

# THE VOICE OF CONTROL LINE AEROMODELLERS FROM AROUND AUSTRALIA

Number 51



Produced by the Victorian Control Line Advisory Committee

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### Copy Deadline for next issue is: Wednesday 16th January 2002

#### 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.

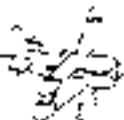
Telephone (03) 9543 2259.

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

Email address:- [acln@ozemail.com.au](mailto:acln@ozemail.com.au)



## COMING EVENTS



### CONTROL LINE CONTEST CALENDER 2001

DEC 16	<b>FAI Team Race, 2.5cc Open Combat, 1/2A Team Race</b>	CLAMF
DEC 29	55th National Championships start.	
	Albury/Wodonga	
JAN 5	55th National Championships finish.	
JAN 20	<b>FAI &amp; Combined Speed, Mini Goodyear</b>	CLAMF
JAN 27	FAI Aerobatics (Hearns Trophy), Novice and Junior Aerobatics, Vintage A T/R, Classic B T/R	KMAC
FEB 3	Simple Rat Race, Simple Goodyear	SMAC
FEB 17	<b>FAI &amp; Combined Speed, 1/2A Combat, Mini Goodyear</b>	CLAMF
FEB 24	Vintage Stunt, Class 2 T/R	KMAC
MAR 3	Hand launched glider	SMAC at Ross Reserve
MAR 17	<b>FAI Team Race, Goodyear, Simple Rat Race</b>	CLAMF
MAR 24	FAI, Novice & Jnr Aerobatics, Vintage "A" Team race, Classic "B" Team race.	KMAC
MAR 29 - APRIL 1	Victorian Control Line State Championships.	CLAMF, KMAC, CLAMF
APR 7	Simple Combat.	SMAC
APRIL 21	FUN/LEARN TO FLY DAY PROMOTE C/L FLYING.	CLAMF
APRIL 28	Classic Stunt, Bendix.	KMAC
MAY 5	Vintage "A" Team race, Aust "A" Team race.	SMAC
MAY 19	<b>FAI &amp; Combined Speed, Triathlon (Artmil Trophy), 1/2 A Team race.</b>	CLAMF
NOTE -	All SMAC events to be held at KMAC flying field. All events at KMAC except Aerobatic events to be run by CLAMF, DAC & SMAC members.	

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

**CLAMF** Frankston Flying Field, Wells Rd, Seaford (Melway 97J10), 10.30am start

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

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

Contact :- H. Bailey (03) 9543 2259

**KMAC** Stud Rd . Knoxfield (opposite Caribbean Gardens) (Melway 72 K9) 10.00am start

Contact :- T. Matthews (03) 9560 0668.

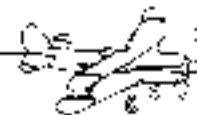
**SMAC** Contact :- Reeve Marsh (03)9776 5949

**WMAA** Horsham. Contact :- V. Cresp (03) 5382 4065

**BRCAC** Bendigo-Newbridge Rd . Marong

Contact :- S. Power 03 54 424 925

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



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

#### LOCATION OF FLYING FIELDS

(ALL EVENTS START 9 am UNLESS OTHERWISE NOTED)

**TAMWORTH MAC:** CONTACT LEN SURTEES 02 67-61 8508

**R.E.M.A.C.:** PETER BOARD HIGH SCHOOL, WICKS RD.,

**S.S.M.E.:** LUDDENHAM ROAD, LUDDENHAM.

**K.M.F.C.:** ST. IVES SHOWGROUND, MONA VALE ROAD, ST. IVES.

**S.A.T.:** KELSO PARK, HENRY LAWSON DRIVE

**I.M.A.C.:** BIRKLEY ADJACENT TO FREEWAY.

**MUSWELLBROOK M.F.C.:** MITCHELL HILL FIELD, NEW ENGLAND HWY., MUSWELLBROOK.

**NARROMINE:** CONTACT STEVE BAKAC 02 68 89 2501

**CLAS** CONTACT MIKE COMISKY 02 9605 2062

### CLAS Contest Calendar 2001

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](mailto:guybevan@hotmail.com)

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

Send address to [guybevan@hotmail.com](mailto:guybevan@hotmail.com)

### CLASII CONTROL LINE EVENTS CALENDAR 2002

*Flying field at Leichardt Park just past One Mile Bridge Ipswich*

Members fly most Sundays between 9am and 1pm. Club competition days are held on the second Sunday of the month. Visitors are most welcome but please bring your F.A.I. card to prove current MAAQ membership. This is a Council Park with permission given to fly only control line planes, no radio and only between the hours of 9am to 5pm. Further information on club activities can be obtained from President Mark McDermott 07 32889263 or Secretary John Taylor 07 33927679 email [johnndt@iprimus.com.au](mailto:johnndt@iprimus.com.au)

**JANUARY** Sunday 13<sup>th</sup>

**FEBRUARY** Sunday 10<sup>th</sup>

Fun Fly Day

Clasii (simple) Rat

FAI Combat

35 Slow

2.5 Slow

**MARCH** Sunday 10<sup>th</sup>

Clasii (simple) Rat

Trierothon

**APRIL** Sunday 14<sup>th</sup>

**Ipswich Open Grass**

**Speed & Team Race**

**Championships Part 1**

Combined Speed

Vintage A

Vintage B

Bendix

**MAY** Sunday 12<sup>th</sup>  
(Mother's Day)

Scale Fly In

JUNE 8<sup>th</sup> 9<sup>th</sup> 10<sup>th</sup>

## QUEENSLAND STATE CHAMPIONSHIPS

**At ALC FIELD Chetwynde  
Street Loganholme.  
Further details from  
Secretary ALC**

JULY Sund 14<sup>th</sup>

Clasii (simple) Rat  
Class 2  
Goodyear  
Classic B

AUGUST Sun 11<sup>th</sup>

Clasii (simple) Rat  
Junior 2.5 Slow Combat  
2.5 Slow  
FAI Combat

SEPTEMBER Sun 8<sup>th</sup>

Clasii (simple) Rat  
**INTERCLUB MOUSE  
CHALLENGE**

Mini G/Year  
Open Combat  
Scale Fun Fly

OCTOBER Sun 13<sup>th</sup>

NOVEMBER Sun 10<sup>th</sup>

**Ipswich Open Grass Speed  
& Team Race  
Championships Part 2**  
Combined Speed  
**Clasii (simple) Rat Open  
Team Race \$15 per team**

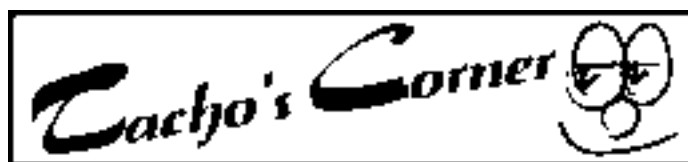
**Prize nib Norvell 15 glo motor, 2<sup>nd</sup> & 3<sup>rd</sup> Trophies  
2 Rounds of heats and fastest 3 to Finals**

Junior 2.5 Rat Race

DECEMBER Sun 8<sup>th</sup>

Christmas breakup and Fun Fly

FOOD AND DRINKS ARE AVAILABLE AT THE FIELD ON CLUB DAYS. Visitors are requested to make a gold coin donation to club funds for fun flyins. Competition events commence 9.30am. Separate entry to apply to each event. There will be a \$50 Open Order at Vogler's Sports store Ipswich for Overall Champion of **Grass Speed & Team Race Championships**. Further details and entry forms will be out in the middle of January. Clasii (simple) Rat rules available from Secty. These Championships will be a great chance for a final practice before Qld State Champs and Qld Nationals.



## NOTICE

### CHRISTMAS BREAK-UP DAY

A last minute addition to the competition calendar is for a general sport/stunt flying day with an F2B competition at KMAC on **Sunday 16th December**.

This will be an excellent opportunity to make up for the flying days lost through recent bad weather.

Bring all your stuff for a long BBQ lunch break.

Everyone is welcome.

Enquiries: Derek Pickard (03) 9889 1149

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.

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Supercool .....

First in Racing

# PULSE JETS REAL AND MODELS.

From John Taylor

Over the years (the past 56 in fact) a lot of interest has been shown in model pulse jets, but before talking about the model variety a little bit of background information on the real thing may be of interest particularly for our younger modellers.

The Chinese made powder rockets many centuries ago and jet propulsion is an old idea. After the end of World War 1, the Treaty of Versailles restricted Germany in all forms of armament. In 1923 a German professor Hermann Oberth published a treatise "The Rocket Into Interplanetary Space" with emphasis on liquid fuels. This led to the establishment of Interplanetary Societies in various countries throughout the world but in particular importance was the formation in 1929 of the German's Army Weapons Dept to undertake research on the possibility of using rocket propulsion for military purposes. The first test stand ever established in Germany for liquid propellant rockets was located at Kummersdorf near Berlin and first actual test took place on 21st Dec. 1932.

So as you can already gather the idea of the pulse jet goes back a long way.

In December 1934 the Army Group had it's first success in launching liquid propellant rockets and after that began the move to Peenemunde and further development of V1 (pulse jet) and V2 liquid fuel rockets took place right up to the end of World War 2. Rockets, information and scientists were grabbed by Russia and America at the conclusion of hostilities and without the tests and research which originally started back in 1918 in secret even when the Versaille Treaty inspectors were inspecting the Krupps Armament Factory, modern rockets and space travel would probably not even exist today.

The operation of the Army Weapons Unit and development of the rockets were under the command of Major General Walter Dornberger, who due to various factors had transferred further development of the Fi 103 (or V1 as it later became known) rocket engine to the German Air Force in 1940 who quickly produced a jet driven air torpedo which was catapulted from an inclined concrete ramp. The V1 (pulse jet) Doodlebug or Buzz Bomb as it was commonly called during WW2 because of the extremely loud sound was a small 25ft low winged aircraft delivering a 1 ton pay load of high explosive with a top speed of 350 miles per hour and a height range of 600 to 6000 feet. In the latter part of the war V1's were also dropped from aircraft towards the targets.

The power plant (pulse jet) burned low grade fuel oil mixed with oxygen as it moved towards the target. The air intake gave intermittent combustion with up to 500 explosions per minute through multiple valve system.

The first V1's were launched towards London on 12th June 1944 and continued until March 1945 by which time a total of 9,300 had been fired against England alone resulting in huge loss of life, untold casualties and enormous property damage as well as the psychological effect on the civilian population.

And now to the model version!

This is in reality just a scaled down version of the V1 working on the same principle with the original multiple valve system replaced with a simpler petal valve system.

This was first tried by Sgt. Bill Tenny of the US Army in 1945 after inspecting a V1 on display, with production of 50 model units of the Dynajet in 1946. Since that time similar models have been produced and sold in various countries of the world with various degrees of success. The original Dynajet is still in production in America and can be purchased for approx. A\$300 dollars. Other pulse jets such as the Bailey Sport and Fast jet and accessories can be purchased new and second hand models are usually available also.

Pulse jets have been mainly used for Control line flying over the years but there have been and still are operational R/C pulse jets in Europe and USA and also here in Australia in the hands of Bob Fry from W.A..

Pulse jets are extremely noisy and as such are usually only flown at Airshows and Special public displays where they are extremely popular and create enormous interest bringing the crowd from far away and encouraging them to ask many questions about the pulse jet in particular and aeromodelling in general.

Competition fliers operate Control line models in speed events at State and National Competitions and at other non sensitive noise sites just for the sheer pleasure of hearing them and flying their usually look like V1's or Scale models. Speeds of up to 220mph have been recorded in C/L models in recent times but even back in 1959 the world speed record was 300kph. I understand that a R/C model powered by no less than three Pulse jets has been flown at well over 400 kph in Europe in recent times and still flies on special occasions.

The picture of the model which is in this magazine was built by Peter Morandini and is a sport display model which flies at approx. 100 mph for about 2 to 3 minutes on a fuel mixture of 80% methanol and 20% MEK. The model was last flown at the PRAMS Airshow and will be able to be seen and heard at the upcoming Tingalpa Airshow.

Peter who is a member of the Control Line Aeronautical Society of Ipswich has been building and flying pulse jet models for over ten years and currently owns OS and Dynajet pulse jets which are nearly 40 years old. There are other jet modellers in Qld who own speed models which should be seen in action at the next NATS. These belong to John Taylor and Frank Sutherland. More sport models are currently being built.

The current revival in jet interest in Australia has been largely due to the efforts of Bob Fry in W.A. and a long time stalwart David Axon. As a result of their efforts "Pulse Jet Aeromodellers of Australia" was formed late last year with representatives in most States. Bob Fry's email address is bob.fry@wpcorp.com.au. The Qld rep is John Taylor phone 0733927679 email johndt@primus.com.au.

We know there are other modellers in Qld who have pulse jets gathering dust in their sheds. Why not contact us and get them in the air again? We are currently negotiating a new site for use and maximum exposure to the general public for the benefit of C/L.

*PULSE JET Aeromodellers*  
  
*of Australia*

# THE HARLOW RETURN

One of Australia's biggest ever names in control line stunt is now serious about his comeback into competitive flying.

Doug Harlow reappeared at KMAC a few months ago to have another go with the handle following a brief period building and practising. That day he took a comfortable third.

It had been around ten years since Doug had flown competitively which was for a brief period in the very early 1990s. But this time he's serious and wants to regain the edge he once had.

Harlow and control line flying go back many years. He started in the 1950s and by late in that decade became a very competitive in combat at State Championship level. But in the 1960s he moved to the grace and style that is stunt and what followed was a long period with his name going onto many trophies.

In the mid-1970s Doug Harlow won Stunt at the Nats for three years in a row.

He was famous for many things but the most well known being his lying down during the overhead eights for as accurate as possible. When he attended the World Champs and the British Nats and demonstrated such a technique his action was widely reported.

After a long period as one of Australia's top stunt fliers, he retired in the late 1980s.

For this comeback, Doug revived an old favourite - a Stiletto powered by an ST46. But to ensure such a plane was given every chance of doing well he fitted an Eather 3-blade CF prop and after practice demonstrated how good such a proven combination can be. But never one to rely on just one design, he's recently been trimming one of his newly finished own-designs called Eclipse. At the front is a Moki 51.

KMAC needs extra stunt fliers for the club's monthly competition and Doug Harlow's comeback is very welcome.



*Left picture :-  
Doug Harlow  
with his Stiletto/  
ST46.*

## TARMAC Notes for October and November

Our band of merry control liners at TARMAC lives in comparative harmony with the Aviat Golf Club where we fly each weekend and that is how I hope it stays, but it seems there have been past conflicts between golfers and aeromodellers. Fortunately, as far as I know, not here. Related in the Aeromodeller editorial for June 1948 is the interesting story of just such an encounter. A modeller from the Bradford area was flying a control line model on Baildon Moor golf course when a ball landed within the flight circle. The golfer became impatient waiting for the model to land and her partner threw his bag of clubs at the lines causing the model to crash. The modeller then attacked the golfer (as you would) and eventually broke several of his clubs over his knee. (A perfectly natural and excusable response I would have thought.) Both parties ended up in court and the modeller was fined 10/- for assaulting the golfer and £9.5.0 for damage to the clubs. The golfer was fined £6 for damage to the model. There you go - a bit of little known history for you, wasn't that more interesting than the boring story of William the Concreter? (You know the one who said- 'I came, I saw, I concreted')

October the 13th was a great day at the club field. There were lots of modelers who had found their way in despite the fact that the gates are still being locked by the Golfers. I took out Geoff Barnes' Conquistador stunter for an outing to shake off the dust. For once I didn't use the 'Plunge into ground' method of dust removal. Adrian Dyson and Dicky Gibbs both had Phantom racers there and are apparently preparing for a little phantom racing. Hans Bertina tells me that he is settling in to a rigorous building program now that he is in retirement. Though he says it isn't as easy as he thought it was going to be (retirement). It will take a little acclimatisation to tidy up the loose ends.

Thank heavens for the contributions that have been provided of late by that most active of modelers, Bob Fry. From time to time he sends a note to keep me updated on his latest activities. On this occasion the news was about the preparations for the coming Nationals Open Combat. I decided that it would be of interest to everyone, as very few people can resist this most dynamic of events. When I first saw and competed in combat events somewhere around 1960, Open Combat was the only game in town. Engines used here (WA) were mostly .35s. like Glo Chiefs and OS Maxes. I used a McCoy redhead .35 at first and later acquired Johnson and Fox Combat specials. The event was rather slower then than now with the fastest model speeds being not much over 100 miles an hour. Also the metal tanks didn't always give the faultless engine runs that you now have with pacifiers, but you still knew that you had a real weapon on the end of those control lines.

The main problem that I remember was trying to get into the air while Noel Mitchell (the perennial Combat Champion) still had some streamer left attached to his model. Noel always had beautifully finished and prepared models powered with wickedly fast OS engines. They flew

quick enough to shred the un-reinforced Crepe paper streamers down to the knot in about 2 minutes. With six minute bouts, You had to get him quick or you had no streamer to cut, (but he had all of yours to aim for). Since he was almost always fastest it wasn't an easy task. It never stopped us trying though.

Still, enough of my ancient history and onward to Bob's latest note. He writes:

I can let you know about the latest efforts from the Fry Aero Works. I have offered to assist Richard Bellis in his attempt to win Open Combat at the Albury nationals at the end of the year. I will build a couple of prototype models and if they are satisfactory in performance we will build up a fleet of eight models. Four will be set up with engines ready for action. On the day of the event the other guys from W.A will be able to organise things and assist by pitting the models, which will allow Richard to put all his attention into his combat bouts. We should see some top action from Richard with well prepared gear and a willing pit crew. The Bush Chook Combat team will back to it's best!

You might ask why I'm offering to help instead of have a go myself, but Richard is quite a formidable combat pilot. In the days of the Bush Chook Combat team of late 80's when the likes of Garry Turna, Bruce Bellis and Brian Greeve were flying with Richard, you saw skilful piloting and some fast and furious bouts were always guaranteed.

The models we are building were originally designed by Steve Rothwell and developed further by Garry Turna. With a few of my own developments added in we now have a very fast, highly manoeuvrable and strong model design. Two test models have been built to determine if any minor changes are required before completing the rest of the squadron. The two models have only just been test flown by Richard and Myself and the results were very impressive. Stuart Sherlock has provided a new prototype combat prop which he is developing for the US guys using the Nelson .36 combat engines. Also his Bendix 9x6 prop performs extremely well and is better than the commonly used Taipan props.

Stuart will also be at the Nats and he too is entering Open Combat. There could be some very interesting action in this event. Although Stuart will probably not have a swag of new models like Richard, he certainly has all the moves in the air to cause a few combatants to be very wary of underestimating the "Grey Avenger" from the West. He is building the built up balsa construction type models and will also have a couple of my old foamie models as backup. So far we have a good team of guys going over consisting of Alasdair and myself, Richard Bellis, Grant Lucas, Jim Stivey, Stuart Sherlock and Hans Bertina. I'm not sure about the Free flight or R/C guys but no doubt there are a few more from the West going over as well.

There is just something about hanging on to a screaming '.40' pulling a model around at over 100 Mph just 60 feet away cutting erratic shapes in the air (grunt ! grunt!). With a bit more testing of props and fuel and engine venturi sizes, the models should be up around 110 Mph. The models turn very tightly that they feel they are almost at the point of stalling. The models are able to pull tight manoeuvres without losing speed and are still very stable in level flight.

In less than 11 weeks we will all be making the long journey across the Nullarbor and we hope to see a very strong field of contestants for the big adrenalin pumping



event of Open Combat !!! Bob Fry

If you have web access and are interested in full size warbirds, especially if you are a builder of scale models, there is an amazing selection of photos of a FockeWulf 190 D13 that is being restored at Doug Champlin's fighter museum in the USA. To check out the pictures get your computer to look at the URL:

<http://pub73.ezboard.com/fluftwaaffeexperten71774frm7.showMessage?topicID=2.topic>

I have mentioned before that Phil Trueman was experimenting most successfully with finishes using butyrate dope. He is not the only one. That recently returned prodigal modeler Jim Trevaskis came to the flying field with a Goodyear model that he has used to practice his finishing techniques using this most effective finishing medium. The work that Jim does with a spray gun is so good that it has to be seen to be believed. He has promised me an article on finishing for these notes that will explain everything in easy to understand detail. Look forward to that in a future column.

I sometimes get inspiration from comments made to me in passing. One of those was that the TARMAC notes were a bit short last time. Well, that happens every once in a while. And if you can remember back about ten years, you will recall that they were a lot shorter then. Remember, I am not doing this job because I like it. In case you didn't know, its just for the money and the women.

Charlie Stone

VH4706

Email<[cestone@bigpond.com](mailto:cestone@bigpond.com)>

*A shot of Bob Fry's new and very swift Bendix model. Note the long shaft extension that Bob has made to get the heavy Nelson engine back towards the wing. That keeps the Centre of Gravity in the optimum location without wasteful ballast at the tail end.*



*A look under the bonnet of Dave's Voodoo. Note the metal engine mounting and tank detail.*



*A beautifully finished Mark 1 Voodoo Vintage A racer made by Dave Gannon. It is powered by a Russian Oliver Tiger copy. This model has been modified to an improved layout using a drop in engine configuration, rather than the two part fuselage & separate metal cowl shown on the original plan*



## Nats Racing Natter

### Bendix, Classic B & Vintage A.

Not long to go now until the Nationals control line team race action begins in earnest. Ears around Albury will soon be ringing to that familiar sound of highly tuned racing engines going round 'n' round. In anticipation, modellers all over the country are enthusiastically adding the final touches to their favourite racers. They are really looking forward to being part of the fun. I'm told that visions of chequered flags are now starting to flash through certain competitors minds in the moments before sleep. And they wrestle with problems about where to put that swag of new trophies. Nationals are always mighty good, but the 55th event is shaping up to be something special. That's because of the expected high standard of competition.

Bendix men, Bob Fry and Alasdair Taylor can't wait to pit their new 'Super Shoestring' machine with the big case Nelson .36 against the amazing looking new 'Nemesis' that Keith Baddock has been so carefully constructing for the last few months. Both models are 'state of the art', with Bob's model already showing plenty of dash with test flights in the mid 15's for 7. They will need to be on that pace to stay ahead of John Taylor's Gillott modded Super Tigre .34 weapon. It's reputed to have speed to burn. Enough, maybe, to blow its rivals into the weeds that grow just outside the race circle.

The 'Cosmic Rays' have been seen practising with their Ray Cote Shoestring and ST 34 quite a bit lately. Prop testing has been the order of the day, with good results, I'm told. I'm quite sure that NSW's Peter Camps and Ian Gapps, who is the reigning National champ from Nowra, will be even more competitive in Bendix this time. As will the very experienced dynamic duo of Tony Bonello and Andrew Heath. As it's appropriate to say just after the Spring racing carnival, there's often a dark horse. What's a dark horse, you say? Well, if Charlie Stone decided at the



*Above Photo:- Kieth Baddock's new Bendix racer.*

Classic B on Saturday, Jan. 5th is assured of good numbers, as is Classic Stunt, also held on the same last day of competition. This race is likely to be really close, just like the Vic. State Champs at Easter when only a couple of seconds separated the first three after 10 miles of nose to tail racing. Jim and Colin Ray, who won that hectic photo finish, are entitled to start favourites in Albury.

However, they won't have it all their own way with several teams, including Graeme Wilson & Mark Ellins and the irrepressible Hunting brothers of 'Dream Team' fame, set to make their move. John Hallowell & Keith Baddock have been putting in the hours on the workbench and at the flying field and expect to be competitive. And don't anybody dare discount Class 2 record holder Harry the fireman Bailey. They would do so at their own peril. Harry just loves a challenge, as does his pit man, Peter Roberts. Throw Stan Pilgrim and Peter Camps into the mix and anything could happen.

The West Australian contingent includes Hans Bertina with his newly constructed OS 25 racer and, of course, Mr



pepper and salt himself, Bob Fry with the Crescendo and ETA 29 repro. Bob's flying in just about everything! Almost a dozen events at the last count! Mainly racing and speed, but his schedule does include some free flight in the Day & Night Scramble.

Hans was recently asking about the wheel diameter for Classic B. The current rules are: 1. (c) The models landing gear shall have two wheels, placed side-by-side with a minimum separation of 4". Minimum wheel diameter is two inches (50 mm sizes are acceptable) with a 1/16th (1.5mm) negative tolerance.

I'd take that to mean that the diameter of each wheel can be as small as 48.5 mm. Quite sensible when you consider how quickly rubber wheels can wear on a hard surface. Class B rules have not changed much over the years. I have a copy of an article from the American Air Trails magazine dated March 1949. It details the wing area rules for a B class racer as 125 sq. in., exactly the same as it is today! Although the early Aussie rules did allow for 1, 3/4" wheels, many overseas designs, including just about all the USA plans I have, are penned with 2 inch wheels. An exception is the Shadrach from Model Airplane News. The plan calls for 1, 7/8" wheels. Try asking for that size at your friendly local model shop!

The Wharfedale designed Dalesman from Aeromodeller magazine in July, 1960 also has 2" wheels. I remember being inspired by this racer's rare beauty, sending immediately for the A.P.S. plan and building it straight away. I was very proud of that model. It featured a complicated (for a 15 y.o.) chicken hopper tank that was specially built for me by my Uncle Bill. I have been told that Bill was the first person in this state to fly a powered model aircraft. He was born in the 1920's so this was at least possible.

The Double Dice also asks for 2" wheels. Some USA models like the Firebrand showed 2 1/4 dia. wheels. And Australian Class A racers like the Hearn's Hobbies Swift, had 1, 3/4" wheels on the plan. Many Vintage A team race models now use 1, 3/4" wheels as they work just a little bit better taking off and landing on long grass. A little more rubber can also help cushion landings. For the same reason, many flyers believe 2" wheels are a slightly better proposition on a B Class. My source of racing wheels is Robin Heirn of Model Racing Services. As you can see, there's plenty of scope for discussion!

Vintage A is looking again to be the best supported class, as it has been every year since its inception at the 1990-91 Bendigo Nats. The NSW Triple Tag Team of Andy Kerr & Richard Justic, Stan Pilgrim & Peter Camps and Steve Rothwell & Andrew Heath will be a big threat. In fact you could just about put your house on at least one of these teams making the final. Andy and Steve certainly have the score on the board this year with a couple of sensational sub 6.50 final times. The Simons family on current form are also a force to be reckoned with and if Gavin Knight and Ray Harvey have the 'Timmy Tiger' sorted, they may well be among the teams taking the walk to the presentation table at the Nationals dinner. Brian Hoggan and Grant Potter have proved at Easter they can win major titles. Remembering the big smile on Brian's face, he really enjoyed the moment. They have to rate highly, so

don't count them out.

The Vics will be well represented. Wilson/Ellins are always dangerous and are capable of making any final if they find a donk that's even close to the pace. Hallowell/Baddock have the score on the board and have a good chance to make the final with the country's fastest heat time of 3.19.22 under their belt. If things go right for the Huntings then anything can happen. In the past, the 'Dream Team' has made winning a habit. A habit they're not too keen to give up. For 2002, could it be time for a return to their 'glory days'? Harry Bailey made the Vintage A final at Waikerie and the Rays will never give up without a hell of a fight. Give 'em half a chance and they'll grab it with both hands. The wild card in the deck has got to be F2C whiz Paul Stein. Don't forget, with Fitzzy flying, he won convincingly at Toowoomba. And the whisper is he will have the right gear. Of the West Aussies, only Bob and Alasdair know how fast their sleek Pluto can go. John Taylor's Queensland entry could well be the fastest model in the field. That's if Mark McDermott can't make it to Albury. Hey Mark, we're still hoping!

Roll on Christmas. Then it's only a few days to the racing. Compliments of the season and best of luck to everyone competing.

John Hallowell.  
VH 1984.



## - NOTICE -

### YOUR STUNT NEEDS YOU

Victoria is running the Nats in Albury/Wodonga in late December and early January and needs the services of a couple of F2B stunt judges.

If you can help, please make contact with Derek Pickard  
03 9889 1149.

# 55<sup>th</sup> NATIONAL CHAMPIONSHIPS

For those of you who intend coming to the Nationals don't forget to send in your entries, they will be accepted up to the registration day after which your hip pocket will hurt.

## 55<sup>th</sup> NATIONALS CONTROL LINE ENTRY NUMBERS to date (19/11/2001)

F2A SPEED	5	F2C TEAMRACE	11
COMBINED SPEED	13	½ A TEAMRACE	6
F2B AERO EXP.	16	GOODYEAR	11
F2B AERO ADV.	12	MINI GOODYEAR	7
VINTAGE STUNT	16	OPEN RAT RACE	8
CLASSIC STUNT	15	2.5cc RAT RACE	8
F2D COMBAT	9	CLASS 2 TEAM RACE	9
OPEN COMBAT	4	VINTAGE A TEAMRACE	15
JNR 2.5cc COMBAT	3	CLASSIC B TEAMRACE	11
STANDOFF SCALE	6	BENDIX	10
F4B SCALE	6	JNR 2.5cc RATRACE	4

## 55<sup>th</sup> NATIONALS PROCESSING.

Any one wanting their models processed before the Nationals can come down to the Frankston flying field on Sunday 9/12/2001 starting at midday, speed & racing models only.

## RESULTS OF CONTROL LINE RULE PROPOSALS. (brief summary)

1. Nationals & State champs results to count towards team selection.
2. Maximum weight to apply to racing & speed models.
3. Competitor must fly or start & tune the engine.
4. Proto speed open to any flyer, pull test increased, official flight by end of 3rd lap, record attempts by end of 1<sup>st</sup> lap.
  - 5A. Sport Jet added to provisional rules.
  - 5B. 2.2cc & 15.92m lines for class 1, 0.60mm min. dual lines for class 3 speed, 19.8m & 0.50mm min dual lines for class 4, 0.60mm min dual lines for jet & sport jet. 65mm Max head length for sport jet & pulse jet to be attached to the model not integral part of the airframe.
  - 5C. Pull test & number of laps increased for class 1 speed, number of laps increased for class 4 speed.
  - 5D. Optical electronic system may be used for timing speed events.
  - 5E. Timing procedure changed to coincide with changes to speed course laps.
  - 5F. Attempts in speed to count once timers have started watches.
6. Class 5 speed added to provisional rules.
  - 7A. Exhaust shrouds not required, engine mounting lugs & fuel lines can be exposed. Min line diam increased for 1/2 A Team race & pull tests increased for 1/2 A & class 2 team racers.
  - 7B. Refuelling stops still required in heats, semi finals & finals for 1/2A & Class 2 team race.
  - 7C. A team shall consist of a pilot, mechanic & assistant (if reqd).
  - 7D. The site may be laid out on grass, a hard surface may be used for the pilot's/centre circle but is not mandatory.
  - 7E. A race will be terminated 10 minutes for heats & 15 minutes for finals after the starting signal.
8. Open combat streamer string lengthened to 2.25m for tying on to model.
9. 2.5cc rat race. A team shall consist of a pilot, mechanic & an assistant (if reqd).

A team shall be eliminated if they cause a collision or crash.

10. Open rat race. A team shall consist of a pilot, mechanic & an assistant (if reqd).

A race will be terminated 10 minutes for heats & 15 minutes for finals after the starting signal.

11. Junior rat race. 2.5cc engines to be plain bearing & fuel to be used will be 10% nitro, 20% castor oil lubricant, 70% methanol. Fuel for compression ignition engines not restricted.

12A. Bendix racing. Pressure feed is still acceptable.

12B. Pull test increased to 30g.

13A. Class A Team race changed to read Vintage A Team race.

13B. NBN Engines Pfeiffer 2.5cc diesel replica allowed.

13C. Modifications are permitted, components should be equivalent to the original design, schneurle, ABC OR AAC not permitted, chroming of sleeves & con rods of different x section are ok.

13D. Motor modifications. Piston porting allowed, no proof reqd for modifications done.

13E. Cox style needle & venturi systems are legal.

13F. No multi function or fast fill valves allowable, simple ball valves acceptable, shut offs may be used during the warm up period and only after the race for that competitor has finished.

13G. Line length to stay at 46ft 8in, division 2 to stay as now in current rule book, no "B" grade. 1 pit stop reqd for a heat & 2 pit stops reqd for a final, CD can not allot warnings as he discerns.

13H. A jury is not reqd for Vintage A Team race at major events.

14. Classic stunt added to provisional section of rule book.

15. Vintage B Team race added to provisional section of rule book.

16. Classic B Team race added to provisional section of rule book.

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## SPEED RULE CHANGES.

Finally after nearly 12 months the rules counting fiasco, stuff up, debacle, etc which had been drawn out due to some peoples actions has been concluded. Most of the control line proposals were passed.

### Of interest to the SPEED FLYER

Class 1. CAN NOW GO TO A MAXIMUM OF 2.2cc [this does NOT mean you have to use a 2.2cc, as a lot thought,] it does mean NEWCOMERS can go out and buy a variety of motors.

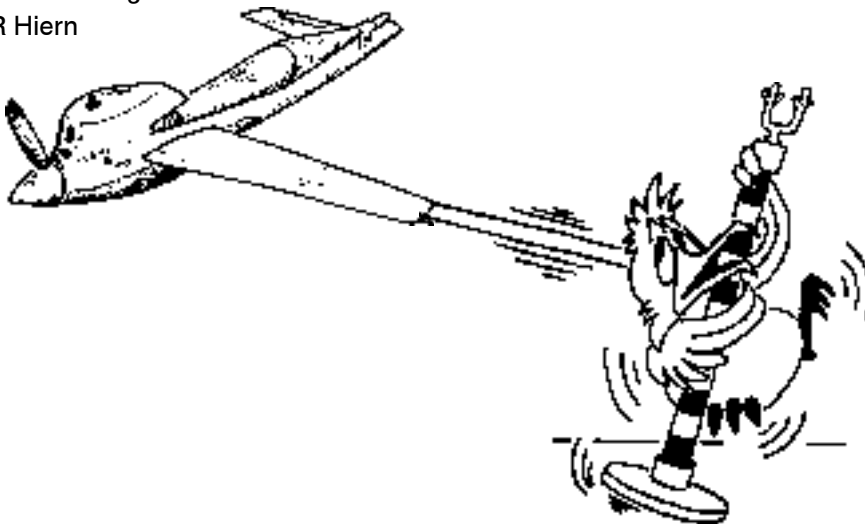
Class 1. Line length will go to 15.92 meters.

Class 5. [.21] Class is now an unofficial event.

These are only the major changes, all the rule up dates for all the classes will be in the new rule book that can now be printed. Printing was held up while control line dithered. It held up F/F & R/C as well.

These changes WON'T come into effect till AFTER the ALBURY NATIONALS.

R Hiern







## CONTROL LINE AEROMODELLERS OF GIPPSLAND

From Peter White.

The November meeting of CLAG took place at Moe on Sunday 4th with a dozen fliers turning up.

The day started off well with excellent weather and a well mown field but deteriorated around midday with the arrival of a mob of cricketers declaring that they needed the field more than we did to play a catch up match from the previous weekend. There being at least twenty two of them, maybe more, some carrying long flat-bladed clubs, others with sharp pointed cylindrical sticks, all obviously weapons of war, we immediately allowed discretion to override any vague notions of valour and we moved to the adjoining soccer field. Here we found the grass a little longer but manageable.

Ted Hall, down from Powelltown, made half a dozen or so flights with his Chief now powered with a new Enya 40 for which he was still finding needle settings. When fully run-in it looks as though it will be a good one.

Graham Vibert, with his black and clear tissued All American had three or four flights using a modified Fox 35. He has had the crankshaft bearing replaced with a neater fitting one giving the Fox a much more positive feel—it also runs extremely well.

Doug Harlow, coming back to competition after a many-year layoff, test flew his new O/D Eclipse, a design that he first flew around twenty-five years ago which was about when my first Zodiac was built. Doug's model was powered with a Moki 51 which ran well despite being set a little too rich. Doug's Moki, like mine, has recently been fitted with a larger gudgeon pin by Robbie Hiern to cure some wear in the little end and piston bosses. The Eclipse was built with an exponential bellcrank (described in Stunt News in early '97) which, unlike a normal bellcrank, retains its sensitivity throughout its range of movement. the actual amount of sensitivity can be adjusted from outside the model via a system that Doug devised.

Graham Keen was present with an OS 15 powered Peacemaker which he used in some slow combat bouts against Andrew Beevor and his OS 15 Wildcat. Andrew also had with him his two year old Enya 29 powered Fancy Pants.

Warren Frith was at it again with his large Epic hauled around by a Stalker 55. Warren is not so overawed by this large combination now and is flying the pattern with much more confidence.

John and Rian Goodge made the trip down from the wilds of Seaton with the infamous Brown Pants and an ST 15 powered O/D which appears to owe something to the Flitestreak designs. The little Tigre pokes out a bunch of revs but the boys were having trouble finding a ground setting that would work after take-off. Eventually they got it going rapidly and fairly consistently. John,

flying the Brown Pants, had an altercation with Terra Firma which bent the needle valve spring and slightly

marked the top of the nose—minor damage which didn't keep it out of the air for long.

Robbie Hiern was the only Melbourne regular to turn up for the day, bringing with him his Fox 35/Skylark, a delta speed model with an AME 049 and a prop driven tether car pushed about by a rear induction Taipan 2.5 diesel. The Skylark as usual flew well and the delta, as usual, didn't. While the 049 really screams the model is extremely temperamental on take-off. It seems that if it doesn't come out of the dolly cleanly, the best it can manage is a half lap in the form of a very sloppy, low scoring wingover. On the other hand, if it survives the take-off, it can circulate very quickly. No take-offs were expected or even wanted with the tether car which found the grass heavy going — at least it was a diversion for a while.

Ron Jones put up a couple of early flights with his Enya 15 powered Two Up and was happy from then on to watch the day's goings-on from the sidelines.

I had one flight on my Stalker 61 Geo-XL and then opted for some light relief by flying a Whirlwind with an AM 25 diesel. The Whirlwind was kitted by Central Aircraft way back in the mid to late 50s and is a basic little model, fairly typical of that era.

Our next gathering will be at the Hobson's Park Hospital Oval on December 2nd followed by Maffra on January 6th. All are welcome and BBQ facilities are provided as usual. We wish you all a happy and safe Christmas and to those off to the Nats in Albury/Wodonga, good luck!!

Thanks goes to our editor, Harry and his helpers for the time and effort spent in putting this great newsletter together. Safe flying.



CLAMF Club members are reminded that the monthly club meetings are held at the secretary's home on the first Friday of the month. You are all welcome and invited to participate.

The next meeting is on Friday Dec 7th

There will not be a meeting in January due to the Christmas break.

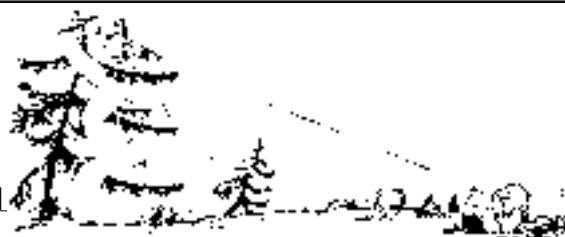
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# CONTEST RESULTS



## SPRINGVALE MAC CONTEST RESULTS 4/11/2001 TRIATHLON



	STUNT		RATRACE		COMBAT		Total points
1. G.WILSON	88	3.5pts	69 laps	3pts	340 W	4pts	10.5
2. R.MARSH	88	3.5	40 no pit stop	1.5	221 W	3	8
3. M.WILSON	80	2	71	4	175 L	1	7
4. H.BAILEY	77	1	65 no pit stop	1.5	286 L	2	4.5

A pleasant day although somewhat soggy underfoot brought out three competitors with "Terminator" models. Reeve Marsh did not use a Terminator but was plagued with an OS Max motor that refused to re start when hot. All competitors returned home with models intact having enjoyed flying in three events with one model/engine combination.

## In the News

**Paul Eisner sets new FAI 2.5cc absolute world record of 335.19 kph ( 208.28mph) 13th Oct 2001**

After waiting forever for some good weather we finally hit the Jackpot yesterday at the Elmbridge club circles in Esher, Surrey. An air temperature of 24 deg C ,65% Relative humidity ( good for alcohol fuel) and no wind, very unusual for mid October.



Using the same equipment as for the 2001 Nationals I made 5 flights of which the best

(10.74 seconds 208.28 mph ( 335.19kph)) will be put forward to the FAI for ratification as the new absolute 2.5cc world record .The previous record was 313 45kph so a 21.7 kph increase ( 6.9%) on this more than justifies a claim.

I wish to thank all of those who helped with the significant preparation and adjudication effort involved in yesterdays record flights , particularly Jo and Peter Halman ,David Brewin , Ted Horne and Dick McGladdery . I would also like to thank all those who turned up to support me, to take the video shots ( and stills which are attached) . Thank you Dick Miles , Martin Radcliffe and John Privett. I look forward to viewing the edited versions of the videos when you are fed up with watching that man with the knobby knees running round and round in ever decreasing circles!



This article was borrowed from the newsletter of the Three Kings Aeromodellers in the U.K. (Court Circular)

# 'Tournament of the Millennium' international championship in Portugal.

## A VT. RACING (90 LAPS / 180 LAPS)

### RESULTS

#### PARTICIPANTS

PILOT / PITMAN	1st HEAT	2nd HEAT	FINAL	CLASSIFICATION
SMITH / YELDHAM (UK)	3.54.6	49 LAPS	7.34.7	1°
TOOGOOD / WARD (UK)	3.29.5	DNF	7.49.0	2°
ISIDRO / HARLE (POR / UK)	3.41.3	3.40.9	117 LAPS	3°
RODRIGUES / RODRIGUES (SPN)	7.08.4	6.16.6	_____	_____
TRIBE / BOLLEN (UK)	5.12.9	4.22.0	_____	_____
DAGLISH / WINSTANLEY (UK)	6.02.7	4.55.5	_____	_____
GEDGE / RIDLEY (UK)	4.51.5	74 LAPS	_____	_____

## "B" VT RACING

### RESULTS

#### PARTICIPANTS

PILOT / PITMAN	1st HEAT	2nd HEAT	FINAL	CLASSIFICATION
REESE / MCDONALD (UK / USA)	3.56.2	_____	7.31.6	1°
GEDGE / RIDLEY (UK)	3.55.9	_____	RET 36 LAPS	2°
HART / HART (UK)	3.57.9	4.02.4	DISQ.	3°
ISIDRO / HARLE (POR / UK)	DISQ.	_____	_____	_____
TOOGOOD / WARD (UK)	5.05.1	4.31.8	_____	_____

## PHANTOM

### RESULTS

#### PARTICIPANT

PILOT / PITMAN	1st HEAT (80 laps / 1 pits)	2nd HEAT (80 laps / 1 pits)	FINAL (160 laps / 3 pits)
GEDGE / RIDLEY	3.32.4	DNF	7.26.1
BAARS / BUYS	3.42.3	3.40.7	9.23.5
ISIDRO / HARLE	4.32.5	5.48.6	9.45.0
CORREIA / CORREIA	DNF	DNF	
RODRIGUES / RODRIGUES	7.41.4	67 LAPS	
PEREIRA DA COSTA / COELHO	4.35.8	DNF	
DAGLISH / WORGAN	DNF	DNF	
TAVARES / LADEIRA	DNF	DNF	
PURIFICAÇÃO / MORAIS	74 LAPS	5.29.7	
MATSON / MATSON	DNF	DNF-	
WINSTANLEY / FRY	DISQ	5.07.8	

## Notes from the Editor

Another year draws to a close and last month saw the 50th edition of the present series of ACLN. Time flies quicker than some of my racing models.

Many thanks to all you newsletter contributors out there for your input over the last year.

The next edition will be reaching your letterboxes during the first week in February.

I hope to catch up with many of our interstate readers at the Nationals over the Christmas/New Year period. Until next year I wish you all a happy Christmas and a modelling full new year.



# For Sale

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Darryl Mills Ph 08 9399 6570 (AH) W.A. TIME.

# WANTED

Plan or copy of plan for Gieseke Nobler  
John Leditschke 08 82647238

→ → → → → → → → → → → → → →

## WANTED URGENTLY.

**A Contest Director is required for Control Line Scale (F4B & Stand Off) at the 55<sup>th</sup> Nationals.**

**If you are willing or able to help please phone Graeme Wilson (55<sup>th</sup> Nationals C/L co-ordinator)  
On 03 9786 8153 (h).**

→ → → → → → → → → → → → → →  
Experienced pilot required to fly my Goodyear model at the Albury Nationals.  
Does low 20 for 10  
Ring Alan Lumsden (03) 9874 2824 or see me at the Nats

→ → → → → → → → → → → → → →

## QUEENSLAND NEWS

From John Taylor

As this is the last ACLN for 2001 now seems to be an appropriate time to pen a few lines concerning the year's control line activities in Qld.

I think it would be fair to say that generally C/L in Qld seems to be at a low point at the moment with competitors generally lacking for team race events (pilots in particular, leaving the way clear for some young juniors to team up with older members who already have the machinery) throughout the year at all club's and all classes. I believe this has mainly been caused by the sometimes bitter wrangling over Vintage A motors from the previous year. Hopefully this is all in the past now that the rules have been voted on and passed by all states,

On a much brighter note Combat (all) classes but particularly 2.5 Slow has attracted good entries at ALC and T/Birds with good support from the Nambour club in particular, so much so that Qld intends to run this event at 56th Nationals in Toowoomba in 2003.

Scale events and Qld C/L Scale Championships run at Ipswich during the year have generally been well supported. Fun Scale in particular has attracted a lot of interest and competitors and will be a Demo Event at 2003 Nats. Rules for this can be obtained from the Net or John Taylor.

I'd like to say that Clasii's attempts at holding a speed competition on two separate occasions during the year were successful, but in fact no competitors turned up except our own two club members in Proto speed. However we are trying again next year with two more events scheduled at Ipswich.

ALC recently ran a Triaerathon day which attracted a good roll up including a number of members from the Bayside Recreation club, T/Birds Secretary Rob Edgerton was the winner on the day with Mark McDermott and Mark Dillon from Clasii equal second. Opinions seemed to support more days like this in the future

At the recent MAAQ Annual General Meeting Mark McDermott was elected to the position of C/L Administrator, Mark will also be the C/L CD for the Toowoomba Nationals in 2003.

On a different note I would like to say that the recent Postal rules vote for C/L and the manner in which it was carried out was not to popular with most of the flyers and clubs in Qld as the general opinion seems to be that to lump a lot of sometimes controversial points and changes into one question and then to be asked to Agree or Disagree is definitely NOT the way any future rules changes should be addressed. What do you think?????

Whilst on the subject of rules (Vintage B) have noticed a number of model's with a type of hot finger arrangement which will not be legal according to the Vintage B Rules Committee unless it can be shown on an approved plan, (Just like the Editor stated in last ALCN read the rules)

Finally from sunny Qld a Merry Christmas And Happy New Year to all  
John Taylor

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