"	7c	14	3/4"x1 1/4"	7c	15	1 1/8"x1 1/4"	9c
11"	16	3/8"x1 3/8"	7c	17	1 1/8"x1 3/8"	8c	18	1"x1 3/8"	9c
12"	19	5/8"x1 1/4"	8c	20	3/4"x1 1/2"	10c	21	1 1/4"x1 1/2"	14c
13"	22	5/8"x1 3/8"	9c	23	3/4"x1 3/8"	10c	24	1 1/4"x1 3/4"	17c
14"	25	3/4"x1 3/4"	17c	26	1"x1 3/4"	18c	27	1 3/8"x1 3/4"	20c
15"	28	3/4"x2"	20c	29	1"x2"	22c	30	1 1/8"x1 3/4"	23c

Helicopter Propeller Blocks Pair, 10c

PROPELLER BLANKS



6 in.	10c	10 in.	18c
8 in.	14c	12 in.	20c



THE DART

Length overall — 16 1/2 in. Wing span — 24 in.

A dandy flyer. Can be assembled in a surprisingly short time by the average boy. This model is scientifically designed and will give excellent results indoors or outdoors. Can be hand launched or will take off from the ground. Wings are detachable and will not break upon striking any object.

Kit contains complete instructions and blueprints, balsa strips and parts cut to correct dimensions, ribs printed on rib veneer, wheels, wire parts, insignia, washers, Japanese tissue, etc. Packed in attractive individual boxes.

CONSTRUCTION SET \$1.25 postpaid



Free Flight Notices

SATURDAY !!

..... not Sunday

67th Waikato Free Flight Champs

Saturday April 16th 2016

9:00 am - 2:00 pm Piako Road

\$5 Field Fee Liquid 1st Place prize for FF events

- | | | | |
|---------------------------------------------|---------|---------------|---------|
| 1. Open Combined | 3 x 120 | 2. 1/2A | 3 x 120 |
| 3. Kennedy Precision | 3 x 120 | 4. P-30 | 3 x 120 |
| 5. HLG / CAT | 6 x 60 | 6. Kiwi Power | 5 x 120 |
| 7. RC Tomboy IC or Electric (2S, 180mA max) | | | |

Fly-offs at 2:30 CD : Bernard Scott scott.scott@xtra.co.nz

INDOOR at MORRINSVILLE

Early notice that Stan Mauger will be running indoor flying days on 15th May and 9th October. Details in the next issue

Waikato Nostalgia Free Flight Champs

Saturday May 7th 2016

9:00 am - 2:00 pm Piako Road

\$5 Field Fee Liquid 1st Place prize for FF events

- | | | | |
|---------------------------------------------|---------|--------------|---------|
| 1. Power | 3 x 120 | 2. Rubber | 3 x 120 |
| 3. Glider | 3 x 120 | 4. Precision | 3 x 120 |
| 5. HLG / CAT | 6 x 60 | | |
| 7. RC Tomboy IC or Electric (2S, 180mA max) | | | |

Models for 1-5 may be from Vintage, Nostalgia or Classical periods
Fly-offs at 2:30 CD : Bernard Scott scott.scott@xtra.co.nz