

THE VOICE OF CONTROL LINE AEROMODELLERS FROM AROUND AUSTRALIA



Number 101

Produced by the Victorian Control Line Advisory Committee

July 2006 INSIDE THIS ISSUE

Contest Calendars.
Vic Stunt's History Re-Visited
The Origins of the Octane Scale
Around the Clubs
Contest Results and pictures
For Sale

Copy Deadline for next issue is: Wednesday 19th July 2006 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 or email. This makes formatting much easier on the editor.

Email address:- hbbailey@optusnet.com.au







VICTORIAN CONTROL LINE CONTEST CALENDAR

2006	ò		
JUL	2	Simple Rat race (Whipping permitted).	
			SMAC
JUL	9	FAI & Combined Speed,	
		Jnr 2.5cc Combat, Mini Goodyear,	
		Jnr 2.5cc Rat race.	CLAMF
JUL	23	Class 2 Team race,	
		Classic "B" Team race.	KMAC
JUL	30	FAI Aerobatics (Yeoman Trophy),	
AUG	3 6	Vintage Combat.	SMAC
AUG	3 13	FAI Team race, Goodyear T/R	
		1/2 A Combat.	CLAMF
AUG	3 27	Vintage "A" Team race,	
		Combined Speed.	KMAC
SEF	² 10	FAI & Combined Speed, 2.5cc Rat rac	e,
			CLAMF
SEF	P 17	Classic Stunt, Vintage Stunt,	
		Aust "A" Team race, Simple Combat.	
		Classic "B" Team race,	MOE
SEF	PT 21	FAI (Stuntmasters),	KMAC
SEF		FAI, Novice & Jnr Aerobatics,	
		Classic Stunt, Bendix,	
		Class 2 Team race.	KMAC
Oct	15	_	IBANK
-01	. •	Siacolo Ciaria, Finago Combat Di inv	,

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

Events conducted by CLAMF at the KMAC Field (Melway 72 K9) 10.00am start.

Contact :- G. Wilson (03) 9786 8153,

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

CLAG Contact: - Graham Keene (03) 51924485

Details of venues can be found on web site www.clagonline.org.au/

NOTE - All events at KMAC except Aerobatic events to be run by CLAMF, DAC & SMAC members

The third Sunday of each month is the regular "Brimbank Club Dav"

Notice

Brimbank C/L MAC holding a Classic Stunt and Vintage Combat contest Sunday 15th October.

Start 10:30 BBQ lunch will be available.

CLASII CALENDAR 2005/2006

Flying has continued on Saturdays at the Leichhardt Park flying site (UBD Map 232 R1)

John D. Taylor,

Secretary/Treasurer CLASII (Ipswich, Queensland)

..A.S. (NEW SOUTH WALES)

CONTEST CALENDAR 2006					
DATE	CLUB	EVENT			
Sun 9 Jul	KMFC	AGM, 2.5 Stunt, Club Racing and Slow Combat			
Sat 22 Jul	REMAC	Classic and Vintage Stunt.			
Sun 6 Aug	KMFC	F2B Aerobatics			
Sat 12 Aug	KMFC	CLUB STUNT (Novice)			
Sun 27 Aug	SSME	Slow Combat (Bonus points for WW2 Style model).			
Sun 10 Sep	KMFC	Classic Stunt, Vintage Stunt, Club Racing, Slow Combat, SWAP MEET			
Sat 23 Sep	KMFC	CLUB STUNT (Novice)			
Sun 24 Sep	SSME	F2B Aerobatics			
Sun 15 Oct	KMFC	Gordon Burford Day, Club Racing			
Sun 29 Oct	SSME	Phantom, Vintage A, Bendix			
		T/R, Vintage 1/2A			
Sat 4 Nov	KMFC	CLUB STUNT (Novice)			
Sun 5 Nov	SAT(Kelso F	Park) F2B Aerobatics			
Sun 12 Nov	KMFC	Vintage T/R, 1/2 A, A and B.			
Sun 19 Nov		shead H.S.) Classic Stunt & int.(I.Smith Ph:024975 2292)			
Sun 26 Nov	KMFC	1.6 and Slow Combat, Club Racing			
Sun 3 Dec	Doonside (K	elso Park) F2B Aerobatics			
Sun 10 Dec	KMFC	Christmas Party and Fun Fly			
27-28 Jan.2007 CLAS. (Details to be advised) CLAS. CITY OF SYDNEY CHAMPIONSHIPS					
DOONSIDE - (Doonside Model Flying Club) - Kelso Park North, Panania.					

KMFC-(Ku-ring-gai Model Flying Club) - St. Ives Showground, Mona Vale Rd, St. Ives. NACA -(Northern Area Contest Aeromodellers) -Gateshead H.S., Pacific Hwy, Gateshead.

REMAC-(Ryde Epping Model Aero Club) - Peter Board HS, Wicks Rd, North Ryde.

SAT-(Sydney Aeromodelling Team) - Kelso Park North, Henry Lawson Dr. Panania.

SSME -(Sydney Society of Model Engineers) -Model Park, Luddenham Rd, Luddenham.

WMFC-(Werrington Model Flying Club) - Entrance to flying site @cnr. Landers & Walker Sts, Werrington.

(Muswellbrook District Model Aero Sports MDMAS -Inc.) - Mitchell Hill Field, New England Hwy, Muswellbrook

COMSOA -(City of Maitland Society of Aeromodellers) Raymond Terrace Rd, Metford.

Please note the websites for CLAS and KMFC, which are now up and running, with thanks to Ross Boyd.

CLAS www.control-line.com.au **KMFC** www.kmfc.com.au

VicStunt's "History Re-visited"

Last month's question? - Ken Taylor's article was written for the Hearns Hobbies Catalogue 1958.

Nothing much is new in the world of Stunt flying.

This article was written by Monty Tyrrell, as a special feature in Model News ... The question is WHEN? (What year?) ... Answer in next Month's column

You know, in a comparative manner, the growth of controline flying in Victoria has been, in a large way, a satisfying pattern in the most exciting period modelling has known. Maybe it's an expression of the dynamic times in which we live.



Here, as I reminisce about the beginning, the first experimental models were built back in 1946. Various modelling bods had the credit but among the first were George Levine, Alan Lim Joon, Ted Gregory and Keith Hearn. The latter, in partnership with his brothers Jack and Bruce, used the new sport as the foundation of what is now one of the biggest hobby dealers in the country. Anyhow, a few others latched on to these pioneers and formed the Eastern Suburbs Model Aeroplane Club and on the whole it was a record of hard work, experiment, discouragement and failure. But we can all agree these early birds can now feel their faith has been justified. Out of all the confusion they weathered the heaviest storm - that of getting started.

By 1947 the Club had grown and at Surrey Park each Sunday morning the sceptics and die hard free flight types, including me, freely criticised the spin dizzies and thought the fad would only be an obscure one with a minority following. The public just stood and stared and complained that the planes were either too dangerous or too loud. But some of the sceptics and the public were sporting enough to try it out for themselves and from both groups emerged some of the top contest boys so well known today. So I guess the swelling of the ranks was the first important contribution the new movement created.

At our flying days we went at top pitch because we wanted to be seen and noticed but all without much progress in a modelling sense. We still just flew round and round, and the break in the monotony came when Ted Gregory showed a model could be looped and flown inverted. It was during this period we relieved the American magazines of every gimmick and experimented continually to get the best out of what was then inferior equipment.

Several of us were fortunate enough to have Super Cyclone and O & R ignition engines of 10 cc but for the rest, not fortunate enough to have these, the outlook was discouraging. The motors generally available then were not the best way to go about things. But by late '47 there were plenty of models, and most of all, modellers with confidence, and the first large scale contest was organised. That was the first running of the Hearns Hobbies Trophy, now one of the most important contests in Victoria. There was a grand roll up and, may I add, a gratifying public interest.

The event is now sheer stunt but briefly, the contest at that time was held over three flights. Speed, manoeuvrability and ability to control. It was won by Norm Bell and the hit of the day was Tony Farnan setting a new speed record which was in the region of 65 mph. Early 1948 saw large numbers of American motors being acquired by means that forever remain a mystery to most of us. To add to the excitement, the locally manufactured Tempest 60 inspired those who previously had been handicapped with small unsuitable diesels. Regardless of the motors used, things were not as easy as now. In our camp, Thursday night was prop night. Rupe Johnson would spokeshave out the blanks, Geoff Davis would use the rasp, Bill White would sand, and I'd do the final sanding and balancing. They would then be tossed in a bucket and at midnight we'd split them up evenly for nest Sunday's flying and prop breaking day. Similar shows were being enacted all over Melbourne as in those days the cheapest ready made proprietary job was 7/6, about £1 in today's dough.

By mid '48 Gregory was doing the stunt book with Johnson close on his heels. Les Heap was turning in reasonable performances with a small diesel and Keith Hearn had a Super Cyclone in what could safely be regarded as the first big area low wing loading stunt plane here. The rest of us were crash and bash with each new manoeuvre costing a model. Contests were being held more frequently but demo flying was the main and popular pastime.

Teams of us made many trips from one country town to another with stops in between. We got our share of carnival applause and the average amount of abuse (the noise factor!), but as I look back we were having what could be considered as growing pains. During these sessions we experimented continually with designs and tanks for the stunters and props for the speed jobs as they were now making a more regular appearance. Lim Joon and Keith Hearn were our main hopes in the latter. In the first post war Nats in 1948 they vindicated our faith by Lim winning Class C (8cc) with 116 mph and Keith getting third in Class D (10cc) at 107 mph. Teg Gregory won the stunt as expected and set the pattern for Victoria to dominate Australian stunt for most of the Nationals from then to now.

By 1949 the controliners were firmly established with Lim Joon bettering 120 mph constantly and a line up of stunt merchants acknowledged as the best in Australia regularly giving demonstration exhibitions at suburban and country carnivals. With so many requests for such shows pouring in we realised the vast possibilities this gratifying of the public interest held. This opened up a new field so, with a picked demonstration team, we staged a new innovation in the modelling emotion known as the pay to see us flying circus. The first was held in the St.Kilda Cricket Ground in July 1949 and it was a howling success literally and figuratively. The team stuck to a set printed programme utilising large planes with motors of the 10 cc type in the main circle with general flying supplementing them in three other circles. 8000 people paid to go through the turnstiles and after expenses and a donation to charity the VMAA cleared £156, which was later used to run the 1950 Nationals in Victoria.

These Nationals saw the game firmly established and more or less finished what could be considered as the barnstorming era. We also staged for the first time a team speed event which ended in an unorthodox manner. The planes had had the sword half way through but the race finished with relay runners from each State carrying the wreckage of their particular entry in the final. In point of fact we had experimented with team speed well over twelve months before that and had held what I believe was the first team speed event in Victoria if not Australia. It was a ragtime affair with three planes using two or three cc diesels and one 5cc ignition engine. The main thing was, we discovered a new excitement in modelling that gave the game a boost and established itself by mid 1950.

We were constantly seeking new and fresh ideas because to cease to do so would be to cease to grow, and a movement only lives by growth and non-stop development. The enthusiasm for team racing renewed our faith to keep moving forward as it heralded a wider public acceptance of the sport. Therefore, prior to the 1950 Nats, we introduced the controline payload event also, and it was long after that it was first tried overseas to get control line flying out of the doldrums. The event proved popular for a few years and was used in a few Nationals of the early 1950's. So came the day when there was nothing new to add till the South Aussies pressed for combat which gave the game another kick along as it deserved.

As I write now, we cannot honestly ignore the fact controlining has moved further away from the "flying for fun" it then was. This is because the lack of new events have brought about specialisation in the existing ones to a large degree, and, because of or in spite of this, more complex rules. The nett result is a losing of favour with some who once had a thrill from holding a handle connected to their own creation. It was a good form of satisfaction in 1947 compared to the rat race of today. But maybe that's a part of the progress which, after all, is what us early birds at Surrey park in 1946 envisioned. Very few of us are left now but the many flying sessions now to be seen on any Sunday drive give us a kick, and bring back many fond memories of the early days of a sport we all still love and were proud to be a part of.

Ain't Nostalgia Grande!

Cheers

Ken Dowell http://www.vicstunt.com

If you are looking for information on Control Line that would be useful to a possible newcomer to the hobby then this web site has an article compiled by Lance Smith that has some excellent content. It would be a worth while exercise for clubs to print some copies to be handed out to those flying day enquirers that ask the usual questions. Lots of the answers are here.

http://members.optusnet.com.au/~smithlw/IntroductionToControlLineFlying.htm

Results of SMAC Limbo and Balloon Burst held at Knox on 4th June 2006

Nine flyers contested Limbo, with Frank McPherson in his first experience at this showing everyone how it should be done, despite flying a model much larger than those of most other entrants. The requirements to do well here are a good eye, a stable model and a steady hand - and a bit of luck! Another notable debutant was Jackson Reeve, the young son of current SMAC member Steve Reeve. Although Jackson is yet to "solo", his tutor assisted him through the event to give him a feel for things.

Place	Entrant	Best height
1st	F. McPherson	32cm
2nd	M. Ellins	34cm
=3rd	M. Wilson	36cm
=3rd	R. Marsh	36cm
5th	G. Wilson	38cm
6th	K. Hunting	40cm
7th	L. Follett	45cm
8th	J. Reeve	50cm
9th	S. Reeve	80cm

Balloon Burst was a little different this time - with two balloons pegged to the ground on the edge of the circle about 10 feet apart, but the rules stating you had to get the "second" balloon first, dodging over the first one (and then coming back for the "first"one). Most flyers found this tough, indeed the majority didn't complete the job.

Jackson Reeve (assisted by his tutor) had a go at this too, and "hit" both balloons in the correct order but one simply bounced away instead of popping. Mark Ellins showed everyone how easy this task was by popping the two balloons, in correct order, in a time of 18.52 seconds.

Place Entrant Time
1st M. Ellins 18.52sec
2nd J. Reeve 2:01.0

3rd S. Reeve 4:11.75 (only Balloon 1) 4th R. Marsh Balloons in wrong order

5th F. McPherson No Balloons

6th M. Wilson Only Balloon 2 (ie the "wrong"

one)



Kennewell CNC Machining 2 Sturt Reserve Rd (PO Box 1257) Murray Bridge. S.A. 5253 Phone 08 8532 4977

Last months ACLN had a picture of Dave Axon alongside a large sized pulse jet.

When the editor received the picture it was titled the Kennewell jet. More information has now been obtained and it would seem that Brett Kennewell is a Murray Bridge local modeller with engineering factory. Wouldn't we all like to be able make our own hardware like samples?



Newsletter Editor

Harry Bailey. Unit 1 4 Lagoona Court Churchill 4305 Queensland Tel (07) 32819318

THE ORIGINS OF THE OCTANE SCALE

This is a description of the role crucial played by the improvements made to fuels used in aviation engines during the early 1900s , in particular, iso-octane, and the Octane scale. The information presented here, is a straight lift from the book titled

FIRST FLIGHT, the Wright Brothers and the Invention of the Airplane, by

T.A . Heppenheimer (WILEY)

The growing role of aviation relied on the increasing power of aviation engines, which drew on the development of high-octane gasolines.

These brought major improvements in horsepower, fuel economy, and reduction in weight.

They served as a major underpinning of the sweeping changes the led to the success of the Douglas DC-3.

As a comparison, the Liberty engine of World War 1, had 1,650 cubic inches of cylinder displacement, using the fuels of the day, it developed 400 horsepower.

The Rolls-Royce Merlin of World War 2, had the same displacement, but developed 2,200 horsepower, using vastly better grades of gasoline.

Samuel Herron, a longtime leader in this field, states that "about half the gain in power was due to fuel "

The focus on fuel development was the struggle to boost engine compression ratio.

Piston motors produced more power and gained better fuel economy by achieving higher compression ratios but the achievable ratios were limited by the motor's ability to resist "knock".

Knock is a detonation of the fuel-air mixture that resembles an explosion, one early researcher described it as "the noise that could be heard across a ten acre lot "

During World War One, all that anyone knew was the kerosene made motors knock badly, while gasoline often did not.

The gasolines of the day were distilled directly from crude oil, and had an Octane numbers as low as 50.

But the Octane scale lay well into the future, and a principle measure of fuel quality was its volatility, or ease of evaporation. Volatile fuels had a reputation for avoiding knock.

Sir Harry Ricardo, a British researcher, later recalled that "the discriminating motorist never bought a drop of gasoline without first dipping his finger into the can and blowing on it to test its volatility".

Concern for this property led to the main advance in this area.

The knock-suppressing qualities of tetraethyl lead.

Two research chemists, Thomas Midgely and T.A.Boyd, began by noticing that a wild flower, the trailing arbutus, that has red leaves, blooms early in spring.

This, they thought, might be because the red color was absorbing sunlight particularly well.

They were working with kerosene, and decided that if this fuel were dyed red, the unburned kerosene-air mix inside the cylinder, ahead of the flame front, might absorb heat from the combustion and vaporize more fully, demonstrating improved volatility, and resisting knock, like gasoline.

They proceeded to test this idea by using iodine from the lab shelf as a colorant.

Sure enough, knock was greatly decreased.

But when they tried ordinary red dye, it had no effect at all on the knock.

Still, these researchers had found that knock might be suppressed by using an additive that was not itself useful as a fuel.

This opened up a wide range of compounds to study. Substances resembling analine proved more effective that iodine but produced a smelly exhaust. Tellurium was even better, but was also smellier stinking like "a mixture of

garlic and onions".

Midgely and Boyd the proceeded systematically, working their way through the periodic table of substances, and, by 1921 they learned of the usefulness of tetraethyl lead.

It had a rich bitter odor, and had been known during the war. Used as a fuel additive, it gave resistance to knock when mixed with gasoline in quantities as small as a few cubic centimeters per gallon

The next advance came at the new firm of Ethyl Gasoline, set up the market tetraethyl lead, where the chemist Graham Edgar defined the octane scale in 1927.

Edgar found that iso-octane, which has a molecule with eight carbon atoms, gave far better knock protection the any available gasoline.

It was out of the question to use iso-octane itself, for it cost up to US\$25- per gallon, at a time when the wholesale price of motor fuels was measured in pennies.

Edgar nevertheless declared that if a fuel prevented knock as well as iso-octane, it would be rated at 100 octane.

For some time, people had been aware that gasolines distilled from Californian crude had particularly good antiknock properties.

Investigation showed now showed they had octane ratings as high as 73.

The U.S Army now responded in 1930 by issuing a specification that called for aviation gasoline of 87 octane, which was made by adding tetraethyl lead to Californian fuel.

Further research showed that modest increases in octane could give dramatically disproportionate improvements in horsepower output of aviation engines.

In 1932 a Wasp was under test at an Army laboratory, putting out 720 horsepower using 91 octane gasoline. It nevertheless continued to knock at full throttle, and the investigators responded with a Californian grade that contained far more tetraethyl than usual, to everyone's surprise this fuel permitted 900 horsepower.

This particular blend was useless for operational squadrons, for much smaller amounts of tetraethyl were damaging engine exhaust valves, still these results spurred new interest in 100 octane fuel.

Iso-octane drew renewed attention, its high cost came about because it was available only from the Rohm & Haas Corporation, which prepared it as a synthetic organic chemical using an elaborate process.

Shell Oil succeeded in providing a thousand gallons of this fuel, in a less pure grade, and the results were outstanding. They showed that a rise in octane from 91 to 100 boosted the power of a Wasp or Cyclone by up to 30%,.

Shell and Standard Oil went on to build plants to produce iso-octane in quantity, at affordable prices.

In 1936 the Army's chief of staff ordered that 100 octane fuel was to serve as the standard aviation gasoline for its warplanes

In addition to drawing help from chemists, the engines of that era spurred a move towards flight at higher altitudes. High-flying military aircraft were more difficult to shoot down.

For passenger airliners, flight at higher altitude took these aircraft above the cloud cover, while giving a measure of relief from nausea inducing turbulence, the reduced air pressure reduced drag, and gave higher flight speeds. In turn, higher speed gave increased range for both bombers and the airlines.

Frank McPherson KMAC / CLAG AUS 58427

Meeting held at Knox on Sunday June 4th.



A smaller but nonetheless keen group gathered at the Knox Field for the combined CLAG Flying Day and Springvale's Limbo and Balloon Day.

Ken Donelly conveyed his apologies for this day. The opportunity to play in his 20 million Airbus Simulator in Brisbane was too good to refuse, as are the big bickies they pay him for commuting 'tween Melb and Brissy. Part of April's Day was -

"Frank McPherson continues to amaze onlookers with his all-plywood "Heavy Flatulence" and it's ability to "touch-and-go" from a height of three or four feet - the shock-absorbing undercarriage removing the bumps."

Frank once again amazed everyone as Reeve Marsh reports:

SMAC staged a couple of "fun events", and it was pleasing to see a couple of new names have a go. One was very new (Jackson Reeve, the young son of current SMAC member Steve Reeve) while the other (Frank McPherson) has a bit more experience - just not in this kind of contest!

Nine flyers had a go at Limbo, where you attempt to fly under a horizontal pole set to ever decreasing height. To the embarrassment of the others, Frank McPherson managed to win this event, despite flying his Heavy Flatulence plywood biplane which was nearly twice the size of the other entrant's models. Frank's winning score of 32cm (i.e. the limbo pole was 32cm high off the ground) gave him only a couple of cm clearance above and below the model, while only four other entrants could successfully negotiate anything less than 40cm.

Well done Frank!

In Balloon Burst, six fliers attempted to come up with the winning time from model release to successful bursting of two different balloons in a specific order. Mark Ellins won with a time of 18.52 seconds (an excellent, precise, performance), while debutant Frank McPherson tried a little too hard to get that pesky balloon, and managed to do considerable damage to the tail of Heavy Flatulence. In fact, most had trouble even getting one balloon, let alone beating Mark's time...

During a pause in the Limbo antics, a photo of the attending SMAC Members is to record what may be the last "official" SMAC activity. We are all aware of the continuing decline in control line modellers, and this leads of course to insufficient members to remain a viable Club. If SMAC calls it quits at June 30, which is the logical time to do so if it must be done at all, then this photo is a sort of commemoration of the last Club Event.

Damien Sammut arrived with yet another new item from

his stable. He took the wing from his old SIG Chipmunk and grafted it into a bitza profile fuselage, then bolted (temporarily) an ST 46 into it. The temporarily means only that it parted company with the rest of the model when in flight. No damage to the model resulted, although he discovered that landing without the usual nose weight means floating down like a proverbial autumn leaf.

Alan Frost travelled from Lethbridge with his Brian Burke (Qld) foam wing kit "Mako" / Fox 25. Like everyone else, Alan enjoys the social scene as much as the flying.

Reeve Marsh, when not managing the Limbo and Balloon Events, was teaching his second cousin Jackson to fly using a forearm-style handle. (see photos) Always good to see another young-un learning the important things in life!

Steve Mitchell has been a good bit more active these past few weeks, although his efforts when in the company of the Knox Weekday Retiree's Group (someone called us "the slack-a*s*s") are best left un-described. He persisted with the somewhat-aged Taipan 2.5 smelly thing, which even Neil Baker and Mark Ellins couldn't get to run. Then it was the sheet-wing Yardstick/Enya 19 that didn't perform right. Just as well Steve attends these days for social purposes, otherwise the supply of eminently-suitable liquid refreshment would dry up.

Mark Ellins once again took time out from T/R and Combat scenes to spend some time with both his Jazzers/Stalker 61's practicing for F2B, and enjoying the challenges of the Limbo and Balloons.

In between rounds of Limbo, Murray and Graeme Wilson had their Profi 2.5 F2C combat wings screaming around in circle #1. These don't howl like open combat models, but really scream at a very high pitch.

John Goodge arrived with his stable of "Voodoos" ("wind doesn't matter" - his words), and his Stalker 51 powered Thunderbird. Has taken some time, but the T'bird is now very nicely trimmed, and flies every bit as good as a Thunderbird is capable of. John could easily be a Classic threat if he were to apply himself to the competitive task, but Hey! - this hobby is meant to be FUN!!!

The Voodoo, with Gold Fox 40 Rat Race engine circa 1970 running on 30% nitro, really howls around. At the end of one flight, Johnno was seen reclining on his rear end (sitting on his butt). Did he trip on the edge of the concrete pad? - that's the excuse he's sticking to anyway. Allowing for different line lengths of Wilson's F2D wing and the Voodoo, the estimated lap times give the actual flying speed honours to the Voodoo.

Paul Stein made a welcome first appearance at a CLAG Day, with his "Super Cyclone 65 spark ignition" powered "Super Zilch". The decibel count probably exceeds today's permissible level, but who cares. Perhaps it's only old *arts like this author who remembers Sunday mornings comprising more sparkies than glos or those other smelly things.

Craig Hemsworth continues to climb F2B's potential pecking order with his Stalker 51 powered "KA10-ish". (See earlier reports) He's now talking about retiring the Da Ducks Guts permanently. His under-construction project will have a Saito 72 4-stroke - can't wait!

The CLAG barbeques are fast becoming legendary, with

better-than-supermarket produce and excellent sauces. A little bit of sausage is very nice with one's Sweet Chilli Sauce, and this time in rolls rather than bread slices. Graham Keene fires up the barby at every CLAG Day, with never even a crumb remaining. His wife must love his culinary skills! On this day, the barby interfered with the flying of his OS 25 powered Demon, a model which when balanced right and not overpowered is surprisingly good.



One event that marred an otherwise low-key and pleasant day was the arrival mid-afternoon of a couple of fliers who proceeded to place a model IN the circle, THEN prepare it for flight; attach lines, etc. This is ignoring the purpose of a Pit Area, and effectively "hogging" the flight circle for just over half an hour, thereby preventing other prepared flyers from flying. When the simple courtesies are not observed in this manner, a somewhat sour taste remains, and even Club Presidents are not exempt from the conventional etiquette when sharing a circle.

Next CLAG Day is at Moe on 7th July. Come along and join the gang in the best Flying Days on the calendar. For CLAG members, this day will include the Club's Annual General Meeting.

Ken Dowell - CLAG Inc.

F2B at the Nationals Report from Peter White

Peter White pictured here with his Geo XL with Stalker 61 engine.



All control-line aerobatics events were held at the Murray Bridge Showgrounds which was a fine venue with plenty of parking overlooking the field, clean and comfortable social club rooms and no large trees or buildings to create turbulence from the prevailing breezes.

The grass was rather spongy, creating a few problems for smaller models or those with small, hard-surface wheels but later in the week the main circle was given a trim

which improved things.

Practice was possible from 7am or a little earlier for those who wished to brave the cold and, on occasion, foggy mornings.

In the early part of the week, patchy rain and wind squalls were the order but settled down to leave us with quite pleasant days. Because of the rough patch of weather, the first day of competition was postponed and to catch up, two rounds of Expert and one of Advanced were run on the second day, one of Expert and two of Advanced on the third day and one of each on the final day.

A canteen operated throughout the Nats period, providing a good selection of food and drinks, both hot and cold.

The event was capably CD'd by Peter Anglberger with John Witzke, John Leditscke and Mal Dyer officiating in the pits and flight circle, Joan McIntyre and Russell Bond judging, Marie Swan running scores and Susan Hegarty tabulating.

The round scores were arrived at by averaging the two judges' scores for each flyer and totalling the best three of four to give a final score for the four rounds.

Eleven in Expert and seven in Advanced made up the field for the event. From the start of practice it was obvious that the competition was going to be keenly fought out with many flyers making the most of every opportunity to practise up until their allotted flight times. The wind was still a little bumpy for the first day of competition and this along with the presence of six or eight curious wedge-tail eagles snooping around close to the circles, made for a number of nervous early flights each day. In fact, Dave Simons had a VERY close encounter when one of the birds wandered into the circle and took evasive action as Dave's model flew past it. The onlookers made daily visits to check us out for the first hour or so before moving on.

The most-attention-grabbing model of the Nats would have to have been PJ Rowland's four Enya 19 powered Lancaster. PJ had this massive model in good trim with its four motors starting, running and cutting very consistently and as it wove its way through the pattern it certainly made an impressive sight. Under the new FAI rules the model, being nearly 100mm oversize in span, was illegal but PJ chose to fly it and take his chances on a DQ which eventually came after an appeal was lodged prior to Round Four.

Other models of interest included four Retro 60 powered Yatsenko models flown by Paul Stein, Paul Lagan (New Zealand), Dave Simons and Hisato Minoda (Japan). This affable 75 year old gentleman made many friends over the week despite his limited English and our even more limited Japanese. One experience that he may (or may not) care to relate to his friends at his flying field back home concerns his choice of "fuel". After spending an unusual amount of time attempting to start an unresponsive motor, it was discovered that his "fuel" was actually a raspberry cordial that he had picked up as he collected his gear from host Peter Anglberger's car.

The Ukrainian models are fully take apart, using a very simple system that works extremely well. Despite their cost they appear to be cornering a market as I'm told there is a fair waiting list for orders. Paul Lagan has been campaigning one of these models since the 2000 Nowra Nats and appears to be quite at home with its characteristics. If there was an award for the total number of practice flights put in, Paul would have to be a major contender.

Making good use of his Yatsenko model with its consistent-running Retro was Dave Simons from NSW. Dave's flying has been steadily improving over the last couple of years with this combination. Typically, the Retros make good power at a steady four cycle helping to create the impression of smoothness.

In his Round Two flight in Advanced, Paul Stein felt something give in the controls on take-off, limiting their movement. An inspection on landing and disassembly of the model revealed that the bellcrank pivot had dropped in its mounting which cut control to almost nothing. He then elected to pull out of the competition and do the repairs at home, confident that it was a reasonably straightforward job.

Bruce Hoffman's impressive Saito 72 powered Walker Mustang, painted green and gold on white and re-badged Miss Australia II was flying very well with soft corners and handling any wind nicely thanks to the power of the big four stroke.

Doug Grinham produced a new "Russian type" Jazzer with a beautifully done pale green and red finish. He was not totally happy with the "take the chance" starting characteristics and the odd rattly burble at certain points of the manoeuvres despite this, there seemed to be ample power to do the job.

Paul Turner's familiar Wind Wiper was well flown, as usual, with a plasma ST 46 providing the smooth consistent power needed to haul the slightly obese model around. Paul has this model finely trimmed and places consecutive manoeuvres accurately.

Eventual winner, Brian Eather, put in many practice flights on his familiar Firecracker which obviously paid off. In all four rounds his flying was neat with good 45s and bottoms.

Mark Ellins, performing his legendary dashes between the racing and aerobatic circles, flew his now familiar ex-Doug Grinham Jazzer powered by a sweetly running Stalker 61 LT. Mark flies very well, taking into account the demands made upon his concentration in alternating between events.

Frank Battam, obviously saving his Number One model for the upcoming World Champs, was content to put in a lot of practice time on an ST 46 powered profile Sukhoi, while yours truly turned up with a twelve month old GEO XL powered by a Stalker 61 Long Stroke. The fitting of a balanced shaft and a hemi head has greatly improved the behaviour of this motor.

Amongst the Advanced boys who battled it out, we had the perennial Denver Harvison flying his St 46 powered Caudron. Denver had some starting problems which threw him out of step in a couple of rounds.

Much improved and Advanced winner, Steve Masterton flew many practice flights under the watchful eye of Brian Eather, flying an ex-BE Hot Dog/ Stalker 61 combination.

Another of the NSW contingent was Bill Swan flying his second Nationals and using an ex-Frank Battam Nobler-ish/Caudron-ish design named the Mongrel powered by a good running ST46 - aren't they all ? Bill is also the new owner, along with wife Marie, of Bristunt Products.

Peter Rowland's Tony, acquired from Herb Hanna at frame-up stage, was an attractive little model that sat well in the air. Peter had an undercarriage leg partly collapse in an early round and needed to treat it gently on takeoffs and landings.

South Australia's Peter Anglberger flew an Ozone/OS 46LA combo which seemed to handle quite well. Peter is flying better each time we see him as he gains confidence and contest experience. He had quite a busy week acting as CD, hosting Japanese guest Hisato Minoda and competing in all three aerobatics events. Well done, Peter!!

Mike Hawkey, another SA competitor, had the misfortune to damage his ST 51 powered Tantrum in an early round but repaired it for the following round. Unfortunately, the weakened stab gave way thus finishing the job off completely. Mike is a relative newcomer to competition at this level who builds quite a neat model.

Photos of the various competitors and models as well as results are posted on the Vic Stunt web site thanks to those who contributed photos. Thanks must also go to all who worked to make the event the success that it was ... the pits officials, the judges, the score runners, the score tabulator, the CD, and those who worked in the canteen. Thanks to each of you from the competitors.

The ACLN Editor obtains a large number of photographs of Control Line models and related matters whilst he goes about his editing duties. Many of these pictures do not get to be published due to space limitations. All is not lost for those of you eager to view these pictures as the Vic Stunt webmaster has set up a section in his webpages to display them.

More pictures have been added this month that were taken at the Vic State Champs. They come from the camera of John Hallowell.

Go to http://www.vicstunt.com Refer, Clubs/Aust Clubs/ CLAC Section, then 2006 Photos

Have a look.

You might be there.

THE WORLD CHAMPIONSHIPS
FOR CONTROL LINE MODELS
F2A, F2B, F2C, F2D
JUNIOR AND SENIOR WILL BE
HELD IN VALLADOLID SPAIN
16-24 JULY 2006
THE CONTESTANTS
REPRESENTING AUSTRALIA
WILL BE:-

F₂D

AUS Senior COMISKEY Snr Michael
AUS Senior COMISKEY Jnr Michael
AUS Junior COMISKEY Ryan

F₂B

AUS Senior SIMONS David AUS Senior BATTAM Frank

F₂C

AUS Senior SIMONS Hugh Pilot AUS Senior POTTER Grant Mechanic

AUS Senior FITZGERALD Robert Pilot AUS Senior ELLINS Mark Mechanic

AUS Senior THOMPSON Ian Pilot AUS Senior HARVEY Raymond Mechanic

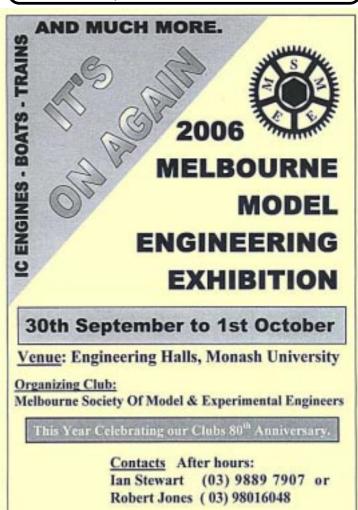
ACLN wishes our team the best of good fortune.

Information on the **60th MAAA National Championships** in Albury/Wodonga can be found on this web site.

http://www.tcmac.com.au/60th%20Nationals/ 1st%20page.htm 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.



CLASII TEAM RACE & 2.5 SLO COMBAT DAY WHEN SUNDAY 13TH AUGUST 2006

WHERE CLASII FIELD LEICHARDT PARK IPSWICH Location UBD 212 R20 Enter via Ernest Street near Scout Hall.

COMMENCING 9AM SHARP

EVENTS: 2.5 Junior Rat T/R, Vintage A T/R, 2.5 P/B Rat T/R, Classic B T/R, Bendix T/R, 2.5 Slo Combat.

ENTRY FEE \$5.00 per person will cover all events.

Sausage Sizzle, Hot & Cold Drinks will be available through the day.

Champion of Champions Trophy (2) will be awarded to the highest point scorer(s) of the day.

For each event entered persons will score points from 1^{st} (10 points, through to 10^{th} 1 point.

There are two grass circles available, one for practice.

CLASII normal Club Day will be on Saturday 12th AUGUST if anyone wishes to practice on that day.

MAAA (FAI) cards must be shown. NO CARD NO FLY.

For Further information contact Secretary John Taylor 07 33927679 email johndt@iprimus.com.au or President Mark McDermott 32889263

Level 3 water restrictions are in place due to the current drought situation and the field cannot be watered by the sprinklers but this will not prevent the contest taking place

2006 NSW State Championships



(Author: Bruce Hoffmann)

It appeared that the Bureau of

Meteorology had finally got the forecast right! On Saturday – the first day of the Control Line Aerobatics – flyers were met with dark clouds overhead that emptied their wet load periodically throughout the day on those below. There was little or no wind to contend with, just a little drift - and as there was no sun to bother the competitors if you managed to fly when it wasn't raining then you could put in a reasonable flight.

We only had a total of eight flyers in F2B Expert; there were a couple of notable people missing from the starting grid including two that originally planned to travel from interstate but owing to personal problems had to cancel at short notice. Judges; Joan McIntyre and eminent pilot Denver Harvison sat through the cold, damp weather on day 1 attempting to have their pens write on often wet paper.

It might be timely here to congratulate Denver on his input and continued interest in the sport over a long career, it was great to see him volunteer to Judge – one would hope that this won't be the last time for him and that it may entice other 'flyers' to emerge from the pack periodically to critique their peers.

Reg Towell flying his 4 stroke Saito 72 powered P51 Mustang "Ole Yeller" drew the 'Devils Seat' and flew first putting in a very respectable flight in near perfect conditions. Those that followed did likewise and to most onlookers there was very little to distinguish the leaders from the 'tail enders' of the group. At the end of the first round Veteran performer and current Australian Champion Brian Eather had gained a healthy lead with his "Firecracker" model in front of Paul Turner and Reg.

Round two commenced after a healthy lunch of BBQ'd sausages on bread rolls – just the thing for the cold weather - and following the "Advanced" F2B competition which I'll mention later. All flyers again put in very good solid flights, however toward the end of the round many flyers were finding whether or not their models were watertight as well as fuel proofed due to the rain falling more consistently. One flyer attempted to gain a few extra points (but didn't) and impress the female Judge by wearing a Dinner suit throughout his flight; he learned later that she didn't realise that he was dressed differently until some point about half way through the pattern! Brian Eather was able to consolidate his lead by achieving a score over 20 points higher than his nearest rival leaving the rest of us wondering where we could muster enough points to overtake him in the final day of flying!

Sartorial Splendour! -Bruce Hoffmann with "Miss Australia II" / Saito 72



Judges Denver Harvison & Joan McIntyre in action.



Sunday. The weather forecast was for 'gale' force winds in the afternoon and once more the weather bureau was proven to be correct – if not a little late in their prediction as the winds started to build up soon after 9am in the morning. Those that were lucky enough to fly early on managed to again score quite respectably however by the end of the round anyone who flew was just 'happy' to bring their model back to terra-firma in one unbroken piece. Brian Eather was seen shortly after his

flight unpacking new underwear from his car following a near miss in his outside squares of the square eight – at least the council won't need to mow that section of grass for a while! He again led the round, though by only a few points ahead of Paul Turner who again flew his latest 'Wind' Series model powered by his ever faithful Super Tigre 46.

Round 4 saw a number of Pilots elect not to fly because of the increasing wind. Reg Towell had decided to in the hope that he might gain a few extra points and enable him to leap ahead of Paul who was just ahead in 2nd position. Brian E also decided to fly – hoping to increase his flight score of the 3rd round where he nearly shaved the ground. Brian was lucky to fly immediately before Reg and following his prayer to the 'wind gods' was rewarded with a window of reasonable air and another good score. Not so luck for Reg though! As he was about to start his model the wind came back in earnest, Reg started his pattern bravely enough however like me found that during his wingover the tail of the P51 wanted to overtake the nose! He opted to abort the pattern from thereon, the conditions such that they would have put unnecessary strain on the model for no real purpose. As it was, a number of pilots watched him fly level for the remaining 5 minutes and ran to his models aid upon landing to prevent it from being blown over such was the strength of the wind! Reg said later that this was the first time that he could recall having to abort a flight due to wind conditions alone.

The final result was a well earned First to Brian Eather, 2nd to Paul Turner and 3rd Reg Towell.

Advanced saw a number of relatively new pilots join the fray, lead by the father and son team of Greg and Michael Frail, the competition was again closely contested and Judged by the extremely competent and experienced Paul Turner and Frank Battam.

The first 2 rounds were held on Saturday between or after the Expert rounds. The perfectly manicured grounds a credit to Blacktown City Council and Paul Turners large mower which helped make take offs and landings no problem for any flyer. As in the case of the Expert competition, the weather was near perfect apart from some light drizzle that didn't detract too much from the flying abilities of the pilots. Les Spaltman, flying a newly finished model in his first competition proved that he will be a force to be reckoned with once he has learned and practiced the full pattern. Greg Frail flying his ST46 powered profile Sukhoi showed what a good reliable engine run can do in a well built aeroplane and likewise his son Michael – flying a 1952 Nobler worried several of the older 'guns' by demonstrating some very decent manoeuvres. Bill Swan – who has almost thrown away his R/C box to return to C/L flew some very decent patterns in his Battam built 'Mongrel' model – also powered by the ever reliable ST46. Denver Harvison flew his recently repaired and faithful 'Caudron' dazzling many onlookers with a very decent pattern whilst Steve Masterton consolidated his win in Advanced at the South Australian Nationals by creating a path in the air for all to try to follow! Paul Kenny again flew his tried and tested ST46 Powered Towell built 'Caudron' entertaining everyone with his dramatic arm and body movements which controlled the direction of his aeroplane!

At the end of the 2nd round Steve Masterton was the one to beat and everyone looked forward to Sunday where it was hoped good weather would prevail enabling those that trailed to better their first two rounds. This unfortunately was not to be, as in Expert many had to contend with ferocious winds in the 3rd round whilst some were lucky enough to fly early and 'beat the breeze'. Most pilots elected to stay on the ground on the 4th round – all except for Paul Kenny and Bill Swan who were brave (or silly) enough to attempt to fly through the wind giving all who watched some very entertaining and frightening moments. At the end of the day the results were as follows: Steve Masterton – First, Paul Kenny – Second, Greg Frail – Third with 'Best Junior' being awarded to the very able Michael Smith-Frail.

A Novice event was also held over the two days – judged by two Novice Judges; none other than Bruce Hoffmann and Paul Kenny.

Only four pilots entered this event; Michael Smith-Frail, Don Keyssecker, Ross Boyd and Steve Yeatman. It was once again good to see some new names arrive on the scene and put in some very decent patterns in what at times were very trying conditions. Saturday saw Don have some serious engine problems where his motor appeared to overheat shortly after performing the 'outside' manoeuvres causing him to have to abort the remainder of the pattern and for the first two rounds perform very neat 'powered' landings! Both Ross and Steve were flying ARF Noblers which flew quite smoothly on the Saturday. Michael again flew his 1952 Dad built Nobler and after a shaky start in his first round settled down to do some excellent flying in rounds 2, 3 and 4. Unfortunately the wind hit him hard during his last manoeuvre in round 4 – a vertical eight, Michael didn't quite leave enough room under his model for the bottom loop resulting with the model hitting ground zero at an angle of about 10 degrees! Very little damage was caused to the aeroplane – perhaps as a result of the wide spaced and springy undercart – the model will certainly live to fly another day! Don changed engines overnight mounting an OS LA46 into his aeroplane. This certainly helped him for his 3rd and 4th rounds where he managed to accumulate some decent scores. Ross flew the 3rd round and reached a tally which would be near impossible for the other pilots to beat, consequently he did not fly the last round.

Final results are: 1st - Ross Boyd. 2nd - Michael Smith-Frail and 3rd - Don Keyssecker.

All in all an excellent competition was held at a perfect venue. Thanks must go to the C.L.A.S organisers as well as to Mr Steve Bali – Councillor at the Blacktown City Council who was present on Monday when 'Classic' and 'Vintage' stunt was being held. He reiterated to those present his and the Councils ongoing support for our sport and suggested that the Blacktown Council could support a bid to host a future 'Control Line World Championship' event. New South Wales state Championship

Stunt Results from N.S.W. State Championships

F2B. B.Eather P.Turner R.Towell F.Battam T.Bonello B.Hoffmann J.Elias D.Simons	1st. round 969.75 923.25 933.25 886.25 901.25 862.25 817.25 917.5	2 nd round 981.75 9635 945.50 932.75 873.75 851.75 730 914.25	3rd round 896.50 892 859.25 818.75 788.25 703.25 743	4 th round. 893.75 		Total 949.33 926.25 912.66 880.25 854.42 805.75 763.34 610.58	Place 1st. 2nd 3rd 4th 5th 6th 7th 8th	
Advanced S.Masterton. Paul Kenny Greg Frail Bill Swan Denver Harvison M. Smith-Frail Grant Wylie Len Spaltman	807.75 730.25 696 607.75 546 394 506 508	781.25 736.25 658 687.25 590 75 528 527 453.5	764.5 641.5 689.5 718.25 557 546.5	502 618.25 		784.50 702.66 681.16 674.58 564.58 489.5 344.33 320.5	1st 2nd 3rd 4th 5th 6th 7th 8th	junior.
Novice Ross Boyd M.Smith-Frail Don Keyssecker StephenYeatman Classic. Reg Towell Frank Battam Steve Masterton	310 230 161.5 308 1st 2nd 3rd	333.25 328.25 265.75 309.5 476 391 455	330.75 297.5 287.5 ——— 548.5 513 472.5	261.5 326.5 ——— 548.5 513 472.5		974 887.25 879.75 617.5	1st 2nd 3rd 4th	
•	4th 5th 6th Kenny Turner.	426 374.5 252	363 239	426 374.5 252				
Vintage.								
F. Battam P.Turner D. Keyssecker J.Elias P.Kenny S.Yeatman	1st 2nd 3rd 4th 5th 6th	126 128.5 125 115 93 106	173 155.75 135.5 52.5 117 133.5	171.5 155 164.5 166 144	299 284.25 280 279.5 259 250	5		

Judges

J.McIntyre

Static Flying

7th

Peter Barclay Denver Harvison Reg Towell

100

Gents:

We no longer have to worry about the 'orrible smell of diesel fuel, when we return home from a spot of Vintage A or F2C'ing, it's not just testosterone and diesel residue our better halves will be smelling!

See the whole range of "solutions" at:

http://www.kemcooil.com/products.php?cId=5

FUEL FRAGRANCES

100

Delight the crowd with a pleasant fuel smell through the exhaust of your vehicle! Nothing like it, guaranteed to make your friends jealous. Try one of 19 different fuel fragrances. They mask the smell of methanol and gasoline. Use 1 oz per 5 gallons





These pictures represent some of the recent imports to Australia of combat competition engines.

ACLN obtained these recent pictures of F2D Combat engines made by Cyclon. It is understood that a batch of 20 engines have been purchased and distributed (sold) amongst F2D combat enthusiast in Queensland.

A batch of 20 .09 sized Cyclon engines have also been purchased for use by Half A Combat flyers. A group of enthusiasts that attended the South Australian Nationals put their names on a shopping list for these engines.

Half A Combat is a less intense and less technical and less expensive form of competition compared to F2D Combat and these readily available and relatively inexpensive competition engines could open up the availability of suitable engines for any newcomer to combat competition. We shall await reports on competition performance of these engines.

Xmas in June

Place:- Our R/C site at Brendale on South Pine Sports Assn Cricket ground

When:- From 9:30 AM Sunday 25th June.

What:- Anything (within reason and 96 dB limit!). Just have FUN.

Why:- All seemed to enjoy the Xmas R/C & C/L get-together. So why only once a year?

Format:- Same as at Xmas function. Sausage Sizzle & Drinks at minimal price

(enough sustenance to keep you flying all day)

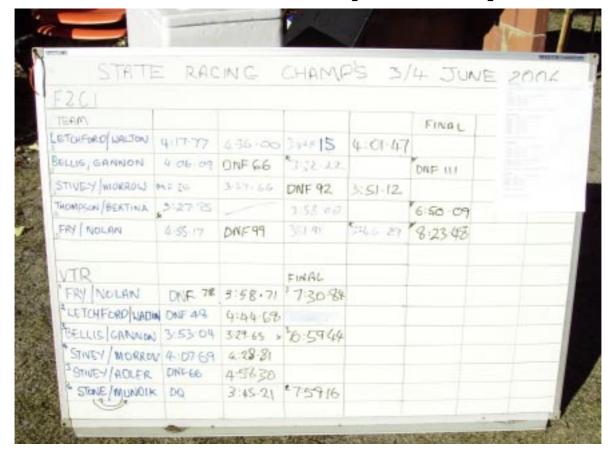
Events:- Whatever comes. Control-Liners will probably have some

balloon bursting and combat.

Baz may have a secret event for that other type of flying.

Hope you can make it!!

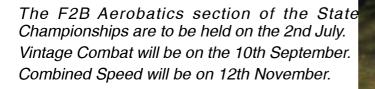
W.A. State Championships 2006

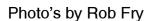




The racing section of the Western Australia State Championships were flown over the weekend of the 3rd-4th of June. The events listed to take place were Vintage A, Bendix and F2C. Ian Thompson and Hans Bertina (Left) were the victors in F2C with a final time of 6:50.09 and are pictured here with their model. Ian will be a member of the Australian team taking part in the Control Line World Championships being held next month in Spain.

Bellis/Gannon were number one in Vintage Team Race (Below) followed by Fry/Nolan and Stone/Mundik.







Pure, 1st pressing Castor Oil - cleaner running than Castrol M.

Cost for 5 litres including container is \$33 +P&P within Australia

Telephone Ken Maier (03) 9398 8244 day or evening. email: combtkid@hotmail.com

Balsa wood sheets.

Approximately 54 sheets of quality balsa wood in 1.5mm, 2.5mm and 3.5mm thicknesses x 4 inches wide and 4 feet long + balsa strips etc. at bargain prices. "Half shop price" Must be collected!

Other control line items including electric starters also for sale. Telephone seller for details.

Seller giving up the hobby due to age and health reasons.

Telephone Ray on (07) 3372 9165

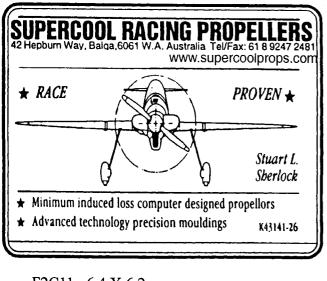
Forest Lake 4078

Brisbane

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"



F2C11 6.4 X 6.2

F2C12 6.4 X 6.3

Supercool

F2C13 6.4 X 6.4

First in Racing

F2C14 6.4 X 6.5

F2C11 to F2C14 now with Suzuki low Re, high Mach airfoils

SUBSCRIPTION APPLICATION ARE YOU BORROWING?

If you have just finished reading somebody else's copy of Australian Control Line News why not get in now and order your own copy. Australia and New Zealand residents cost \$20A and other countries \$30A. For this annual amount you will receive eleven issues of this newsletter, and be up to date on Control Line both in Australia and lelsewhere. Please make payments payable to "Control Line Advisory Committee"

You can order from:

G.WILSON PO BOX 298 **SEAFORD** VICTORIA 3198 AUSTRALIA

NAME	
ADDRESS	
POSTCODE	
TELEPHONE	
	

Oily hand day COWRA MAC 19TH & 20TH August Special diesel only event

- Bring along whatever model you have that is powered by a diesel - r/c, ff, c/l -there will be plenty of opportunity to smell, see and talk diesel as we will have diesel conversant aero modellers attending.
- Fuel available for purchase on the day.
- 175 x 30 meter runway, 40 acre field devoid of trees, separate c/l circle caters upto 70' lines.
- Swap and sell stall set up both days.
- No entry fee.
- Catering at field both days brekky Sunday morning 7:30 to 8:30 am.
- Accommodation cowra motor inn ph 63422011 and mention Cowra MAC to get a discount. Or go to http:// cowra.visitnsw.com.au/ and click accommodation.
- For information contact mike levs on 63411571 email mike@leys.id.au
- or andy luckett on 63423054 or 0412820865.
- Please give us a courtesy call to show your interest and to help estimating catering.

Mmmmmm - ether mmmmmmM - castor Mmmmmm - diesel

AUSTRALIAN CONTROL LINE NEWS If undeliverable return to:-

G. WILSON P. O. BOX 298 SEAFORD VIC 3198 SURFACE MAIL