

THE VOICE OF CONTROL LINE
AEROMODELLERS FROM
AROUND AUSTRALIA

Number 45



Produced by the Victorian Control Line Advisory Committee

June 2001

INSIDE THIS ISSUE

Contest Calendars
Contest Results
Around the Clubs
Tacho's Corner. Engine test on RM61S ABC
Nationals Results
W.A. News
Allouchery 1.25cc
Nitromethene
F2C Team Race Times
The Prop Doctor
Letters to the Editor
Qld State Champs Bulletin 2
For Sale
Wanted

**Copy Deadline for next issue is:
Wednesday 20th June 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.

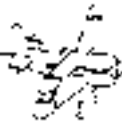
Telephone (03) 9543 2259.

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

JUNE 2-3	Vintage A, Classic B, Simple Rat, Simple Goodyear, 1/2A Combat	WMAA SMAC
JUNE 10	Balloon Burst, Limbo.	
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 SMAC
AUG 12	Simple Combat.	
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
OCT 21	Friend and Fly Day	Brimbank
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

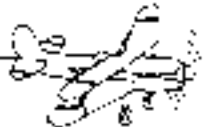
BRCAC Bendigo-Newbridge Rd . Marong

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.



COMING EVENTS



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.
NARROMINE: CONTACT STEVE BAKAC 02 68 89 2501
CLAS CONTACT MIKE COMISKY 02 9605 2062

CLAS Contest Calendar 2001

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

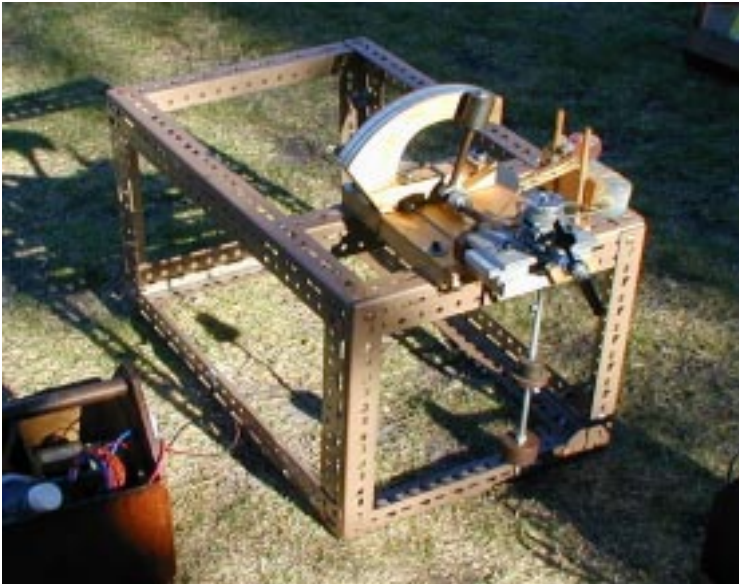
Send address to guybevan@hotmail.com

Queensland Control Line Events Calendar

DATE Year 2001	FIELD
June 9 -11 Qld State Championships	ALC

TARMAC Notes for March, April and May

The first weekend in April saw intensive activity at the TARMAC flying field as the usual sport fliers rubbed shoulders with the competitive types getting ready for the Nationals. There was modeling activity wherever you looked. In one corner could be seen Grant Lucas and Stewart Sherlock armed with starter motors and fitted with bulky earmuffs. They were running one of Grant's monster speed engines on his trusty dynamometer. Every so often there would be a screech of astronomical revolutions as they tried different loads on the motor to get the maximum power out of the poor thing. As he often does, Grant had brought along some new bits and pieces to show to any interested parties. This time it was his new Profi FAI speed model, which is beautifully made, and comes as a nearly complete kit of parts.



Grant Lucas' portable dynamometer setup at TARMAC field

Meanwhile, the smell of diesel fuel wafted slowly across the oval as vintage team racers swapped places with stunt fliers in the main circle. Hans Bertina was practicing with his new Gee Bee stunter which is designed on similar lines to full sized aerobatic aircraft. It has a huge, round section fuselage and comparatively small wings with much smaller flaps than usually seen on competition stunters. This design is a high thrust, high drag layout with lots of engine offset and it seems to need to be built fairly light. Hans' model weighs in at about 52 ounces and it turns very tightly when needed. The power plant is a four stroke Saito .56 that really has some pulling power, as is obvious to anyone that has launched it. It is like trying to hold back a tractor. Typical of four stroke engines, it is very quiet and the engine note is not at all obtrusive.

Other stunt fliers in action on the day were the now regular visitor, Peter Smith over from Canberra for a little pre-Nationals practice with his take apart transportable stunter, Phil Trueman with his newest GEO XL and Dick Morrow who has his recently repaired Magnum back in the air and as pretty as ever.

After recent discussions about fixing the Nationals firmly in

one place, I am reminded of the words of an ancient prophet. 'If the mountain will not come to Mahomet, Mahomet must go to the mountain.' In the event of the Nats being fixed at one location, no doubt those of us that are interested enough (and able to) will go to them. This time, the mountain came to us.

The Nationals has now, of course, been and gone. For one reason or another, some folks are unable to travel to the nationals on a regular basis. So one of the great things about the Nationals moving from State to State is that you get a chance to meet up with people that you see either rarely, or in some cases would never otherwise meet. They would remain just names read in a modeling magazine. I was pleased to make the acquaintance of several for the first time and some others that I hadn't seen for many years. One of the notables being Doug Murray who is famous as a pioneer of practically every branch of Radio Control seen here in WA. He looked as fit as a Mallee bull and visited many of the competition venues. Several times I heard expressions of interest in a return to Control Line flying from ex-modelers that had been drawn to the Nationals and even some from the exponents of that mysterious and little known activity of Radio Control flying.

If you would like to join the throng of folks returning to Control Line in Western Australia, you will be welcome to visit and fly with us at the TARMAC club field on any Saturday afternoon (weather permitting) from about 1 PM onwards. We fly on an oval located inside the Aviat Golf club on Kalamunda Road. If you are traveling from Great Eastern Highway towards High Wycombe, the entrance is on the left about 2 kilometres from the intersection of the Great Eastern highway bypass and Kalamunda roads and just before King road and the overpass across the railway line. The oval is on the right as you come through the entrance gate.

I saw some of the action at the Nats as I was able to make a couple of brief visits to Busselton during the week. It gave me a chance to exercise the new family chariot that has replaced my faithful old van. This one is half the size, has an engine twice the capacity and quadruple the horsepower of the van. At least it is a station wagon and will hold a stunter or two when necessary.

Among the items of interest on display was the engine test rig of Turbo Jet Technologies that was supplied and operated by Chris Mounkley to demonstrate his fantastic West Australian made gas turbine engines. I was shown some of the rotating bits of the engine as it was dismantled and I can attest to the fact that this is a beautifully made and very professional piece of equipment. A world leader. It is even more impressive when you see the ease with which it can be started and operated. These engines are kerosene burners and come in 6 kilogram and 18 kilogram thrust sizes. At present he is gearing up for large scale production here and will soon be the largest producer of model gas turbines in the world. Watch out for TJT engines; they will be coming to a competition near you..

The weather started off looking a bit suspect with strong winds and gloomy skies that threatened rain, but by the end of the week the breezes had abated and the showers stopped. The flying venues were well chosen and in the case of Control Line also prepared with marked circles by the usual workers in the shape of that tireless labourer Dick Morrow and a band of faithful workers. Thanks to everyone that contributed to the preparation of the flying

sites.

TARMAC was well represented at the Nationals, both in Free Flight and Control Line. Several of the events were affected by strong breezes and Free Flight is usually the most susceptible to this pestilence. Entrants in open rubber had a very hard time and I considered tying myself to a tree so as not to be blown down wind as far as Trevor Letchford's best model. A triumph for another TARMAC member was when Adrian Dyson won open power with a consistent performance and three Maxes using a Jim Stivey designed 'Stone Axe' Slow open power model.

Fortunately, by the time that Chuck Glider and day Scramble came around the breeze had calmed to a gentle drift. The field was an excellent open venue, dusty and liberally scattered with traces of a recent occupation by cows. I watched the Chucky event with interest as a great variety of shapes and sizes of aircraft were flung up and variously fluttered down, floated away or speared into the cowpats or the gray dirt. I saw Bob Fry enjoying his first experiences with a really successful model. One absolute standout performer was a young bloke by the name of Paul Mitchell. I could have watched him for hours. He had some very well trimmed out models and a right arm like a missile launcher. His models when thrown would leave his hand with a distinctive moaning whistle that sounded like it was nearing sonic speeds and the amazing height gained always ended in a beautiful transition to gliding flight. He won the day and richly deserved to do so.

Day Scramble was held late in the afternoon and I was drafted as a timekeeper. This event was fun. It was an exciting hour, especially for the timekeepers who are right at the start line; although firing line would be a better description. Timekeepers not only have to time the flights of the model that they have been assigned to watch, they have to keep a beady eye on all the other aviation activity about them. With cries of 'Heads' echoing about and various misguided missiles chugging aimlessly about the skies at low altitude, you need eyes in the back of your head if you want to avoid having a prop nut embedded there. I saw a tiny all balsa biplane spiraling steadily up towards invisibility, while the operator of the plane that I was timing slowly bloodied his fingers at ground level by struggling to start a tiny red headed Allen Mercury engine that wasn't yet ready to run. Many of the competitors, possibly as an indication of their state of fitness, had resorted to runners who were tasked with the job of model recovery, while others did it for themselves. Either way there were a lot of heavy panting going on and a liberal scattering of sweat and diesel fuel droplets into the dirt. At the end of the hour of competition, the flight line was quite peaceful as a lot of models were in the air on their last flights. They drifted gently downwind, silhouetted artistically against the high evening clouds, while out of our earshot, the faithful runners gasped along on their final pursuit. Scramble was won by a very well prepared Jim Stivey aided by his hyper fit runner Trevor Letchford and thus Jim ended up with responsibility for polishing the worlds largest perpetual trophy. Tarn Stowe took second using his own legs and operating a highly dangerous (low) flying carpet. In third was Norm Kirton, who did most of his own running, which is not bad for one of his advanced years. It is all that galloping around in the team race circle that does it.

I will briefly list just the top placings in the C/L events as I am sure that a complete list will be made available by the relevant authorities shortly. The Control Line events kicked off with the premier racing event F2C. The wind at this time was strong enough to be a worry and rain clouds were blowing in from the coast, though no rain actually fell. Another concern was the proximity of the Pylon racers, who were a little too close for comfort and perhaps safety too. As expected, the visiting Brits Bernie Langworth and Dave Campbell performed very well. Well enough in fact to win quite easily as they had just done at the Victorian State championships a week before. Although they had quite a fast model, there was absolutely no time wasted in the handling of the model. Pit stops were lightning fast and the whole show was very professional.

Next was Goodyear, which was conducted in slightly less windy conditions than the F2C event. The fastest team was Fitzgerald/Walton, but they were handicapped by leaky tank valve problems and ended up in third place leaving first place to Fry/A Taylor and second to the veterans Stivey/Adler.

Combined speed was held in wet and windy conditions.

Onward ever onward, to the next event of Aerobatics (or Stunt to those of us that live in the past). This was a dull day which is always good for Stunt as you don't have problems of the usual sun blindness when the wind blows towards the sun, which for some reason it usually does. A slightly variable breeze caused a few problems. This is the first time that National Stunt has been run in WA since the 1980 Nats at Albany when it was won by Frank Battam. This year it was won by Paul Turner from NSW using his 'Wind Wizard' model powered by ST .46. Paul had a setback in his first flight when his outboard flap pushrod disconnected itself from the flap horn and caused some very unusual flying characteristics. He did some hasty repairs and had it back in action as good as ever in short order. Oddly enough the other two place getters had both flown and placed in those 1980 nationals at Albany. Albeit in reverse order to this time. In second place was Stuart Sherlock flying a 'Firecracker' powered by Enya .45. This was a pleasant change as he has had engine run problems in bulk for months and he obviously sorted them out at just the right time. Third was taken by Peter Smith of Canberra, who flew an own design, take-apart model powered by an ST .46.

Then came Bendix racing, a favourite of the West Aussies, though rumours abound that it originated in Queensland. A likely story you say. There was even a Queenslander here in the form of John Taylor, and he had a very potent Bendix racer powered by a heavily modified Super Tigre heli engine and John Hunting along with him to fly it. The weather was dull again with little or no breeze. Just how I like it. There were several ruptured engines in the heats of this event which took out Bellis/Mills and Hoogenkamp/Leknys. It almost got Steve Walton who, having cracked a crankshaft, methodically worked his way through all of Bob Fry's spare engines in a successful attempt to remain competitive. He even tried seeking sympathy by referring to his entry as a 'Lame duck team'. Ha! A wolf in lame duck's clothing. Hunting/Taylor were very fast, but came unstuck with a shutoff problem that kept them on the ground for an extra 20 seconds in one of the pit stops in the

RESULTS

BENDIX

1.	Fitzgerald/Walton	7:53.03
2.	Fry/Taylor	7:56.9
3.	Hunting/Taylor	8:06.26
	Letchfort/Bone	
	Stivey/Adler	
	Bellis/Mills	
	Hoogenkamp/Lekneys	



COMBINED SPEED

Pl.	Name	Class	Speed	% Record
1	R. Fry	Proto 29	190.79	87.01
2	R. Fry	Jet	242.22	84.61
3.	D. Axon	Jet	194.00	67.77
	A. Taylor	Jet		
	A. Taylor	2cc		
	J. Hunting	Proto 29		
	J. Taylor	Jet		
	B. Butkevicius	Class III		
	G. Lucas	DNS		

AEROBATICS F2B

1.	Paul Turner	3939
2.	Stuart Sherlock	3638
3.	Peter Smith	3590
	Phil Truman	3181
	Hans Bertina	2900
	Richard Morrow	2480
	Mal Bone	1399



Peter Smith's take-apart stunter powered by ST .46

TEAM RACE

F2C

1	Campbel/Langworth	7.03.2
2	Fitzgerald/Ellins	7.41.5
3	Owen/Justic	8.37.56
4	Potter/Potter	
5	Walton/Cameron	
6	Hoogenkamp/Leknys	
7	Morrow/Mundik	
8	Bertina /Stivey	
9	Fry/Taylor	
10	Mills/Bellis	

GOODYEAR TEAM RACE

1.	Fry/Taylor
2.	Adler/Stivey
3.	Fitzgerald/Walton
	Hoog/Leknys
	Hunting/Taylor
	Mills/Bellis

VINTAGE A

1.	Langworth/Bertina	7:08.49
2.	Kirton/Stone	7:45.43
3.	Fry/Taylor	8:22.20
	Adler/Stivey	
	Mills/Bellis	
	Hoogenkamp/Lekneys	
	Beilby/Stivey	
	Hunting/Ellins	

VINTAGE COMBAT

1.	A. Adler
2.	G. Turna
3.	R. Fry



Bendix racing in progress at Busselton

STAN PILGRIM'S ALLOUCHERY 1.25cc.

As you are aware, I collect engines from 1.25cc up to and including 1.8cc. I actually prefer to play with engines rather than race them. A lot more enjoyment for the effort. Have just finished restoring my Allouchery 1.25cc diesel from 1945 (ref pic). I made the fuel tank bowl, cylinder retaining studs and nuts. Definitely not a racing engine!



Prosper Allouchery, lived in Vincennes a suburb of Paris, France and constructed his first engine at the ripe old age of 14. He commenced production of his 1.25cc diesel in 1943. The engine in the picture is an example of the second version and was available from 1945 to 1948. It had a 10mm bore, 16mm stroke and weighed in at 120 grams. It was capable of speeds up to 7000 rpm, the very mild port timing being the limiting factor.

Early examples had an aluminium tank bowl (ref pic) but this was changed to a transparent plastic one early in the production run. The same plastic tank bowl was used on all the other 1,25cc engines that followed. Allouchery made other versions of his 1.25cc diesel and the same specifications were used on all of them.

The last engines were produced circa 1966, and were mainly for the collectors. They were basically a reintroduction of the first model with minor cosmetic changes. The engines were very well made and much sought after, today they are very hard to find.

The oldest engine I have in my collection is also from France. It is the Stab and was made in the Sewers of Paris during the Second World War. A nice engine with lots of character, maybe the next pic??

The views and opinions expressed in ACLN do not necessarily reflect those of the Editor or Committees of Clubs or of the members of the Club represented in ACLN but are those of the respective authors.

Any comments, queries or complaints with respect to any article in this publication should be addressed to the author of the article.

The Editor and Committee of Clubs accept no responsibility or liability for any loss or damage incurred or suffered by anyone as a result of this publication or in reliance upon or as a result of acting upon anything contained in this publication.

NITROMETHANE

Well known US modeller BILL LEE recently posted this on the C/L Racing e-group forum.

Many years ago I wrote the C/L Racing column for Model Aviation. In one of the columns I cautioned everyone that COMMON chemicals in the shop are all that's needed to make the BIG BANG.

Nitromethane is stable until sensitized (or compressed). The light yellow dye that is put in pure nitro (at least in the U.S.) turns blue when the nitro is sensitized. If you have any nitro in your shop that is dark colored, you MUST get rid of it! Best to carefully find a place where you can pour it onto soil where it can be absorbed. (Anybody else have a better solution?)

The chemical commonly found in your shop that will sensitize nitro is Polyester resin catalyst, MEKP. A friend of mine in Louisiana used to get all the nitro he needed from his company. They used it for excavating boat slips off the Mississippi River. Picture this; A 55 gallon drum on the back of a barge; tape a blasting cap to the outside; pour in a pint of MEKP; push over the side and let settle to the bottom; drift off well away trailing blasting cap wire; set it off; result; **BIG BANG!!!** And a BIG hole in the river bottom.

BE CAREFUL!!!

Bill Lee.

Horsham Country Weekend

Hosted by WMAA

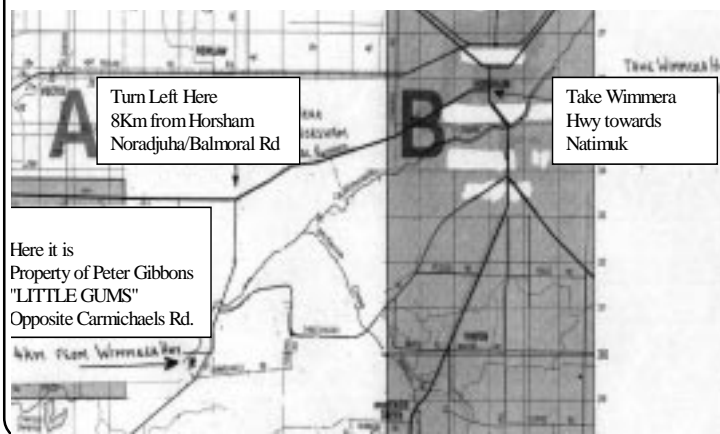
Saturday June 2nd and Sunday June 3rd
To be held at "Little Gums" as indicated on map below

Saturday:- Simple Rat Race & Simple
Goodyear Team Race

Sunday:- Vintage A Team Race
Classic B Team Race

1/2A Combat

Contact V Cresp (03) 582 4046



F2C Race Times

From Richard Justic

Ever wondered just how far the other teams are in front/behind in terms of Heat time performance ?? Lets break down an F2C heat into basic fundamentals. There are 100 laps to complete, one cold start and two pitstops.

Lets say you have a racer that can do 19.0 for ten all day in traffic (Hey, we ALL have one of these !). This adds up to 190 seconds or 3:10 and if that hasn't got you thinking yet, nothing will ! Add in the two "accepted" 10 second pitstops and a 2 second cold start and what have you got ? 212 seconds or 3:32. The numbers don't lie, and plenty of teams have proved it.

So how can we get faster heat times ??? Everyone wants to go FAST in airspeed terms, so lets say we spend another \$500+ US and get an engine that goes 18.5 for ten in traffic CONSISTENTLY. 18.5 for ten is 185 seconds and gains us 5 seconds in the air over the previous racer. All else being equal, heat time will now be 3:27. (Hmm, getting better, it is an improvement of 2.4%.....)

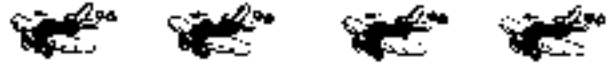
Lets get serious and spend some more \$\$\$\$ and get a racer that goes 17.8 for ten in traffic. (We all agree that we would like one of these ??) 17.8 for ten is 178 seconds and ALL ELSE BEING EQUAL we now have a heat time of 200 seconds or 3:20. (An imrovement of 6% over our original 19.0 for ten racer, but we are STILL not in the 'teens'.... And King Paul has gone quicker.....)

So, why don't all these teams with airspeed of AT LEAST 19.0 for ten run heat times in the 3:25 to 3:35 bracket ??? (Hell, I have an old "Circle Torque" that had an AUS team at a TT back in the Nelson 15 era run a 3 stop 3:47. And not a Cippola to be seen, that's how long ago it was.)

- Your start is MORE THAN TWO SECONDS. (Or the pitman is veeerry sloooooow)
- Your engine doesn't "GRUNT" the instant it fires up. (ie gets up slightly cold/lean for a lap or two)
- Your acceleration is slow.
- You take more than 1 lap to bring a model in. (Or engine splutters on last laps of tank)
- Each pitstop costs you more than 10 seconds.
- You are not REALLY doing that airspeed consistently for 33 laps in traffic.
- You believe in "gremlins" (Or "Borrowers" - a great kids flick)

Some tips/thoughts on getting to better, more consistent heat times, especially since the AUS F2C scene is getting a bit faster/tighter in the last few years.

- If the start is 10 flicks, the REST OF THE HEAT IS A TUNING EXERCISE.
- If you need to make a compression adjustment, the REST OF THE HEAT IS A TUNING EXERCISE.
- If you break a prop, the REST OF THE HEAT IS A TUNING EXERCISE.
- If you drop a catch badly, the REST OF THE HEAT IS A TUNING EXERCISE.
- If you cant get the 33 laps in practice, 3 stop it. It's MUCH more consistent and there have been some surprisingly quick 3 stop heats over the years.
- If you think your favorite prop is the "best" one, THINK AGAIN. RACE a different one and see what the TIMEKEEPERS stopwatch says.
- Take heart, the difference in percentage terms between a 3:30 and a 3:20 is only 5%. And it's easy to improve the whole race package by 5% isn't it ?



NORTHERN DISTRICT CHAMPIONSHIPS FOR CONTROL LINE

AUGUST 18 & 19, 2001

Hosted by Bendigo Control Line Flyers

The Bendigo Control Line flyers will conduct the Northern District Championships and the Jnr. Allen Trophy to be held at the Bendigo Radio Control field at Marong

PROGRAMME

Saturday 18th August 2001 - 1:00pm Start

SIMPLE RAT

SIMPLE GOODYEAR

JUNIOR 2.5cc SIMPLE RAT

Sunday 19th August 2001 - 8:00am Start

VINTAGE TEAM RACE 'A'

VINTAGE TEAM RACE 'B'

½ A COMBAT

- Practice may be on racing circles up to starting time on Saturday / Sunday. No practice on race circles after 1:00pm Saturday and after 9:00am Sunday
- Practice circles will be available over the weekend
- Points gained in each event will go towards the Champion of Champions Trophy
- Full catering service will be available on Sunday
- Please consider this weekend event as we need your support to make it a success

For more information please contact
Shaun Power (03) 5442 4925



The Prop Doctors Return from Busselton

Well the Busselton Nats our now history. The heroes have their laurel wreaths and the losers are forgotten. There was a great atmosphere, good fields and not a little wind. This made F2B Stunt a challenge for some.

Paul Turner and Peter Smith got in plenty of practise prior to the event, including flying in the wind. Their ST46's certainly pulled well through the gusty and turbulent air. As for yours truly, incredibly my motor problems resumed. I switched to my ST46 with no improvement. The motor would run sweetly until the outside squares, then lean out, sometimes to the point of stopping. Unbelievable.

Both Paul and Peter did their best to help me, but nothing

seemed to work. Indeed, as I went to start my motor in the first round, I had to call an attempt as the motor wouldn't even start! Back in the pits I tipped it on its back, and there, floating in the fuel line, was a fleck of yellow paint! It was too big to enter the spraybar, and was acting like a chaotic reed valve!

The paint removed, suddenly my problems with the motor disappeared and at last I was on even terms with Paul, Peter, Phil Trueman, Hans Bertina, Mal Bone and Dick Morrow. With all the problems, I made some real progress. The following findings may be of interest.

1. Commercial fuel may be suspect. I used locally supplied 4:1 and found I had to add 10% castor to get it to work right. That does not make sense. In the East I always used Magnum 4:1 and never had a hint of a problem. Here, my Rossi 15 proved hard to start and blew scarce and expensive plugs. Something is wrong.

2. Pete Smith suggested I try OS #8 gloplugs, and they certainly seem to be a good plug. He also uses straight fuel, but mixes it himself. Peter is a retired chemical engineer, I think he knows a thing or two about fuel.

3. We tried reversing the needle valve. I have it on the opposite side to the exhaust to save burning myself. Reversing it to the exhaust side had no effect. Also I chose to use an Enya needle valve assembly.

4. My ST46 did not like my 11X5 prop, as the pitch is too low for the low revving cross-flow engine. I tried a Bolly nylon 11.5X6 and this performed very well indeed. It pulled through the overheads very well, negating the wind and turbulence. Highly recommended.

Now I have a couple of thoughts to share with you on F2B. It seems to me that there is a lot of psychology in F2B. Most guys can do the pattern, and do it well. But to fly with precision, you need to think precision. One way to do this is to treat the level laps between manoeuvres as scoring laps. This keeps you focussed and makes for a tight and tidy flight.

Secondly, I flew a G15 Dominator in Vintage Combat. This model builds very quickly and does quite a good pattern, albeit a little too quickly for my old synapses. But how about a big one, with a nice stunt .46 for power? Say 44" span, using 36" preshaped LE and 4" tips? It will be very light, build quick and be cheap. I've no doubt it will fly the pattern well. It could just be the ticket for guys wanting to fly stunt, but not having the 6 months or resources required to build a traditional ship. Now last month you may recall it was my intention to beat Paul Turner at Busselton. My mistake, I meant Albury/Wodonga!

I need some G15 bits. Anyone wanting to sell please call me on (08) 9247 2481. Bye for now. Supercool.

To all C/L Competition modellers,

The rule change proposals have been again sent out to the State reps on the MAAA C/L Sub committee for distribution to all C/L clubs so if you want the chance to comment on any changes make sure your club has a copy so your comments can be returned to your State rep. The replies have to be back in by the 14th of August to me for postal vote submission.

Graeme Wilson. MAAA C/L Sub Committee Chairman.

2000/2001 QUEENSLAND CONTROL LINE STATE CHAMPIONSHIPS

Bulletin No. 2

- The following events failed to meet criteria set out in the Terms and Conditions of Entry and now **will not proceed**:

Class 11 Team Race	Bendix Team Race
2.5cc Rat Race	Class "A" Team Race
Mini-Goodyear Team Race	Clas1 Inc. Rat Race
Combined Speed	F2A Speed
Classic Stunt	

- Events listed below satisfied or exceeded the criteria mentioned above and **will be held**:

F2C Team Race	Junior Rat Race
Goodyear Team Race	Vintage "B" Team Race
Mouse Race	F2B Aerobatics (incl. Jnr)
F2D Combat	Junior Combat
Open Combat	"35" Slo Combat
2.5cc Slow Combat	

- Subject to any **Late Entries** received which will be accepted without penalty up to 9.00 am on Saturday 9th June (and of course the weather) the final programme is:

Date Time Grass Circle #1 Grass Circle #2 Bitumen Circle

Sat.
9th 9:00-9:15 Welcome to all competing and assisting.
Brief introduction of category Contest Directors.

9:15-10:00	Junior Rat	
9:15-10:30		F2C T/Race
9:15-Noon	F2B Aerobatics	
10:00-Noon	Junior Combat	
Noon-13:30		Goodyear
Noon-14:00	Open Combat	
13:30-16:00	F2B (if necessary)	
14:00-16:00	35 Slo Combat	

Sun.
10th 9:00-Noon F2D Combat
Noon-13:30 Vint. "B" T/Race
13:00-16:00 F2D (cont)

Mon.
11th 9:00-Noon 2.5cc Slow Combat
Noon-13:30 Mouse Race
13:30-16:00 2.5cc Slow Combat (cont)

- This timetable has been formulated to assist competitors entered in multiple events and parents/seniors teaming with juniors. Although the initial commencement time for each day's competition will be adhered to rigidly, other times are indicative and may change as circumstances dictate.

(Registrar)
15th May 2001



THE BULLDOG IS BACK

Derek Pickard tests a new generation of an old British favourite that builds on its original appeal.

Take a well proven old formula, add modern technology and the result has to be worth a long serious look for stunt. And that's exactly what's being tested here - a new millennium version of a 1960s master.

"A damn good 60 at a damn good price" is how long time London-based Merco man Ian Russell describes his latest engine - a reproduction of the famous Merco 61 Stunt (now called the Rustler Merco 61S).

The big Brit engine was a firm favourite years ago with its timeless layout proving a dependable power unit for full-size stunt ships. And the situation stayed that way until Super Tigre paralleled the design with a version of its own that offered less weight and better build quality.

The eventual disappearance of the London-made power unit was delayed for a few years by people like Tom Dixon who custom-built small numbers from accumulated parts. With porting modifications, those performed very well and proved competitive, but the name was on the way out. By the mid- 1990s the big 61 Brit was gone.

But as traditional manufacturers dropped out and the stunt market asked for more, so the emerging small specialist builders behind the previous Soviet lines put up their hands as willing workers. They had the skills and access to the specialist alloys so vital to do a top job. The result is frequently good engines at attractive prices. And although the London engine specialist won't confirm their origin, I believe these repro Mercos are being made in Russia. This is probably why it contains such little oddities as the 8x1mm fine metric thread for the large prop nut - not a very British fitting. But what the heck, the quality is good so who cares where the RM 61S is made.

This new Moscow Merco is on the slightly heavy side at nearly 14 ounces but incorporates the time-proven 140 to 120 degrees exhaust to transfer port stunt timing. The 23.6 x 21.9 bore/stroke gives 9.6cc which with the classically low 7.5:1 compression means the traditional 4-2-4 run is virtually guaranteed. The true ABC has a liner taper of just half a thou.

The only problem areas with the design as delivered are the, as previously mentioned, unusual 8mm diameter front shaft which has a 1 mm fine pitch, and a muffler is not included. But the latter is not too difficult as a quick answer is to use any old Tigre muffler - as the two screws holes are identically spaced.

Out of the box, the engine has a slightly tight piston fit so

breaking-in is vital. But whereas most Soviet-made ABC engines take only a few minutes, this needs up to an hour on the bench as the runs is gradually leaned out from a rich 4 stroke and the ABC piston/liner fit fully beds in.



Merco inspired RM 61S ABC

For the air test, the engine was screwed into a Time Machine that had originally been built for another pre-Soviet block 60. That plane previously needed an ounce more nose weight for trimming so the use of the big RM61S was right on the numbers.

An old ST muffler was used and a traditional 1 2.5x5.5 two blade prop was screwed onto the front. Whereas a real old Merco 61 with its bad fitting rings would have demanded 25% castor oil, this new one with its decent ABC is more than happy with no more than 20% lubricant; and 5% nitro is the minimum.

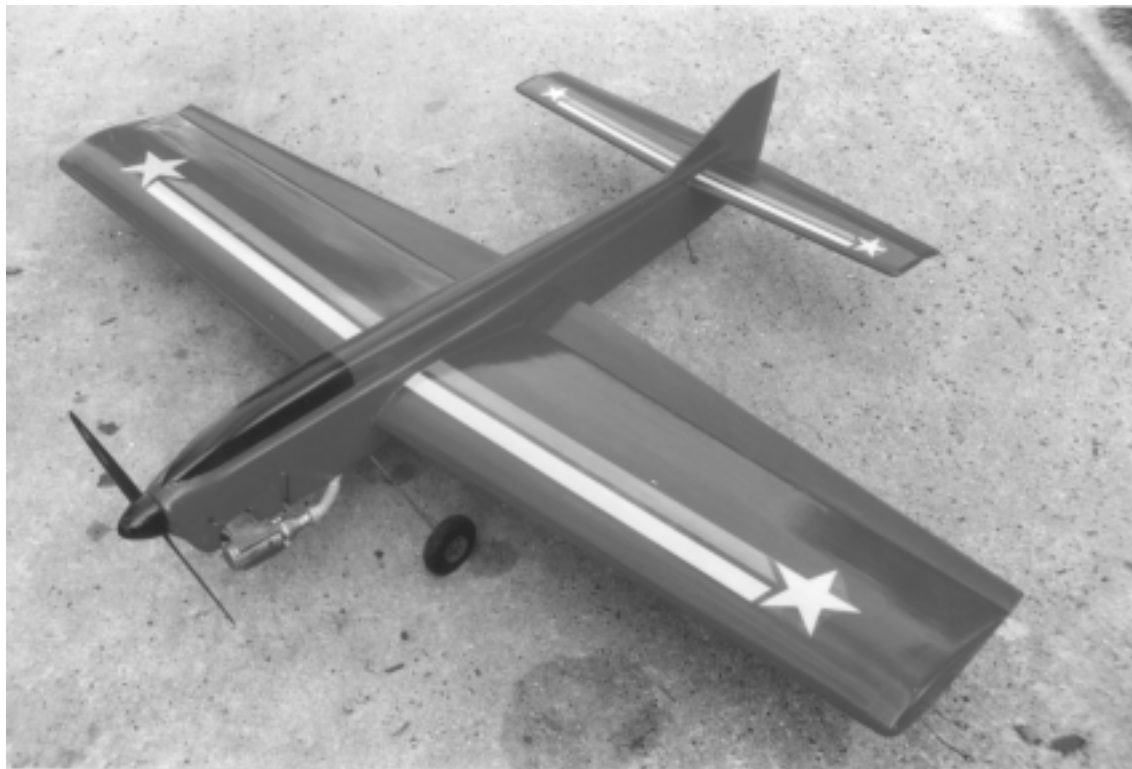
(Flight testing revealed the usual story on oil. If that 20% lube is all castor the 4-2-4 break is stronger than with a half/half synthetic blend. And if a pure 20% synthetic oil is used the traditional run is even more hard to achieve. So even if you live in a cold climate, you're advised not to go any less than half synthetic.)

An Enya #3 plug and a push-on air filter were fitted with the fuel coming from an Eather 140cc tank via an in-line filter all standard Pickard test layout stuff.

The big surprise with this engine is the way the 4-2-4 switch takes place at such low revs. In fact on the stock venturi and compression with 5% nitro it broke into a 2 stroke as low as 8000. And while that break is as reliable as the dawn, it dictated the plane be either fitted with much shorter than normal 60-size lines or slightly more prop pitch. Our test saw it run from 63 feet centre to centre with the initially fitted 12.5x5.5 to 66 feet with a 12x6 three blade.

From starting to aerobatics, the words total dependability are the only way to describe the behaviour. It starts quickly, takes up to 20 seconds to warm, settles to a steady 4 cycle beat and launches to a legendary Merco 61 deep thudding big capacity traditional beat. The sound is

A Time Machine was used with an ST muffler to fly the traditional British 67.



fantastic. And that delightful 4 stroke gentle throb maintained lap after lap until the nose is pointed up.

With the traditional two blade prop on the front of the Tin Machine, the plane proved very strong for its 5.8 second lap time. Despite the 650 squares model being up on the wing loading numbers, this 61 gives all the power necessary to hold it firm at the top, in all manoeuvres as well as the thick Patternmaster-type wing giving good lift for quick turns. On 5% nitro, it used around 130cc of fuel for the pattern.

The big old Brit may not be as sophisticated as the very latest 4-2-4 exotic sixties nor as powerful nor as light, but is at least good in all departments. More importantly, it easily and dependably achieves and keeps a 4-2 traditional stunt run right out of the box.

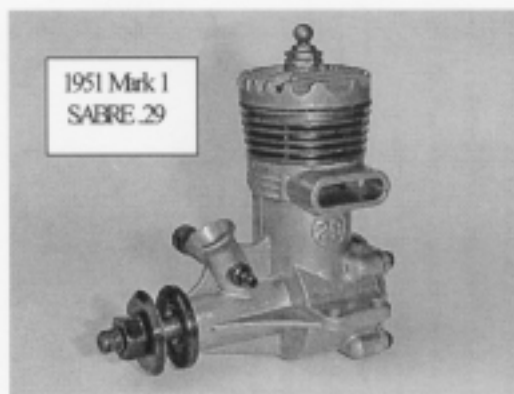
The RM 61S was subsequently retested on different weekends in different weather conditions and the same dependability was repeated. It was meant to go through retuning with different venturi sizes and compressions being used to move the switch point up the rev scale for long lines. But time and wet weekends prevented this.

A good traditional 60 with a reliable 4-2-4 is one of the best ways to fly stunt and this big Merco RM 61S fits the bill.

Conclusion: As the man in London said: a good engine at a good price. Recommended.

Declaration of interest: Derek Pickard was sent this engine free of charge for testing by Ian Russell of Rustler UC at 98 Elers Road, Ealing, London, W13 9QE, UK (fax -442089-326-783 and Email rustler@aero.fslife.co.uk). He sells the RM 61S for £78.75 which includes the cost of recorded post to anywhere. An original type Merco 61 muffler is an additional £10.50

ALL ENGINE COLLECTORS



You are cordially invited to the next MECA Collectors' Club at the SYDNEY SOCIETY of MODEL ENGINEERS Inc 869 Luddenham Road, Luddenham NSW 2745 on Sunday, July 1st 2001, from 10am-4pm
DISPLAY-BUY-SELL-EXCHANGE-JUST CHAT
For further details, please contact David Owen
Ph: 02-4227 2699, Fx: 4227 2975, owendc@1earth.net

The views and opinions expressed in ACLN do not necessarily reflect those of the Editor or Committees of Clubs or of the members of the Club represented in ACLN but are those of the respective authors

Any comments, queries or complaints with respect to any article in this publication should be addressed to the author of the article.

The Editor and Committee of Clubs accept no responsibility or liability for any loss or damage incurred or suffered by anyone as a result of this publication or in reliance upon or as a result of acting upon anything contained in this publication

**REMINDER : TEAM RACE
AND SPEED WEEKEND**

WHERE: SSME Model Park.

Luddenham Road

Luddenham NSW.

When: Sat 28th and Sun.29th July

2001 (9.00am start)

Cost: \$5.00 per head per event.

Events Sat 28th:

Vintage 1/2 A Team Race

Goodyear

Vintage B Class Team Race

Combined Speed

Events Sun 29th:

Phantom Team Race

Vintage A Class Team Race

*Vintage A Class Team Race
(B Grade)*

Bendix Team Race.

All events flown on grass.

Events flown in order as per list.

*For more information on Vintage A
Class Team race (B Grade) please ring*

Andy Kerr on 02 9683 4349

PLUS A LOT OF FUN

*Plenty of room, bring your caravan or
tent.*

*Or bring your sleeping bag as
accommodation provided.*

**** We need to know numbers for events
and catering.****

Saturday: Lunch and evening BBQ.

Sunday: Breakfast and BBQ lunch.

*Meals, cold drinks, tea and coffee
available at minimal cost.*

Ring Tony Bonello 02 9834 4290 ah or

Email tonybonello@bigbond.com

OR

Ring Colin Blake 02 45 775485 ah or

Email merril@hawknet.com.au



Just wanted to add my bit to the bun fight over the proposed vintage BT/R rules.

1/ Engines: Nothing later than 1959 except FP 25's LA 25's ETA 6 C.S. or VLATBROIEV 12 port injected V4's, (Give me a bloody break!)

2/ Airframes: No glass fibre carbon etc. How come your model weighed only 10 grams before the wing fell off and the black stuff and fishing line fell out? [I didn't build the model]. So you draw up a set of rules with things like "In the Spirit." "Design ratified by the original builder" (The poor bugger is probably in a nursing home suffering from Alzheimer's and would sign anything.)

3/ So how do you stop the rot? Easy maximum speed 100 mph use any engine you like, build the bloody airframe from Tungsten/Boron if you want so long as it is a recognised design, the engine people could engineer, the buyers could buy, the cheats could cheat, everyone would be happy, except maybe those that would argue that it stifles development, go do photography you can develop all you want.

Its gotta be sorted and fast. Potential racers have watched and left vowing not to bother because it is going the same way as half a dozen other classes before.

The 100mph works in the US. Why not here? Think about it while you take your remaining shoe off and load the gun.

Jim (Politically incorrect) Trevaskis

P.S.

The letter is aimed at Vintage B but if I read the latest contest reports correctly a Classic B was using an OSFP or LA with a Nelson plug for god's sake.

Best wishes

Jim



CLAG By Peter White

Excellent weather, a recently mown sports oval and eighteen fliers all added up to make a very successful and enjoyable day for the CLAG group at Warragul on May 6th. This was our best roll up so far for any of the country venues, bettered only by the 25 at the first gathering at Knox when it was included in the cycle.

From furthest afield, Ballarat in fact, were Dave Lacy and Don Blackham who brought with them Dave's OS Max 3 powered Dragon and Madman with a K&B Stallion 5 and Don's Vintage B Accelerator team racer with a Healthy Enya 29 up front. After a couple of flights to find the tuning the little red racer was showing some fast laps until the controls gave up. The damage didn't appear to be serious. The successful team racer which caused havoc around the State Championships and Nationals scene for some years was designed and kitted by Don and

Bob Hyde in Ballarat in the late 50's.

Also from the west we had John Boys, Dave Gregory and Alan Harrison of the Brimbank Falcons Club. John flew his Combat Streak / Enya 29 and an O/D Advancer powered with a Frog 500. Dave had what was the most unusual model of the day - a "Sassy Saucer" with a wing span of 30". This was a 120% version of the Air Trials plan from 1953. Dave has installed a near new K & B 35 series 61 inverted as opposed to originals' upright layout. A neatly built model in bright yellow, it was an eyecatcher in the air with quite a rapid landing approach once the motor cut.



Along with his yellow and green Mk1 Thunderbird with Merco 35 power Alan brought a Plover, an Aeromodeller design from 1960 powered with a Glo Chief 19. This model has the appearance of some of the early German machines with its odd shaped fin and trailing edge extensions. However it seemed to fly quite well.

New to the country venues and hopefully to become regulars were John Goodge and son Rian, Craig Hemsworth and Doug Grinham.

John and Rian are from Seaton, between Heyfield and Toongabbie. John flew in competition during the 80's and has decided to become a "retread" bringing Rian into the sport with him. They both flew an OS15 / Firestreak (An O/D I think) and Robbie Hierns Fuji powered Triathlon model.

After only a couple of assisted flights, Rian was flying solo and doing a pretty good job of it, looking confident and keeping his model steady. He has started building an Acrocat (I hope I've remembered that correctly) which we should see in the air soon.

Craig came along with the two models that he flew at our last Knox day - A Cougar / Taipan19 and his O/D Pirouette with an OS 45FSR. Although on the heavy side, the Pirouette flies quite well and would be competitive at club level until the new Nobler is painted.

Making his first trip out to Gippsland was Doug Grinham who flew his old Jazzer with a sweet running Stalker 61 up front. Doug put in four or five flights for the day.

Ron Jones flew his Fox 35 / Ringmaster and enjoyed his day out. Unfortunately, because of shift work, Ron doesn't fly as often as he'd like to - he's flat out making the electricity that we use in our drills saws and soldering irons

to build our models.

Vic Mitchell once again failed to get his Dixon T'Bird into the air with an Enya 45 that refused to start.

Brother Steve had more luck and two or three flights with Old Whitey and it's nicely running ST46.

Geoff Ingram turned up with his Windy / Fox35 and the tail-dragging Wombat with it's Taipan 19.

At the end of the day, Geoff had a fly of my Manito which seemed to have set him thinking about larger models as he rode off into the darkness mumbling "Bigger models—

more positive— go where you point them— hmmm, wonder where there's a .46 lying around".

Graham Keen spent much of the day helping out with John and Rian along with Craig. In between times his Midi Slow / OSFP15 was tossed aloft for a couple of flights.

Graham Vibert was having problems keeping his rebuilt Merco 35 running in his Ruffy. Towards the end of the day, in desperation move, three changes were made at once involving removing one of the two head shims, fitting an idle bar plug and going from 28% oil to 25%. From then on the Merco ran beautifully but at this point we are not which change worked. Graham will have to

retrace his steps to pinpoint the cure.

Peter Roberts brought along an O/D Classic with an Enya 45. (Can't recall whether flew it or not. A Frisky / Taipan 2.5 and his Fox 15 powered Liquidator. Peter is particularly happy with his Frisky which is a Hearn's Hobby design from the late 50's that is much to his liking.

Robbie Hierns airforce consisted of a scale Mosquito with two Max OS25's which sound great in the air, his Mercury Marvin / Elfin 1.49 and a Fokker Triplane powered by a Taipan ballrace 2.5.

Robbie's day went well till he became tired of flying around and around and decided to try going up and over. The model however, would have none of that and the ensuing uncontrolled arrival resulting in a fair amount of debris lying around.

Yours truly managed a couple of flights on the ST46 powered Manito, a model that was rebuilt with a new wing in mid 97 but hasn't been flown too often since.

Prospective member, Frank Bale, spent much of the day catching up with the current scene. Frank, from Mirboo North, is a flyer from some years ago who has been bitten by the bug again.

During the BBQ lunch, Graham Keen presented Geoff Ingram with the Whelan Award for his Spitfire crash at Maffra which was graciously passed on to Steve Mitchell to remind him of the time "It" took things into it's own hands at the last Knox day.

Paul Richardson, who was absent due to family commitments, has added a very large pencil to the trophy on which can be noted the names of all those who have written off a model, or at least seriously damaged one at a CLAG flying day.

Our next get together is at Moe on June 3rd followed on July 1st and Maffra on August 5th.

As usual BBQ's will be provided and everyone is welcome. Keep in mind also the Warragul Comp Day in September where the programme will be similar to the last two and the weather will hopefully be much better than last year.

CONTEST RESULTS



May 6th SMAC contest Held at Knox field.

Two "A" Class racing events were flown on the day. The first was Vintage A as per the rule book. Some combinations of engines and models that were different than the norm were on display. The brothers Hunting had a Mars/Voodoo, the new team of Holmes/Bailey used a Taipan/Footprint, John Hallowell teamed up with his regular pitman Kieth Baddock using some Olly/Voodoo setups and pilot Murray Wilson teamed up with father Greame with a Taipan/Footprint mix. The cosmic Rays Colin and Jim were on the pace in practice but a broken line disintegrated their model and their chances and put out the Wilson/Ellins team in the process.

Results

Team	Heat 1	Heat 2	Final
Wilson / Wilson	5:05.28	4:26.33	8:36.02
Hunting / Hunting	4:01.27	4:54.01	8:44.65
Hallowell / Baddock	3:30.32	49laps (Disc)	31 laps
Holmes / Bailey	5:49.86	4:57.38	

Next up was Ausie "A" which use the same type of models but allow the use of plain bairing glow engines. The glows are much less fiddly to tune and produce some very close racing. The Rays were getting up to 52 laps to a tank in practice using a similar range brew to what they use in Classic B. The range was a major contributor to their final success.

Results

Team	Heat 1	Heat 2	Final	Model/Engine
Ray / Ray	4:00.5	DNS	8:17.81	Fury / O.S.15FP
Bailey / Holmes	4:40.16	4:15.88	8:52.83	Footprint / O.S.15FP
Wilson / Wilson	4:02.24	DNS	8:54.56	Footprint / Taipan
Hallowell / Baddock	4:20.56	4:28.68		Voodoo / O.S.15FP

TRIATHLON 2001

held on Sunday May 20th at Frankston

Pl	Entrant	Stunt	Rat race	Combat	Pts	Total Pts	Engine
1.	Mark Ellins	139 6	72laps	5 304 W	4	15	OS FP 15
2.	Graeme Wilson	126 5	74	6 361 L	3	14	OS MAX
3.	Murray Wilson	69 1	68	3 400 W	6	10	OS FP 15
4.	Harry Bailey	112 3	45	1 378 W	5	9	OS FP 15
5.	Andrew Nugent	118 4	49	2 325 L	2	8	PAW TBR
6.	Colin Holmes	108 2	69	4 302 L	1	7	OS FP 15

A fun event that had it's fair share of hard luck stories of what might of been. Mark Ellins gets to have his name engraved on the trophy again. Some great combat bouts between Ellins V Holmes, Bailey V Nugent and Greame Wilson V Murray Wilson kept the spectators entertained. Congratulations to Murray on his success on beating Wilson senior.

Combined Speed, Midge Speed and FAI Speed 20/5/01

Pos	Name	Class	Engine	Flight 1	Flight 2	Flight 3	Fastest	Km/h	%
1	R Hiern	Class 1	RH-11 Speed	15.39	15.14		15.14	237.78	98.08%
2	N Wake	Class 1	OS CZ11 PS	15.30	15.25		15.25	236.07	97.38%
3	C Agnew	Class 1	OS CZ11 PS	15.86			15.86	226.99	93.63%
4	R Hiern	1/2A	AME .049	8.87			8.87	163.29	93.24%
5	N Wake	.21	Picco 21	16.14	16.03	16.01	16.01	224.86	87.34%
6	R Hiern	Class 2	Novarossi 21	12.79	13.09	12.00	12.00	241.40	83.33%
7	C Holmes	Class 1	OS CZ11 PS						0.00%
	K Hunting	Midge	PAW	11.47	11.73	10.54	10.54	137.42	
	J Hunting	Midge	Taipan	10.63			10.63	136.26	
	K Wareham	Midge	PAW	10.73	11.28		10.73	134.99	
	M Wilson	Midge		14.57	12.35	14.76	12.35	117.28	
	N Wake	FAI	Irvine 15R	16.29	15.20	14.72	14.72	244.57	
	C Agnew	FAI	Profi	15.27			15.27	235.76	
	R Hiern	FAI	Profi	.	.	.			

For Sale

I have a new in box O.S.15FP with remote NVA which I'd be happy to swap for a new Fox 35, Enya 29, stunt kit or whatever.

Make an offer to Bob Allen on (02) 6342 4413

→ → → → → → → → → → → → →
ST 660/XL Pre-sheated (light weight) foam core wings from Tom Dixon. Current U.S. price \$95 (Wings only)

Sell \$145 Aus

SV - 11 Foam cores and stab from (Randy Smith U.S.) Same wing as Intrepid, Novar, Etc.

U.S. price \$55

Sell \$95 Aus

O.S. 40FP Stunt-RN. Brand new in box. Never run.
\$145

Ron Varnas (03) 9579 1143

→ → → → → → → → → → → → →

FLITE STREAK KIT \$65

FOX 40 ABC E.C. (in box) \$95

IRVINE 20 ABC MK 2- PYLON (NEW) \$90

K&B 35 FAIR CONDITION \$40

PRICES NEGOTIABLE.

WILL PART EXCHANGE FOR FROG 100 MK2 - FROG 150R AM 25 IN GOOD CONDITION.

WENDELL PRINS (03)9801 4110

Email antheap@hotmail.com

→ → → → → → → → → → → → →

1 genuine Russian built F2C team racing model to suit Mazniak motor and valve

Used once, as new, top flier. \$500.00

Contact: Paul Stein

Phone: 03 95465006 (AH)

Super Tiger. ST60 Stunt engine. Early model with tube muffler. Eather converted. All excellent. \$175

Derek Pickard Tel (03) 9889 1149



Torpedo 40 Stunt Motor. Must be complete and good.

Derek Pickard (03) 9889 1149

→ → → → → → → → → → → → →

Taipan 1.5cc Glow motor (Late 60's - early 70's)

Prefer V.G.C. to E.C. Will pay right \$\$.

Taipan needle valve assembly to suit 2.5cc B.B. diesel (Ser. 11 - 12)

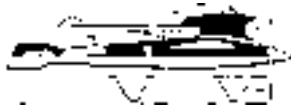
Ron Varnas (03) 9579 1143

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 298 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"

MODEL RACING SERVICES



*** Services ***

- Motor Modifying and Blueprinting for all competition classes, ie. Pylon, Control Line, R/C, FF, Aircraft, Boats, & Cars,
- Rebush Conrods - Replace Conrod - Replace Piston - Diesel Conversions - Motor Repairs - General Machining - McAnelly Pans.

*** Kits ***

"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**

COMPONENTS FOR THE COMPETITION & SPORTS MODELLER

- Goodyear Shut Offs
- Head Inserts 1/4 x 32 & Nelson
- Wheels 27, 40, 50 & 60mm
- Racing Undercarriage Leg & Box Sets
- Prop Nuts, Prop Drivers & Extensions
- Elevator & Flap Horns
- "Adjustable" Team Race & Stunt Handles
- Tank Valves - Pressure & Suction
- Single Blade Counter Weights
- Mono-Line Handle Units
- Paxalon & Steel Bellcranks

- Venturis
- Check Valves
- Stunt Mufflers
- Line Reels
- Piston Rings
- Pan Hold Downs
- Alloy Wings
- Exhaust Extensions
- Mono-Line Torque Units
- Single Strand Lines
- Bobbin Bellcranks

For Mail Order or for complete price list to :-
Robin Hiern Model Racing Services

P O BOX 976 CRANBOURNE 3977 VIC
Phone 03 59 96 0339 Fax 03 59 96 0307

Hrs. Monday to Friday 8.30 a.m. - 7.00 p.m. Visitors by appointment

AUSTRALIAN CONTROL LINE NEWS
Print Post Publication No. PP 343695/00024

**SURFACE
MAIL**

POSTAGE
PAID
SEAFORD

If undeliverable return to:-
G. WILSON
P. O. BOX 298
SEAFORD VIC 3198



We stock a vast assortment of products for jet speed flyers.

→ Complete Engine*	\$285.00	→ Tuned Intakes w/cowl & Flowjector	\$200.00
→ Metering Jets	\$ 3.00 each		
→ Flowjectors	\$ 25.00 each		
→ Reed Valves	\$ 3.00 each		
→ Plugs VR1	\$ 25.00 each		
→ Blowguns for starting	\$ 20.00 each		
→ Coils	\$ 45.00 each		
→ Fueling Bottles	\$ 10.00 each		

**Comes with extra reeds and starting gun & set of 5 metering jets*

All prices above are plus shipping.

Also available:

State-of-the-art Ironsides IV with totally adjustable mounts to fine-tune your flight. Made of the finest quality Aircraft Aluminum and Titanium.

For more information and/or advise, call or write:

Jet Bill Products
3101 Sweitzer St. NW
Uniontown, Ohio 44685

Phone: 330-699-9295

Fax: 330-699-4818

Email: jetbill40@aol.com

Bill Capinjola