

THE VOICE OF CONTROL LINE
AEROMODELLERS FROM
AROUND AUSTRALIA

Number 42



Produced by the Victorian Control Line Advisory Committee

March 2001
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**Copy Deadline for next issue is:
Wednesday 21st March 2001
PRODUCTION SPECIFICATIONS**

Please remember when submitting copy that if you have access to a PC, or suitable typewriter you can save me retyping by giving me your items pretyped, and please use a good black ribbon for best reproduction.

Best of all is to send it on a 3.5" disk as a Windows Write, Word for Windows, or as an ASCII TEXT FILE or use Email

Contest results should be tab delimited, ie use a single tab between each column of results, if submitted by disk. This makes formatting much easier on the editor. Harry Bailey. 37 Thompson Street. Clayton VIC. 3168.

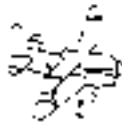
Telephone (03) 9543 2259.

Fax is also available on (03) 9511 0171 but please notify before sending to ensure fax is active.

Email address:- acln@ozemail.com.au



COMING EVENTS



CONTROL LINE CONTEST CALENDER 2001

FEB 4	Simple Rat race, Simple Goodyear.	SMAC
FEB 18	FAI & Combined Speed, 1/2 A Combat, Mini Goodyear.	CLAMF
FEB 25	Classic Stunt, Vintage Stunt, Class 2 Team race.	KMAC
MAR 11	Hand Launched Glider.	SMAC
MAR 18	FAI Team race, Goodyear, Simple Rat race.	CLAMF
MAR 25	FAI, Novice & Jnr Aerobatics, Vintage "A" Team race, Classic "B" Team race.	KMAC
APR 8	Simple Combat.	SMAC
APR 13,14, 15,16	Victorian Control Line State Championships.	KMAC/CLAMF
APR 21 - 27	54 th Australian National Championships. Busselton, W.A.	
APR 29	FAI (Yeoman), Novice & Jnr Aerobatics. Vintage Stunt.	KMAC
MAY 6	Vintage "A" Team race, Aust "A" Team race.	SMAC
MAY 20	FAI & Combined Speed, Triathlon (Artmil Trophy), 1/2 A Team race.	CLAMF
MAY 27	FAI, Novice & Jnr Aerobatics, Classic Stunt, Simple Rat race.	KMAC
JUNE 10	Balloon Burst, Limbo.	SMAC
JUNE 17	FAI Team race, Goodyear, 1/2 A Combat, FAI & Modified Combat.	CLAMF
JUNE 24	FAI, Novice & Jnr Aerobatics, Combined Speed, Vintage "A" Team race.	KMAC
JULY 8	Simple Rat race (whipping permitted)	SMAC
JULY 15	FAI & Combined Speed, Jnr 2.5cc Combat, Mini Goodyear, Jnr 2.5cc Rat race.	CLAMF
JULY 22	FAI, Novice & Jnr Aerobatics, Class 2 Team race, Vintage Stunt.	KMAC
AUG 12	Simple Combat.	SMAC
AUG 19	FAI Team race, 2.5cc Rat race, 1/2 A Combat, Combined Speed.	CLAMF
AUG 26	FAI (Stuntmasters), Novice & Jnr Aerobatics, Vintage "A" Team race, Classic "B" Team race.	KMAC
SEPT 2	Classic Stunt, Vintage Stunt, Aust "A" Team race, Classic "B" Team race, Simple Combat.	Warragul
SEPT 9	Vintage "A" Team race, Aust "A" Team race.	SMAC
SEPT 16	FAI & Combined Speed, Simple Rat race, 1/2 A Team race.	CLAMF
SEPT 23	FAI, Novice & Jnr Aerobatics,	

NOTE - Classic Stunt, Bendix. KMAC
All SMAC events to be held at KMAC flying field. All events at KMAC except Aerobatic events to be run by CLAMF, DAC & SMAC members.

Events will be flown in order of printing. Events in **Bold type** will be flown over hard surface

CLAMF Frankston Flying Field, Wells Rd, Seaford (Melway 97J10), 10.30am start
Contact :- G. Wilson (03) 9786 8153,
Events conducted by CLAM.F at the KMAC Field (Melway 72 K9) 10.00am start.
Contact :- H. Bailey (03) 9543 2259
KMAC Stud Rd . Knoxfield (opposite Caribbean Gardens) (Melway 72 K9) 10.00am start
Contact :- T. Matthews (03) 9560 0668.
SMAC Contact :- Reeve Marsh (03)9776 5949
WMAA Horsham. Contact :- V. Cresp (03) 5382 4065
BRCAC Bendigo-Newbridge Rd . Marong
Contact :- S. Power 03 54 424 925

Competitors at CLAMF competitions are reminded that events **start at 10.30a.m.** and they should be ready to begin at this time.



THE FOLLOWING PROGRAMME IS OPEN TO ALL MEMBERS OF THE MODEL AERONAUTICAL ASSOCIATION OF AUSTRALIA (M.A.A.A.)
LOCATION OF FLYING FIELDS

(ALL EVENTS START 9 am UNLESS OTHERWISE NOTED)

TAMWORTH MAC: CONTACT LEN SURTEES 02 67-61 8508
R.E.M.A.C.: PETER BOARD HIGH SCHOOL, WICKS RD.,
S.S.M.E.: LUDDENHAM ROAD, LUDDENHAM.
K.M.F.C.: ST. IVES SHOWGROUND, MONA VALE ROAD, ST. IVES.
S.A.T.: KELSO PARK, HENRY LAWSON DRIVE
I.M.A.C.: BIRKLEY ADJACENT TO FREEWAY.
MUSWELLBROOK M.F.C.: MITCHELL HILL FIELD, NEW ENGLAND HWY., MUSWELLBROOK.
DOONSIDE M.F.C. : EASTERN CREEK RACEWAY OFF REEN ROAD, BLACKTOWN
NARROMINE: CONTACT STEVE BAKAC 02 68 89 2501
CLAS CONTACT MIKE COMISKY 02 9605 2062

CLAS Contest Calendar 2001

Sun 18 Feb	KMFC	F2B Aerobatics
Sun 25 Feb	Illawarra	F2B Aerobatics
Sat 3 Mar-Sun 4 Mar		Hunter Valley Championships
Sun 11 Mar	Werrington MFC	
		F2B Aerobatics & Classic Stunt
Sun 25 Mar	SSME	Vintage A T/R ,Phantom T/R, Bendix
Sun 1 April	KMFC	Classic/Vintage Stunt, Simple Rat Race, Bring /Buy & Swap Meet
Fri 13-Mon 16 April		Victorian State Championships
Sun 6 May	KMFC	Palmer/Aldrich Classic Stunt + Vintage
Sun 13 May	SAT	F2B Aerobatics

Sat 9 Jun -	
Mon 11 Jun	Queensland State Championships
Sun 24th June	SSME F2B Aerobatics
Sun 15 Jul	KMFC AGM + 2.5 Stunt, Slow Combat, F2CN [Simple FAI]
Sat 21 July	REMAC All American [de Bolt] Vintage Stunt
Sat 28 July	SSME Vintage 1/2A & B T/R . Goodyear. Com. Speed
Sun 29 July	SSME Phantom & Vintage A T/R + Bendix
Sun 12 Aug	KMFC F2B Aerobatics
Sun 9 Sept	KMFC Classic Stunt + Vintage Stunt
Sun 16 Sept	Illawara F2B Aerobatics
Sat 29 Sept-	NSW
Sun 30 Sept	State
Mon 1 Oct	Championships
Sat 13 Oct	REMAC Duke Fox Memorial Vintage Stunt
Sun 18 Nov	SAT F2B Aerobatics
Sun 18 Nov	KMFC Vintage 1/2A & A & B Team Race
Sun 25 Nov	SSME F2B Aerobatics
Sun 9 Dec	KMFC Christmas Party & Fun Fly

Dates and events subject to change.

For further information contact CLAS Secretary:

Guy Bevan: 2 Kamilaroi Road Bayview NSW 2104

Fax/phone 9979 9595 Mobile 0412 465 802

Email: guybevan@hotmail.com

For regular updates and contest news get your name on the CLAS email list

Send address to guybevan@hotmail.com

Queensland Control Line Events Calendar

DATE	Year 2001	FIELD
Feb 11	Round 1 CLASII Rat Yearly Competition FAI Combat, 36 Slow Combat	CLASII
March 11	Round 2 CLASII Rat Classic B T/R Mouse T/R 2.5cc Combat	CLASII
April 8	Round 3 CLASII Rat Bendix T/R Mini Goodyear T/R Aerobatics	CLASII
May 13	Round 4 CLASII Rat Scale Fly In	CLASII
June 9 -11	Qld State Championships	ALC




Super Tigre G 21/35 (combat) twin ball race crankcase.
and a Tiapan 15 Gold head crank shaft.

Bob Fry 08 93626370

bob.fry@wpcorp.com.au

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*Stuart I
Sberigck*

- ★ Minimum induced loss computer designed propellers
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F2ACW01	6 X 6.2	Bendix01 9 x 6
F2ACW02	6 X 6.3	Bendix02 8.5 x 6.5
F2ACW03	6 X 6.4	
F2C04	6.3 X 6.1	
F2C05	6.3 X 6	Supercool
F2C06	6.8 X 5.8	



Can you find room to publish this incomplete list of Nationals Stunt Winners in the next ACLN? It is part of a tribute to these flyers. David Kidd has asked for help in finding details of all the original winners and placegetters and their models. They are being displayed, along with a number of photos, on the Control Line Aircraft in Australia website. <http://www.dkd.net/clmodels/>

He is also looking for more old photos of the models used by the placegetters. So it would be great if we could make an appeal to readers to help fill in the details by either e-mailing David at ddk@ddk.net or writing to him at 106 Pallas Street, Maryborough, Qld, 4650.

It requires modelers with a clear and elephant like memory or just access to old issues of Airborne, Model News or Australian Model Hobbies, which dates back more than 50 years.

Regards, John Hallowell.

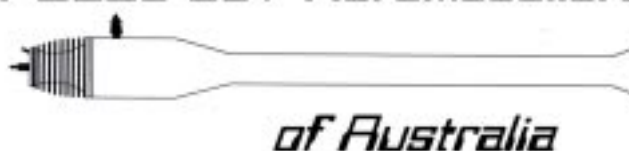
Venue	Placings
1950	1
West Beach	2
SA	3

1951	1 Reg Cooper /
Camden	2
NSW	3
1952	1
Bendigo	2
VIC	3
1953	1 C Munro /
Toowoomba	2
QLD	3
1954	1 K Spry /
Mallala	2
SA	3
1955	1 K Castle /
Archerfield	2
QLD	3
1956	1 John Crockett / Dragon Wagon
Traralgon	2 Norm Sutcliff / / Sabre 35
VIC	3 Tony Farnan / Socks / OS 29
1957	1 Bob Hyde / Thunderbird / OS 35
CampbellTown	2 Tony Farnan / Ramrod / OS 29
TAS	3 Ian Wright / Ramrod / OS 29
1958	1 Bob Hyde / Thunderbird / OS 35
Camden	2 Tony Farnan / Thunderbird / OS 29
NSW	3 Ken Taylor / Thunderbird /
1959	1 Tony Farnan /Thunderbird / OS 29
Gawler	2 Tom Prosser / Comanche /
SA	3 Ken Taylor / Kismet / OS 35
1960	1 Doug Harlow / Nobler / OS 35
Rosewood	2 Paul Turner / Comanche / OS 35
QLD	3 Ken Taylor / Kismet / OS 35
1961	1 Doug Harlow / Comanche / OS 35
Echuca	2
VIC	3
1962	1 Paul Turner / Thunderbird / OS 35
Camden	2 Doug Harlow / Own Design
NSW	3 Ken Taylor / Shark / Enya 45
1963	1 Ken Dowell / Angelique / Merco35
Strathalbyn	2 Ken Taylor / Shark / Enya 45
SA	3 Reg Towell /Thunderbird / Merco35
1964	1 Ken Taylor / Shark / Fox 59
Melbourne	2 Brian Birch / Imperial / Merco
VIC	3 Darryl Hartshorne /
1965	1 D Hartshorne / Angelique /Merco35
Canberra	2 Ken Taylor / Shark / Fox 59
ACT	3
1966	1 Ken Taylor / Shark / Fox 59
Strathalbyn	2
SA	3
1967	1 P Smith / Crusader / Veco 35
Northam	2 Theo Georgiadas / Shark / Merco 49
WA	3 Len Armour / Lasher / Glo Chief 49

1968	1 Ken Taylor / Shark / Merco35
Warrnambool	2
VIC	3
1969	1 Dallas Hannah /
Wallacia	2 W Sutton /
NSW	3 Reg Towell /
1970	1 Paul Turner / Windwagon / Fox 35
Strathalbyn	2 John Tidey / Supermaster
SA	3 Dallas Hannah / Supermaster
1971	1 Peter Smith / Sleever / Veco 35
Northam	2 Gary Bourne / Angelique /
WA	3 Len Armour / Lasher / Glo Chief 49
1972	1 Paul Turner / Windwagon / Fox 35
Geelong	2 John Tidey / Supermaster
VIC	3 Peter White / Supermaster
1973	1 Paul Turner / Windwedge / Fox 40
Amberly	2 Peter White /
QLD	3 B Hampton /
1974	1 John Tidey /
Camden	2
NSW	3
1975	1 Doug Harlow / Atlantis / Enya45
Loxton	2 Dave Campbell /
SA	3 Lindsay Hall /
1976	1 Doug Harlow / Atlantis / Enya45
Bunbury	2 Dave Campbell
WA	3 Lindsay Hall
1977	1 Doug Harlow / Eclipse / ST 46
Camperdown	2 Peter White / Zodiac / ST 46
VIC	3 Paul Turner / Windwand /
1978	1 Doug Harlow / Eclipse / ST 47
Amberly	2
QLD	3
1979	1 Gary Morgan / Stilleto / ST 46
Goulburn	2 Reg Towell /
NSW	3 Paul Turner /
1980	1 Frank Battam
Albany	2 Peter Smith / Sleever / ST 46
WA	3 Stuart Sherlock / Anna Domini /
1981	1 Paul Turner / Windwitch / ST 46
Horsham	2 Reg Towell / Blue Caudron / ST 46
VIC	3 Brian Eather /
1982	1 Paul Turner / Windwitch / ST 46
Warwick	2 Reg Towell /
QLD	3 Brian Eather /
1983	1 Reg Towell/ Yellow Caudron/ ST 46
Richmond	2 Brian Eather / Starduster / ST 46
NSW	3 Paul Turner / Windwitch / ST 46
1984	
Mandura	Not held due to lack of entries
WA	
1985	1 Brian Eather / Firecracker
Wangaratta	2 Paul Turner /
VIC	3 Reg Towell / Coudron

1986	1 Paul Turner / Windwitch / ST 46
Wakerie	2 Reg Towell/Blue Caudron / ST 46
SA	3 Frank Battam/Mean Machine / ST 46
1987	1 Paul Turner / Windwitch / ST 46
Richmond	2 Bob Whitely USA / Laser / ST 60
NSW	3 Brian Eather / Firecracker / ST 60
1988	1 Brian Eather / Firecracker / ST 60
Amberly	2 Joe Parisi / Reactive / ST 60
QLD	3 Paul Turner / Windwitch / ST 46
1989	
Bunbury WA	Not held due to lack of entries
1990	1 Paul Turner / Windwitch / ST 46
Bendigo	2 Brian Eather / Firecracker
VIC	3 Reg Towell / Caudron / ST 46
1991	1 Paul Turner / Windwitch / ST 46
Wakerie	2 Doug Grinham / Maton / ST 51
SA	3 Frank Battam / Caudron / ST 60
1992	1 Joe Parisi
Bundaberg	2
QLD	3
1993	1 Reg Towell / Gotcha 5 / ST 46
Wagga Wagga	2 Paul Turner / Wind Wizard / ST 46
NSW	3 Tom Dixon / Thunderbird / Merco 61
1994	
Mundijong WA	Not held due to lack of entries
1995	1 Joe Parisi / / PA 40
Ballarat	2 Reg Towell /
VIC	3 Paul Turner /
1996	1 Ray Ogle /
Darwin	2 J McNair /
NT	3
1997	1 Joe Parisi / Novar / PA 51
Wakerie	2 Brian Gardner/ Obsession / Jett59
SA	3 Reg Towell / Junar / ST 46
1998	1 Murray Howell/Courageous Kaz/ ST60
Toowoomba	2 Joe Parisi / Novar / PA 61
QLD	3 Brian Eather/ Firecracker / PA 61
1999	1 Mark Batty / Coy Lady / Fox 35
Nowra	2 Murray Howell / Miracles / ST 46
NSW	3 Paul Turner / Wind Wizard / ST 46

PULSE JET Aeromodellers



Metering Jets

By Bob Fry.

In previous articles the methods of tuning a Pulse Jet for maximum performance have covered areas of fuel type, tank adjustments, flowjectors and fuel metering. The fuel metering on a Pulse jets is controlled by the metering jet (also known as a "meter" or just a "jet") and is normally a non-adjustable or fixed orifice jet fitted to the front of the flowjector. On some jets such as the Zanon the metering jet can be an adjustable type. One disadvantage of the adjustable jet can be the flow rate is not known and must be adjusted and the engine test run and then readjusted until the correct tune is achieved. Any change in fuel types or major changes in atmospheric conditions would require the adjusting procedure again.

With the fixed metering jet, once the correct jet is found for each combination of fuel and model set up, it can be recorded and easily changed for the correct tuning. The one engine can be set up to run on suction, pressure or bladder by changing to the correct metering jet size.

A word of warning on using a bladder system for Pulse jets. The fuel is restricted to a very constant flow through a primary restrictor and then via the metering jet for fine-tuning. With this arrangement the fuel supply to the engine will not change with increase air velocity through the head intake and will lead to running very lean and possible burning out a petal and cutting out. (As I found out on my R/C Pulse Jet model) So if using a bladder on your engine, ensure the intake will not be operating with a "Ram Air" effect. (i.e. intake shrouded from direct air flow) This fuel system will not work effectively on C/L models as we use the "Ram Air" effect and increased fuel supply due to the rotational centrifugal force to increase power from the engine.

I once spoke with Jerry Thomas from the US about manufacturing some metering jets to supplement the ones supplied with my Bailey Stock Jet. He was careful to point out that the way in which the metering jets are manufactured can be critical to how they perform. In fact he does not rate them by their drilled size but by "flow rate". He had manufactured two jets drilled to the same size and found they flowed at different rates when compared to each other. The difference in flow rate may not be enough to notice a significant change in engine performance between two jets of the same size but when using jets from different manufactures, rating them by hole size is just not good enough. When trying different metering jets to obtain the best tune it is critical that if a larger jet is used it is actually flowing at a higher rate than the previous jet. If the flow is less the results will be totally confusing and will probably lead you to the wrong conclusions on what to do next.

A.C.L.N. ADVERTISING

For the newer readers, we point out that "private" (personal) ads are free to subscribers, and "commercial" ads are \$20 per quarter page, or \$5 for business card size. Commercial Advertisers can receive a free business card size ad for submitting original articles of interest to A.C.L.N. readers.

Copy or artwork for ads should be sent to the editor, cheques to the treasurer (G Wilson, P.O. Box 208 Seaford, Vic. 3198). If you want to save a stamp, I can forward on any cheques sent with ads, but please make them payable to "Control Line Advisory Committee".

One of the most astute and technically proficient modellers I know, Alasdair Taylor (what a wrap!), heard of the need to flow test our jets and got straight to work on assembling a test instrument to do the job. The attached photo is not very clear but the instrument consists of a primary regulator supplied from a 100psi air supply. The primary regulator drops the pressure to ~ 5psi and supplies a second low pressure adjustable regulator and a very accurate low pressure gauge with the air flow passing through a scaled Rotameter (thing with a floating ball) and out through the metering jet being tested.

I tested about 40 jets with some interesting results. One series of jets gave the following results.

Size (thou inch)	flow (units ?)
60	80
61	84
62	85
63	88
64	76

The 0.064 thou jet had been manufactured differently and had a .064 inch hole bored through the whole length of the jet. The others had been counter bored .094" to within the last .040" of the jet face.

This particular jet was then counter bored progressively deeper until the flow was increased to 90.

Small changes in flow can be achieved by de-burring the drilled edges or larger changes by slightly increasing the counter bore depth or diameter.

A set of "Jet Bill" metering jets from 0.080" to 0.090" were tested and some were found to flow at nearly the same rate. De-burring and machining adjusted the jets to increase in regular steps.

Normally changes of .002" will be sufficient to notice a difference and .001" will fine tune for differences in atmospheric conditions etc. Engines running on pressure are more sensitive to changes and may only operate within .001" of the optimum size. A good range of calibrated jets will be essential to achieve the best from a Pulse Jet.

All the metering jets used in OS, Dyna, Bailey and Jet Bill flowjectors use the same thread size, which is 10-32 UNC. They should be stored in a holder to protect them against being scored or scratched. A holder can be made from a piece of wooden engine bearer with holes drilled and tapped with sizes written adjacent to the holes and protected with a layer of clear tape.

I can offer a service to calibrate your metering jets and supply a holder and data sheet.

Call on 08 93626370 (WA) or

e-mail on bob.fry@wpcorp.com.au



*Above :-
Flow testing Rotameter used for calibrating metering jets.*

*Below :-
Aluminium and brass metering jets for all occasions ranging from .031 to .090 thou.*





Letters to the Editor

Mr Editor.

I was pleased to read the letter from Len Surtees in the last edition of ACLN. I thought I was alone in my thoughts about the stupidity of how we suffer the locations of our Nats.

It was back in the early 1990s that I attended the Wagga Nats and loved every minute. I can clearly remember saying to all who'd listen how such a reasonably central location to the main population input had to be the logical place for a regular Nats. I still believe that and the more I think about it the better the whole concept sounds.

Sure it loads the one club who may be unwilling or not have the people to do such a huge workload. But that can be overcome by them merely ensuring the facilities are arranged with various other guys from around Australia organising and running the actual events. Done logically, it is achievable.

But then again, I find our hobby contains so much apathy and inertia that as it's taken 7 years for me to put this in writing by reacting to that first letter with an endorsing opinion, even if the snowball starts rolling we cannot be meeting in a regular single central spot before.....mmmmmm.....2096.

But the idea is right.

Derek Pickard.

Fools Rush In. by Joe Supercool

F2B is probably the last area of aeromodelling that I should brave to comment on (on which I should comment!). My list of bad engines and clunky aeroplanes would fill quite a few pages.

Others, Al Rabe, Bob Hunt etc have certainly filled a few pages with their successes. However, being a failure has never stopped me before, so here are some reminiscences and thoughts for the future on F2B Stunt.

My interest in Stunt was first piqued in about 1960, when I visited Sydney's Centennial Park to watch a stunt comp. I was stunned by the gorgeous Thunderbirds of Ian Brown and Ron Diprose, not to mention Paul Turners beautiful "Peter" Commanche style-airplane. I was hooked, so it was off to Hobbyco for a Mk6 T'Bird and OS35 Max3.

This model had a chequered career. It think I got a third place in one comp, but I could never get that motor to run right. The model suffered various indignities, including Gary Lynch taking off the inboard wing with a combat model. Still, the wing glued back on all-right; the model meeting its ultimate end at the 1964 Victorian Nats when both lines broke and it went through the rear window of the

passing garbage truck. I thought the driver might get mad, but he just sat there and didn't move. He was still sitting there an hour later. Maybe he was dead.

By the way, that was the era of the gorgeous Victorian giant stunters, all beautifully finished with Olde English lettering and very swank. "Angelique" was number one by me, but others were the "Shark 45", and John Hughes "Rebel", with Kyowa 45 engine. The latter model flew at a beautiful constant, speed, leaving a strong impression on me. If only I had a motor that ran like that!

But returning to the Thunderbird: Palmer had introduced differential flaps, which used independent horns on each flap. By using a shorter horn on the inboard flap to give more deflection, the effect was to roll the model out on the lines during manoeuvres. This worked a treat, you could wind in the overhead eights really tight. Its rare these days to see overhead eights about the 45 degrees required. But with the T'bird, you could lie on your back and do them till the tank ran dry. You were in trouble then, of course, but being younger we could jump up and land safely. These days, just a loop gives me a heart attack.

In the late '60's, I was impressed with Dick Mathis "Chizler" design, which he claimed to fly very slowly, something like 45MPH. Now our T'Birds were screaming around at 60 MPH, and you really needed good reflexes. Cutting furrows in the grass with the fin was not uncommon.

But the T'Bird would not take to being slowed down, at least for me. The problem seemed to be the flaps. While the model rolled out nicely in the loops, it over-rolled in the squares. At high speed, you didn't see this. So in the late '60's I came up with my "Rivets" design, which had "constant differential" flaps.



"Rivets"

The problem with the Palmer differentials was that they were progressive. More deflection gave more differential between the flaps.

In my system, again two horns were used, but this time they were the same length. However, the outboard horn had a horizontal slot instead of a circular hole. This way, the inboard flap deflection always lead the outboard flap by a fixed amount.

This remains the sweetest flying model I ever had, and I remember with affection the days flying in Centennial Park with Reg Towell, Ron Nyberg, Will Sutton, Ian and Robert Mooney, Ian Korner, Tom Barry and others. We always had a lineup of 6 to 8 stunters every Sunday. Actually it was Ron Nyberg who sold me the best Stunt motor I ever ran. He pulled this beat-up looking Enya 35 6001 out of his pocket and sold it to me for \$3. This was

really a dubious buy, it had bits of araldite stuck to it and looked horrible. But it had exhaust lugs that were strong and you could hang an OS "Jetstream" muffler off it no trouble at all.

But mostly, it ran beautifully! You set it rich on the ground, with just enough power to get the model rolling. This gave beautiful long take-off rolls which were very impressive. Once in the air, it lumbered around slowly picking up revs until by the time the reverse wingover was called the power was there. Every time! That is, until the Northam Nats, when the rod let go. That motor had so much running the crankpin was worn triangular!

At about this time (1973), Dave Campbell built the first "Anna Domini", which was published in "Airborne" magazine. This was the first of the long-fuselage stunters. The earlier designs, including "Angelique", were short moment models, reflecting I feel the Palmer and Aldrich set-ups. But "Anna Domini" was more than 48" long, a trend continued by Reg towells "Caudron C-460" series and Brian Eathers "Firecracker"s.



"Anna"

In "Anna", I abandoned differential flaps in favour of a new system. The problem with differential flaps, of any type, was that the increased lift on the inboard wing also produced increased drag. So while the model rolled out nicely, it also yawed inwards. This compromised the line tension, especially in the square eights. That is not something you want on a slow flying model.

The solution seemed to be some sort of outboard spoiler. The spoiler would reduce lift, thus rolling the model out: and at the same time increase drag, thereby yawing the model out as well. This is the best of both worlds. Furthermore, the spoiler can be retrofitted, as the mechanism is all external.

I flew this set up at the '74 Camden Nats, but my luck was really out that year. Firstly, I had an undercarriage leg break off in practise. Then in the first round, I had my silicon fuel line split where it entered the venturi, stopping the motor dead after the loops. Finally, the heat affected my black and red finish, so that the spoiler

was jammed over-centre, leaving me with a model flying severely wing-up. Sheesh, some days you should just stay in bed!

Now in the year 2001 I have another shot at this idea. Recently I have retrofitted my Eather "Firecracker" with an outboard "anti-flap". I didn't want the spoiler, due to the over-centre problem. But the new method won't do this. Check out the photos.



A small flap is mounted near the tip of the outboard flap. A simple linkage drives this flap in opposition to the main flap, thereby always rolling the model out, and also yawing it out. Test flights so far have been very good, plenty of line tension everywhere, and no possibility of jamming. Now I've just got to fix my tank problems!!!!



Finally, there is a secondary trimming problem I want to address. The fore-and-aft position of the tip weight has always worried me. Should the weight be near the leading edge, on the C/G or near the trailing edge??

When a model turns, one would assume it turns about an axis that passes through the C/G. But where does the rest of that axis pass? If it passes thru the inboard tip leading edge, the model will yaw outwards. Conversely, if it passes toward the outboard tip leading-edge, then it will yaw inwards. Maybe the tip weight position needs to be adjustable fore-and-aft for trimming purposes.

Well there you are folks. Would you like to hear about all my dud stunt engines next?



TARMAC Notes for January and February

In my recent roamings around the World Wide Web, I had the great good fortune to happen upon the web page of Ron Chernich. He is one of the 'Motor Boys' to whom I referred a couple of issues back (the October & November TARMAC notes). Ron has assembled a comprehensive web page that holds great deal of interest to those of us that are interested in Model engines or in Model Engineering. If you are one of those folks and have access to a computer, I would strongly recommend that you take the time to check out his site which can be found at: <http://archive.dstc.edu.au/BDU/staff/ron>

Having had a busy month that has kept me away from aeromodelling, I thought that I might fill up a few gaps in these rather abbreviated notes with a few tips and hints (don't you think that 'abbreviated' should have been a much shorter word?). So, ready or not, here we go.

Just recently while I was examining Phil Trueman's latest 'GEO XL' stunter we discussed the best way to attach canopies. There could be lots of 'best ways' depending on your building style, and there are now special glues produced for exactly that job although I have not used them myself (for those see your local model shop). I just use normal, thin Cyano (Pink Zap) because it is quick and effective. The problem with Cyano is that it will often fog the inside of the canopy and make it look unsightly. I get around that by liberally spraying Zip Kicker around the inside edges of the canopy. Wait till it dries, and polish the

inside of the canopy with a soft cloth to remove any marks. Then hold the canopy firmly in place and with a fine feed tube in the Zap bottle, just put the right amount of glue around the edges. It only takes a tiny drop. As the glue wicks under the rim of the canopy the Zip Kicker sets it off fast and there will be no smoky residue. Well it works for me, and for Phil too.

This new GEO XL of Phil's is lighter and generally more highly detailed than his current machine, and has a few new developments incorporated. It features among other items, crankcase cooling vents, a fuselage stiffening tank enclosure, and a fiberglass cowling that is Phil's first venture into making composite parts. Although it was quite time consuming to prepare the mould and the finished product, it was an interesting learning experience and will enable him to easily and quickly make more to the same pattern if needed. He had no real trouble making this cowl that not only has a beautiful surface finish, but will be proof against the oil soakage and paint cracking problems that often go hand in hand with carved balsa cowlings.

I recently had a call from Alwyn Smith who was kind enough to pass on a few hints and tips that could well be useful to builders. High on this list is a reminder of the need for scrupulous cleanliness when soldering if you want good, strong joints. Quite a few people seem to have a lot of trouble soldering tanks and other accessories, and I think that this is usually caused by one of two things. Lack of heat in the joint, or dirty joint surfaces.

For good soldering, you must have enough heat to raise the temperature of the joint above the melting point of the solder used and the metal to be bonded must be perfectly clean. If the surfaces to be soldered are not clean, the solder will not 'wet' them and adhere properly. This is what may have happened when you see a drop of solder sitting on the surface like a drop of water on your highly polished car. To be sure that the surfaces are properly clean, degrease with metho or acetone and then polish them up with fine abrasive paper before applying flux to the joint. Solder will flow and bond better if you use a good acid flux for steel joints, but you must not use acid fluxes for electrical wiring or electronics. Use only non corrosive resin fluxes for electrics.

If you do use an acid flux, the residue must be neutralized when the work has cooled down. This can be done by treating the work with bicarbonate of soda dissolved in water. When the bubbling stops, dry the job off and lightly oil. This method of using acid flux and neutralization with bicarb was recommended by the Stanzel company for making up their 'Monoline' control lines which used tiny steel coil spring retainers as binding at the line ends.

Make sure that the tip of the iron is clean and properly tinned for best transfer of heat to the job. If it is pitted, file the working face of the bit flat and tin it again. Do not melt the solder on to the iron and then apply it to the job. Heat the job with the iron until the solder can be melted by and flowed directly into the joint. If the job is not hot enough the surface of the finished joint will be dull, rough and crystalline in appearance. This might mean that you need a higher wattage soldering iron, although you can have similar problems if you are working on a metal bench or in

a vice that is soaking the heat away faster than you can provide it. If that is the case, holding the job between bits of wood, or working on a wooden surface will fix the problem.

While on the subject of soldering, it is possible to take advantage of the fact that different alloys melt at different temperatures. You can sometimes solder up your more complicated creations in two stages. If you use the higher melting point stuff first, then you can add on other bits (quickly) with the lower temperature solder without the first bit melting and falling to pieces at the critical moment.

Just in case you didn't know, it is possible to buy high strength soft solders such as Comweld '965' which is an alloy of silver and tin instead of the more usual lead and tin. Just ask at your BOC Gas and Gear outlet. They will know. Despite the drawback of greater expense, the silver/tin alloy is about 30% stronger and has a melting point of 9 degrees higher at 221 degrees C. This is well within the capability of a good electric soldering iron. The acid flux sold by Comweld for this solder is super stuff and even works on stainless steel. It can be used with ordinary tin/lead solder as well. Although this silver/tin solder is good gear, it is not in the same league as hard silver solder and that is the only thing to use for joints needing really high strength like fixing horns to torque bars in the controls of big Stunters.

Something else has occurred to me that may be worth considering if you are interested in producing high quality models. At the risk of being branded a hypocrite, here it is. Firstly, do things the hard way. Here is why. It's often difficult to resist the temptation to do things the 'easy way', but thinking through, then doing a job correctly and getting it right the first time, is often simpler than doing it the 'easy way' twice and still ending up with a sub standard job. Secondly, a very useful tool for modellers is sandpaper, which is available in smooth grades as well as rough. The rough stuff is for knocking off the high spots and the smooth puts on the shine. Sandpaper has been said to be the difference between a beginner and an expert. To quote someone else, "I don't claim to be an expert, but I am the shortest fingered beginner in the business". Finally, we all have in our possession an indispensable aid to quality control. It is called the dustbin.



Somewhere close, there should be some photographic decorations to compensate in some small way for any shortcomings in the text.

You should find a photo of a beautiful 2 part aluminium propeller mould made by Stuart Sherlock for Grant Lucas to produce his single blade speed props in carbon fibre. Grant has been putting the final finish on this tool. The only problem with it is that the mirror finish makes it hard to photograph.

There is a photo of Dick Morrow's new Magnum. It is a remake of the SIG design using built up wings and tailplane instead of the kit skinned foam flying surfaces. This model has ended up much lighter than his original foam winged version and is still being sorted out. It is powered by a Super Tigre .51.



Last, but not least is a picture of Mal Bone's 'All Australian'. This one is powered by (I think) a Double Star .40. Certainly this has one of those 424 stunt runs that are a pleasure to listen to and seems to fly very well.



Every now and again, I get the urge to relive some of the experiences that I had as a young lad when I was rather more sprightly and fleet of foot than I am now. In those days I would indulge from time to time in the merry sport of Free Flight. Then I remember those breezy days with my Veron Cardinal traveling (as usual) at high speed directly downwind. And me, running at the fastest pace that I could muster, in pursuit of it. Galloping across ancient dried lakebeds (filled with ancient dried water, a powdery substance looking much like dirt) to end up knackered and far from the rest of the mob. Hmmm. I still like Free Flight, but I'm not the boy I was.

Charlie Stone
Email<cestone@bigpond.com> VH4706

ACLN Social Column

For those who've been wondering whatever happened to Carl Nichols for nearly the past year.....he's had other things on his mind.

And to prove just that, here's the evidence - a picture of his recent wedding when he married Phenzi.



Representing all things Control Line on the day were Roger Virgo, Matti Korhonen and Derek Pickard - all suitably scrubbed-up for the excellent occasion.

Okay Carl, what about coming back to flying now?

HEARNS BACK TO GRINHAM

KMAC's first stunt competition of the new year had nearly everything. The judges were friendly, the weather was good and the gathering enthusiastic.

More's the pity, only three fliers put in for the F2B event.

It was the annual Hearn's Trophy, a classic piece of ironmongery that traces its history back to pre-Durassic times with the line-up of names on the cup proving popular reading.

This year, it was the turn of Doug Grinham to take the cup. He used his very sweet flying Jazzer 2 which - although underpowered by only a 46 up - the front does fly extremely well (even in the wind).

Peter White on the other hand was struggling with a Zodiac powered by a Moki 51. Unfortunately, whereas the previous Zodiac proved a fantastic flier (enough to motivate the building of a replica), this new one is still far from sorted.

Machine-of-the-day was the third placed Firecracker of Derek Pickard who's switched to Saito 56 four stroke power. Boasting a total conversion to CL stunt (with Rob Hiern very special venturi to boot) the engine demonstrated excellent power at all times with totally

stable run behaviour. The heavy model used only 70cc of 10% nitro fuel and turns an Eather 12x5.75 threeblade CF prop on full length lines.

The judges were Bill Cecil and Peter Roberts.



Above:- Doug Grinham (left) once more got to hold the Hearn's Trophy as he finished ahead of Peter White and Derek Pickard.



Werrington Park Model Aero Club (NSW) - Control Line section.

February already! Christmas doesn't seem that long ago!

The Club Christmas party went well and after the barbecue we flew some three-up combat {friendly} with much debate on who actually got cuts and whose lines may have been shorter?

One of the junior members showed his parents how well he is flying now... GOOD FUN all round. We even managed some night flying, with glowing Cylumes attached to the undercarriage.

Our club trainers are being built, every one being happy with the cores and kits supplied by Brian Burke. I have flown my one and the Thunder Tiger 25 pulls it around nicely. When we have the rest in the air we will run a club competition.

Speaking of comps, the official F2B and classic stunt comp will be held on Sunday 11th March. We will also be having a "fun fly" on Saturday 10th March. A barbecue will be run on the Sunday, many thanks to Dave Lewis. This will be the only official control line competition this year so we are hoping to make a good weekend of it!

Most Sundays have seen a good roll out of flyers, often with over twenty planes in the pits and often two circles busy. Models vary from combat wings to full F2B ships, Neil Alleyne has a Stalker Medusa Arkusha A-47 which he

imported from England, he is also currently trimming out a composite built ship and a Stalker 61RE for grunt.

Plank stunters are giving good service to a lot of flyers, and with flying skills at all levels, enjoyable weekends are the norm. After the club's display at the local shopping centre there has been some interest from possible new members which is a good thing!

Till next time, c'ya at the circle.

Stephen Yeatman

Control Line Aeromodellers of Gippsland.

From Peter White.

The club met at Traralgon on Sunday February 4th with ten members turning up.

Thanks to Greg and Andrew Beevor for their efforts in mowing 2 circles on the oval at Hobsons Park Hospital.

The day was marred somewhat by light showers at close intervals but most who were present flew despite the likelihood of getting wet.

Those present were Greg and Andrew with Stunt Runt and Fancy Pants, Graham Vibert (All American), Graham Keen (Mini and Standard Stunt Runts) James Cross with his OS15 in Andrew's Aeroflyte Spitfire, Peter Roberts (Frisky and Peacemaker), Robbie Hiern (Tucker Special and Marvin), Geoff Ingram with his Midge Speed and Wombat Biplane, Paul Richardson (Stuntmaster and Doctor) and Peter White (Nobler).

During the lunch break, Greg and Andrew and Graham Keen showed a number of items including some very small vintage wooden props and an encouragement award from U.S. PAMPA member, Doug Dahlke for their work in building various enlargements of the Stunt Runt in answering to a challenge that Doug ran in "Stunt News," Pampa's newsletter/ magazine, some time ago.

Also during the break, Paul was presented with the highly coveted "Whelan Award" for his efforts in splintering his "Doctor" at Warragul in December, needless to say he was almost overjoyed with the award.

Later that afternoon Geoff fired up his Midge/ PAW 149 and spent the next 3 or 4 minutes wondering why he couldn't fly the thing level. It was OK the last time he flew it except for a small fracture at the wing root which he had subsequently repaired. Close examination after the flight revealed the CA used in the repairs had wicked into the bellcrank/ lead out area, locking everything solid.

Naturally Geoff received widespread sympathy in his predicament and no-one saw a humorous side to the situation - well not that humorous. Really, we are a compassionate group of souls. When working with CA glues it obviously doesn't follow that "If some is good, more's better".

Both Robbie and Paul have been using Fox 35s fitted with plasma liner and piston sets which have been developed by Tony Cincotta. These show very good compression and starting qualities and take some time to run in, indicating that they should have a long operating life.

While Paul didn't run his Fox on the day, Robbie put in quite a few flights with an Ex-Dave Lacey Tucker special fitted with the modified Fox that ran quite well, producing good power when set right.

Our next gathering is slated for Maffra on March 4th followed by Knox on April 1st.

For those who like a BBQ lunch, bring your own raw materials- BBQ's are supplied.

If you think, or have been reminded, that you have been spending way too much time or money on your hobby of late. Remember that there is no recorded instance in history of a man being done away with or even severely injured by his wife while he was actually washing or drying the dishes.

See you at the field.



RESULTS OF FLYING DAY AT KURINGAI M.F.C. - SUNDAY, 19TH NOV., 2000.

Two events were held, Vintage A T/R, and Vintage 1/2A T/R. Entries were down, as the weather was very overcast, and threatened rain for most of the day. (In fact, it did rain, but fortunately, only for the first heat of Vintage A).

Vintage A T/Race. (Six teams).

ROUND ONE.

Heat One

Kerr/Rothwell	3.27:61	
Simons/Simons	4.51:06	
Knight/Owen	4.42:60	(faulty lap-counter)

Heat Two.

Huggan/Fairall	4.02:47	
Knight/Owen	4.13:06	(re-run)

Heat Three.

Bonello/Gapps	4.11:04	
Camps/Pilgrim	3.34:27	

ROUND TWO

Heat One.

Kerr/Rothwell	3.26:56	(1)
Huggan/Fairall.	4.04:30	

Heat Two.

Knight/Owens	3.56:13	
Bonello/Gapps	D.N.F.	(65 Laps)

Heat Three.

Simons/Simons	3.38:32	(3)
Camps/Pilgrim	3.32:75	(2)

VINTAGE A FINAL.

Kerr/Rothwell	6.46:25	(6.45:66)
Camps/Pilgrim	7.37:81	
Simons/Simons	8.14:40	

Andy Kerr and Steve Rothwell flew a "Voodoo Mk 5" powered by Andy's self modified Oliver Tiger 3, (chromed bore, Kerr shaft, Kerr conrod, Kerr piston [no holes] - Kerr cooling jacket, Kerr spinner, and Kerr fitting together), turning a full A.P.C. 7X7. Yes, a new record is being claimed!

Peter Camps and Stan Pilgrim flew a "Voodoo Mk.1" powered by a Pilgrim/ Kerr Oliver Tiger 3, swinging a full

A.P.C. 7X7. If they could have had Andy and Steve's over 60 lap range, the result would have been so much closer, but an extra stop in the final made the difference.

Dave and Hugh Simons flew another "Voodoo Mk. 1" powered by an M.R.S. prepared C.S. Oliver replica, also with a full A.P.C. 7X7.

The other event was Vintage 1/2A T/Race, currently having a slow birth in NSW., but we are gradually seeing more models at the field (I am even building [shock amazement!!] one myself). These little models had no trouble handling the well mown Kuringai grass (Good job, John Nolan!), and look likely to spread rapidly - hopefully more contests can help this happen.

Vintage 1/2A T/Race. (Four teams).

ROUND ONE.

Heat One.

Camps/Pilgrim 4.37:65

Knight/Owen 5.01:97

Heat Two.

Nolan/Simons 5.07:06 (3)

Fairall/Fairall 6.22:22

ROUND two.

Heat one.

Camps/Pilgrim 4.23:41 (2)

Fairall/Fairall 5.20:47

Heat Two.

Nolan/Simons 5.21:97

Knight/Owens 4.21:62(1)

VINTAGE 1/2 A FINAL.

Knight/Owens 9.17:69

Camps/Pilgrim 10.05:23

Nolan/Simons 10.44:94

Gavin Knight and Robert Owens flew a "Pawprint" powered by a PAW CT 1.5cc (plain bearing), swinging a 7x6 A.P.C. cut-down to 6x6, the second-place team of Peter Camps and Robert Owen flew a "Diddy Dice", with an Oliver Cub and a Graupner 6.5x6.5 (electric), whilst John Nolan and Hugh Simons flew a "Nurk", using a C. S. Cub replica, spinning a 6.5x6 (cutdown A.P.C. 7X6). All in all, a most enjoyable day, some great competition, and a selection of delicacies from "Pie in the Sky Restaurant" of Cowan. What more could a young lad want ??

Len Brown.

2001 QUEENSLAND C/L SCALE STATE CHAMPIONSHIPS 26th and 27th JANUARY

CLASII FIELD LEICHHARDT PARK IPSWICH

Yes. it was hot, hot at Ipswich over the two days, but I noticed according to the television weather reports that Melbourne, Adelaide and Perth temperatures were even higher, so don't use that as an excuse for not being here.

After a misunderstanding by our local council parks' workers we had to do some furious watering, rolling, fertilising. fine cutting etc to get the surface back to A1 condition, Our thanks to all concerned

With sufficient entries received by pre-closing entry date all events scheduled look place although sickness and work commitments at the last minute prevented Max Newnham and Warren Shurmer from competing.

The weekend got under way at 12.15pm on Friday with a free barbecue for competitors and officials followed by static judging and free flying practice till 5pm.

A special thanks must be extended to MAAQ secretary-Kevin Dodds and Jeff Tickle, Phil Collings from Tingalpa WC Club and Ian Garton from A.L.C, who did an excellent job as static judges. Who said R/C and C/L fliers can't get on'??

If you didn't attend the dinner and social evening held at the local "Jets" club you missed out on a great dinner for \$7-95 and a wonderful social evening. I believe that more social activities at those events make for a better fun outing and less tension

Apart from the high ambient temperatures, competitors and officials were protected from direct sunlight by tarpaulins and shady trees and with a nearly perfect surface to fly from. Flying got under way just 2 minutes late on Australia Day under the critical eyes of flying judges Ian Garlon ALC, Rob Edgerton and Matthew Henley and C/ Director Frank Sutherland from T/Birds Club.

Events were run in order 3 rounds each respectively F4B Qld Stand Off and Fun Scale.

A fine selection of models were presented and flown in near perfect conditions and no crashes. All models returned home in one piece.

Dave Murrell came up from Coffs Harbour, and Tom Barry who recently arrived from Sydney were in attendance and managed to take home some of the excellent trophies organised by our secretary John Taylor who as usual had everything highly organised and as event Co-ordinator ensured that the whole weekend was an outstanding success.



Dave Murrell. Tiger Moth and Spitfire
Next year (2002) we are planning an even bigger and better event over the long weekend in May so all C/L modellers with scale aeroplanes gathering dust. try and

make it to Ipswich for a great scale weekend with plenty of cold drinks, food etc. held under relaxed conditions for your maximum enjoyment We should have even more permanent shade available next year (if negotiations with our council continue to proceed smoothly.)

RESULTS

A hearty congratulations to all finalists!

F4B

1st	John Jamieson	Hawker Hart	OS35
2nd	Dave Murrell	Tiger Moth	OS 52 F/S
3rd	Trevor Larsen	Kawasaki K161	Stalker 46

(QLD) STAND OFF

1st	John Jamieson	DC3	OS Max 15S
2nd	Peter Morandini	P5ID Mustang	Glo-Chief 49
3rd	Tom Barry	Ryan St	OS35S

FUN SCALE

1st	Dave Murrell	Spitfire	ST60
2nd	Mark McDermott	Blue Baron	OS40FSR
3rd	Peter Morandini	Spitfire	OSLA46

To all competitors, thanks for coming as you all said you enjoyed the events and will be back again next year, we guarantee it will be cooler

Finally a very special heartfelt thanks to all officials and helpers without your assistance we would not have been able to have such a great weekend of scale.

Report by Mark McDermott,

Combined Speed Held at Frankston 18/02/01

Pos	Name	Class	Engine	Flight 1	Flight 2	Flight 3	Fastest	Km/h	%
1	R Hiern	Class 1	RH-11 Speed	14.97			14.97	240.48	99.20%
2	N Wake	Class 1	OS CZ11 PS	15.83			15.83	227.42	93.81%
3	C Agnew	Class 1	OS CZ11 PS	-	16.13		16.13	223.19	92.06%
4	N Wake	.21	Picco 21	16.09	16.11		16.09	223.74	86.91%
5	C Holmes	Class 1	OS CZ11 PS	-	"19,.02"	19.92	19.92	180.72	74.55%

FAI Speed

1	R Hiern	FAI	Profi	13.85	13.75		13.75	261.82	
2	N Wake	FAI	Irvine 15R	15.69	15.45		15.45	233.01	
3	C Agnew	FAI	Profi	-	-				



Left:- Robin Hiern and Mark Ellins prepare a .049 speed model for a record breaking flight at a recent Frankston competition.

SPEED COMP Frankston 18/ 02 /2001.

Hot weather and winds greeted us on Sunday, not ideal flying conditions, but we did manage to get another new flyer to join us, Colin Holmes who flew his Class 1 Arrow powered by an OS CZ 11 PS. I flew my own home built .11 which did 240 kph. Noel and Callum also flew Class 1 all with OS motors. Noel is still flying his Picco .21 model but a Nova Rossi .21 model

is on the way

IN FAI the usual problem of getting the right settings especially in these conditions .Callum could not find the right set up, Contrary to what is said the Profi is not easy to set up ,and the motors sold now are not the same as the earlier ones,but what else is there? I don't know if the Halman Special is still made.The Std Irvine is not, so that only leaves the Zalp/Kostin at about \$1500 Aus,and the motor should be sent back to Russia to be serviced , ridiculous for our small numbers flying. Far better to fly other classes like Class 1 or .21 at a fraction of the cost and have FUN , most cannot operate this exacting equipment, get frustrated and give SPEED or modelling away.

Our next Speed comp is at the VICTORIAN State Champs over Easter. FAI & Combined hard surface models on Saturday at Frankston and Grass combined at KNOX on Sunday. ALL WELCOME.....

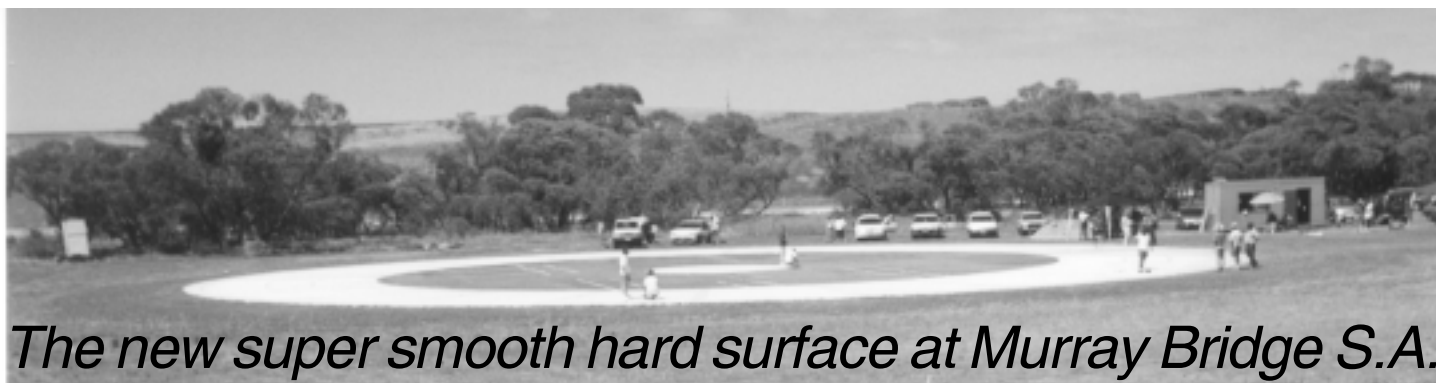
Robin Hiern

Model Racing Services

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The new super smooth hard surface at Murray Bridge S.A.

The recent C/L State Championships held in South Australia were the first to be held for ten years. The lack of a suitable flying site prevented the locals organising a competition. This has now changed because work has been completed on what must be the best purpose built flying circle in Australia. The circle is big enough to take models on 60 foot lines and still have room for mechanics to pit. The hard surface is only a small area of the flying site of the Adelaide Model Aerosport Inc. and the grass surface used for aerobatics, combat and vintage team racing was green and smooth and the local R/C fraternity showed their support and friendliness whilst using their facilities.

The weather was hot but not excessively so and a great weekend was had by all that attended. Some Australian record times were recorded in Combined Speed, Goodyear T/R and F.A.I. T/R.

Results from South Australian State Championships 2001

Below:-Rob Fitzgerald and Mark Ellins with their model after a record breaking flight.

Competitor	F2A SPEED			
	Round 1	Round 2	Round 3	Placing
	kph	kph	kph	
Maris Dislers (SA)	253.8	nil	236.4	1
Richard Justic (NSW)	nil	nil	253.6	2
John Walker (NSW)	nil	nil	245.0	3

Competitor	F2B AEROBATICS				Placing
	Round 1	Round 2	Round 3	Total	
	Points	Points	Points		
Mark Ellins (Vic)	1847	1791	1690	3638	1
Richard Spurling (SA)	1891	1677	1734	3625	2
Maris Dislers (SA)	1633	1697	1737	3434	3
Mike Hawkey (SA)	1102	1389	1323	2712	4
John Lomas (SA)	1288	1384	1031	2672	5
Ron Templer (SA)	1249	49	721	1970	6

Competitor	F2C TEAM RACE				Placing
	Round 1	Round 2	Round 3	Final	
	Time	Time	Time	Time	
R Fitzgerald - M Ellins (SA/Vic)	4:14.3	Disq.	3:27.3	6:50.6****1	
R Justic - R Owen (NSW)	3:25.6	nil	nil	7:23.7	
P Cameron - M Dislers (SA)	3:35.4	3:30.7	nil	76 laps	
G Potter - G Potter (NSW)	76 laps	Disq.	3:38.1		
G Wilson P Stein (Vic)	3:58.2	4:13.6	3:40.1		
K Hunting - J Hunting (Vic)	4:51.2	05:11.8	4:48.1		

Competitor	F2D COMBAT					Placing
	Round 1	Round 2	Round 3	Round 4	Round 5	
G Pretty (SA)	W	L	B	W	W	1
M Dislers (SA)	B	W	W	L	L	2
R Owen (NSW)	L	B	L			3



COMBINED SPEED

Competitor	Class	Round 1 kph	Round 2 kph	Round 3 kph	Best %	Placing
M Dislers (SA)	049	170.80	175.07****	nil	116.4	1
John Hunting (Vic)	Midge	139.69	141.13	nil	86.4	2
Ken Hunting (Vic)	Midge	130.83	131.43	nil	80.1	3
H Bailey (VIC)	Proto	183.02	174.83	182.84	76.6	4
G Pretty (SA)	4	196.79	206.11	210.89	69.5	5
M Dislers (SA)	Midge	nil	nil	nil	0	

VINTAGE A TEAM RACE

Competitor	Round 1 Time	Round 2 Time	Final	Placing
Richard Justic - Andy Kerr (NSW)	3:23.2	nil	7:22.4	1
Ken Hunting - John Hunting (Vic)	3:46.2	nil	7:37.9	2
Graeme Wilson - Mark Ellins (Vic)	3:57.1	3:50.6	8:05.0	3
Ron Lee - Frank Coombs (SA)	5:39.8	3:54.6		4
Harry Bailey - Paul Stein (Vic)	4:12.9	04:14.9		5
Murray Wilson - Rob Fitzgerald (Vic/SA)	4:54.2		37 laps	6
Mark Poshkens - Ron Templer (SA)		49 laps	nil	

GOODYEAR TEAM RACE

Competitor	Round 1 Time	Round 2 Time	Final	Placing
Rob Fitzgerald - Greg Pretty (SA)	3:23.7****	nil	6:54.8	1
John Hunting - Ken Hunting (Vic)	4:55.3	nil	10:03.7	2
Andy Kerr - Robert Owen (NSW)	6:29.9	nil	10:15.4	3
Paul Templer - Ron Templer (SA)	8:21.6			4
Casey Spear - Ron Templer (SA)		08:36.6		5

Mark Ellins F2B Winner



****NEW CLASS RECORD

SA State Championships F2B Results – Australia Day Long Weekend By Mike Hawkey

For the first time in many years, an F2B competition was flown at the South Australian State Championships, held over the Australia Day Long Weekend at the Monarto Flying field of Adelaide Model Aerospport.

As members of the host club prepared the field for the weekend's flying, competitors prepared their equipment. The forecast was for wind, and in this instance the bureau got it right - by 11am it was gusting very strongly. Only two flyers were keen enough to brave the wind. Richard Spurling put in a couple of good flights. John Lomas also put in a couple of practice flights, but was less fortunate in the wind, busting up his Road Runner, beyond repair. This meant that he would be flying his sheet wing backup plane in the competition.

The first day of competition started Saturday morning. The plan was to fly two rounds on Saturday, then a third on Sunday. We hoped that this would allow us to beat the wind. With the wind tending to pick up by late morning, the early rounds looked like being the best...except for those out of practice. Six competitors flew with half of those using callers to ensure that they got all the maneuvers in the right order.

Competition at the top of the field was tight, with Mark Ellins ahead of Richard Spurling after the first day by only 70 points.

Ron Templer put in a good first round in the wind, flying an Enya 35 powered Shark 45. Unfortunately, he 'tent pegged' it during the wingover in the second round, and worked hard that afternoon to put it back together, successfully flying in the third round the next day.

The weather on the final day proved to be perfect. Mark Ellins was first up, but a 'flame out' in the clover meant that he was unable to improve his scores of the first two rounds. This gave Richard his best opportunity to take the lead. He put in a solid effort, but a rich engine run left him short on fuel, so he also got no points for the clover.

Maris Dislers put in three consistent rounds with his own design sheet wing stunter complete with Mars 2.5 cc diesel to come in third. Who says you need a full house stunter and big motor.

The only person able to improve their position after the previous day was Mike Hawkey, who was flying the full F2B pattern for the first time in competition.

We would like to thank the Adelaide Model Aerospport club for hosting the event. They put on a great barbeque for lunch on each day of competition as well as practice day. We would also like to thank the judges, Brian Horrocks and Bernie Shinks, without whom we could not have had all that fun.

8 YEARS ON TOP Derek Pickard

Ever had a really favourite model that's always flown well despite time, abuse and crashes? I'm sure everyone has.

Mine has just clocked up no less than 8 years service and during that time has done a huge mileage. It's a Firecracker of around 1988 design that Ken Taylor built in 1991 to take a Tigre 60. I bought the thing and finished it in 1992 - at the time in red plastic covering and flew it regularly with a Tigre 60.

>From the first flight the big Firecracker impressed at the slow and graceful way it flew combined with good turning. Despite its huge dimensions requiring nothing less than a large car for transporting, this has always been among my very favourite planes.

Along the way, the ship has been recovered and repainted (now with a black fuse and orange wings) and for now less than five years was the flying test platform for the long series of engine tests I did for the US magazine Stunt News.

During those five years the big Firecracker was converted (very lightly each time) to take various Stalkers, Discovery Retros, Double Stars, modded Mercos, etc., along with different tank sizes and locations. It always flew well and if the test engine was any good, this plane allowed the power unit to show what it could do.

The only time things went wrong was a crash a couple of years ago with a then new DS60RE up front. It had to be repaired which added a little too much weight and after bolting in a Stalker Pro-61 to cope with the extra ounces and competing in the NSW State Titles in 1999, the decision was taken to quietly put it into retirement.

Then came the decision to test a Saito 56 which is a fairly heavy but powerful engine that required a huge wing area. Obviously, the big Firecracker came down from the loft and away we went again. From that first flight with the big stroker turning the prop, the plane again showed what a superb flier it truly is.

Okay, the weight at 70 ounces is heavy and the lines pull like hell during multiples in the wind, but the plane still turns a treat.

Happy birthday Firecracker, it's been a great first 8 years. Derek Pickard



Queensland News

By Mark McDermott

The Qld Scale C/L Championships conducted at CLASII field Ipswich is over for another year. All scheduled events were held which just goes to prove scale is "not dead," The "Fun" scale event is proving really popular so if scale in your area or club is not happening why not put on a "Fun" scale event! Further details on net or available from CLASII.

We will have a 'Scale Fly In' on May 13th at CLASII field Ipswich,

We have just run an FAI Combat Day on February 11th with our own 3 combat members having some great bouts and the final of the day between Mark and Paul Dillon resulted in a midair. Pity no one else showed but perhaps a clash of events scheduled on same day (A.L.C. Vint. B) had something to do with lack of support or maybe Qld combat fliers are out of models?

On September 9th we are trying again for a combined speed day on grass at Ipswich, so you speed freaks get your models ready.

On a different note I hope we can get this MAAA rules business sorted out in a proper democratic manner with meaningful discussion and decisions with all involved, people and clubs,

I believe Peter Morandini (ex T/R fame) is getting further involved in scale with a new multi-engined model which should be competing in next years C/L scale champs.

The first round of CLASII (simple) rat was held under the slightly modified rules. Entrants are competing over 10 rounds for a Norvel 15 engine. This is an entry level event into team racing with special bonuses for teams including juniors, Further details can be obtained from our secretary John Taylor Phone 3392 7679, Fax 3392 7529,

Email johndt@primus.com.au

M.A.A.A. Rules Conference

To all Control Line Competition Modellers,

Just a note about the M.A.A.A. Rules conference held on the 9/2/2001,

A protest letter was sent in by CLAS (NSW) complaining that they did not have enough time to answer the rule change proposals put out by the sub committee. Consequently a decision on the rule changes has now been put off for another 6 months to allow more time to look at the proposed changes. After this time they will be sent out to the State Delegates for a postal vote.

If CLAS had known how the system worked they could have named the rules they were not happy with and had these parts go out for further review. The first rule change proposals went out in July 2000 so I don't think much thought was put into the protest.

Queensland & South Australian delegates also said at the conference, (But not before,) that they didn't have enough time for discussion. This course of action didn't give the

chairman much time to find out about any problems.

Many of the proposed rule changes are safety items so should have been let go through unless there were some obvious mistakes. No mistakes were pointed out to me.

So this is where it's at.

When finalised, none of the changes will apply to the 55th Nationals being held in Albury/Wodonga because rules for that event are frozen 6 months before it is held.

Some safety rules can be enforced.

If you have any queries don't hesitate to see your State Rep and if you want an input into the postal vote make sure all the proposals are sent to your clubs so you can comment on all of them.

Graeme Wilson. MAAA C/L Sub Committee Chairman.

2000 WESTERN DISTRICT CHAMPIONSHIPS – HORSHAM 17 & 18TH June 2000.

**Saturday 1.00pm start.
Simple Rat race, Simple Goodyear.**

**Sunday 9.00am start.
Class A Team race,
Classic B Team race,
1/2A Combat, Bendix.**

**Wimmera Model Aircraft Assoc Club
field 12Km NE of Horsham.
To be held at the Wimmera machinery
field days site at Longerenong via
Doon.
For further enquires contact Vic
Cresp 03 5382 4065 (AH).**

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2001 Busselton Nationals WA

The Western Australian Nationals are quickly coming upon us (21st April) and are eagerly awaited by all of our local modellers. The Busselton area is be one of the best locations in W.A and has many great attributes to offer visitors other than the modelling championships.

Busselton is a tourist and holiday town on the coast with great beaches and has many attractions and historical venues to visit and entertain the family. A short drive from the heart of the vineyard area of Margaret River and many top surfing and swimming beaches around Dunsborough and Yallingup. If you haven't been to the South West of W.A this is the place to start from and to see some of the best tourist areas we have to offer.

On the competition side of things we are offering 8 events in the Control Line discipline which may appear a bit light on but has been decided by the organising committee, (not me!) as what the local and expected interstate competitors will be able to support.

To add some extra interest, members from the two Control Line clubs in W.A the Mercurians and TARMAC clubs attended a recent Nationals committee meeting to submit a request to include some extra events in the April 2001 Nats.

After some negotiations we now have permission to run some extra events concurrent with the official events listed on the program. These events will be unofficial and will be organised and run by the two host C/L clubs. Entry will be on the day and the events will be run if sufficient numbers are willing to fly.

The events offered are 2.5cc Rat Race and Class 'B' T/R, to be run on the same day as Goodyear (Monday 1.00pm) Possibly Class B in the morning and Rat Race in the afternoon after Goodyear. If we have enough juniors prepared to fly, a Junior 2.5 Rat race will be held on the grass site after Vintage Combat on Friday afternoon as well. The Junior 2.5cc Rat race will be run to the current Plain Bearing Rat race rules as used in W.A.

The two sites for the C/L competitions will be at the airport for all the hard stand events and the hockey stadium for the grass events. The grass site is on the same road as the airport, just on the edge of town. The grass surface is like a Bowling Green with plenty of shade and acres of flying area. The tarmac surface at the airport is not as smooth as some might like but better than we normally use for our local comps. Some of the surface has a protective coating sprayed on it and is slightly smoother surface. (approx 2/3 of each flight circle)

I would like to extend a welcome to all ACLN readers to come along and enjoy a friendly relaxing holiday and National modelling championships in Western Australia.

VMAA 2001 VICTORIAN CONTROL LINE STATE CHAMPIONSHIPS DETAILS

To be held at :- KMAC Field on Friday 13th of April
CLAMF - Frankston Field on Saturday 14th of April
KMAC Field on Sunday 15th of April
CLAMF - Frankston Field on Monday 16th of April

Events to be run, in the order below, for each day at nominated time below. See * for first event.

<u>FRIDAY 13th* (12.00pm)</u>	<u>SATURDAY 14th* (9.00am)</u>	<u>SUNDAY 15th* (9.00am)</u>	<u>MONDAY 16th(9.00am)</u>
*Junior 2.5cc Rat Race	*FAI Speed	*Jnr, FAI & Novice Aerobatics	*1/2 A Teamrace
Junior 2.5cc Combat	Midge Speed	*Combined Speed (grass)	Mini Goodyear
Simple Rat Race	FAI Team race	*FAI Combat	Goodyear
Aust B Teamrace	Combined Speed (hard)	Class A Team race	
	1/2 A Combat	Vintage Stunt	

Rules for events shall be found in Aeromodels Official Rules and Instructions and 1997 Sporting Code and Amendments to 31/12/2000. Local events in Victorian Rule Book.

Entry forms available from Graeme Wilson PO BOX 298 Seaford 3198. Send SSAE.

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Further to last months editorial regarding O.S. Engines. I have made contact with Tony Farnan of Model Engines (Australian main importer) to obtain further clarification of this subject. Tony contacted O.S. in Japan and they confirmed that the manufacture of the FP series has ceased and have been replaced by the LA series. Spare parts for the FP series will continue to be produced for at least the next five years and Tony suggests that any person who is having difficulty obtaining O.S. spares should contact Hawthorn Hobbies in Melbourne. Tony has invited me to visit his warehouse and have a look at the modelling stock he has and I will report on my findings in next months edition.

MODEL RACING SERVICES



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"Arrow" - 2cc - 2.5cc speed kit includes pan, pre cut wood, hardware, plans etc. **\$85.00**
"Ol Blue" - 2cc Mini Goodyear - pre cut wood, hardware, wheel, shutoff, plans etc. **\$69.00**

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"Adjustable" Team Race & Stunt Handles	Alloy Wings
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