

THE VOICE OF CONTROL LINE AEROMODELLERS FROM AROUND AUSTRALIA

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February 2005
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Copy Deadline for next issue is: Wednesday 16th February 2005 PRODUCTION SPECIFICATIONS

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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:- acln@optusnet.com.au



COMING EVENTS



COMING EVENTS

VICTORIAN CONTROL LINE CONTEST CALENDAR 2005

FEB 6	C.L.A.G. Country Flying Day	Traralgon
FEB 6	Simple Rat race, Simple Goodyear.	SMAC
FEB 13	FAI & Combined Speed, 1/2 A Combat,	
	Mini Goodyear (From 2004 Vic State Champs.)	CLAMF
FEB 27	Vintage Stunt, Class 2 Team race, Bendix, Classic Stunt.	KMAC
MAR 6	Hand Launched Glider.	SMAC
MAR 6	C.L.A.G. Country Flying Day	Moe
MAR 13	FAI Team race, Goodyear, Vintage Combat.	CLAMF
MAR 25-28	VMAA CONTROL LINE STATE CHAMPIONSHIPS Events to be advised.	CLAMF, KMAC, CLAMF
APR 3	Simple Combat.	SMAC
APR 3	C.L.A.G. Country Flying Day	Moe
APRIL 17	FAI & Combined Speed, Goodyear, 2.5cc Rat race.	CLAMF
APRIL 24	FAI, Novice & Jnr Aerobatics, Classic Stunt, Bendix	KMAC
MAY 1	Vintage "A" Team race, Aust "A" Team race.	SMAC
MAY 1	C.L.A.G. Country Flying Day	Traralgon
MAY 15	FAI & Combined Speed, Triathlon (Artmil Trophy), 1/2 A Team race.	CLAMF
MAY 22	FAI (Yeoman), Novice & Jnr Aerobatics, Simple Rat race, Classic Stunt, Class 2 Team race.	KMAC
JUNE 5	Balloon Burst, Limbo.	SMAC
JUNE 5	C.L.A.G. Country Flying Day	Knox
JUNE 19	FAI Team race, Goodyear, 1/2 A Combat, FAI & Modified Combat.	CLAMF
JUNE 26	Vintage Stunt, Combined Speed, Classic Stunt, Vintage "A" Team race.	KMAC
JULY 3	Simple Combat.	SMAC

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 CLAMF 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

CLAG Contact :- Graham Keene (03) 51924485

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

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

C.L.A.S. (NEW SOUTH WALES)

Contest Calendar 2005

DATE	CLUB	EVENT
Sun Feb 6	SAT (Kelso Park)	F2B Aerobatics
Sun Feb 13	KMFC	Gala Racing Day
Sun Feb 20	KMFC	F2B Aerobatics
Sun Feb 27	Doonside (Kelso Park)	F2B Aerobatics
Mar 5-6	"MDMAS (Mitchell Hill Fields, Muswellbrook"	2005 HUNTER VALLEY CHAMPIONSHIPS
Sun Mar 13	KMFC	JUNIORS DAY
Sun Mar 13	Werrington	F2B Aerobatics and Classic Stunt
Mar 25-28th	KMAC and CLAMF	VMAA C/L STATE CHAMPIONSHIPS
Sun Apr 3	KMFC	1.6cc Combat and Slow Combat
Apr 9-10th	MAAQ. Gold Coast MFC.	MAAQ Classic / Vintage Stunt. State Championships
Sat Apr 16	KMFC CLUB STUNT . (Novice)	
Sun Apr 17	COMSOA	"F2B Aerobatics. Buy, Swap and Sell. "
Sun Apr 24	SSME	"Phantom, Vintage 1/2A, Vintage A, Bendix T/R"
30 Apr-2nd May	"ALC field, Chetynd St, Loganholme. QLD"	MAAQ C/L STATE CHAMPIONSHIPS Ph: T.Barry 07 38074217
May 14-15	MDMAS (Muswellbrook)	VETERANS' GATHERING
Sun May 29	SSME	F2B Aerobatics
Sun Jun 5	KMFC	Palmer / Aldrich Classic Stunt and CLUB STUNT (Novice)
Sun Jun 26	KMFC	GALA COMBAT DAY
Sun Jun 3	IMAC	F2B Aerobatics
Sun Jul 3	KMFC	2.5 Stunt, Simple Rat and Slow Combat
Jul 8-14	"Benson's Lane, Richmond. NSW"	AUSTRALIAN MAAA 58th National Championships
Sat Jul 23	REMAC	Mid Winter Vintage Stunt.
Sat Jul 24	SSME	"Vintage 1/2 A, Vint B, Goodyear T/R, Combined Speed"
Sun Jul 25	SSME	"Phantom, Vintage A, Bendix T/R"
Sun Aug 7	KMFC	F2B Aerobatics
Sat Aug 13	KMFC	CLUB STUNT (Novice)
Sun Aug 28	SSME	Slow Combat (Bonus points for WW2 Style model).
Sep 10-11th	MAAQ. CLASII Ipswich	MAAQ C/L Scale State Championships. J.Taylor 0733927679
Sun Sep 11	KMFC	"Classic Stunt, Vintage Stunt, Simple Rat, Slow Combat, SWAP MEET"
Sat Sep 24	KMFC	CLUB STUNT (Novice)
Sun Sep 25	SSME	F2B Aerobatics
Oct 1-3rd.	MDMAS as host club.	NSW C/L STATE CHAMPIONSHIPS

Sat Oct 15 REMAC
 Sun Oct 17 IMAC (Berkeley) F2B Aerobatics
 Sun Oct 30 KMFC JUNIORS DAY
 Sun Oct 16 KMFC JUNIORS' DAY
 Sat Oct 29 SSME "Vintage 1/2 A, Vint B, Goodyear T/R, Combined Speed"
 Sun Oct 30 SSME "Phantom, Vintage A, Bendix T/R"
 Sat Nov 5 KMFC CLUB STUNT (Novice)
 Sun Nov 6 SAT (Kelso Park) F2B Aerobatics
 Sun Nov 13 KMFC "Vintage T/R, 1/2 A, A and B. "
 Sun Nov 20 NACA at Gateshead H.S.
 ClassicStunt&Cardinal Stunt.(I.Smith
 Ph:024975 2292)
 Sun Nov 27 KMFC 1.6 and Slow Combat
 Sun Dec 4 Doonside (Kelso Park) F2B Aerobatics
 Sun Dec 11 KMFC Christmas Party and Fun Fly

"Doonside. Kelso Park North, Panania. "
 "IMAC (Illawarra Model Flying Club)- Flying site @Hooka Ck Road, Berkeley. NSW"
 "KMFC (Ku-ring-gai Model Flying Club)- St. Ives Showground, Mona Vale Rd, St. Ives. NSW"
 "NACA (Northern Area Contest Aeromodellers)-Gateshead H.S., Pacific Hwy, Gateshead. NSW."
 "REMAC (Ryde Epping Model Aero Club)-Peter Board HS, Wicks Rd, North Ryde. NSW."
 "SAT (Sydney Aeromodelling Team)-Kelso Park North, Henry Lawson Dr. Panania. NSW" "on Drive, Panania. NSW. "
 "SSME (Sydney Society of Model Engineers)- Model Park, Luddenham Rd, Luddenham. NSW. "
 "WMFC (Werrington)-Entrance to flying site @cnr. Landers & Walker Sts, Werrington. NSW."
 "MDMAS (Muswellbrook District Model Aero Sports Inc.) Mitchell Hill Field, New England Hwy, Muswellbrook"

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

Stunt, Squish and Singh.

by Joe Supercool

For those who came in late, Supercool has been trying to improve the performance of his stunt engines by increasing compression, as opposed to the more usual process of decreasing compression. No doubt these efforts will be washed away by the tide of history, but them's the breaks. We last left Supercool on his way to the Whiteman Park tick farm, ready for further testing with the trusty Enya 45.

This morning, however, we find Supercool has departed once again from the straight and narrow, this time via the sensual path of the Internet. How about a nice Google search for "Squish Band"? You never know your luck in the big city! And what a gold mine this turned out to be!

But first, quite at random, Supercool struck a familiar vein in a Model Airplane News article dated January, 1976, page 54. Reader Neil Harrington of Connecticut wanted to know what it meant for a 2-stroke engine to "4-stroke". In reply, Peter Chinn suggested, on every other stroke, that the engine did not fire, due to a combination of rich mixture and charge contamination from imperfect exhaust gas scavenging from the previous firing cycle.

Interesting, I wonder if it is true. I guess what I call "4-stroking" is really just running rich. Since there is virtually no RPM change when I needle in from "4-stroke" to "2-stroke", there is very little power change and hence every other cycle cannot be "missing".

Whatever, we are back at the old question of what does happen when the charge burns in the cylinder head at TDC. There seems to be a consensus that most of the combustion occurs while the piston is still close to TDC, with all the later action resulting from expansion of the hot gases after burn completion. There is also believed to be a considerable variation from fire-to-fire in the combustion process.

This latter variability results from the rather unpredictable state of the mixture, which includes methanol vapour, methanol/castor droplets, un-scavenged burnt gases from the previous firing, plus oxygen and nitrogen. All this mess has to be compressed before it can produce a powerful and fast burn. Anything that can improve the quality of this mixture is going to improve the engine run, and that is where the "squish" comes in.

Something like a hundred years ago, a gentleman by the name of Ricardo found that modifying the combustion chamber shape to include flat areas which closely oppose the piston could improve power and running characteristics. The improvement was due to increased turbulence at TDC, which improved mixing and hence burning of the charge.

The Supercool internet study found that the squish had the following properties:

1. Timing: reducing the squish clearance, and using a wider squish band with a smaller, deeper combustion dome makes the motor "act" as though the timing has been advanced.
2. Vibration: To make maximum power, the squish

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band should be flat. If the resulting pressure rises by more than 35 PSI/degree, the engine will run roughly.

3. Grunt: At lower RPM, "grunt" is achieved by higher squish velocities, which means wider squish bands. For power at higher RPM, narrower squish bands and shallower hemispherical heads are required.
4. Cooling: The fuel trapped in the squish does not burn readily, due to the cooling proximity of the piston crown and the metal in the squish band. This provides a small cooling effect.

If one is to apply this to F2B stunt, then a wider squish band is indicated for low down grunt. The ST G21/46 has this feature. Motors that tend to "run away" may benefit from having a new head with a wider squish band. It is also suggested that reducing the squish clearance will improve low-down grunt as well.

The photo below shows the heads for Supercool's ST G21/46. Next to the original head, are 2 new heads, with identical wider-squishes and deeper bowls. One has grooves cut in as suggested in US patent 6,237,579 of May 29, 2001, as defined by Mr. Somender Singh of Mysore, India. You can view the patent details just using a Google search. The argument behind the patent, and the diagrams of head mods can be read on the US Patent Office website, no charge or other exploitation.



Mr Singh's idea is to create extra turbulence by adding grooves to the squish band. He has made some remarkable claims regarding low-end grunt, and this I found attractive as I am trying to use 11X8.5 props on my F2B ship. Anything that permits me to run rich with grunt is desirable.

Ground running of the new heads showed excellent behaviour while rich. I could needle down to 4000 RPM comfortably, lean out to 6500 at the break and peak out at 7400. This latter may be too high for my comfort, will need to test fly.

Sadly, I could not see any difference in the head with squish band grooves. Maybe the grooves are not the right shape: but there it is.

Test flying: During the desultory break as the morning Easterly gale switches to the afternoon South-Westerly gale, Supercool managed about 8 flights with the Singh head. Performance was fine, no nasty signs of SMS

(sudden motor silence), and 5.2 laps on 60' lines and straight fuel with 30% Castrol M. Compared to the original ST 46 head, the level flight "4-stroke" was somewhat faster and sounded to have more "bark". This could be consistent with the more advanced timing expected with the wider squish. No effort was made to alter the compression with shims.

What an anti-climax. I seem to have achieved the state of getting the ST46 to run about the same as it does out-of-the-box!



Jim Ray brought an old original Australian .35 sized Combat model to the CLAMF Christmas BBQ.

Mice had been nibbling at the spars so renovation was not an option but it did make a good conversation piece.

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Back issues of this newsletter can be found on the following web sites.

<http://www.vicstunt.com/>

<http://www.dkd.net/clmodels/>

TARMAC Notes for November, December and January

Jim Stivey's annual TARMAC Turf racing day was held on the 28th of November. This is a race day that is designed to allow several different classes of racers to compete directly with each other. The models are flown over grass. This year just Vintage A and Classic B were run with three heats per class. The rules remained the same as the last time the race was held. The fastest heat time on the day in each class is taken as the class record and counted as 100%. Each team's best two heat times of the day are averaged and calculated as a percentage of that fastest time. This process rewards both performance and consistency. All the calculation was made simple by using Mark Sherburn's laptop computer and a spreadsheet program.

The eventual winners were the vintage team of Kirton/Stone (A Class), in second place were Sherburn/Dyson (B Class) and third were Stivey/Adler (A Class). Generous prizes for the event were once again supplied by Scott of Ace Models in Midland, who maintains a wide range of Control Line kits and accessories for our convenience.



Here is one of a set of photos that were sent to me of a very new looking carrier aircraft. I have no way of knowing if they are genuine or not, and neither does the sender, but they certainly look real enough. The note with it said that it was a prototype F/A-37 on board the USS Washington for catapult fit checks.

If for some strange reason you should want to refer back to past TARMAC notes, issues since 1999 can now be found on the 'Vicstunt' website at: <http://www.vicstunt.com/>.

Under the category of gossip, I suppose is the news that Jim Trevaskis was briefly back in WA for his annual visit to his home territory. It was good to have a chat with him again and to catch up with what he had been doing. While he was at the field, he told me that he should be returning to WA for good in a year or so. That will be a very welcome addition to our stock of regular control line fliers.

Late addition.

Thanks to the persistence and research of Jim Stivey (Master sleuth) I have been informed that these two photos of the supposed new jet are in fact scenes from a forthcoming film. It was too good to be true. They were taken aboard a real U.S. aircraft carrier: the USS Abraham Lincoln, which was used as a background for the filming of a new show called 'Stealth' at San Diego's Naval Air Station North Island in June 2004. Look for it at your local theatre sometime in the future.



Another photo of that mystery plane on the carrier deck. This one rather obscured by steam from the catapult. A close up of the cockpit area shows the pilot's name stenciled on the side of the aircraft. It is 'LT KARA WADE'. One of the photos shows her in the cockpit.

'Aeromodellers can do anything.' said my old friend Len Armour a few years back. He was right, but what he really meant was 'Aeromodellers can do anything if they feel like doing it.' Sadly, they don't always feel like doing the things that they are asked or ordered to do – (usually by the household management). But that leads me to the next bit, which is that some of the things that aeromodellers *do* like to do, is to fool about with full sized aeroplanes or other mechanical devices like cars or motorcycles. Even if they are not dabbling with full sized transport machines, they make quite reasonable home handymen (when the mood takes them).

An ex control line aeromodeller friend of mine who really *can* do anything, is Charlie Urwin. For many years he worked miracles repairing the Tupperware bits of damaged aeroplanes in the aviation plastics business with his company 'Universal Plastics'. He now runs the extremely modeler friendly 'Fibreglass and Resin Sales' and in his spare time dabbles with building racing cars for both clubman type road racing and midget speedcars.

As an adjunct to this automotive activity, he has set up a new mail order company called Genesis Auto Developments to provide tools and hard to source components for the do it yourself car builder. He even provides a procurement service that will find those rare bits that you can't source for yourself. Here is where this information can be handy for the average modeler, because even if you have no desire to build yourself a motor car or a man carrying aeroplane, many of the special tools and accessories can be of use to all of us. For example he has a stock of long series drills (like 1/8th drills that are a foot long). Cleco pliers and several sizes of Clecos (These are devices used a lot in the aircraft industry as temporary rivets used to hold metal panels in place while other rivet holes are drilled). There is lots of other stuff like clamps, profile gauges, mini micrometers, aluminium peel rivets and rivnuts (nuts that can be riveted to sheet metal). If you have any interest in this stuff, you can look at the website at <http://www.genesisautodev.com.au/> Email to genesisautodev@iinet.net.au. Or contact Charlie on (08) 9470 2571 or snail mail to PO Box 76 Cloverdale WA 6985. While you are there you can even order your fibreglass, carbon fibre, resins and glues.



On the left is a Cleco skin pin and a pair of Cleco pliers. These are my well worn set that have done lots of work. On the right the Cleco is fitted into the fork of the pliers and compressed so that the pin at the nose of the Cleco extends and reduces in diameter, allowing it to be fitted into the rivet hole. When the tension is released from the Cleco, the pin retracts and firmly (but temporarily) clamps together the items to be riveted. When the preparatory work is finished, the Clecos can be removed so that any fresh holes can be de-burred before re-assembly and permanent riveting.

As I write this, the South Australian championships are just over. Hans Bertina, Ian 'Maverick' Thompson, and Peter White (who is now being counted as a West Aussie) all made the long trip over to the other side of the Nullabor to compete. I don't have any complete results, no doubt they will appear in ACLN or elsewhere, but I have been sent some photos that were taken by Harry Bailey while he was there.



This is Harry Bailey's latest Vintage A model. It is called The Olympian. He saw a picture of this design on the South Bristol MAC web site in the UK. He thought that it looked interesting and contacted the builder Tim Andrews for more information. It was designed by Terry Smith and featured in the August 1953 "Model Aircraft" magazine. Harry says that the nose moment is a bit long and the resulting balance is well forward, but it handles like a pussy cat and glides well without power. No glassed wing on this one!

The photo was supplied by Harry Bailey



The 'Classic B' finalists at the SA Championships. From the left are Murray Wilson, Harry Bailey, Keith Baddock, John Hallowell, Ian Thompson and Hans Bertina. Photo supplied by Harry Bailey.



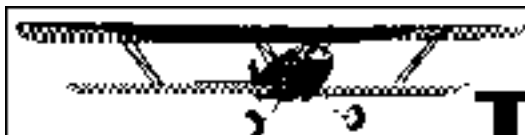
This month's photo from the TARMAC archives was supplied by Ron Simpson. It is circa 1950 and shows John Shaw starting a racer held by Jack Dewhurst. I never met John Shaw, but Jack Dewhurst was one of my instructors when I joined the Narrogin gliding club in the early 1970s. He was a life long aeromodeller, serviced and repaired full size gliders and also if my memory does not lead me astray had in his younger days won the Queen's medal for marksmanship on the rifle range.

A while back I reached the third of these three mileposts in a man's life and have realised the truth of the saying that a man at 20 worries about what other people think of him. A man at 40 doesn't care what other people think about him. And a man at 60 finally, and sadly, realises that no one was ever thinking about him.

Charlie Stone

VH4706

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AROUND THE CLUBS

Meeting held at Keilor Park on Sunday September 19th.

CLASSIC & VINTAGE Day

This annual Competition Day is conducted jointly by the members of the Brimbank Falcons, and Control Line Aeromodellers of Gippsland (CLAG) clubs, and began in 2003, with the venue alternating between Moe and Keilor Park.

Melbourne's weather gods smiled almost benevolently upon a small but enthusiastic group at Keilor Park. The showers ceased, and the Southerly breeze was slight but with quite a chill factor.

CLASSIC STUNT

Mark Usher arrived with a real classic model - a 1967 design "Novi" (by David Gierke) which was half-built 30 years ago then completed in 2002 with an OS MaxIII 35 in the snout.

John Hallowell made a welcome return to the stunt circle with his 1996-built Tucker Special using an OS 35 FP.



Photo: John Hallowell - Classic "Tucker Special" - OS 35 FP

Ken Maier used his vintage Lil Ambassador (Oliver Tiger diesel) for the first round, then his profile Wildcat/Enya 35 for the second.

Mr Good Vibes, Graham Vibert, earned a new nickname for himself - "Closet Speed Demon" - with his OS 35 FP powered Shoestring. The identity of the donor of this nickname is being withheld to protect his innocence.

Adam Kobelt used his TopFlite Nobler ARF with OS 35 FP to great effect, and showed just how nicely these ultra-light-weight ARF's perform.

Johnno (Goodge) finally arrived with his Nakke/Stalker 40 combination. It was widely whispered that he lost his way on the 3 hour drive, but he vehemently denied such a scurrilous rumour. He also kept his pants up today.

Two rounds was deemed sufficient, with the obligatory coffee break between, and resulted in -

	Round 1	Round 2	TOTAL
Adam Kobelt	1720	1630	3350
John Hallowell	1530	1595	3125
John Goodge	1480	1380	2860
Ken Maier	830	1220	2050
Mark Usher	1000	910	1910
Graham Vibert	770	730	1500

The BBQ was most capably manned by David Gregory and Graham Keene, with sausages, rissoles, and mountains of onions being the lunch fare. A few, noticeably Ken Dowell and Keeno, were observed imbibing on more of Steve Mitchell's wonderful Ginger and Apple ciders that make these days so "enjoyable". (read "enjoyable" as slurred)



Photo: Lunch Barbeque

VINTAGE STUNT

Mark Usher's Veco 45 powered Monitor, designed by Englishman Henry Nicholls in the 1940's, looks just as sweet in the air today as they did 60 years ago. Shallow dihedral makes a model look more "real" somehow.

Johnno's Demon reflects the Aussie style of 1954, and he powers it with his "favourite" motor - a Fox 35. (One's tongue is planted very firmly in cheek with that comment)

Our Closet Speed Demon had more fun with his Shoestring in Vintage as well. What the heck!

Ken Maier's little Lil Ambassador, a 1951 design by Alan

Hewitt (UK) powers along nicely for a small model.

Adam Kobelt also said "what the heck" and used the "legal" Nobler in Vintage also, but of course suffered loss of all static points as it's an ARF. The judges spoke!

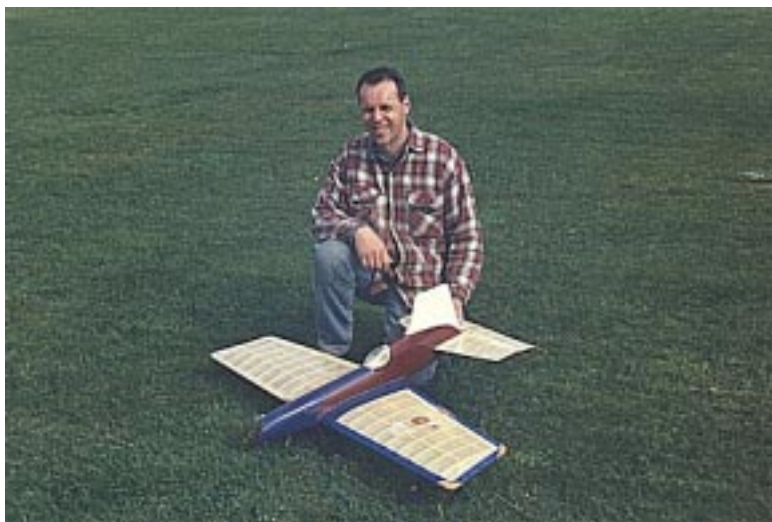


Photo: Mark Usher - Mercury "Monarch" - Veco 45

	Static	Round 1	Round 2	TOTAL
Ken Maier	103	268	236	371
John Goodge	86	264	277	363
Adam Kobelt	-	348	351	351
Mark Usher	79	237	245	324
Graham Vibert	70	225	230	300

While Classic and Vintage occupied one circle, John Boys, Ron Jones, Graham Keene, Frank

Neeson and a few others enjoyed their sport flying in another, and were entertained by Frank

McPherson's "CurrieWot" biplane with electronic engine speed control using an equivalent to a car's remote alarm control unit.

Keeno has smoothed out the Coreflute plastic sheet wings with a little engine downthrust, and

they are now a very flyable model, and enormous fun to fly.

Judges for the events were Steve and Vic Mitchell, who sheltered from the wind chill factor

"inside" a convenient beach umbrella. Their attendance and efforts (aside from the ciders)

were greatly appreciated by all.

Ken Dowell achieved a whole week's exercise routines (exercise? - what's that?) wandering

around with camera in hand for the happy snaps that provide a pictorial record of friends

enjoying friendly flying days.

David Gregory, as Contest Director, general Co-ordinator, and part-time chef, worked tirelessly all day.

September next year will be at Moe, with all who attended this day looking forward to it.

Graham Keene Sec/Treas CLAG Inc.

South Australian State Championships

F2D Combat

Only four entries this year, but the spectators were treated to some truly excellent bouts. Probably the best was between Graeme and Murray Wilson. With very evenly matched equipment, it was down to pilot skill alone. They exchanged cuts early, but Murray had the advantage with a double cut. He then took a neat third cut and Graeme overshot his aim to take Murray's remaining streamer. Unsure whether he was one cut ahead, Murray continued the chase and close to the four minute mark took the remainder of Graeme's streamer to the cheers of the crowd. These two went on to fight out the final, which had to be reflown owing to a tied score. With only one model left each, Graeme was one cut up before a mid-air collision put Murray out of the bout.



Photo. In the F.A.I. combat pits. Graeme Wilson in front whilst Robert Owen chats with Richard Justic and Peter Van Meurs at the rear.

Robert Owen was not able to capitalise on his superior equipment, but was satisfied with third place. His models were lighter than the rest and there's no denying the extra airspeed of his Fora engines. Robert also used the new Cyclon PC 6 engines, which were almost as fast and very easy to use.

F2C Team Racing

A quality field of eight entries including Western Australians Thompson/Bertina and relative newcomers to F2C Hugh Simons from NSW and Mark Poshkens from SA. Fastest heat time honours went to the Wilson/Stein team with a blistering 3:12.09 in a race that was virtually one-up owing to problems for the other two teams. Graeme had to return to Melbourne the following day, so forfeiting their spot in the final. Nevertheless, the final had a real "national" spread with Fitzgerald/Ellins (SA/Vic) Simons/Potter (NSW) and Thompson/Bertina (WA). Expectations were high, as all three teams had recorded sub 3:30 times in the heats. Unfortunately, none of the teams completed the race. Thompson/Bertina suffered a run-in at the first pit stop in very windy conditions. Rob Fitzgerald was disqualified for snagging the lines of Simons/Potter model while landing at lap 172, which in turn prevented that team from completing the race. This is an unfortunate way to conclude an otherwise excellent contest.



Photo:- Left to right, Pilots Robert Fitzgerald, Hugh Simons and Ian Thompson wait for the final to begin.

F2F Team Racing

Mark Poshkens' purpose-built flying wing model with Nelson "steel" T/R engine certainly had the edge on the two other entries, which used old Goodyear models. Rob Fitzgerald had a Rossi R/V diesel in his model, just to show that top-notch engines are not necessary. Harry Bailey, had set up his late model Nelson T/R engine for a one-stop race strategy, but at the expense of airspeed. As in many a race, the hot favourite didn't win, as Wilson/Poshkens could not retrieve their model at the 136 lap mark. That left Fitzgerald/Ray to cruise reliably through to a win, followed by Bailey/Baker. F2F is still in its formative phase and we can expect significant gains in performance in the future. Time will tell whether the event achieves its aim as a stepping-stone to F2C participation.

F2A Speed

There was nothing new this year. Maris Dislers chose to use a well-proven, but slow set-up from 1996 with Cyclon engine and longer lines. A couple of sweet sounding runs of moderate speed (259 KPH) resulted. Richard Justic had problems with his first model, but a fine 280.5 KPH with the back-up model proved that he has the goods.

Vintage A Team Racing

Hot weather along with some hot equipment made for an

exciting event. A couple of scratchings from WA and SA left the field to eight Victorian and NSW entries. Prime candidate for top honours was the Potter/Hoggan team with their Rothwell R250 engine on a high note. Their model was clocked at over 100 MPH in light traffic. A super qualifying time of 3:16.35 was the result. Hallowell/Baddock and Knight/Harvey posted race times around 15 seconds slower to qualify for the final. Of the others, Simons/Simons had potential, but lost out in the restarts, while the rest were not quick enough on the day to pose a threat. As expected, an exhausted Grant Potter was first home in the final (6:56.04) followed by Hallowell/Baddock (7:38.59) who's Timmy Tiger ran superbly in the purple Voodoo 1. Keith Baddock set the motor for laps and made over 60 on the first tank. However, a few laps disappeared on the second tank which meant it was going to be a 3 stop final instead of the intended 2 stops. They had the same airspeed as Knight/Harvey who withdrew on lap 155.



Photo:- Brian Hoggan with the winning Vintage A "Dimpled Dumpling"

Classic B Team Race

All eyes were on the classy entry from Thompson/Bertina. Their 'Thornley Thunderbolt' model was looking really good in practice, but suffered from the gremlins in the first round. A fine second round time (3:14.45) secured the West Australians a spot in the final. Top qualifiers Hallowell/Baddock had a near faultless race in the second round, their 70 lap time of (3.02.92) was the fastest ever Classic B heat time in Australia or USA. Bailey/M. Wilson eased into third qualifying spot with their first round time (3:26.47).

Consistency was lacking for the West Australians in the final. When it was going well, their model was a real threat, but errors along the way crept in. John Hallowell just kept on flying in a calm manner and Keith Baddock refuelled and restarted the engine without a hitch. Their fine display of race-craft was rewarded with a winning time of 6:22.04. Poor Murray Wilson had more to do than expected, as the fuel line on their model kept giving trouble by coming adrift from the tank resulting in lots of pitting practice. Harry called it quits 76 laps into the race.

See photo in W.A. News article.

1/2A Combat

A cool change made New Year's Day more comfortable for the combat guys. An overcast sky and relatively mild wind added to good flying conditions. Ken Maier sporting new models with dieselised OS and Magnum 10's was putting in the test flights along with Adam Kobelt. Perhaps it paid off, with Adam winning the event and Ken placing second. Of the remainder, Greg Pretty and Harry Bailey were clearly rusty and were dispatched in two bouts each. Flashes of early brilliance from Murray Wilson, who won his first three bouts were marred by troubles later on, but a third place was still worth the effort. As with all of the competitors, Mark Ellins had his moments too.



*Photo:- L to R
Ken Maier, Adam Kobelt and Murray Wilson with the models and certificates.*

1/2A combat preserves a certain, precious low-key fun appeal that was evident throughout the contest. Fears that Greg's fancy CTAH and Fora diesels would steamroll the show were unfounded. Adam Kobelt's well-worn ENYA 09's were still good enough to put him on top, despite one of them ungraciously breaking a crankshaft along the way.



*Photo:- L to R
Goodyear finalist Poschkins/Bailey, Fitzgerald/Pretty and Owen/Justic*

Goodyear Team Race

The Fitzgerald/Pretty dominance was again not really threatened. Brute horsepower from the Gillott-improved Rossi Mk 3 and a well-oiled act came to the fore again. Bailey/Poshkens mounted a credible challenge with their Nova Rossi powered Mr D, a little short of the potential for a sub four-minute heat time. Ray/Ray had a better showing this year with good airspeed from their CS engine, but not enough to keep Justic/Owen out of the final. As with other final races in this Championships, troubles beset the two challengers, with neither able to complete the race. This gave Robert Fitzgerald a relatively easy race to the finishing flag.

Open Rat Race

One of those events that the die-hards will just not let go. This was a rare opportunity to let loose the big growlers on the large Monarto flight circle. Three very rusty entries, with the Ray/Ellins ship rather squirrely in its initial laps until the fuel tank emptied a bit. The model was originally built for a 40 engine, but had a lighter 29 in the nose. It was at least reliable in restarting and returned a solo race time of 2:34. Owen/Justic had a model that originated in the USA. Running well within itself on mild fuel, their race time was 2:56. After a lot of preliminary flights, Pretty/Fitzgerald posted the fastest time of 2:28. The inescapable fact that a poorly vented carburettor sucks in foul air when hot, making restarting very difficult was only partly overcome by taking the pitstop at lap five. That left Greg plenty of time to exercise his muscles over the remaining 65 laps.



Photo:- The top model was flown by Colin Ray. The second model belongs to Robert Owen and the third model belongs to Greg Pretty

Combined Speed

Three entries this year. Harry Bailey's Proto had its teething problems, but returned a reasonable 82.4% of the record. Maris' Midge powered by a Cipolla Junior engine could not crack ten seconds on the day, delivering 88% of Keith Baddock's record speed for that event. Maris also flew Ivars' old Cox TD 051 powered model to a sweet run almost equalling its best time, but only 96% of Robin Hiern's record. An attempt to wrest the record with the "Secret Weapon" Glo Bee plug resulted in the top half of the piston, said Glo Bee plug and top of cylinder plug turning blue. The platinum element escaped unscathed!

Conclusion

As usual, the 2005 SA Control Line Championships were held in a friendly and competitive atmosphere. They were a combination of high-tech expert competition along with a measure of events with an easier fun to effort ratio. Unusual weather combining very dry air, a bit more heat and wind than desirable added to the challenge. Well supported from interstate, the atmosphere was excellent. Thanks to the organisers, helpers and valued sponsors Model Flight, Bolly Products and Scotcher Petroleum.



Above:- Grant Potter and the winning F2C model warm up for the final.

Below:- A social beer was always appreciated after a hot days competition. Seen here are Mark Ellins, Dave and Hugh Simons and Robert Fitzgerald.



S.A. Control Line State Championships 2005 Results

F2C Team Race

Team	Round 1	Round 2	Round 3	Final	Place
Simons - Potter	3:27.98	34 laps	3:24.43	172 laps DNF	1
Thompson - Bertina	3:35.79	3:30.38	3:28.81	35 laps DNF	2
Fitzgerald - Ellins	3:19.62	3:22.13	3:21.44	171 laps DQ	3
G Wilson - Stein	3:37.58	3:12.09	NT		4
Knight - Harvey	3:36.78	DQ	3:30.88		5
M Wilson - Poshkens	3:55.49	3:45.48	4:26.05		6
Justic - Owen	3:54.95	DNS	4:04.47		7
Ray - Baker	4:22.22	4:27.05	3:56.97		8



Mark Ellins during F2C warm up

G Wilson not available for final, so forfeited spot in that race.

F2F Simple Team Race

Team	Round 1	Round 2	Final	Place
Fitzgerald - Ray	4:50.39	5:00.14	10:36.19	1
Bailey - Baker	5:08.40	NT	12:55.66	2
M Wilson - Poshkens	4:37.41	4:28.08	136 laps DNF	3



F2F finalist

Vintage A Team Race

Team	Round 1	Round 2	Final	Place
Potter - Hogan	3:16.25	NT	6:56.04	1
Hallowell - Baddock	3:31.81	56 laps	7:38.59	2
Knight - Harvey	3:31.06	3:40.27	155 laps	3
H Simons - D Simons	3:51.04	3:39.30		4
Bailey - Baker	3:43.74	3:51.16		5
C Ray - J Ray	3:47.24	3:49.13		6
G Wilson - Ellins	4:30.19	3:57.05		7
M Wilson - Van Meurs	4:01.14	4:31.72		8

Classic B Team Race

Team	Round 1	Round 2	Final	Place
Hallowell/ Baddock	3:23.54	3:02.92	6:22.04	1
Thompson - Bertina	5:29.36	3:14.45	7:30.97	2
Bailey - M Wilson	3:26.47	39 laps	76 laps	3
C Ray - J Ray	3:36.81	4:46.73		4
G Wilson - Ellins	4:24.16	3:48.82		5
Knight - Harvey	3:56.63	4:08.19		6

1/2 A Combat

Entrant	Results	Place
Adam Kobelt	W W L W W	1
Ken Maier	W L W W L W*	2
Murray Wilson	W W W L L L*	3
Mark Ellins	L W L	4
Harry Bailey	L L	=5
Greg Pretty	L L	=5
	* Fly-off	



Robert Owen pits in half A combat

Goodyear Team Race

Team	Round 1	Round 2	Final	Place
Fitzgerald - Pretty	3:39.78	NT	7:07	1
Bailey - Poshkens	4:52.82	4:06.22	167 laps	2
Justic - Owen	4:18.37	6:08.59	116 laps	3
C Ray - J Ray	4:21.39	4:53.22		4
M Wilson - Ellins	4:51.76	NT		5

Combined Speed

Entrant	Class	Round 1	Place
Maris Dislers	049	96.2%	1
Maris Dislers	Midge	88.0%	2
Harry Bailey	Proto	82.4%	3

F2D Combat

Entrant	Results	Place
Graeme Wilson	W W L B W	1
Murray Wilson	W L W W L	2
Robert Owen	L W B L	3
Maris Dislers	L L	4

F2A Speed

Entrant	Round 1	Round 2	Round 3	Place
Richard Justic	-	-	280.6 kph	1
Maris Dislers	259.0 kph	258.6 kph	-	2



Photo above:- Richard Justic & F2A model

F2B Aerobatics

	Round 1	Round 2	Round 3	Total
1. Peter White Geo-XL / Stalker 61	1856.5	2041.0	-	3897.5
2. Dave Simons Yatsenko / Retro 61	1849.5	1875.5	-	3725.0
3. Adam Kobelt Impact / Saito 56	1661.5	1905.5	1756.0	3661.0
4. Mark Ellins Jazzer II / ST 60	1691.5	1879.5	1475.0	3571.0
5. Doug Grinham Jazzmate / Stalker 61	1684.5	1845.5	-	3530.0
6. Ken Taylor Kismet / MVVS 51 Shark / MVVS 51	1035.5	661.0	-	1696.5
7. Paul Turner WindWiper / ST 46	0.0	1335.0	-	1335.0



Classic Stunt

	Round 1	Round 2	Round 3	Total
1. Peter White Nobler / Veco 35	954.0	201.0	1026.0	1980.0
2. Dave Lacey Skylark / Fox 35	796.0	894.5	903.0	1797.5
3. Peter Anglberger Squaw / GloChief 35	767.5	747.0	-	1514.5
4. Ken Taylor Shark / MVVS 51	540.5	624.0	569.0	1198.0

More stunt photo's can be viewed in the S.A section of Vic Stunt.

<http://www.vicstunt.com/>

Vintage Stunt

	Static Round 1		Round 2	Total
1. Peter White All American / Fox 35	115	372.5	391.0	506.0
2. Ken Maier Lil Ambassador / Oliver Tiger Mk3	124	303.0	350.0	474.0
3. Dave Lacey FlapJack / Frog 500	110	318.5	363.0	473.0
4. Maris Dislers Peacemaker / AM 25	113	328.0	339.0	452.0
5. Ken Taylor (1) Wildman 60 / Fox 59	125	167.5	-	
(2) Go Devil / Fox 59	118	-	326.0	444.0
6. Doug Grinham Jamison / Atwood Triumph	128	0.0	0.0	128.0
7. Peter Anglberger Squaw / GloChief 35	105	0.0	-	105.0

Ray Harvey and Gavin Knight with their Classic B Model



The Vint A Voodoo of Dave and Hugh Simons

Jim Ray with his Goodyear model



Mark Poshkens pitted in F2C. The pilot was Murray Wilson.



The wind conditions during the final round of F2B



More pictures from S.A. State Champs

Ray Harvey counts the seconds during F2C warm up



Neil Baker gets a first flick start in F2C



Hans Bertina came from W.A. to compete in F2C with Ian Thompson



Paul Stein and Graeme Wilson did the fastest heat time but did not take part in the final.



Two Voodoo models that were used by John Hallowell / Keith Baddock

Combat at St Ives November 28 2004



Report by Ray Fairall

James Armstrong and the Sydney Kuring-Gai Model Flying Club usually run up to four combat gala days each year on the beautiful flying field they maintain at St Ives. The last event for 2004 was held on a calm warm spring day in November. As usual 1.6 cc and NSW 2.5cc slow events were flown. These events are usually friendly relaxed affairs where most competitors are sport fliers. This one was no exception. Slow 2.5cc was won by Peter Norrie fresh from an outstanding performance at the World Champs. His model was a very clever own design semi scale de Havilland Vampire. Tom Ransom won 1.6cc with an own design British style wing with OS FP .10 power.

It is suggested that for 2005, an additional event, Vintage Combat to the W.A. and Victorian rules, might also be run on the Combat Gala days!

Thanks to Tom and Jenny for an another excellent lunch!

Results 1.6cc

Name	rnd one	rnd two	Final Place
Tom Ransom	W	W	First
Greg Ardill	W	L	Second
James Armstrong	L	L	Third

Results 2.5cc

Name	rnd one	rnd two	rnd three	Final Place
Peter Norrie	W	B	W	First
Greg Ardill	L	W	L	Second
James Armstrong	W	L	L	Third
Bill Swan	L	L	L	Fourth



Greg Ardill after the final with the remains of his 1.6cc model



Tom Tobin receives his prize from CD James Armstrong now a third year Aeronautical Engineering student at Sydney University.



Radio retread Bill Swan with his Peacemaker.

**VMAA 2005 VICTORIAN CONTROL LINE STATE CHAMPIONSHIPS
DETAILS AND ENTRY FORM**

To be held at :- CLAMF - Frankston Field on Friday 25th of March
 CLAMF - Frankston Field on Saturday 26th March
 KMAC - Knox Field on Saturday 26th March (10.00am Start)**
 KMAC - Knox Field on Sunday 27th of March
 CLAMF - Frankston Field on Monday 28th of March

*Events to be run, in the order, for each day at nominated time below. See * for first event.*

FRIDAY 25 th	SATURDAY 26 th *(9.00am)	SUNDAY 27 th (9.00am)*	MONDAY 28 th (9.00am)*
Practice - CLAMF	*FAI Speed	*Jnr, FAI & Novice Aerobatics	*Midge Speed
Practice - KMAC	*Junior 2.5cc Combat	*Combined Speed (grass)	1/2A Team race
F2F Team race	FAI Team race	*FAI Combat	Goodyear
	Combined Speed (hard)	Vintage A Team race	Mini Goodyear
	1/2 A Combat	Classic B Team race	Simple Rat race
	** FAI Aerobatics Rd 1	Junior 2.5 cc Rat race	
	Vintage Stunt		

Rules for events shall be found in Aeromodels Official Rules and Instructions and 2002 Sporting Code effective from 10/02/2002. Local events in Victorian Rule Book.

ENTRY FEES :- \$ 5.00 per Senior
 \$10.00 per Senior Team
 \$ 2.00 per Junior
 \$ 4.00 per Junior Team
 \$ 7.00 per Junior/Senior Team
\$ 2.00 per each additional class in Combined Speed.

Make Cheques/Money Orders payable to C.L.A.C.
 Send to :-C.L.A.C.
 P.O. Box 298
 SEAFORD VIC 3198

BY MARCH 24th, 2005.

* A minimum of 5 entries for each event (except Junior events) must be received for that event to be run."
 NB Interstate Entries can be rung through on (03) 9786 8153 before **24th March 2005.**

ENTRY FORM

X in box to left of event.		TEAM MEMBERS NAME	
<input type="checkbox"/>	FAI AEROBATICS	<input type="checkbox"/>	FAI TEAM RACE
<input type="checkbox"/>	NOVICE STUNT	<input type="checkbox"/>	VINTAGE A TEAM RACE
<input type="checkbox"/>	JUNIOR STUNT	<input type="checkbox"/>	JNR 2.5cc RAT RACE
<input type="checkbox"/>	VINTAGE STUNT	<input type="checkbox"/>	MINI GOODYEAR
<input type="checkbox"/>	FAI SPEED	<input type="checkbox"/>	GOODYEAR
<input type="checkbox"/>	FAI COMBAT	<input type="checkbox"/>	CLASSIC B TEAMRACE
<input type="checkbox"/>	1/2 A COMBAT	<input type="checkbox"/>	1/2 A TEAM RACE
<input type="checkbox"/>	JUNIOR COMBAT	<input type="checkbox"/>	SIMPLE RAT RACE
<input type="checkbox"/>	MIDGE SPEED	<input type="checkbox"/>	F2F TEAM RACE
COMBINED SPEED <input type="checkbox"/> CL 1 <input type="checkbox"/> CL2 <input type="checkbox"/> CL3 <input type="checkbox"/> CL4 <input type="checkbox"/> CL5 <input type="checkbox"/> PROTO			

ENTRANT :- _____ AUS NO. :- _____

ADDRESS :- _____

PHONE NO. :- _____ DATE OF BIRTH (if Junior) :- _____

____ (no.) Junior entries @ \$ 2.00 = \$ _____	____ (no.) Senior entries @ \$5.00 = \$ _____
____ (no.) Jnr Team entries @ \$ 4.00 = \$ _____	____ (no.) Snr Team entries @ \$10.00 = \$ _____
____ (no.) Jnr/Snr Team entries @ \$ 7.00 = \$ _____	____ (no.)Extra speed classes @ \$2.00 = \$ _____
AMOUNT ENCLOSED \$ _____	

☐ Write in box the number who want to come to Keysborough Hotel on Sunday evening 27th March 2005.

BULLETIN NO 1 FROM THE 58TH NATIONALS COMMITTEE

RICHMOND NSW

DATE: Please be advised that the 58th MAAA Nationals will be held between 8th and 14th of July 2005 inclusive. Practice sites will in the main be available some two days prior to the commencement of the championships.

LOCATION: All events will be held in and around the township of Richmond NSW with the full approval and support of the Royal Australian Air Force Richmond. In this regard our sincere thanks is extended to the base commander Wing Commander Knight and his representatives.

SITES:

Free Flight. All free flight events will be held on the turf farms situated to the north of the RAAF Base (NSW Free Flight Society Field and site of the 1938, 1983 and 1988 Nationals).

Control Line. All events flown off grass will be conducted at the Bensons Lane Sporting Complex to the North West of the RAAF base. This site is some one kilometer from the Richmond town center and the Richmond Club. Hardstand events will be flown at the Penrith Lakes area some 15-20 minutes drive from Richmond.

Radio Control. All events will be flown at various field locations being within a 10 kilometre radius of the Richmond town center.

Indoor. The site for these events will be the Hawkesbury Indoor Stadium located at South Windsor some 10 minutes drive from Richmond.

OTHER DETAILS

Entry Form, Events Programme and Accommodation Details.

Specific details relating to the above will be advised in early 2005. Enquiries in the first instance may be made to www.hawkesburyweb.com.au

Or phone the Tourist Information Centre 02-4588-5895.

CONTACT DETAILS NATIONALS COMMITTEE

Chairman. Mr Joe McGuffin 02-9825-4695

Secretary. Mr Lyle Broadbelt 02-46-21-1667

Free Flight. Mr Tahn Stowe 02-47-54-1334

Control Line Mr John Elias 02- 8824-3310

CLASII CALENDAR 2005

CLASII FIELD HAS NOW REOPENED AND EVENTS WILL BE HELD AS SCHEDULED .At this point in time the only competition scheduled will be the **Queensland C/L Scale Championships to be held at one of our two fields on September10/11**. Further details will be advised later in year

Please note Club flying days have been changed to SATURDAYS.

Regardless of what day it is **flying is only permitted between 9am and 5pm** (i/c. engines are not to be run before or after these times) and in accordance with **MAAA, MAAQ and Club policy**, permission must be sought from club executives for **visitors** to use facilities on days other than **SATURDAYS**. Mufflers are to be used wherever possible. **Field entrance gate will be locked except for designated flying times.**

Aside from **published competition days**, after more than two casual visits, FAI licence holders would be expected to apply for Associate membership of Clasi. All members and visitors to the field will be required to sign an attendance book. This action assists in meeting insurance requirements and would be of great help in the event of a claim being made. Visitors to the field **MUST** show their current FAI Card. **NO CARD NO FLY**

Intending members will be allowed two visits (training days) before being requested to apply for membership. Applications will be then be assessed by Committee and applicant advised of outcome before any fees are payable.


CLUB AND ASSOCIATE MEMBERS WILL BE ABLE TO ACCESS THE FIELD 7 DAYS PER WEEK BETWEEN 9am and 5pm

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