

THE VOICE OF CONTROL LINE AEROMODELLERS FROM AROUND AUSTRALIA



Number 119

Produced by the Victorian Control Line Advisory Committee

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Copy Deadline for next issue is: Wednesday March 19th 2008 PRODUCTION SPECIFICATIONS

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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

Mar-09	F2C Team Race, Goodyear, Mini Go	odyear,
	Vintage Stunt.	CLAMF
Mar 21-24	Victorian C/L State Championships	
Apr-13	Speed, Simple Goodyear, Simple Rat	CLAMF
May-04	Vintage Combat (Hosted by Brimbank))
	"All Aussie" (Hosted by CLAG)	KMAC
May-18	Classic B, Vintage A, Navy Carrier	CLAMF
Jun-15	Speed, FAI & Mod Combat,	
	1/2A Combat	CLAMF
Jul-13	Speed, Balloon Burst, Limbo,	
	2.5cc Rat Race	CLAMF
Jun-22	2007Stuntmasters Trophy F2B (Resch	eduled)
	+ Novice Stunt	KMAC
Aug-10	Speed, Classic Stunt, Simple Rat,	
	Simple Goodyear	CLAMF
Sep-14	Speed, Vintage Combat, Navy Carrier	CLAMF
Oct-12	Classic B, Vintage A, 1/2A Combat	CLAMF
Nov-09	Speed, Simple Rat, Aussie A,	
	Triathalon	CLAMF
Dec-14	Speed, F2C Team Race, Goodyear,	Mini
	Goodyear	CLAMF

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),10.00am start

Contact :- G. Wilson (03) 9786 8153, Email :- CLAMF@ozemail.com.au Web site :- http://clamf.aerosports.net.au/

KMAC Stud Rd. Knoxfield (opposite Caribbean Gardens)

(Melway 72 K9) 10.00am start

Contact :- Peter O'Keeffe (03) 9753 3442

Email:-kmac@aanet.com.au

CLAG Contact :- Graham Keene Email :- gkeene @wideband.net.au

Details of venues can be found on web site

www.clagonline.org.au

Brimbank Falcons Stadium Drive, Keilor Park Recreation Reserve, Keilor. (Melways ref 15 C 5). Regular flying day 3rd Sunday of each month 10.30am. Contact Ken Maier 03 9398 8244

Email:-combtkid@hotmail.com

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Victoria
Tel (03) 9543 2259

	C.L.A.S.	NEW SOUTH	WALES
DATE	· · · · · · · · · · · · · · · · · · ·	CALENDAR	,

Mar 1-2 2008 HUNTER VALLEY CHAMPIONSHIPS.

Contact Luke Anderson MDMAS. (Mitchell Hill Fields Muswellbrook)

Hill Fields, Muswellbrook)

Sun Mar 9 F2B Aerobatics and Cancelled Classic Stunt Werrington. Venue TBA.

Sun Mar 16 500 Lap Club Race.

(Kuring-Gai 500) KMFC

Sun Mar 30 Phantom, Vintage A,

Vintage 1/2A and Bendix SSME

Sun Apr 6 1.6cc Combat and

Slow Combat KMFC

Sun Apr 13 F2B Aerobatics and

Novice F2B. KMFC

Sat Apr 19 Club Stunt (Novice) KMFC

Sun Apr 20 Vintage Team Race.

1/2A, A & B. KMFC

May 17-18 VETERANS' GATHERING.

Contact Luke Anderson 0409409367

MDMAS. (Mitchell Hill Fields Muswellbrook)

May 17-18 NO FLYING AT KURING-GAI. ST.Ives Show

Sun May 25 F2B Aerobatics SSME

Sun Jun 1 Palmer / Aldrich Classic Stunt

and CLUB STUNT (Novice) KMFC

Jun 7-9 CLAS. NSW C/L STATE CHAMPIONSHIPS

CLAS. Venue TBA

Sun Jun 22 Diesel Goodyear &

Sabre Trainer Racing KMFC

Sun Jun 29 SKYHAWKS REUNION To be held at SSME Sun Jul 6 AGM, 2.5 Stunt and Club Racing. KMFC

Sun Jul 13 1.6 and Slow Combat KMFC

Sat Aug 2 CLUB STUNT (Novice) KMFC

Sun Aug 10 F2B Aerobatics and Novice F2B. KMFC

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Sun Aug 17 Diesel Goodyear & Sabre Trainer Racing.

KMFC

Sun Aug 31 Slow Combat

NACA -

(Bonus points for WW2 Style model). SSME

KMFC - (Ku-ring-gai Model Flying Club) - St. Ives

Showground, Mona Vale Rd, St. Ives.

(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.

MDMAS - (Muswellbrook District Model Aero Sports

Inc.) - Mitchell Hill Field, New England Hwy,

Muswellbrook

DOONSIDE- Details of venue TBA.



Adelaide Aeromodellers Club

2008 Events Calendar

2.F2B / Novice Stunt Clinic – March 1st
3.F2B / Novice Stunt Competition – April 5th
(SA State CL Champs – tentatively)
4.Slow Combat and Balloon Burst – June 7th

(Whyalla Show CL Competition -

tentatively (August 16and17)

5.Peacemaker / FliteStreak Stunt # 1 - September 6th 6.Vintage Combat and Grass Rat Race (Monarto)

7.Triathlon – October 4th
November 1st
8.Peacemaker / FliteStreak Stunt # 2 December 6th

Notes:

- 1. All days are Saturdays, dates are provisional
- Start time of all competitions is 11.00 am. Practice from 10.00am
- All events to be held at the AAC field, Unley Rd City opposite BMX Park
- 4. All entrants must be MASA members and show their FAI licence
- 5. Safety straps required on all handles in all events.
- 6. Mufflers mandatory on <u>all glow motors</u> 2.5cc and above

For more info contact Peter Anglberger Tel 8264 4516

Adelaide Aeromodellers Vintage & Classic Stunt, February 2nd 2008

(Report by Peter Anglberger)

Vintage Stunt:

Conditions were ideal for Vintage but the event was not without drama. Bob Edgecombe could not get his normally reliable Brodak 40 start in R1 s had to call an attempt. Max Newcombe's ED Racer was off song and the resulting crash unfortunately ended his competition.

Bob finally got the Brodak to co-operate and earned a well deserved 3rd place. Bill Pudney is new to Vintage Stunt and flew very nicely into 2nd place. Peter Anglberger has refurbished his old Ambassador and used the high static score to secure 1st place despite the Ambassadors skinny 1 1/4" wheels digging into to spongy turf resulting in nose overs.

Place	e Entrant	Static	Round 1	Round 2	Score	Model	Motor
1	Peter Anglberger	125	184	182	309	Ambassador (1951)	Sabre 2.5(1955)
2	Bill Pudney	101	181	174	282	Peacemaker (1958)	PAW 15 (modern)
3	Bob Edgecombe	99	173	179	278	All American Snr (1951)	Brodak 40
4	Greg Roadknight	93	184	182	277	Flite Streak (1957)	OS Max 25
5	Alan Roadknight	99	175	175	274	All American Snr (1951)	Fox 35 (1958)
6	John Barbara	84	144	53	228	Flite Streak (1957)	OS LA 25
7	Max Newcombe	125	47	DNF	172	Blue Pants (1954)	ED Racer (1951)

Static and Flying Judge: Maris Dislers

Classic Stunt:

Unfortunately two crashes occurred in this event: Bob Edgecombe rubbed into the ground near the end of R1 but did not sustain significant damage. Alan Roadknight suffered a worse fate writing off his Thunderbird due to what may have been control system failure during the bunt entry to inverted.

Greg Roadkinght would probably have taken first place had his Flite Streak not run out of fuel during the 4 Leaf Clover in both rounds.

Plac	e Entrant	Round 1	Round 2	Best of R1 &R2	Model	Motor
1	Peter Anglberger	513.5	546.5	546.5	Veco Squaw (1951)	GloChief 35 (1958)
2	Greg Roadknight	482	503	503	Flite Streak (1957)	OS Max 25
3	Bob Edgecombe	356.5	445.5	445.5	All American Snr	Brodak 40
4	Alan Roadknight	373.5	101	373.5	Thunderbird Mk2	OS LA40



Alan and Bob's All American Snrs

Subscribers are reminded that they can receive Australian Control line News by email at no extra cost. This option would allow you to view the pictures in colour as soon as it is ready to be sent to the printers for publication.

If you would like to use this option just make a request to the Editor by email.







Tickets \$2.00 each !!

Available 21st, 22nd, 23rd March 2008 during the champs !! (or by prior arrangement - clamf@ozemail.com.au)

Raffle drawn Sunday night 23rd March at the Keysborough Hotel

Cnr. Corrigan & Cheltenham Rds, Keysborough, 3171 www.keysboroughhotel.com.au Proudly sponsored by CLAMF Aerosports and the Hobbycave

SPEED MODEL RECORD CLASS 1 [2.1cc] 260 KPH/161MPH

Recently I re-broke my Australian record for Class 1 [2.1cc speed], The model was an old model that was built back in 1994 for the Ballarat National Championships, it was then powered by an OS CZ11 PS which were a version of the .11 car engine made for 1/2 A pylon racing, they also were used in Mini Goodyear Team Race. Since then the model has had my homebuilt 2cc speed engine and more recently a 3-port OSTZ 12 car motor. For the new record I used a Nova Rossi 12 RR I3, the basic 12-sized car engine, with the big 11.5 mm shaft. The previous record of 251 kph was held in my other identical model, powered by the old, first made model Nova Rossi 12. The models are like small FAI speed models, Asymmetric alloy wing, side mounted motor, but on pressure fuel feed. Tuned pipes are not permitted, but we use nitro fuel.

The Nova motor was modified to use in an aircraft, i.e. sleeve prop nut, prop driver, venturi and spray bar etc, It was modified in timings, gas flowed, blueprinted, nelson style plug head with high comp, etc for maximum power. I always modify my own motors, as that is the part of the hobby I enjoy most, getting maximum performance out of a motor.

On the test bench with the test prop it showed increased power over my previous motors, so I was optimistic. In the air it proved to be slow being too rich and erratic. Leaning off until very lean on ground did not fix the problem so I shifted the tank outboard but it was still no good. I even shifted the tank further outboard until the cowl would not fit and made a temporary bracket to hold the tank without the cowl, but it still wasn't any good.

By using the Audio tachometer I deduced that it was over revving, and getting prop slip. The engine was revving erratically to 37000+ rpm, normally they do not rev that high. With the old OS I found best performance was at around 34400 rpm.

Based on these findings I made up some more props with bigger blade area, length and pitch, First flights with the tank back to it's normal position showed a big improvement and the revs were more consistent and lower, the last flight in testing was only 1 tenth of a second over the record.

At the next club competition in November I requested that we had 3 official timekeepers as I thought the model might break the record. It certainly did doing 260 kph/161 mph.

The props used are modified FAI speed props, with up to 6 1/2" pitch and 74 mm radius, but they MUST be carefully thinned out and polished, or the motor becomes loaded for no forward gain. I don't go to a lot of time and effort to get good horsepower only to waste it swinging a plank of a propeller.

In the air revs are now 35500 rpm, and even through the timed 10 laps which is equal to 1 kilometre. Fuel used is 60% Nitro, 16% Klotz synthetic oil + 5% Castor oil the rest being methanol!

This setup works reliably in all nitro classes, as I very rarely damage a motor even taking into consideration the amount of testing I do and I always aim for max performance out of the motor, as that is the name of the game and what they are made for. Do not abuse motors by running them lean or over propped on clubby propellers or in a dirty environment etc.

In the 17 years I have been flying Class 1 speed I have only broken 1 shaft, one worn out piston and liner /scored by glow plug, 1 conrod (which broke the side out of the piston which gave it sub-piston induction), but it still set the previous record 'damaged like that'. I won't mention how many glow plugs I have blown in fact I would be frightened to count.

Class 1 is not an expensive class to compete in at all. In fact speed is not as expensive and dead as people would have you believe, especially in Victoria where I have being promoting it for 30 years.

FAI Speed is expensive; especially as very few people build there own models now, due to the ready to fly culture that has built up.

Prices have rocketed and you cannot get gear when you want or need it.

An asymmetric model is not necessary for Class1 especially when starting out; as there are so many other things to work on to get faster besides the model. I built my asymmetric for the last fractions of kph but it did not fly well as it always flew low on one side in windy conditions.

When I went to England for British Nationals in 1996 I decided to build a conventional upright model [my Arrow kit] as I new it would be windy there, I was right. On the first flight I clipped the ground, so I got out the upright model and won the speed class. I have since got the asymmetric model to fly ok, so I

The conventional models can also be flown over grass easier, as I have demonstrated in paddocks at displays. Hope this gives an insight into 2cc Speed, Come and join the fun...

ROBIN HIERN.

won the 1997 event as well.



Robin Hiern with his record breaking Class 1 model.



Navy Carrier - Part 2



Navy Carrier flying - models?

What sort of model is needed to fly in Carrier?

The Australian Navy Carrier rules ensure than models are kept as technically relatively simple as possible. The scale requirement is also very straightforward: a model must be recognisable as a particular carrier aircraft and full bonus points are awarded for scale models. Models must have only the minimum systems that enable them to undertake the basic Carrier functions of high speed, low speed and arrested landing and are therefore permitted only an arrester hook and speed control system in addition to the normal elevator controls. Moveable flaps and rudder are the only additional control surfaces permitted.

Because of the scoring system's emphasis is on high and slow speed and also a successful 'arrested' landing, a model which will fly and handle well during all flight phases is invariably the best type to use. Not only will this type produce higher flight scores, a model with a good slow speed capability will also mean that accurate arrested landings are most easily achieved by the novice pilot.

All models require the usual 2-line elevator control system for normal C/L flight. To obtain fast and slow speed flight, most Carrier Deck models use conventional R/C throttled glow motors with a variety of proper speed control systems, most of which are derived from the same basic design.

Only when the model is twin-engined can the simplest 'speed control' system of all be used, in which one motor - usually the outboard - is allowed to run out of fuel before the slow flight starts!

There are a number of different types of proper speed control system that can be used to operate an R/C engine. The simplest is undoubtedly an independent third control line running from control handle to model and directly connected to the engine's throttle by a system of cranks. As this single line can only be pulled in one direction, such a system will require spring loading to obtain movement in the opposite direction. Whilst simple, this has the disadvantage that pulling too hard can reduce or even completely remove elevator line tension.

A far more satisfactory system is the 3-line arrangement first developed in the US as the 'J.Roberts' Flight Control System' and now more widely used, and imitated, than any other. The J.Roberts' system uses a special bellcrank in the model and a matching mechanism within the control handle to give fully balanced and compensated control movements. The system provides full throttle control at the same time as full elevator control whilst maintaining equal tension in all 3 lines, and also allows the throttle to be set and left in any position. Although this very successful commercial system is readily available, it is not inexpensive. This has given rise to a number of variations on the theme which not only are often just as effective, they can usually be manufactured easily by the average aeromodeller and at very moderate costs indeed. See the appropriate section for information on the J.Roberts' system, plus diagrams of all the common imitations and full instructions for the manufacture of each.

Modern electronics have also been used to provide multi-function control via 2 control lines! Sometimes known as closed loop telemetry, it is essentially normal radio control but sent 'down the wires' instead of through the air. Some R/C systems can even provide it without modification: special plug-in points actually bypass the unwanted radio frequency circuits so that transmitter and receiver can be connected directly to each end of a normal 2-line C/L system (though, of course, the wires must be insulated) and this will give as many control functions as the system has channels!

Whilst very sophisticated and particularly popular with C/L scale modellers, it is nevertheless very complex and expensive, and rarely used in Carrier. The mechanical 3-line J.Roberts' system and its derivatives are unhesitatingly recommended as the best systems and it is assumed from here on that this is what the Carrier model builder and flier will be using.





Pictured is one of many excellent designs built from plan – Wildcat with Merco 35

Navy Carrier requires models that fly well at low speeds. Such models are generally characterised by large wing areas, thick wing sections, lifting aerofoils and low wing loadings - or some combination thereof. These requirements can be very easily satisfied! Conventional aerobatic designs or even stunt trainers often make excellent Carrier Deck models by virtue of their relatively large, thick sectioned wings, light weight and good flying qualities. Such model designs often need no more than the provision of a throttle control system, local undercarriage strengthening to cope with heavy deck landing impacts and the addition of strong arrester hook mounts. It is therefore perfectly possible - and has already been successfully achieved on a number of occasions - to modify an existing model in this way. In fact, if you are unsure about committing yourself, modification of a suitable but redundant old model is undoubtedly the quickest and easiest way to see if you'll like flying the class.

Navy Carrier is a challenging event which is a balance of good, reliable equipment and flying skill. Reliability during slow flight is at least as important as high-speed performance making modern throttled controlled R/C engines competitive.

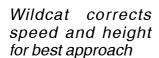
Wildcat action sequence.

Wildcat makes a missed approach – too 'hot' and high!





Wildcat positions for landing - too low and slow





W i I d c a t c o m p I e t e s 'arrested' landing with No. 2 cable (notice position of 5lb sandbag)

Stay tuned for Navy Carrier - Part 3!

The team that will be representing Australia in the upcoming C/L World Championships in Landres France are busy arranging travel and accommodation for their trip in July.

For your information, here are this countries top 10 F2B flyers and their accumulated points from the qualifying contest.

	ENTRANT	POINTS
1	Joe Parisi (Qld)	1984
2	Murray Howell (NSW)	1983
3	Dave Simons (NSW)	1944
4	Frank Battam (NSW)	1891
5	Peter White (WA)	1499
6	Peter Anglberger (SA)	1280
7	Stephen McMurray (WA)	1197
8	Bill Swan (NSW)	1053
9	Mark Ellins (Vic)	936
10	Leon Baird (SA)	714

At this stage the Team is as follows.

F2A Richard Justic

F2B Murray Howell Joe Parisi David Simons Frank Battams (first reserve)

F2C
Rob Fitzgerald & Mark Ellins
Hugh Simons & Grant Potter
Trevor Letchford & Steve Walton

F2D Peter Norrie Murray Wilson Robert Owen Tom Linwood (Junior entrant)

Well known for his combat prowess and Ironmonger design, Englishman Richard Evans (pictured here on the right side of the photograph) took to an Aussie flying field during his short stay in Melbourne with local ace Ken Maier.

On a warm and sunny but slightly breezy summer afternoon, Richard put 1/2A. Vintage, early F2D and finally Open Combat models through their paces. Tony Caselli and John Hallowell were there to lend a hand, have a fly and enjoy the sunshine.

CONTROL LINE VINTAGE AND SCALE FLY IN

FUN DAY and SWAP and SELL Sunday April 6 2008

Control Line Aeronautical Society Ipswich Flying Field

Leichardt Park Ipswich .Ref Map 212 R20 Cross One Mile Bridge, 2nd turn left into Ernest Street then enter park alongside Scout Hall

Commencing 9.00AM

Gold Coin Donation

Cold Drinks and a Sausage sizzle on field.

Two Grass circles. Toilets close by.

As there has been some interest shown in resurrecting C/L Scale competitions in Queensland, a short on field meeting will be held for interested persons in attendance to air their views.

However, the primary aim of this day is purely a get together for Vintage and Scale fliers.

John Taylor

Secty CLASI (07) 33927679 email johndt@iprimus.com.au



Richard also had a couple of bouts with Ken (see photo) and probably got the nod both times. He is one very experienced and tricky customer. We were not surprised he flew so well.

The night before some of the local combat flyers had a night out with Richard at a Port Melbourne pub where a really good time was had by all.





10TH FEB 2008

Our first Navy Carrier Comp on our new deck went off reasonably well. Entries were a bit light on due to a few unfinished models and a bit of equipment failure on the day, nevertheless everyone except Peter managed to put in two official flights with varying degrees of success. All the models flown were actually built back in the 70's when we last flew Navy Carrier. Graeme, Murray and Mark were all flying HP 40 powered Bearcats made from the old GS kits, Paul's model was a GS Corsair also HP 40 powered, Peter's Wildcat is an O/D powered by a Merco 29 which didn't get a chance to put in a flight due to a stripped plug thread. Landing on the deck seemed to be a problem for everyone... much harder than it looks!!. Only Murray and Paul managed 100 pt landings, the HP powered models all had similar performance... 70-72 mph high speed, 25-28 mph low speed... a bit of practice will see the low speeds come down. Brodak are reproducing the GS Bearcat and Skyraider Carrier Models as well as their own Guardian Kit, 3 Line Handles and Bellcranks are also available. These items can be obtained locally from the Hobbycave.

Results	Total	High Speed	Low Speed	Landing	Bonus
1 Murray Wilson Bearcat HP 40	172.9	29.53sec	72.43sec	100	30
2 Paul Stein Corsair HP 40	162.15	27.78sec	59.93sec	100	30
3 Mark Ellins Bearcat HP 40	75.2	24.63sec	69.84sec	Splash	30
4 Graeme Wilson Bearcat HP40	74.4	24.75sec	69.16sec	Splash	30
5 Peter Roberts Wildcat Merco 29	DNS			•	

SPEED COMP ... FRANKSTON

Our first comp for 2008 had a good entry, with 6 models in Class 1 (2cc) so it becomes a separate event within combined speed. Murray Wilson flew his new Arrow that placed 3rd at the Nats powered by an OS CZ11 PS.

Harry Bailey has just finished 2 Arrows, one for him and one for J Taylor, both gold in colour, so we called them THE GOLDEN ARROW from the land speed record car of Henry Segrave. After a few tuning problems getting the needle set, using a 6x5 prop which is to low in pitch to go fast, with some testing it will go faster, and some proper fuel, etc.



Harry's "Golden Arrows"



Supplier of Brodak Control Line planes, parts, pilots & accessories.

For further information & details go to the website or contact Shane Adams on 0438556998.

My record breaking Nova Rossi 12 did not go anywhere as fast as last time. On checking when I got home I had put on an untried prop to test the day I cut my leg testing and due to the accident I did not test it. Looking at my logbook after the event, I realized my mistake. I thought I had the good prop on, and did not look at the book before flying. I was not with it that day, my Class 5 went very well, and flew better as I put new lines on and geared down the controls since Albury comp. My new old model PROFI FAI went under 13 secs for the first time, a lot more to go.

Vern had 3 consistent flights with his Asp 12. We need to go out and test before the state champs.

David Shackleford managed to find a spare weekend from his other interests. He had a Nova Rossi he got off Ebay for a song fitted another P & L, after a problem with the fuel supply etc. and finally putting some decent fuel (30%) instead of 10% stunt fuel! Once again some testing will go faster. David - please stick with this setup and sort it out. Most of my fast models are up to 14 years old, just continual refinement of the motor, prop etc.

The Vintage Proto brigade were a little off the pace from usual this time ...

Thanks to all the competitors who turned up, and the timekeepers, especially Ron Savage who always helps us time, even though he does not fly (YET!). He used to fly in the old Moorabbin days. He also built us a siren so we can signal the end of a timed flight.

Our next comp is the Vic State Champs over Easter, so please enter into the fun. It is only for official events - Saturday at Frankston and Sunday for the longer line events at KNOX. It may be the only time we fly speed at Knox, unless we make a speed calendar to submit to Knox as Knox do NOT put events on for any events apart from STUNT and a few novelty events. IF ?? other classes want to fly at Knox we have to let them know; not exactly rocket science.

See you at Frankston at the Vic State Champs. Robin

Po	<u>s</u>	<u>Name</u>	Engine	Flight 1	Flight 2	Flight 3	<u>Fastest</u>	Km/h	<u>%</u>
1	R Hiern	Class 5	Novarossi 21	13.94	DNS	DNS	13.94	258.25	100.57%
2	J.Hallowell	Vintage Proto	Brodak 25 mk4	33.43	34.87	32.13	32.13	180.32	95.74%
3	R Hiern	FAI	Profi	12.96	DNS	DNS	12.96	277.78	95.22%
4	M Wilson	Vintage Proto	Brodak 25 mk4	34.57	33.21		33.21	174.45	92.62%
5	R Hiern	Class 1	Nova Rossi 12	N/T	15.65	15.30	15.30	235.29	90.59%
6	N Wake	Class 1	Nova Rossi 12	15.37	<u>15.62</u>	15.40	15.37	234.22	90.18%
7	D.Shackleford	Class 5	Novarossi 21	ATT	ATT	16.55	16.55	217.52	84.71%
8	N Wake	Vintage Proto	Magnum 25	38.35	37.38	37.55	37.38	154.99	82.29%
9	M Wilson	Class 1	OS CZ11 PS	17.53	DNS	DNS	17.53	205.36	79.06%
10	H Bailey	Class 1	OS CZ11 PS	18.24	18.34	17.80	17.80	202.25	77.87%
11	J.Taylor	Class 1	OS CZ11 PS	NEL	NEL	18.45	18.45	195.12	75.12%
12	V Marquet	Class 1	Asp 12	24.69	23.60	22.50	22.50	160.00	61.60%
13	N Wake	Class 5	Novarossi 21	NEL	DNS	DNS			0.00%

Vintage Combat

The Vintage Combat event got underway at around 1 pm following the Speed contest and removal of the Carrier Deck from the circle.

Our CD Graeme Wilson pushed through the rounds for the day and we were fortunate that entry numbers were not as large as they possibly could have been or we might never have completed the contest on the day.

Matt Shears had come down from Castlemaine with his Liquidator models and was rewarded with the best mid air collision of the day whilst up against Ken Maier. He managed to get his model airborne again minus a large percentage of the outboard wing.

The Lewis brothers had made the trip from Tyabb as they really enjoy a day of Vintage Combat.

Murray Wilson had one of his poorer quality ST G20-15 diesels doing the propulsion and restarts were a handicap.

Harry Bailey managed to arrive at the pointy end of the contest without a loss and had to fly two fly-off rounds with Ken Maier who had previously had 1 loss. Ken got the better of Harry and won both bouts to claim first place.

Murray Wilson grabbed third spot.

The Vintage Combat event on Easter Monday at the Vic State Champs should commence at an earlier time than today's affair and hopefully will be a grand finale to the weekend's activities.

Thanks to all contestants and officials for helping make the day successful.

Harry B.

The top three with their models:-Left Murray Wilson (Ironmonger/ST G20-15) Centre:- Ken Maier (Ironmonger-PAW) Right:- Harry Bailey (Vernon Hunt Warlords and Stockport Warlord with ST G20-15 and Taipan power.)

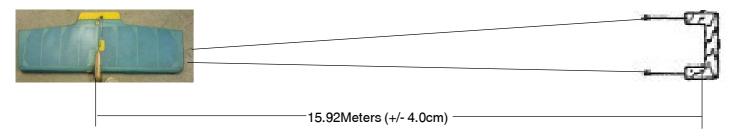


Vintage Combat - CLA	MF 10/	2/08					
	1	2	3	4	5	6	
1. Ken Maier	W	L	W	W	W	W	Ironmonger/ST G20D
2. Harry Bailey	W	W	W	В	L	L	Warlord/ST G20D
3. Murray Wilson	L	W	W	L			Ironmonger/ST G20D
=4. Michael Lewis	W	L	L				Ironmonger/ST G20D
=4. Phillip Lewis	W	L	L				/Enya 15
=4. Matt ShearsL	W	L					Liquidator111/PAW 15
7. Mark Usher	L	L					/Enya 19

Victorian State Champs Notes

Entries to be in by the 19th March, Interstate by the 20th March, indicate on entry form if attending dinner on 23rd March.

Vintage Combat lines are measured from the Inboard face of the control handle to the longitudinal centre line/engine crankshaft of the model, 15.92 meters (+/- 4.0cm).



Control lines of a minimum diameter of 0.34mm must be used, a safety strap connecting the competitor's wrist to the control handle must be provided by the competitor.

Round handles with winding knobs not permitted.



New Frankston Club member Gavan Opperman had this jet style stunt model at the KMAC field on the blown out Stuntmasters Day. It is the first he has built in over 50 years!

This swoopy design is called a Mirage and is an American design by Lou Wolgast. It's powered by an LA 46 stunt engine.



Doug Grinham gave his seal of approval.

How I solder Stainless Steel lines.

By Harry Bailey

There are lots of different ways of making up line end terminations and we all have our preferred methods. I generally bind and solder my laystrate ones and use crimps when making up the ones for combat as this can be done quickly at the field if necessary. Some wire cutters and a crimping tool are all that is required. This method has proved to be successful for me and as yet I have not had a breakage at a crimp.

This article is about **soldering** stainless steel lines.

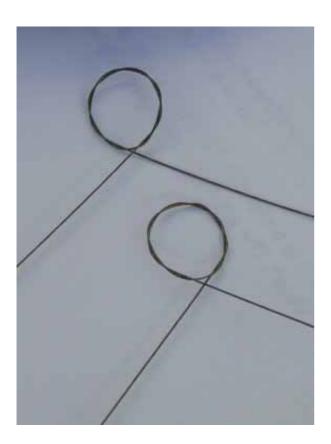
Many years ago I was shown how to do this method by Graeme Wilson at a demonstration during a club meeting. At the time I did not think that soft soldering stainless steel was possible but Graeme proved me wrong and the magic ingredient was the flux that he used to make it work, and that is **Phosphoric acid.** I came away from that meeting enlightened but without knowing where to obtain the magic ingredient, the lesson was not put into practice.

Some years later I had the unpleasant task of doing some rust removal work on a job at my workplace using a chemical rust remover. Upon reading the label I found to my surprise that the active ingredient was (you guessed it) phosphoric acid. A trip to the local hardware superstore was all that was needed to obtain the solderers best friend "flux"

Having obtained the flux I then gathered together my soldering iron, my roll of fuse wire for binding, the long tape measure, some wire cutters and my roll of bulk-purchased stainless 7 strand wire.

My Classic B lines had been chewed up by a model propeller during a run in on take off the week previous so some sixty footers were needed as replacements.

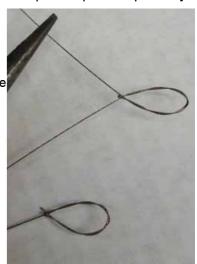
I start this task by forming a double loop in the end of the wire, wrapping the tail around the first loop about five times making a circle of about 16mm diameter.





Next step is to squeeze the loop into a pear shape ready

for binding. The extra bit of surplus cable can be removed at this stage. I like to leave up to 3mm of wire projecting from the pear to bind to the main piece of line.



I now bind the pear starting in the middle and working the fuse wire in each direction to form a tight neat bind.





Because of the use of the phosphoric acid as a flux, resin cored solder will not work in this application. I use a stick of 60/40 hard solder.



I beat the end to a thin section so as to assist in the melting process.



Now is the time to heat up the soldering iron. Whilst this is taking place coat the joint with the flux.

At this point it would be prudent for me to advise on the health and safety aspects of what happens next. When using acids care must be taken not to splash any on your skin or eyes and the heating process will produce toxic fumes which should be avoided. I turn on an electric fan to keep the fumes moving away from me. Follow the safety instructions provided with the product and proceed with caution.

Apply some solder to the heated iron and then apply the iron to the joint. It may be necessary to repeat this process until the solder can be seen to have entered the weavings of the

multistrand wire.

Having created a properly soldered joint the ends of the fuse wire can be removed and the joint thoroughly cleaned to remove any acid residue. Some people use a paste of Baking soda to do this as it is an alkali and neutralises the acid.



The job can be finished off by applying some heat shrink plastic covering so as to help identify your up from your down line.



INVITATION QUEENSLAND 2007/2008 CONTROL LINE CHAMPIONSHIPS

The Aeromodellers of Logan City Inc. as the organizing club on behalf of the Model Aeronautical Association Queensland Inc. takes pleasure in inviting you to enter the following events to be held at the club's facilities adjacent to Chetwynd Street, Loganholme Qld 4129 over the long weekend of 3rd to 5th May (COMBAT) and weekend of 10 th -11th May 2008 (TEAM RACE, SPEED & AEROBATICS)

As usual event priority will be Junior, then FAI, National and Queensland events respectively. With the exception of Junior events, only those for which **five (5)** or more fully paid entries have been received on or before the closing date will be scheduled. Sufficient entries for competition to take place must have been received by the same closing date of 4th April for Junior events to be held.

Trophies will be awarded to the top three (3) placegetters in each event. Entry for Junior competitors will be free for Junior Rat, Junior Combat and Junior Aerobatics (F2B). Juniors entering any other events will be charged \$5.00 each per event. Entry fees for Seniors will be \$10.00 each per event. Team racing \$20.00, \$15.00 or \$10.00 per event depending on the category of each team member. Each team member entering must complete a separate entry form. A one-off administration charge of \$20.00 will be levied on each Senior competitor. Juniors are not liable for any Administration Charge. F2A / F2D fuel will be available to those who require it at \$12.00 per litre. Kindly indicate your requirements below.

Cheques, money orders, etc are to be made payable to the Aeromodellers of Logan City Inc. All fees together with a completed entry form and stamped, self addressed business size envelope must be lodged on or before the closing date of 6pm, 4th April, 2008 with :-

The Registrar QUEENSLAND 2007/2008 CONTROL LINE CHAMPIONSHIPS c/o 2-24 Appaloosa Court MUNRUBEN QLD 4125 Telephone: (07) 3200 1308

	(QLD 4125 Telephone: (07) 3200 1308			
EVENTS	RULES	Name and AUS. No. of other team entrant FEES PAY			
F2C TEAM RACE	FAI				
JUNIOR RAT RACE	NATIONAL		NIL		
GOODYEAR T/R	NATIONAL				
CLASS II TEAM RACE	NATIONAL				
BENDIX TEAM RACE	NATIONAL				
2.5cc P.B. TEAM RACE	ALC				
VINTAGE A T/R	NATIONAL				
CLASSIC 'B' T/R	NATIONAL				
MOUSE RACE	T/BIRDS				
COMBINED SPEED	NATIONAL	(No. of Categories entered @ \$10.00 each)			
F2A SPEED	FAI				
F2B AEROBATICS	FAI				
F2B AEROBATICS JNR	FAI		NIL		
F2D COMBAT	FAI	(F2D Modified/ 2.5cc. Fast or Vintage also eligible)			
JUNIOR COMBAT	NATIONAL		NIL		
OPEN COMBAT	NATIONAL				
'35' SLOW COMBAT	QLD				
2.5cc SLOW COMBAT	ALC	Note: No modified F2D wings permitted!!!			
F2A FUEL REQUIRED	@\$12.00/LITRE				
F2D FUEL REQUIRED	@\$12.00/LITRE				
ADMINISTRATION CHA	RGE	(\$20.00 per Senior/Pensioner or \$NIL per Junior)			
TOTAL OF FEES PAYA	BLE				

	(PRII	NT NAME) as an entrant in	the 2007/2008	3 Queensland
Championships agree to full Address	ly comply with all the Terms a	nd Conditions of Entry pub	olished in/with	this form.
1441 635	Postcode	Telephone No. ()	
Date of Birth		or/ Pensioner/Senior	,,	
AUS No				
Entrant's Signature:				
	Email			

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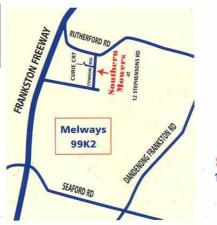
Price: \$149.00 each + P&H.

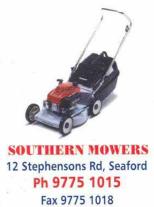
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Bech and Borge Engineering Pty Ltd (ABN 36 006 187 506) can be contacted as follows:





Engine Reconditioning Specialists



2008 Victorian Control Line State Championships details.

On Saturday 22nd of March FAI Speed & FAI T/R will alternate, Rd1 F2A, Rd3 F2C, Rd2 F2A, Rd4 F2C, Rd3 F2A. F2C Final.

1/2A Combat will start as soon as F2C concludes, those not involved in T/R to have processing done beforehand.

On Sunday Vintage T/R to start at 9.00am followed by Classic B T/R, then Combined Speed & F2D Combat.

On Monday Goodyear will start at 9.00am followed by Vintage Combat.

Food will be available all days except Friday 21st of March.

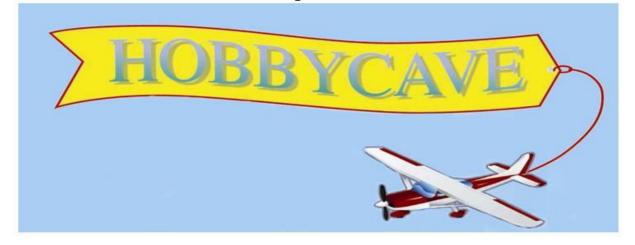
The events not listed on the program 1/2A T/R, Mini Goodyear, Simple Rat & Midge will be run at a later date T.B.A. at CLAMF.

AUSTRALIAN CONTROL LINE NEWS

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