

THE VOICE OF CONTROL LINE
AEROMODELLERS FROM
AROUND AUSTRALIA

Number 41



Produced by the Victorian Control Line Advisory Committee

February 2001 2000
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**Copy Deadline for next issue is:
Wednesday 14th February 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.

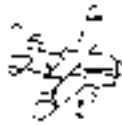
Telephone (03) 9543 2259.

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COMING EVENTS



CONTROL LINE CONTEST CALENDER 2001

2001

JAN 21	FAI & Combined Speed, Mini Goodyear.	CLAMF
JAN 28	FAI (Hearns), Novice & Jnr Aerobatics, Vintage "A" Team race, Classic "B" Team race.	KMAC
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, Classic Stunt, Bendix.	KMAC
NOTE -	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

Sat 27 Jan	REMAC	Bob Burrell Memorial Vintage Stunt
Sun 28 Jan	KMFC	Classic & Novice Stunt
Fri 26-Sun 28 Jan		South Australian Championships
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
Mon 11 Jun	SSME	
Sun 24th June		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 State Championships
Sun 30 Sept		
Mon 1 Oct		
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

Stunt Blues from Joe Supercool

Well I have the wing back on my Firecracker after a norty tree ripped it off.

At the time of this misadventure the Enya 45 6002 was running sweetly but only giving me 6 second laps, not enough to loop safely and there was no needle margin.

So with a little time to spare I setup my test stand in the backyard to do some serious tuning. I can do this as I have a very quiet muffler. Usually I try to do this on the field, and it just doesn't work out.

First up I ran the Enya45 6002 on 4:1 fuel, 11X5 prop and 1/4" (6.35mm) venturi.

This gave a steady 7600 RPM. On switching to 10% nitro fuel (FAI plus 10%), RPM jumped to 8200. The needle setting on the Enya needle assembly was interesting, giving 100 RPM per click!

Still with the 10% nitro fuel, I opened the venturi to 6.5mm, and got 8400.

Opening the venturi to a further 6.8mm gave 8700 RPM and I figured that was enough to go fly. The change from initial 7600 to 8700 was useful indeed.

Now I switched to my mystery fuel. It should be 5% nitro but I'm not too sure.

Whatever, it gave 8400 as against the 8700 from 10% nitro, so I guess it really is 5%.

My Enya 45 6001 was now mounted, mystery fuel, same prop and a 6.1mm venturi insert. This gave 7600 RPM, so I pulled out the insert and got 9000 on the remaining 7.15mm venturi, but I can't say I liked the sound of the motor.

Finally I dropped on my ST46 with a 6.6mm venturi. Again with the mystery fuel, this gave a very healthy 8600. This motor has at least 200 RPM on the 6002.

Well I guess if nothing else, this proves an extra 5% nitro is useful, just as a larger venturi releases more power. Next month: flight tests.



NOBLERS DOMINATE TYRRELL

KMAC's annual Monty Tyrrell Classic Stunt competition was another success when all went well at Knox last November. The sun shone, the wind stayed reasonable and a good roll-up for both enthusiasts and spectators.

The only downer on the day was the high number of injuries. Ken Taylor and Derek Pickard were briefly hospitalised to have their deepo cuts repaired while John Lamond and Doug Grinham went home with sore fingers (not to mention John's blood stained plane).

The day started with PJ wanting to win his third Monty in a row following his successes from 1998 and 1999. But Peter White and Doug Grinham (the only other two names on the trophy) had been practicing and the day saw them finish first and second. Those three fought it out between

them all day with Peter's fine lines putting his hands on the huge trophy when all the marks were added.

The once a year KMAC competition fliers of Dave Lacey, John Lamond and Mike Gordon enjoyed themselves with John's beautifully period finished Chief putting in some very good flying.

Noblers were no less than half the fliers.

RESULTS

Peter White	(Nobler/Fox 35)	2191
Doug Grinham	(Nobler/Fox 35)	2119
PJ Rowland	(Nobler/OS35)	2106
Mark Ellins	(Nobler/Fox 35)	1881
Peter Hiern	(Skylark/Fox 35)	1804
John Lamond	(Chief/OS35)	1604
Dave Lacy	(Venus/OS35)	1500
Mike Gordon	(dunno/can't remember)	1266
Derek Pickard	(Chief/Fox 35)	1218
Peter Rowland	(Nobler/OS35)	1186
Ken Taylor	(Shark/Moki51)	DNS

Judges: Steve Mitchell, Vic Mitchell and Bill Cecil.

The biggest smile at the end of the day was with winner Peter White who won from fellow Nobler fliers Doug Grinham and P.J. Rowland



CLASSIC STUNT Newcastle, N.S.W.

Once again N.A.C.A (Northern Area Contest Acromodellers Inc) from Newcastle in N.S.W. held their annual Classic Stunt competition on Sunday 5th November, 2000.

The weather was overcast as it was for the previous year's event, light winds greeted seven flyer's who made the 9.00am pilots briefing.

In Round 1 Glen Walker who was last to fly must have thought that the previous flights were a bit tame as on the last inside loop of his cloverleaf, he was cutting grass on the pullout, not sure if Glen had not noticed that the other club members from N.A.C.A had cut it the day before with lawnmowers!

In Round 2 John Tidey put in one of his best flights with the Merco 35 powered Thunderbolt every thing worked a treat, 102 point's up on his first round score.

Round 3 Dennis Percival tried to better Glen's grass cutting feat on his inside loops, just over cooked it a bit, broken prop and slightly flatter undercarriage resulted. Local flyer Dave Curry flying in his first Stunt Camp (I think) put up three consistent flights.

The Concourse Award went to Ian Smith with a Mk1 Thunderbird, well done Ian.

RESULTS

1st Paul Allen,	1769, Oriental,	Fox 35
2nd John Elias,	1708, Tucker Special,	Fox 35
3rd Dennis Percival,	1645, Thunderbird,	LA 46
4th Ian Smith,	1617, Thunderbird Mk1,	DS40
5th John Tidey,	1572, Thunderbolt,	Merco35
6th Glen Walker,	1522, Tucker Special.	LA 46
7th Dave Curry,	1452, Chipmunk,	LA 46

Interesting line-up of model's and motors, all very consistent on the day. The OS LA46 being the most popular motor, Tucker's and Thunderbird's most popular in the model department. Since the comp I have had the chance to run one of Glen Walker's LA 46's, very user friendly.

Thanks to Glen Walker for being CD, thanks to judge John North and to all the helpers from N.A.C.A, the members wives who helped with the BBQ lunch, much appreciated by the flyers, the members who mowed the field and to the Sponsors. Newcastle Model Auto Sports. I hope it happens again next year.

Paul Allen AUS 23305

Photo below:-

L to R standing, Dave Curry, Dennis Percival, Paul Allen, Ian Smith, John Elias.

Kneeling ,Glen Walker, John Tidey



PULSE JET Aeromodellers



of Australia

Tuning Pulse Jets

By Bob Fry.

Unlike most other engines of various types in use in model aircraft the Pulse Jet engine cannot be tuned while running. Even if adjustments could be made the time available would be short, as the risk of petal damage is likely during prolonged ground running. The adjustments available to tune a Jet engine are limited and are implemented before the model is flown. You will see I refer to the Pulse Jet as an engine not a motor. For those who prefer things to be technically correct I once read in an article that the definition of an engine is a device that converts fuel into energy, whereas a motor is a device which converts one form of energy into another form of energy. Therefore I shall refer to the Pulse jet as an engine or a Jet.

Tuning adjustments can effect the "Starting" and/or "In flight" performance of the Jet. In some situations the engine will start well but flame out on take off or the engine can be difficult to start but runs better when in the air.

A compromise to get the best of both conditions is achieved by fine adjustments to the engine, model and type of fuel. Slight adjustments may be required after the best set up is found to compensate for changes in atmospheric conditions. Most model engines are tuned by ear and the same goes for Pulse Jets. (But with ear protection!) A deep blubbing or burbling sound indicates a rich setting and a harsh screeching or fluffy sound indicate a lean run. Best performance is achieved with a deep throaty growl

The parts and operating principal of the Pulse Jet engine are fairly basic. Although a description of the complex shock wave pulses and how the engine really works is a pretty heavy piece of technical explanation. (Maybe some other time)

The types of adjustment are limited to the metering jet size, flow injector design, engine to tank alignment, fuel tank plumbing and fuel type. This article will deal with the suction type fuel system (control line models) but most principals apply to the pressure type jets also. The most essential part of the Pulse Jet is the "Fuel Flow"! Different components or modifications can be used to gain more power but the correct tuning is still required to achieve the best from your engine. Once the correct set up is found the engine will be easy to start and will perform consistently.

Jet Fuels

Alcohol based fuels are safer and generally have wider flammability limits than petrol fuels and will perform better when subjected to the varied conditions between ground and air running.

Mixing other chemicals such as Propylene Oxide, Nitromethane and ether will also assist in low temperature starting and better ignition. Changes in the fuel mix will generally require a metering jet change to compensate for the change in characteristics. ie. Adding more Propylene Oxide would require a larger metering jet.

Sometimes the blend of fuel can be varied to compensate for a rich or lean run while keeping the same metering jet size.

Metering Jets

The major tuning is achieved with the metering jet size. Most metering jets are rated in thousandths of an inch. Care must be taken that all the metering jets are manufactured in the same way. The jet is normally counter bored to a precise depth and the final metering hole is only a small depth hole in the seating face of the jet. Varying the counter bore length can affect the flow rate of the jet. In fact the true method of grading the metering jets is to check them with a flow meter and compare them to each other in flow rate. The fuel line and tank plumbing should be sufficient to supply fuel up to the metering jet without any restriction. Suction model should use 1/8" ID tubes and fuel line. Ensure your metering jets are de-burred and free from any machining marks and are stored in a holder to prevent damage to the seating face.

Changing the jet size will have an effect on both the ground and air running tune. Normally changes of .002" will be sufficient to notice a difference and .001" will fine tune for differences in atmospheric conditions etc. Jets running on pressure are more sensitive to metering jet changes and may only operate within .001" of the optimum size. Begin with a larger than expected metering jet, attempt to start the engine and decrease the jet size until the engine starts and runs (with lots of noise!) If the engine just pops a lot without starting, the metering jet is probably too small. If the engine will only run while the compressed air is kept on the jet is too large. The engine will give its best performance on the richer setting and is less likely to burn out petals.

Flowjectors

The flowjector holds the metering jet and is used to atomise and deliver the fuel to the intake ports. An air tube is sometimes attached to the flowjector to direct air at the correct angle to draw fuel from the flowjector for starting. Several types of flow injectors are in use with the most common being the two-hole type as used in the Dyna jet. This design is also the preferred type on most high performance jets operating with tuned length intakes. Sometimes a third hole is drilled on the inboard side to increase fuel flow if using high performance fuels.

The second type is used in the "Bailey" stock jet and has 10 very small holes drilled just past the metering jet base. This type works very well and greatly improves starting when used on a "Dyna" or stock type jet. This type of flowjector requires cleaning on occasion as some of the holes can be easily blocked causing the engine to flame out on take off. As with the metering jets, the flowjector must be clean and free of any burrs or obstructions.

Tank adjustments

When the model is flying, listen for any change in engine noise when flying at both high and low positions. If the

engine leans out when flying higher the engine centre line should be moved further out from the tank. With the engine further out from the outboard side of the tank a greater head pressure will supply more fuel to the engine at flying speed. If the engine runs better when flying high, (too rich when level) move the engine in towards the tank. Check the yaw of the model and confirm the fuel pick up line is situated on outmost edge of the tank when in the flying position. When the correct alignment between the tank and the engine has been set further adjustment should not be needed.

The tank design is possibly one of the most important areas of the whole model and engine set up. To create an efficient and reliable fuel flow everything starts at the fuel tank.

For a Jet operating on suction the tank should be set up for "uniflow" venting. (End of the air vent located in the fuel head near the feed line) An open vented tank will start rich and lean out towards the end of the flight. The uniflow system will give a lower pressure but will be constant right through the flight. The tank should have 2 baffles dividing the tank into 1/3 sections and cover about 80% of the cross section. This will help with stability by keeping the fuel from sloshing about and maintain a consistent head of fuel at the feed line. The tank design should be as narrow as possible (up to 25mm) to decrease the change in fuel head pressure, total volume is determined by with the depth and length of the tank.

Finally, keep a record of the changes made and note what jet sizes work with different fuel brews and weather conditions. Often just looking back at your notes will help keep you on the right track.

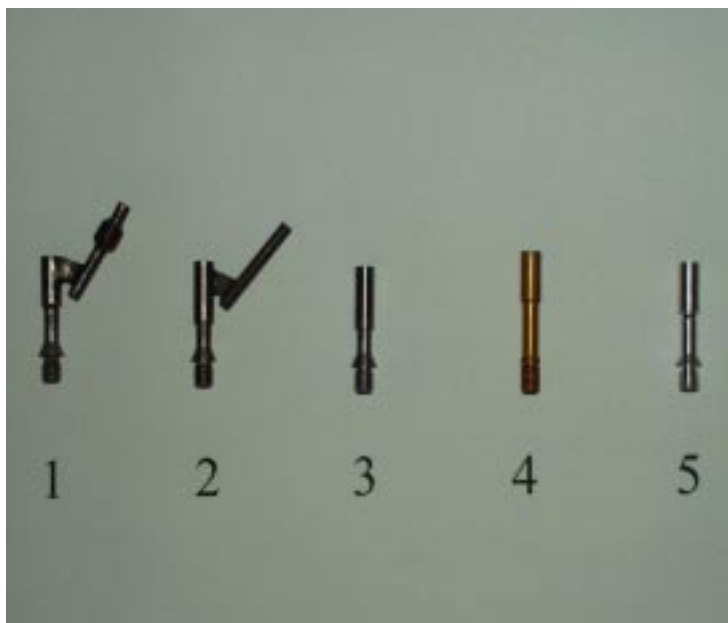


Photo above

Flowjectors.

1) Dyna with 2 x .050 inch holes.

2 & 3) Stock Bailey - 10 radial holes with and without starting blow pipe.

4) Bailey Fast jet available with 2 x .050 inch holes (anodized Yellow) or 2 x .062 inch holes (Red).

5) Jet Bill tuned intake flowjector with 2 holes.

Photo below

Engine fuel pickup on the outboard edge of fuel tank. Engine shimmed in or out for in flight tuning.



2000 CLAS NSW State Championships

Official Results

Aerobatics- Expert

1. Brian Eather
2. Mark Batty
3. Reg Towell

Aerobatics- Advanced

1. Gary Tansley
2. Jeff Brown
3. Neil Alleyne

Junior Simple Rat race

1. D.Clements 170 Laps
2. H.Simons 163 Laps
4. M.Comiskey 163 Laps [count back]
5. J. Armstrong 51 Laps
6. L.Fairall 48 Laps

2.5cc Rat Race

1. Grant Potter/R.Harvey 218 Laps
2. J.Nolan/H.Simons 187 Laps
3. R. Fairall/L.Fairall 17 Laps

F2A Speed

1. J.Walker 13.87 Seconds
2. R.Justic 14.62 Seconds
3. H.Simons Did Not Fly

Bendix

1. J.Hallowell- M.Ellins 7.52.90
2. J.Taylor - W.Shurmer 82 Laps

F2D Combat

1. Rod Smith
2. M.Comiskey Snr
3. D.Clements
4. Grant Potter
5. B.Harrison
6. G.Bucholz
7. M.comiskey Jnr

Slow Combat

1. R.Smith
2. M.Comiskey Snr
3. L.Fairall
4. M.Comiskey Jnr
5. D.Burnett

Junior Combat

1. C.Andrews
2. D.Clements
3. L.Fairall
4. J.Armstrong
5. M.Comiskey
6. D.Burnett

Vintage A Team Race

1. P.Camps/S.Pilgrim 7.34.19
2. J.Hallowell/M.Ellins 7.36.66
3. R.Justic/A.Kerr 7.58.34
4. H.Simons/D.Simons 3.53.90 [h]
5. G.Potter/G.Potter 4.01.25 [h]
6. G.Knight/R.Harvey 4.01.69 [h]
7. B.Harrison/J.Nolan 4.41.00 [h]
8. L.Fairall/R.Fairall 4.54.41 [h]

Vintage B Team Race

1. D.Simons/H.Simons 9.42.08
2. G.Potter/G.Potter 128 laps
3. G.Knight/R.Harvey 114 laps

Combined Speed

1. H.Simons 91.6%
2. D.Curry 90.22%
3. L.Fairall 81.3%
4. D.Clements 81.0%
5. D.Curry 71.1%

Goodyear

1. D.Simons/H.Simons 8.52.14
2. J.Nolan/J.Hallowell 14.58.09
3. G.Knight/R.Harvey 163 Laps
4. R.Justic/A.Kerr 68 Laps

F2C Team Race

1. R.Justic/M. Ellins 181 Laps
2. R.Harvey/G.Potter 179 Laps

Class 2 Team Race

1. G.Potter/G.Potter 1 Lap
2. J.Taylor/W.Shurmer 3.26.88 [h]
3. J.Hallowell/M.Ellins 3.51.22 [h]



FOUR STROKE STUNT ENGINES - WIN OR LOSE?

Derek Pickard looks at the renewed trend to four strokes in stunt and compares a top offering to established two stroke power.

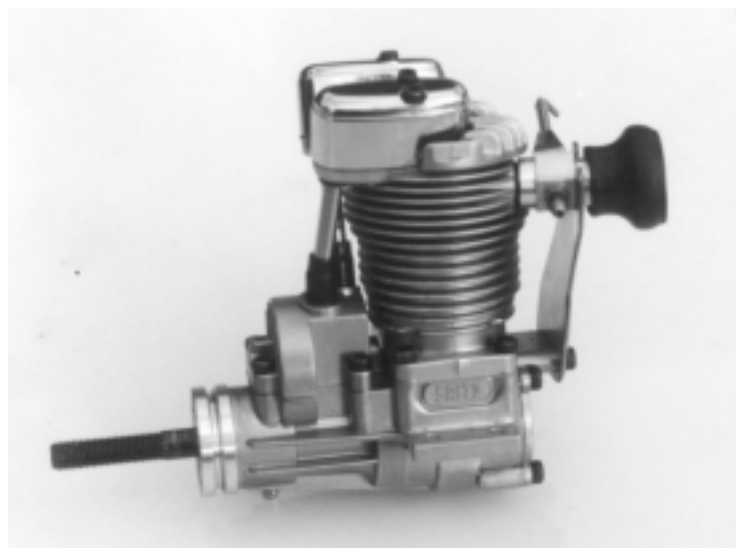
The Beringer family, by using Saito 4 strokes to finish second and fourth at the last World F2B championships in France, have re-ignited the whole debate on this alternative power source. And when you consider how close the plot came to winning outright and the excellent impression the performances made on most observers, the layout has to be considered.

For those who've kept a global perspective on developments, there was nothing new about what happened. It was Italy's evergreen Compostella who used a big Webra for success in the Euro champs back in the 1990s. But that unusual plane with its small front moment and upright engine won few admirers as it looked as attractive as a Rumanian female weight lifter on steroids struggling to raise 800kg.

When I began my six year engine test program back in the early 1990s I clearly remember taking a look at four strokes with a quick comparison of an OS40, Enya 40 and Webra 40. Their lack of power for their weight did not impress and only pouring huge volumes of nitro made the situation anywhere near acceptable. There was also the frustration of inconsistent run lengths due to what appeared to be over-sensitive needle settings with stock radio carbs. But that was then and I totally agree that change, development and diversity are a wonderful part of life.

Recently, I became motivated to revisit the situation by the many endorsements made from top fliers using the latest breed of new generation four strokes. Most of these enthusiasts have clubbed together to pool information via Bob Zambelli's E-chat forum. (His enthusiasm is delightfully infectious.)

After following their exploits for some months, it became clear that the latest Enya 53 and Saito 56 are rated by everyone who has tried them as among the best in four strokes. So I jumped in at the deep end and bought the Saito which is the most bang for the weight in relation to our 50/60 size planes.



The NVA conversion to the Saito was achieved with an inlet level venturi retained by a special bracket up from the lower radio carb mounts. An air filter is fitted to achieve this top set-up.

There is no doubt that these engines do a great job in an F2B ship - that is because their power for weight is good. The big question is: "Are 4 strokes the next stage in F2B competition and should club fliers consider converting from conventional 50/60 two strokes?" Curiosity got the better of me and I set up a comparison between the various types of two stroke alternatives to put the matter in context.

Firstly, let's handle the big questions and common misconceptions (and these statements concern only the current generation engines):

- Four strokes are too heavy. Not necessarily so; by the time the fuel load is taken into account the total flying weight is comparable.
- Four strokes develop more torque than two strokes. No they don't and it's usually the other way around - especially when a tuned pipe is added. But four strokes invariably develop a lot of their torque lower in their rev range which can be of advantage with F2B type props. (If conventional 60 fliers want to feel how much torque their engines can output, screw in the needle at least half a turn for a two stroke run only and hang on. The most torque in F2B engines is from piped 60s but they demand high revs, small pitch props and careful set-ups.) Torque is invariably the product of capacity times BMEP (the bang on the piston) and in potentially displacing its capacity every second stroke (instead of every fourth stroke) the two stroke can have an advantage which is why in many forms of motorised competition contemporary two strokes are preferred for their maximum output. But it's the type of torque stability that's important for us - more on this later.
- Four strokes are an unnecessary expense. This could be true for many club fliers.
- Four strokes are less fussy when aiming at peak performance. True.
- Four strokes need more maintenance. Not really, sufficient correct oil should see them last a long time and the latest crankshaft bearing thru-flow lube systems help a lot.

Now that the basics are out of the way, let's move into how this comparison test was done. The one plane with its system of alloy plates to mount the engine was used to test fly the Saito FA56, Stalker 61 and PAW 51 engines. This would give direct comparisons between a good four stroke, good conventional 60 two stroke and a diesel alternative. (The latter was included because both former units are there to be compared for torque at low revs which is where a diesel is very good.)

The Stalker 61 was chosen because of its attractive price, the fact that it is available in either 4-2-4 and 2-2-2 characteristics and I've owned both for some years and are on my shelf. I consider this engine to be superior to the established Tigre 60 because it is available new and does everything the ST60 can do. I also realise the latest Double Star 60RE Lite (schnerle ported) is the best in this category when taking weight and power into account but I don't own one.

SAITO FA56

This is a conventional pushrod four stroke where the only model is for radio and can either be run with full throttle or after being converted to a stunt-type venturi and NVA. Saito has developed it from their 45 so it's a slightly short stroke. The weight with the stock muffler and carb is 15.5 ounces that reduces to nearly 14.5 ounces after a venturi conversion. Between 75 to 110cc of fuel is needed for the pattern (depending on nitro content and carburation size) making a total flying weight of up to around 18.5 ounces. The motor has most of its available torque relatively low in the rev range and can pull a 13x6 prop. While most stunt

conversions have simply replaced the stock radio carb with a venturi, that leaves the engine inevitably vulnerable to easy flooding when starting in the inverted F2B position. A alternative is to make a different type of venturi suitable for stunt that goes straight into the inlet port and is retained by a bracket which reaches up from the original carb mounts. This has two advantages:

- It prevents any starting difficulties but demands a low level tank position. (And just to complicate things, I made my venturi to take an easily changed choke diameter to allow experimentation for optimum performance. The concept is similar to Weber car racing carburetters.)
- The shorter total intake length is better matched to the needs of full throttle rpm than the original longer device.

STALKER 61

These big Stalkers have conventional porting but there is a choice between the two run types:

- 4-2-4 run specification is the most powerful version that runs best with around a 305 thou venturi, an empty muffler and more head shims with up to 10 nitro. These engines go for ever on a recommended 20% synthetic oil and like up to a 13x5.5 prop. Total pattern consumption is between 130 to 150cc.
- 2-2-2 run has a different sleeve with milder port timing and baffles in the muffler. It runs well with a 285 thou venturi and more compression on only 5% nitro for as little as 80cc consumption. The weight ready to go with muffler is 14 ounces. Adding fuel for the 4-2-4 or 2-2-2 type runs means a total flying weight of 19 or 17 ounces.

PAW 51

A two stroke model diesel of this type is known for its ability to develop good torque at relatively low revs. Complete with stock muffler the motor weighs 16.5 ounces and uses around 80cc of fuel making a total flying weight of around 19.5 ounces. A diesel such as this handles up to a 14x6 prop without any grumbles.

So far so good. All three motors are reasonably close in weight but worlds apart in concept.

Everyone knows about the conventional 60s so the Stalker will be handled first. This engine is relatively cheap to buy, comes with a great warranty and a buyer can choose the type of run behaviour. I own both and know the 2-2-2 is sweet requiring hardly any needle setting alterations during a summer flight season. If value, simplicity and sweetness are the criteria this is tops. But I prefer the power and behaviour of the 4-2-4 version and I achieve this with an empty muffler which then gives a slightly louder bark but does so with a very dependable run switch. The only cost is more mucking around on the needle setting and up to twice the amount of fuel. These engines run well in any mount position and the 4-2-4 version definitely has the torque advantage over the 2-2-2 when it switches as the nose is pointed up. If a conventional 60 is required, the big Stalker is recommended.

The mount limitation is a big problem with the PAW which runs best when mounted on its side otherwise the thing can give a worrying misfire at corners in the squares. It also vibes the most and demands nothing less than very strong mounts. In operation is simple in that only the

compression vernier T-bar needs adjusting up for starting and winding back for running after the warm-up. The good torque at low revs is the result of the energy rich kerosene fuel that allows this PAW to stomp out real stump-pulling grunt. In terms of raw torque, this PAW will pull the pants off the Stalker - it really is that good. But the lack of user-friendliness is the problem. Also the burnt kero smell lingers all the way home in the car. Although in terms of torque this thing is good, the various downsides make it only for the dedicated. All things considered, it must lose out to the 4-2-4 Stalker. (There was also the problem of the British brute giving the test plane a worrying shaking for the period the diesel powered its sector of the comparison flights.)

Against those two strokes comes the Saito and the 56 size is accepted as being the most recommended; it is the closest to 60 size and even drops into 60 mounts with minimal mods. These four strokes don't have much of a needle-controlled variation for run characteristics nor do they need a complex diesel fuel mix - they perform on 20% synthetic oil and only 5% nitro. On that fuel, life is simple with the run being sweet and strong. With a totally dependent single speed output the motor whirs around the pattern doing it easy. Power is always there and obtaining the right lap times is a matter of tuning the prop pitch and line length. The test plane was flown on a number of set-ups but ran well on 68s with a 2 blade 12.5x5.5 and the tank position was found to be 3mm closer to the engine mounts instead of in-line with the new NVA.

As regards venturi I.D., the unusual venturi I designed incorporates the facility to quickly swap inserts of different I.D. It was tried with three sizes: 265, 275 and 285 thou; all of which were run with an Enya NVA. The trick here is to realise that carburation for max power is not a linear effect and while it is easy to use as big an I.D. as possible, the smart thing to do is to use as small as practical while retaining 99% of the max output. The benefit will be faster gas speed past the NVA and more precise fuel metering. Run time length will also be more consistent.

Anyway, my experiments confirmed that the 285 insert with up to 15% nitro did give bucket loads of power, but the output with 275 was hardly anything less and the ease of setting was noticeably better. Amazingly, the 265 thou insert on no nitro still gave sufficient power to effortlessly fly a 68oz plane very impressively and only use 70cc of fuel for the pattern - the lowest consumption I've ever recorded for a genuine 60-size output. (Following much experimentation, the final set-up which gave the best all-round performance was a 275 thou venturi on a fuel of 20% synthetic Cool Power and 10% nitro needing 90cc for a 6 minute run turning Eather's excellent 12x5.75 three blade CF prop on full length lines.)

The advantage with a constant speed run with gobs of torque is the total predictability. When this impressive Saito is fitted with the right pitch prop, it not only turns the revs as a single rpm but pulls the plane at the one dependable speed - up, over, across, down, tight, around again, the lot. The plane feels as though it's on rails connected to a power source of utter grunt and dependability. The behaviour is very similar to the PAW 50 and 60 diesels that impressed me so much when they were released. But this Saito matches their output thump

for thump with complete user-friendliness and in delivering both is superior. There, I've said it.....this is a much better all-round stunt engine than the big British diesel.

*2 or 4 stroke -
These three
engines are of
comparable
size and weight
but their
characteristics
are very
different.*



The Saito 56 combines the sweetest single speed run with all the torque that's need to do a top job. The result is ease of timing in the manoeuvres and faith in constant line tension. When correctly set up this is very impressive. After a period of getting used to the thing, most fliers realise this is a very nice and super effective way to fly.

Against a two stroke, this four stroke has to be described as producing a constant flight performance that is very strong without any problem of over-enthusiasm which is a frustration with many peak performance two strokes. The Saito is sweetness with real power.

In comparison, the Saito in action is definitely more powerful than the Stalker 2-2-2 but every bit as sweet. This thing is a lovely combination of both and a great experience in the air. All in all, the four stroke is a clear winner with the only downside being initial cost and the problems with making a stunt venturi.

So, if the dollars are not a difficulty and there is access to a machinist for a venturi conversion, then the Saito 56 is very highly recommended. It looks really different, makes a different note in the air (even better with a straight-thru muffler), turns a big pitch prop to keep line tension up top and is very impressive all round.

There is only one major downside to such a big four stroke: Nearly all of the weight is in the engine (as opposed to a high fuel load burning two stroke) which means while the total weight may be the same but the four stroke is at full front moment....and that means a pendulum effect. This big engine requires a well trimmed big plane.

And to answer the big question of whether or not this could be the next step in stunt power, I'd have to say anything this powerful and sweet will have to attract top fliers who will then give real momentum to the trend. As for its ability to win, Beringer only missed the world championship by a few points getting very close to the dominant Chinese number one and his conventional 60 - but that's another story.

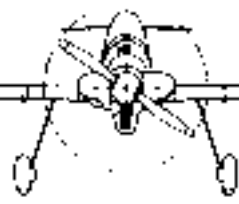
As an aside, I've always had a problem having faith in the way model four stroke engines are adequately lubricated. The system works on the basis of the oil inevitably passing the ring and valve guides to lube the bottom end and valve gear. The only good point is the way Saito has fitted the 56 with a small breather outlet nipple between the two crankshaft bearings. This helps oil flow out through the two bearings and also can double for injecting after-run oil. But as for how long the engine will last - I dunno - stay tuned.

Conclusion

The numbers add up, the grunt and torque are there, and the sweetness can be gained. It works. This Saito 56 is a great way to fly. Highly recommended.

Declaration of interest Derek Pickard paid full price for the Saito and the other engines were off his shelf.

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★ Minimum induced loss computer designed propellers
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K1141 20

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	



Letters to the Editor

To the editor,

I came across some photos that I took at the Nowra 2000 Nats. Although the Nats are long gone, your readers may enjoy looking at the colorful characters.

As the Contest Director of F2B Expert and advanced, I must say that CLAS N.S.W. did a magnificent job in preparing and putting on such a professional Stunt event. I thought the handing out of 'PINK' copies of each competitors score sheets at the conclusion of each days flying should become mandatory.

The thought of hiding score sheets from competitors till the end of competition is backward looking. The pilots need to know which maneuvers are scoring poorly so as to concentrate on improvements. Certainly the highlight for me was meeting the BOSS Mr. Bob Palmer.

I was pleased that we had 2 warm up flights each day to give the Judges an opportunity to discuss their judging methods with the view of doing the best job possible and we started the competition on time every day for six days. Joan McIntyre led the 2 judging groups as Chief Judge and we were fortunate to have her experience (National and International) for other judges to learn from.

Just a thought on location and timing of Nats.

Why can't the MAAA agree to find a suitable flying location that is somewhere between Vic and Queensland (Sorry N.T,W.A. and S.A. you just don't have the population and the majority will always win the day) that can accommodate R/C, F/F and C/L in the same general area, establish a caravan park or similar with canteen, toilets, showers, parking, shade and possibly a CAT 2 building with offices and facilities with a full time caretaker/s. Then the Nats could be run on the same week each year, same location and every competitor would know what to expect. The flying site could be rented out to various State Champs and other regular championships. To me running Nats at different times of the year is stupid and lets face it - the Nats being held at Perth will be a local Derby - only a handful will travel from the East Coast. (Sorry if this ruffles some WA feathers but it is a fact!)

The more pressure for MAAA to establish these facilities the better off the MAJORITY of competitors will be. If the Yanks can do it why can't we? Any others care to comment.

Best regards,
Len Surtees

Right:- Expert F2B Judges. Chief Judge Joan McIntyre, John Elias and Gary Tansley. 3 cool professional individuals who gave up thier practice days to judge. Thanks!

Bob Palmer USA,
Ian Smith and Tim
Gee watching Reg
Towell flying Bob
P a l m e r s
Thunderbird.



Above:- Niel Whymark and friend who turned up with a 1930's racing classic. Didn't see the model fly but it created a lot of interest. Note the car rim used to roll up the C/L lines- made a handy seat.

Left:- Niel Whymark flew his original stunt plane at the conclusion of F2B





TARMAC Notes for November, December and January

Some good (TARMAC related) news is that Jim and Lorraine Stivey have become grandparents. David and Tanielle presented them on the 21st of December with a 9lbs 1oz grandson named Zachary James Jacobson/Stivey. Another combat pilot to carry on the Stivey tradition.

The weekend of 18th November was the occasion of the famous 'Turf racing' day. Classes catered for were Vintage A, Bendix and Plain bearing rat racing. Last years event measured team performances against the record for the class being raced, with the highest percentage being the winner. But this year was it was changed to a nominated time event, where the teams competing had to declare their expected heat time, the closest time to the estimate would be the winner. All times were rounded down to the nearest second, so if your time was 3:50.99 it would be considered to be 3:50, not 3:51.

Due to lack of entries (interest?) Bendix was not flown this time. The place was awash with the smell of ether as the diesels were fuelled up and I was sniffing it up like a drug addict getting his first fix for the day. For a change Jim Stivey was flying the Gillott Oliver powered 'Elliptic' Vintage A model that Hans Bertina has rebuilt after a crash that I thought had totally destroyed it. He has performed a minor miracle to restore it to near pre-crash condition. Jim says that it flies very well and it definitely goes like stink at 18.3 seconds for 9 laps. That, according to my little ready reckoner is a speed of 98.32 Miles per Hour and that is very quick for this class. For comparison, my unmodified CS Oliver powered 'Pluto' was going as fast as it ever has at 19.7 seconds for 9 laps (91.33 MPH).

I know that most of the East coast racers compare race times for Vintage A against a reference of 10 laps. That is probably just habit carried over from FAI racing and of course it doesn't really matter what distance you use to compare times if that is all you want to do. It is all you NEED to do. The reason that most of the West Aussies time over 9 laps, is that when using the 46 foot 8 inch line length that we have for this class, 9 laps is exactly one half mile. That makes it easy to calculate speeds in Miles per Hour. It is even easier with my handy (and oil soaked) speed chart.

The winners were the team of Letchford/Dyson who managed to achieve the exact time nominated for one of their Vintage A race heat of 90 laps at 4 minutes 45 seconds, but were rather further from the mark in their other heat. In second place was the Kirton/Stone team whose best estimates missed by 2 seconds in the first heat and 1 second in the next. Heat times were 3:33 and 3:32. Third was Stivey/Bertina whose model was going like the clappers to turn in the fastest heat time in Vintage A of 3:27, but their estimate was a bit further away with a 5 second miss. Even so, that is not bad considering that all

competitors were going as quickly as they could. It was full on racing.

All the same, it has to be admitted that there is quite an element of chance here, and you have to be lucky to jag a time that is smack on the estimate. Therefore Jim Stivey (the promoter) has suggested that next time we hold an event of this type, it would be fairer to average the differences between estimates and actual times for 2 or 3 heats. That should dramatically reduce the luck factor.

The 'Stop the Clock' prize this year was a \$40 voucher donated by Scott of Ace models in Midland (have you checked out his new shop on the corner of Victoria and Viveash Streets in Midland yet?). This is a prize that can be won by anyone - skill is not necessary, but you do have to enter an event and compete. The winner is the team that has a recorded time where the seconds are closest to those on a stopwatch that has been stopped at random. That was won by the very deserving and totally unabashed team of Kirton/Stone for the second year running. How is that for (c)lass. Thanks Scott for your continuing support of the Control Line events. For those of you that are too far away to check out the shop in person, it is possible to mail order from the wide range of Control Line, Free Flight and R/C kits and spares that he always has in stock. To contact Ace Models phone (08) 9274 4519 or check out the web site www.tnet.com.au/~ace.

The last weekend in the year 2000 saw a good roll up at the club field, and as that very observant chap Jim Stivey noticed it was an impromptu Father and Son day. Or in his case, a Grandfather and son day. There were six pairs of them roaming around. Jim with son David, Adrian Dyson and Ben, Garry Turna and Stephen, Bob Fry and Blade, Fred Adler and Daniel, and myself with Charles jnr. Grant Lucas, not wanting to be left out, was doing a passable impression of Long John Silver with his pet green 28 parrot firmly attached to his shoulder.

Grant had his nearly finished monoline 'B' speed model (built from a John Newton kit) along with him and very impressive it looks too. Built from fiberglass, with a magnesium pan and powered by a Nelson .29, I expect that this will be a very good performer. While we were there, Grant set up his dynamometer in a shady spot and spent some time checking the power produced by Garry Turna's Metkemeyer .40 Pylon engine. It was very interesting to see how he went about the testing. Though the engine sounded very impressive and revved more than any .40 I have ever heard, I was later told that it had been over propped slightly and that had held the revs down to only 30,000 or so. Hmmm.

Grant has been working with Stuart Sherlock (also present on the day) to produce some moulds for Stuart's plastic injection machine. The first trial production is under way and producing some engine offset plates. Grant is also getting ready to produce his carbon fibre, speed model tailplanes from highly polished metal moulds.

Jim Trevaskis was home in WA, having briefly escaped from his work on the East coast. He brought along lots of interesting stuff for me to look at and has promised more details and photos in the future. He had a Brian Burke

manufactured kit for a 'B' class team racer. It is a copy of the Aeroflyte Rambler and this version goes under the name of 'Scrambler'. It has a high degree of prefabrication, seems very sturdy and easy to build. The fuselage comes already built with a top block of balsa skinned white foam, with a shaped balsa cowl. The wing is pre-shaped with controls already fitted. It looks like good value at \$85.00.


Jim also showed me his freshly made 'Stooge' (mechanical model launcher) that had been based on my design. It was beautifully made and finished and along with the other stuff that Jim has planned for us, there may be some photographs, drawings and construction details on the way to show us how he did it as well as future articles on special finishing and painting methods.

My spies tell me that Alasdair Taylor and Bob Fry have applied to the Nats committee to add some extra unofficial events to the upcoming Nats line up. If all goes to plan, there will be 2.5 rat racing, junior rat and 'B' class team racing as well. That is the full on current rules stuff, not vintage B.

I was asked how I lubricate my engines for storage after they have been run. My method doesn't take long and it certainly works for me. I always wash out the engines with clean (filtered) petrol. I keep a sealed squeeze bottle full of the stuff in my model box for just this purpose. Put in a couple of venturis full and slosh it about in the engine at the end of the days flying. Then empty out the petrol, and replace it with the same amount of (car) automatic transmission fluid. Slosh that about in the engine as you did with the petrol and empty that out as well. The engine then can be left for ages and will stay free and rustproof 'til you next need it. Easy isn't it?

Although somewhat general, I think this sometimes applies to our hobby: "You can often learn more" they say "by watching an IDIOT than by listening to a GENIUS!"

Charlie Stone VH4706
Email<cestone@bigpond.com>

.....
**Notice**
Members of CLAMF are advised that the next club meeting on Friday 2nd Feb will take place at the secretarys home at 37 Thompson Street, Clayton. **Not** at Clayton Primary School.
.....



Control Line Aeromodellers of Gippsland from Peter White.

Fourteen fliers turned up for the December get together at the Warragul Regional College Oval under skies that threatened to rain all day. However, late in the morning the

wind blew up quite suddenly and when it died some 15 or 20 minutes later the heavy grey clouds had all but disappeared leaving bright sunshine and gentle breeze for the rest of the day.

With four circles in action there was plenty of flying done throughout the day.

Present were Dave and Vera Lacy all the way down from Ballarat, the Mitchell boys, Vic and Steve, Ron Jones, Graham Keen, beginner, James Cross (under Graham's wing), Peter Roberts, Robin Hiern, Greg and Peter Beevor, Graham Vibert, Geoff Ingram, Paul Richardson and yours truly. James had three flights with his Cox Texan/ 049 and seemed to do quite well with it.

Dave Lacey's airforce consisted of a Frog 500 powered El Diablo; a Madman with a K&B Stallion 35 and an OS 35 powered Dragon. All three of these models appeared to handle quite well. Good to see Dave and Vera make the two and a half to three hour drive down our way again.

Graham Keen flew his enlarged Viper with urge provided by an OS LA 46 as did Andrew's 46 in his Viper.

The Beevor boys have now fitted a new Enya 29BB to their Fancy Pants (the model that is) - although probably not fully run in the Enya sounded quite happy and put out ample power for the needs of the model. The aforementioned three also had with them a 049 powered Delta and a couple of Stunt Runts with OSFP 15's for noseweight. These enlarged Stunt runts get around pretty well, so much so that Greg is looking at the possibility of a scaled up version for the LA46.

Geoff Ingram's old warrior, the Wombat, has again been fitted with the Taipan19 diesel and is back to its old tail dragging line dancing tricks, Geoff also managed a brief flight with his Midge Speed model before terra firma reached out and took hold of it.

Paul Richardson, after much initial trouble starting and setting two new MDS 15 diesel copies, managed to get his new twin fuselage Peacemaker into the air. I seem to recall him mentioning that the model was a bit overweight but it hung out there quite well even after one the motors cut. Geoff, even with his good ear for tuning diesels, found it tricky getting the two in sync.

Paul also ran into a spot of bother during maneuvers with slack lines and the wind in the wrong quarter, which allowed the Good Doctor to head off in a downward direction by itself, resulting in damage mostly to the wing rest area. I believe that it's now back together and ready for more action.

Ron Jones put in a couple of flights with his Valiant/ Enya 35 setup as did Graham Vibert with his topflight Nobler powered by the old faithful Fox 35. This old Nobler flies very well despite its age and was responsible for convincing me to build another one after miserable experiences with two Noblers many years ago. Happily the third attempt was much more successful.

Steve Mitchell had, I think, one flight on his ST 46/Old Whitey, while brother Vic flung his Taipan 2.5 'Vics Folly' skyward a couple of times before they selected to sit back in the shade and snigger at the antics of us younger chaps in the burning sun.

Peter Roberts brought along his Peacemaker/OS15. Liquidater/ Tiapan 2.5 and his neat little Frisky also with a Taipan 2.5, all of which were given an airing during the day.

Robbie Hiern was present with his AM 35 powered Ambassador, his newish Marvin with the Elfin 1.49 and a

Delta Speedster powered by what could have been a Norvel. This little model was very quick until the evil ground spirit struck it down.

I put in one flight with El Diablo/Fox 35 and a couple of hairy flights with the All American Junior and its not-quite-run-in Torpedo 19. On the first attempted flight it pulled the standard All American trick where by on takeoff it ran in and took a low-level short cut across the circle tearing the landing gear out in the process.

Over all the day went off well despite the temperature soaring during the afternoon.

The venue proved to be popular and now that we all know how to find our way onto the actual field the next time we need to use it, there should be less confusion and puzzlement in getting there.

By the time you read this the Moe Day will be history (Paul's report may be somewhere close at hand) and so it's on to Traralgon on Sunday 4th February where we can be found on the grounds of Hobson's Park Hospital, entering off either Hazelwood Road or Hyde Park Road.

The following flying day will be at the Maffra Sports Complex on Sunday 4th March.

As usual everyone is welcome to take part no matter what type of model you fly.

BBQ facilities are provided for those who wish to bring snags, steak etc. for lunch.

Any further info regarding these days can be obtained from Paul Richardson on 51 47 2374 or

mobile 0402 066 753. or

Peter White on 5623 5120 or

mobile 0401 496 265.

WANTED

Crankshaft's to suit Picco .21 Engines

1 To suit silver case Picco P5 21

1 To suit black case P S

Phone Alan Lumsden on 03 9874 2824

→ → → → → → → → → → → → →

Crankcase for ETA .29 Mk 3 or Mk 4

Main barrell section only needed.

This is to get my ETA flying again and not for a collection.

Contact Robin Hiern on 03 59 960339

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Wanted

Travelling companion to W.A. Nationals April 2001

Share expenses. Car with trailer. Departing Melbourne 17th April or Adelaide 18th.

Arriving Bussleton 21st. One way? or return?

For further details please contact:-

John Taylor Ph (07) 33927679 Fax (07) 33927529

Email annmt@primus.com.au

→ → → → → → → → → → → → →

Wanted - Muffler to suit Fox 25

Phone 9801 4110 or Mobile 0404 479 215

Many thanks, Wendell Prins - K-MAC



As readers of this newsletter you may or may not have noticed that unlike most news papers the content is not dominated by advertisements. We do not discourage business advertisers (and our rates are very reasonable) but we do not actively try to encourage them. Your subscriptions are what keeps this newsletter going.

Now and again things are mentioned in peoples articles on where to obtain items that can not be obtained down at your local hobby shop.

Here is a recent experience of my own.

In Victoria we have a racing class called Simple Rat Race. The models can be of any design but must use a plain bearing, unmodified, uncowed motor. This class always produces some very close racing with the winners and placegetters often separated by one or two laps. The most popular motor over the years has been the O.S.15FP. It's quality and reliability straight out of the box made it a natural first choice. O.S have now ceased production of the F.P. series and replaced it with the L.A. series.

A few members of our club wished to breath new life into the well used F.P's and tried in vain to obtain spare O.S. pistons and liners through local hobby shops only to be told parts were not available.

In desperation I contacted a company that advertises in the Aeromodeller called Just Engines in Reading, England about price and possible availability. Email justengines@enterprise.net (<http://www.justengines.unseen.org>)

The next day I received an email reply with a price and expected delivery to Australia in 4 to 6 days (They must of been thinking I only wanted one.) I placed an order for six piston & liners, two con rods and two gudgeon pins on Christmas Eve and received them in good order on Jan 16th. Well done Just Engines and thank you!

If these parts are readily available in Britain then why was it so difficult to obtain them in Australia?

Our local hobby shops want us to support them but they and their suppliers should also support us.



Two top stunt engines: Merco 35 red head in excellent condition and converted to run an air filter \$70

Super Tigre 60 stunt in excellent condition complete with muffler, set up by Brian Eather.

Bargain at \$160.

Derek Pickard (03) 9889 1149.

→ → → → → → → → → → → → →

CONTEST RESULTS



Combined Speed held at Frankston 19/11/2000.

Pos	Name	Class	Engine	Flight 1	Flight 2	Flight 3	Fastest	Km/h	%
1	R Hiern	1/2A	AME .049	9.49			9.49	152.62	101.37%
2	R Hiern	.21	Novarossi 21	14.59			14.59	246.74	95.85%
3	R Hiern	FAI	Profi 14.20	13.44	13.49	13.44		267.96	94.53%
4	N Wake	Class 1	Enya CX 11.	16.40			16.40	219.51	90.55%
5	N Wake	.21	Picco 21	15.88			15.88	226.70	88.06%
6	N Wake	FAI	Irvine 15R	16.13	14.88	14.70	14.70	244.90	86.39%
7	V Marquet	Vintage Proto	McCoy 29	47.73	48.41	49.47	47.73	121.38	75.42%
	J Hunting	Midge	PAW	11.24	10.35	10.35		139.94	
	K Hunting	Midge	PAW	10.75	10.88	10.75		134.74	

Springvale Contest Results 10/12/2000

Australian "A" Team race	Rd 1	Rd 2	final	engine
1.K.Hunting/J.Hunting	4:25.9	4:13.56	8:56.59	Taipan
2.M.Wilson/G.Wilson	6:05.1	4:19.19	9:42.01	Taipan
3.H.Bailey/R.Marsh	5:26.09	4:24.19	10:47.91	OS 15 FP
4.J.Hallowell/M.Ellins	4:10.92	DNF	25	Oliver
5.C.Ray/J.Ray	6:42.97	4:59.74		OS 15 FP

Classic "B" Team race	Rd 1	Rd 2	final	engine
1.J.Hallowell/M.Ellins	3:32.03	3:14.72	6:40.32	OS 25FP
2.C.Ray/J.Ray	3:13.10	dns	7:05.22	OS 25FP
3.G.Wilson/H.Bailey	3:50.59	3:49.10	7:40.67	OS 25FP
4.J.Hunting/K.Hunting	4:33.75	dns		Enya 29

CLAMF Contest Results 17/12/2000

FAI Team race	rd 1	rd 2	rd 3	engine
1.A.Nugent/M.Ellins	5:07.90	4:05.16	4:37.22	Chaicka
2.J.Hunting/K.Hunting	4:51.47	4:43.35	dnf 49	Nelson
3.C.Ray/J.Ray	4:52.47	5:00.09	4:48.76	Nelson

2.5cc Open Combat

1.G.Wilson	W B W
2.M.Ellins	L W L
3.H.Bailey	B L

Queensland News

It's now official, confirmation received this morning from MAAQ. The Qld C/L champs will be held on the Queens birthday weekend in June (9-11 June 2001). This does not include the scale events which are being held over the Australia Day long weekend (Jan 2001).

The Champs are being hosted by ALC Inc at their club facilities at Chetwynd St Loganholme .

Also, for the comfort of competitors more improvements are underway. The pit area is being enhanced by the addition of full hard cover over its entire length for shade and rain protection (half finished). The canteen area has also been extended in the front with hard cover as well and by the champs should have some seating added.

All going well and to plan (yeah, right) further covered areas might just get added to the hard stand and racing circles in time for the champs. Don't hold us to that one but we'll see what happens.

Regards Les Winterton (Sec ALC Inc)

Notes for the competitive minded

The Next Nationals after Busselton are to take place in the Albury/Wodonga District. It is intended to run all the official C/L events plus Classic Stunt and Classic B Team Race. These Nationals will take place over the traditional Christmas/New Year period.

World Championship Competitors.

For those C/L modellers interested in qualifying for the World Championships to be held in Germany 2002 the following competitions are to be used. The best 2 results from any State Championship held during 2001 and the following Nationals, 54th in W.A (F2A & F2C) and the 55th in VIC (F2B & F2D).

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