



# THE VOICE OF CONTROL LINE AEROMODELLERS FROM AROUND AUSTRALIA

Number 248

Produced by the Victorian Control Line Advisory Committee



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### PRODUCTION SPECIFICATIONS

Please send any submissions for publication by CD/memory storage device or use Email.

Contest results should be tab delimited, i.e. use a single tab between each column of results, if submitted by disk or email. This makes formatting much easier on the editor.



## COMING EVENTS



### VICTORIAN CONTROL LINE

#### CONTEST CALENDAR 2018/19

DATE	EVENT	CLUB
Dec 1	CLAG Flying Day	Moe
Dec 8	Vintage A, Classic B, <b>Classic FAI.</b>	CLAMF
Dec 15	Christmas Breakup	KMAC
<b>2020</b>		
Jan 2-5	2020 Grand Prix. F2A & Combined Speed, Goodyear T/R, Classic B T/R, Vintage A T/R, Classic FAI T/R, 27 Goodyear, Junior Rat Race, Classic Stunt, Vintage Combat, F2D Combat.	Twin Cities Cub, Albury
Feb 2	CLAG Flying Day	Moe
Feb 23	Hearns Trophy F2B / Yeoman's Novice Stunt	KMAC
Mar 1	CLAG flying day incorporating Electric Control-line!	Moe
Mar 29	State Champs practice day, general flying welcome	KMAC
29th April to the 9th May. MAAA Nationals West Wyalong		

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

**CLAMF** Frankston Flying Field, Old Wells Rd, Seaford (Melway 97J10), GPS -38.086777,145.148009  
10.00am start  
Contact :- Secretary, H. Bailey (03) 5941 5978  
Email :- [clamf@ozemail.com.au](mailto: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: President:- Reeve Marsh 0405 001 008 or Secretary:- Steve Vallve 04099 35358  
Email:- [knoxmacvic@gmail.com](mailto:knoxmacvic@gmail.com)  
Web site :- <https://sites.google.com/view/knox-model-aircraft-club/home>

**CLAG** has monthly fly-ins at the Moe Race Track every first Sunday of the month.  
Contact :- Treasurer. Alan Frost  
Email:- [afrost2@skymesh.com.au](mailto:afrost2@skymesh.com.au)  
Phone:- 03 52817350

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## COMING EVENTS



### C.L.A.S. CONTEST CALENDAR 2019

DATE	EVENT	CLUB
Dec 1	F2B Aerobatics.	Doonside. Whalan Reserve
KMFC - (Ku-ring-gai Model Flying Club) - St. Ives Showground, Mona Vale Rd, St. Ives.		
SAT- (Sydney Aeromodelling Team) - "Duck Pond", Ashford Road, Milperra.		
SSME - (Sydney Society of Model Engineers) - Model Park, Luddenham Road, Luddenham.		
DOONSIDE- Baseball diamond, Whalan Reserve.		



### 2019 Clasii Ipswich Calendar

#### Club Comps

14<sup>th</sup> December. Xmas Break Up. Vintage Combat, 27 Goodyear.

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

# Queensland State Championships Results.

## Combat flown on October 19th.

### Open Combat

	Rd1	Rd2	Rd3
1st Trent McDermott	W	W	W
2nd Mark McDermott	W	W	L
3rd Bob Phippin	L	L	W
4th Eric Nutter	L	L	L

### 2.5cc Slow Combat

	Rd1	Rd2	Rd3	Rd4	Rd5	Rd6
1st Callum Dillon	L	W	W	W	W	W
2nd Eric Nutter	W	W	W	L	L	W
3rd Bob Phippin	W	L	W	W	L	L
4th Mariianne	W	W	L	L		
=5th Mark McDermott	W	L	L			
=5th Andrew Iwin	L	W	L			
=7th Peter Laing	L	L				
=7th Trent McDermott	L	L				

## Team Racing flown on 2-3 November.

### 27 Goodyear

Pl	Team	Heat 1	Heat 2	Final
1st	T. McDermott/M. McDermott	5:19.01	DNS	10:39.21
2nd	R. Justic/R. Owen	5:34.20	DNS	10:51.22
3rd	C. Dillon/M. Dillon	5:28.12	DNS	10:59.01
4th	P. Laing/B. Phippen	5:59.01	6:02.24	
5th	M. Stewart/B. Phippin	DNF 34L	DNF 26L	

### Classic FAI

Pl	Team	Heat 1	Final
1st	C. Dillon/M. Dillon	4:41	9:29
2nd	R. Justic/R. Owen	4:57	9:52
2rd	T. McDermott/M. McDermott	4:29	DNF 170 laps

### Vintage A

Pl	Team	Heat 1	Heat 2	Final
1st	T. McDermott/M. McDermott	3:25.94	DNS	6:42.19
2nd	R. Justic/R. Owen	4:00.44	DNS	7:56.12
3rd	P. Laing/B. Phippin	4:17.56	DNS	9:32.12

# News from Qld

### 35 Slow Combat

	Rd1	Rd2	Rd3
1st Bob Phippin	W	W	W
2nd Mark McDermott	W	L	L
3rd Trent McDermott	L	W	L
4th Peter Laing	L	L	



*Teams that flew in 27 Goodyear.*



*Classic FAI T/R finalists.*



*The Vintage A team racers.*



# BRODAK T-REX ARF

Derek Pickard looks back on his latest ARF build, the T-Rex from Brodak that resulted in many frustrating problems. Future buyers of ARF kits are advised to read on....

You must admit it, most top stunters these days all look the same. Walking down the line-up on a competition day is like trying to find your car at the airport – nothing stands out with even the colours mostly blending in with one another.

Yet it hasn't always been that bland. A visit to a Vintage of a Classic event will reveal the incredibly interesting range of styles that most fliers were prepared to try. So we've either been beaten into submission of a single focus or the single top layout is the only one which works well. Obviously the latter is not true as a whole range of designs are more than capable of being competitive.

From my own experience attending an F2B World Championship years ago, the diversity of engines and planes in the winning team proved we don't have to always follow the one fashionable design.

And that must have been one of the reasons for my choosing the very different T-Rex plane from the Brodak ARF line-up. Additionally, it was available in nothing less than bright orange. Lovely.

Clearly the styling behind this plane traces back to the famous Palmer Thunderbirds. Nice rounded tapered elliptical wings and tail and a complementing rudder all come together as attractive lines which we all know fly very well.

But the other thing that makes the T-Rex stand out is the fuselage which is wide with a snub nose. This is very deep at the front where it is vertical to the extent there is no top sweeping taper to a matched spinner. Instead the air intake is a long slot thru which the engine's crankshaft can poke out at any height with the design avoiding the compulsory use of a spinner; presumably a hand start being okay. But I can only fire up my engines with an electric starter that is pressed against a conventional spinner so my version of the T-Rex has a minimal spinner (1 ½") and a narrow blade prop.

The only other change from the maker's design is the wheel size. As the Americans mainly fly off smooth sealed car park surfaces so needing only minimal wheels size and my local clubs fly off grass surfaces, larger wheels had to be fitted.



*T-Rex ARF*

*The kit has a 2-piece radio mount system which is hard to set up accurately, so a change was made to an easier to accurately fit single piece plastic mount. An options pack includes ply doublers and braces to strengthen the RC engine mount layout.*



It wasn't until I opened the box and had a good look at the finer points of the layout that I realised a huge problem with this design – the construction uses a thick ply bulkhead behind the engine and in front of the tank to hold a plastic radio mount. Buggar.

I appreciate this is done to both simplify (read: cheapen) the kit as well as being able to make the model take a range of motor sizes, but the fact is this mount system is not as good as conventional timber beams that reach back to the wing. This traditional proven system is all about being light, strong, and well aligned; but it also locks in a single engine width.

It gets worse. In the T-Rex the upper part of the ply bulkhead is shrouded by the fuse top at the forward end and the fuse top as well at the tank compartment top behind the bulkhead. This means getting clear room to align the precision of the RC mount position in the front is very difficult and putting in the top blind nuts at the back of the bulkhead is impossible. Buggar and buggar again.

The solution is to either butcher the top of the fuse and the top of the tank compartment or, as I did, buy a more suitable single piece RC mount and screws. This was complemented by making many epoxied hardwood braces to strengthen the bulkhead against the ply fuse side doublers. Serious work on this area is vital.

The ONLY good aspect is the maker does provide extra ply bulkheads to laminate thicken the stock one together with ply buttresses. This is for the builder who chooses to strengthen the stock layout that way.

Interestingly, there is no one vertical position for the engine to be aligned as the layout gives a choice. I opted for a conventional location as high as practical together with the use of a small spinner.

And as all this is going on, time has to be taken to accurately measure where the fuel tank is to be precisely located and then find a mounting method within its cavernous compartment. Such an additional situation with the problems of the engine mount means the frustration factors add up to more than an acceptable modeller's challenge. Definitely bugger cubed.

Compared to all this, the rest of the plane's construction as initially observed out of the box was forecast to be easy. That is until the remainder of the bits were taken out when accident damaged was discovered.

This problem has nothing to do with the design or prefabrication. My T-Rex kit was obviously one of the early ARF production in a normal cardboard box. As such, transit damage is relatively easy to incur. In this case one of the wing halves, the one at the bottom of the box, had many of its ribs broken from an impact that was visibly disguised within the flexible plastic covering. The fix meant peeling back the plastic before carefully rebuilding each rib and effecting the recovering. (As the kit had been on my shelf for some time it was considered too late to return for replacement by the supplier.)

Brodak has reacted to reports of such transit damage to fragile ARF kits by upgrading the packaging boxes to now use incredibly strong thick cardboard top & bottom.

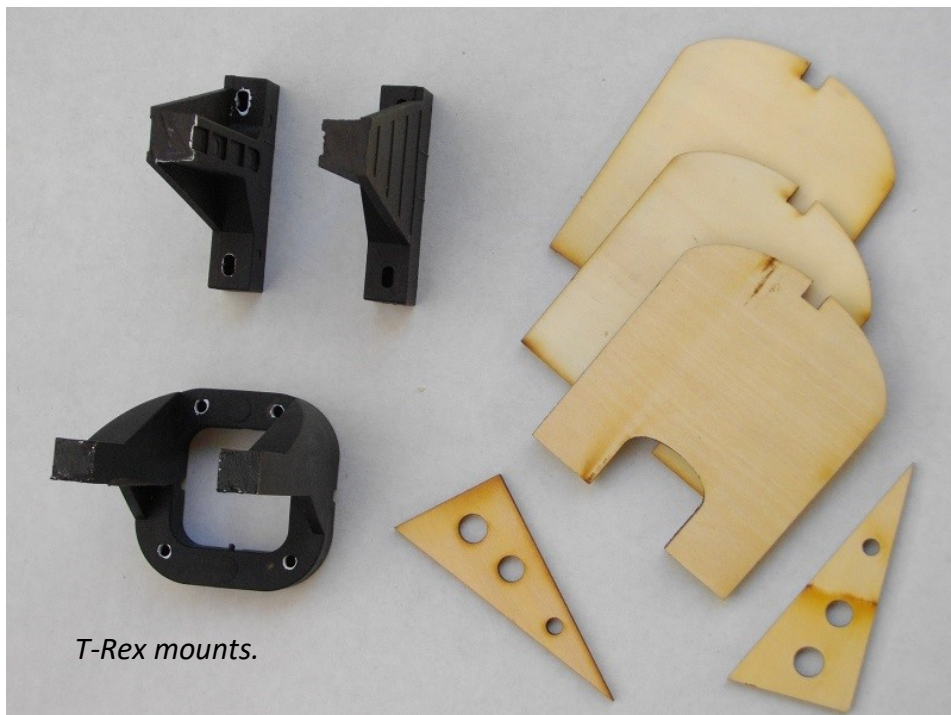
This overall experience has forced me to the following advice:

- Best buy an ARF if the engine mount is by conventional beams and check the space dimension suits your intended engine.
- Ensure the packing box is one of the later strong type so the built-up internals are more likely to survive the hazards of mailing.
- Quote: ".....can be assembled in under 5 hours." That's ridiculous.

Anyway, the rest of the plane's kit was coming together in a conventional ARF manner apart from gaps. These are due to bad tooling accuracy when the model's production was being set up. The worst of the gaps was between the fuse and the wing which was 3mm on one side and 2mm on the other. Those together with a few others forced the build process to take advantage of old-fashioned modelling skills of making gap fillers from scratch. Obviously disappointing. The size of these gaps are the worst encountered in Brodak ARFs.

Going back to positives again, mention must be made of the huge range of options allowed by the RC mount which can be configured for just about any engine at any angle. You name it and it can be arranged to fit. But my T-Rex was always intended for an inverted power unit with a rear muffler – made convenient by the main bulkhead having a pre-cut section to accommodate such an exhaust. And on my shelf was a Stalker 61RE from over a decade ago. Although I have a definite preference for my 76 version, that motor is currently in my top flying plane (conventional non-ARF with a balsa-sheeted foam wing) which tops the scales at 64oz. Like most 60-size ARF kits, this T-Rex is also fairly light and with my 61 motor results in a plane of 59oz which is very acceptable.

The kit box label says this model needs a 51 to 75 engine. But whatever size is chosen, make sure the ply bulkhead mount is well braced against the ply fuse side doublers.



Overall the model has very smooth and attractive lines at the front which is right up there with the various reasons why I bought the thing in the first place. Such a stand-alone classic should not be ruined by the fitting of a side exhaust engine together with its awkward muffler stuck out half way up this well styled front. That's ugly, just ugly.

Conveniently, the deep fuselage front allows the Stalkers rear muffler to be partially hidden. But I added an extension to the outlet pipe to ensure the oil muck is mostly kept out of the tank compartment and minimise what goes onto the plane's under-side.

Right now, the model hangs on the wall and has gone no further. I assume it will fly well because the layout is good, the wing is very impressive, tip weight has been added, balance point is right, the lead-outs located, the alignment seems spot-on, and the Stalker 61 motor came out of good flying 60 inch F2B plane. So what could possibly go wrong!!!



As it hangs there today, despite the many frustrations during the build, the plane has eventually delivered on what I wanted. It's a very different and attractive F2B and certainly stands out. You see, it's the same-ness of all the rest that makes this T-Rex welcome. Nearly all the other stunters are typical American varied mainly by slight differences confined to the wing tips and paint. That's boring.

Vive la difference.

## 2020 MAAA Nationals.

*As most will realise, the 2020 Nationals will be held next year from the 29th April through to the 9th of May and this is your opportunity to have input into how the events are run and the programming of them. Previously the 'Nats' have been run/coordinated by individual States however over past years only two or three States have agreed to hold the event and at this past years MAAA Conference in May **no** State volunteered to do so.*

*For that reason, and to enable a 'Nationals' to be held; a decision was made by the MAAA to once again hold the event at West Wyalong in 2020.*

*The difference would be however that the MAAA will co-ordinate the event – Not the State bodies; so in 2020 it will truly be a 'Nationally' run event.*

*Tyson Dodd, (MAAA Secretary) has become the overall Co-coordinator (though that may not be the correct term) but to enable the holding of the event other sections of our Aeromodelling community will be requested to assist.*

*The plan is to enlist the assistance of individual "National Special Interest Groups" (NSIGs) which are comprised of members from all over Australia; to seek and supply names of members willing to help run events. It is not expected that the NSIGs will actually run the event; but help to locate members to do so. (Which may or may not be individual members of the NSIG) Many NSIGs are already on board to co-ordinate their individual disciplines.*

*At the time of writing, there is no Control Line NSIG; however that is about to change! A Control Line NSIG should be established within the next few weeks – comprising specialist modellers in CL disciplines – from across the country.*

*However prior to that occurring 'we' need to think about next year's Nationals. Questions such as who is going to CD what, Judges, helpers, timekeepers, etc. required and the programming of events?*

*Many of the event CD's and other officials of previous Nat's and State Championships have done so several times over the past numerous years and some have indicated they will not do so again. (It is not fair or reasonable to expect the same people to do so time and time again)*

*Just prior to this year's Nats there was considerable internet traffic concerning the programme which had been posted and last minute changes were made to accommodate some competitors.*

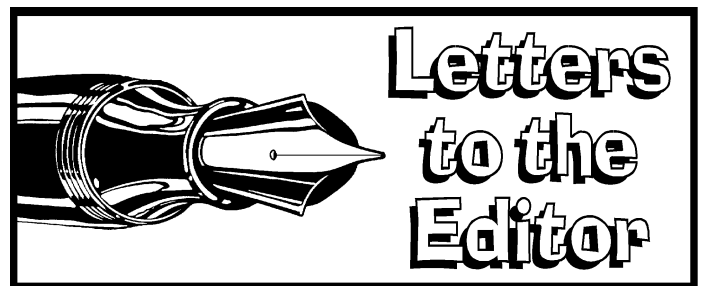
*Regarding all the information above, I am seeking volunteers from the CL community from across Australia to CD/Run/Judge/Time keep/ etc. and help run our National event.*

*This email is not coming from the President of CLAS, or the Vice President of the MAAA. It is coming from me as a fellow member of our community asking for assistance.*

*If adequate numbers of volunteers are not obtained it is very likely that your particular event may not be held or programmed to your liking.*

*If you would like to be one of the many needed people who are happy to volunteer to help our Nats happen please let me know and I'll ensure it's passed onto those that need to know.*

Bruce Hoffmann





# Combined Speed at CLAMF

## 10th November 2019



The usual entrants turned up for speed except Murray as he was in S.A.

Once again the weather did not look promising but turned out to be great for flying.

I flew my Proto model NR .28 but it was a bit slow so I put it away. Harry was flying a Class 5 with NR.21 (what else) and had 3 consistent flights, it needs some prop compression sorting to go faster, he also flew the old OS Class one model for 3 more good flights.



We had a new guy! fly speed, club president Paul. I set up my old Rossi "Devil" model with an Enya CX11, this is the engine that got me into Class 1 decades ago.

He flew well for 3 reliable flights, having never flown out of a dolly before, just hope he goes onto something faster, a NR .12 in a modern model would be the go.

I also had a fly of my old Moki

S12 FAI speed motor in my Irvine model. It runs well and sounds great. I tried to fly it at Albury in 2 rounds but had pipe seal problems, then I had a go with my old 1996 Profi, it ran OK but a bit slower than Moki.

Mark and Harry flew FAI but Marks cut out after about 6 laps. Harry had to pull out of a fast run as he had hooked the handle pivot bar under the pylon "V" and the model was starting to pitch high and low.

Andrew flew his NR12 for another 3 flights and he is getting faster, hoping to break into the 17,s which he did the week later after making up another prop slightly bigger radius and a little more pitch he did high 17,s consistently.

Ken flew a ½ A Proto with a Fora 1.5 diesel. It was OK once got tune correct, he also flew Simple Speed with a simple rat model powered by a AP Hornet glow? Time to get the NR12 out Ken and challenge Andrew.

We hoped to fly "Perky" speed but only 2 models were available so we decided to fly that the following week but still only 2 models showed up so we decided to fly anyway. But! my K&B 15 broke a crankpin on the ground, so Andrew decided to fly his Fora instead of his very fast Parra but after a few flight it seized in the air, we are awaiting the post mortem.

I have set up a model to give guys a fly of mono-line, originally it was a Two-Up but that met a tragic end. Next I tried an old Class 4 speed model that had a K&B 40, but that would be too fast for learners, so a HP40 was fitted with a few mods as well as a spring nose wheel off my old radio model. The motor had no compression, but who needs compression?

I test flew it OK so then Mark Ellins had a go as he once flew the Two-Up, he mastered it OK, then someone else tried and hit the ground twice and did a shaft run. It sounded great and the comp improved slightly.

I have fixed the damage and the model is ready for next pupil, so if you want to have a go it is there.

Robin .



Pos	Name	Class	Engine	Flight 1	Flight 2	Flight 3	Fastest	Km/h	%
1	R Hiern	Proto	Novarossi .28	29.33			29.33	197.53	91.34%
2	A Nugent	Class 1	Novarossi 12	18.62	18.35	18.13	18.13	198.57	88.36%
3	H Bailey	Class 5	Novarossi .21	17.73	17.14	17.25	17.14	210.04	86.87%
4	R Hiern	FAI	Moki & Profi	14.20	15.00		14.20	253.52	85.14%
5	K Hunting	1/2 A Proto	Fora15 D	37.11	N.E.L	30.69	30.69	117.30	84.00%
6	K Hunting	Simple/Speed	AP Hornet	30.59	26.80	27.13	26.80	134.33	82.09%
7	H Bailey	Class 1	OS CZ11 PS	20.20	19.66	19.54	19.54	184.24	81.99%
8	P Stein	Class 1	Enya CX 11.	21.00	20.25	20.20	20.20	178.22	79.31%
9	M Ellins	FAI	Profi	N.E.L					0.00%
9	H Bailey	FAI	Profi	N.E.L					0.00%

# WHY TAPER CYLINDER BORES AND PISTON WALLS?

From "DECLARATION" — newsletter of the Control Line Aircraft Association June/July 1977.

There is little doubt in my mind that one of the major factors in determining motor performance is the degree and distribution of the cylinder and piston tapers. In all considerations of bore and piston tapers, the key factors are:-

What shape is wanted at operating temperature?

What are the operating temperatures?

Since it is virtually impossible to measure operating temperature, the second question is more difficult to answer than the first, so it is with temperatures that I start. What guides to operating temperatures do we have? Some data on these does exist as follows:-

## PISTON CROWN

Large static diesel engines which have been researched for these are critical due to large piston diameters on piston crown temperatures. 425 °C is a very typical figure found in these engines. Similarly in ABC speed engines, piston crown deformation is not uncommon indicating that maybe 500 °C can be reached. We can therefore assume 400 °C is in the right area for TR motor piston crowns — maybe this is a little conservative, as TR motors are run very lean and this means hot.

## PISTON WALLS

These are in direct rubbing contact with the liner so they must be lubricated to avoid seizure. Most oils we use start decomposing around 210-230 °C so in a running motor not seized or about to seize, our piston walls must be near this, in TR motors anyway, at around 200 °C.

## BOTTOM END

Some direct temperature measurements of rear bearing temperatures for running motors have been published notably by John Kilsdonk in "Model Aviation" for various glow engines.

John found rear bearing temperatures ranging up to 100 °C with FI type motors having distinctly lower rear bearing temperatures due to fuel evaporation inside the shaft was more significant for glows than diesels but still significant for diesels I would think. A rough estimate for the bottom of the cylinder temperature from those bearing temperatures is around 100 °C. Bearing in mind that our cylinder bores and pistons are finish-machined to size by lapping and/ or honing (both 'cool' operations) it is reasonable to assume that the actual tapers are, established around 20 °C (which also happens to be the sort of temperature at which tapers can be measured by bore-gauging, etc.) We can calculate what tapers are necessary to give parallel bores and pistons at our operating temperatures.

Using the following expansion coefficients:-

Cast iron and steel — 11-13mm x 10-6/mm/°C

Brass and aluminium — 20-22mm x 10-6/mm/°C



I calculate that for 15mm bore piston in cast iron,

Crown @ 400 °C,      expansion = 0.068mm

Walls @ 200 °C,      expansion = 0.032mm

Difference = 0.036mm = 1.4 thou. (inches)

So to give a parallel piston, a taper at the top of the walls of 0.7 thou each side is required - George Aldrich's recommendation of 1.0 thou, given in the 1969 Aeromodeller Annual.

For a 15mm bore liner in steel, I calculate:-

Above TDC @ 400 °C      expansion = 0.06mm

Above ports @ 200 °C      expansion = 0.032mm

Difference = 0.036mm = 1.4 thou. (inches)

Below ports @ 100 °C      expansion = 0.14mm

Difference = 0.18mm = 0.7 thou. (inches)

Rather surprising answers, not as well supported by 'best practice' experience, as the piston calculation - obviously liner temperatures don't go as high at 400 °C as I have assumed. However the liner bore obviously must be tapered to make it parallel at operating temperature. It wouldn't surprise me as the bore tapers on Rossi 15's were about right and these have been measured at:-

Top of exhaust to TDC

Bottom of exhaust to BDC

Now to the second question of what shape is desirable at running temperatures. Most of us know what a 'happy' piston looks like when it has got dirty. It has: 'a single shiny seal' band all the way round at a uniform height of around 1mm below the top of the piston wall, the seal' band itself being uniformly 1-2mm deep. This implies a barrel shape at working temperature. Very logical, really, a uniform narrow seal band at the top of the piston is like a ringed piston with one continuous ring - good seal and minimum friction. Very light tapers above and below the seal band are necessary to squeeze oil into the seal both when the piston is going 'up' and when it is going 'down' to ensure efficient piston lubrication. If the seal band was right at the top of the piston, the sharp edge would wipe oil neatly off the liner wall - result, early seizure. If the seal band was at or below the gudgeon pin, then a good seal would never happen for a gas -leakage path always exists via the gudgeon pin holes.

More than one seal band and/or a deep seal band simply means more friction than necessary. It is now common on ringed model aero and racing 2-stroke motorbike engines to use just one ring - what is enough for them is enough for us. Since temperatures must reduce as you go down the piston wall, when cold a 'happy' piston is parallel except for a larger than theoretical top-of-the-wall taper.

Equally a 'happy' liner is one that goes 'tight' only at piston TDC, for this is the only place it needs to be tight, at running temperature. Ideally in a TR motor, the liner material should have an expansion coefficient somewhat higher than the piston material. This is because my sums show that the liner must run cooler than the piston and also because, if anything, a tighter fit when cold is desirable to ensure good restarts.

So we want higher-than-piston-material expansion coefficients, meaning manganese steel liners with cast iron pistons, or high tensile brass liners with high silicon (greater than 20%) aluminium pistons. Chrome plating liners is always good because chrome has excellent wear-resistance and gives very low friction. Rossi-like tapers ensure the right shape at operating temperatures.



# RESULTS of KMFC competition SUNDAY 10/11/19

Events were:- Diesel Goodyear — 2.5cc Diesel speed — 2.5cc Speed — Weatherman Proto Speed.

Report and pictures from Warren Williams.

A Super day, Super weather, Super models, Super contestants, Super flying, Super barbecue, and Super FUN ,WOW. (What a Hobby)

Placings, Diesel Good Year Team Race



1st Place- Grant Potter (Pilot) Ray Harvey (Pit) Note: Grant was a



2nd Place- Roy Summersby (Pilot) Andrew Linwood (Pit)



3rd. Place-Wally Bollinger (Pilot) John Nolan (Pit)

## SPEED RESULTS

2.5cc Diesel Speed

1st Place Trevor Perry

2.5cc Speed

1st Place John Nolan

Below:-

Weathermans in waiting

PROTO SPEED

1st Stan Pilgrim

2nd Phil Poole

3rd John Nolan



4th Place-Phil Poole (Pilot) Rick Bonomo (Pit) Make a Colourful pair?



Andrew Linwoods BEAUTIFUL Mr. D



A Beehive of Activity





Updated timetable of events for the "Grand Prix" at the Twin Cities Club in Albury.

***TCMAC & CLAMF Aerosports present....***

*2020 Control Line Air Racing,  
Speed, Stunt & Combat "Grand Prix"*

*January 2nd – 5th 2020 over 4 days  
Plus Swap Meet and Social Activities...*



Day	Venue	0900 - 1200	1300 - 1700
Thursday 02/01/20	TCMAC	Practice	Classic B T/R Combined Speed
Friday 03/01/20	TCMAC	Classic FAI T/R	F2A Speed Vintage A T/R
Saturday 04/01/20	TCMAC	Classic Stunt Junior Rat Race	Goodyear Vintage Combat
Sunday 05/01/20	TCMAC	27 Goodyear	F2D Combat

**FEDERATION AERONAUTIQUE INTERNATIONALE**

**TCMAC & CLAMF**

**Twin Cities Model Aero Club - Albury**

Entry \$10 per person / event \$40 maximum fly all events



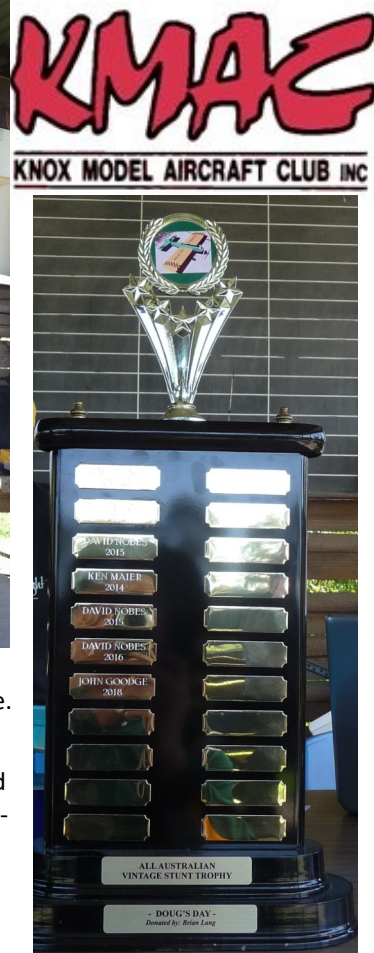
# **AROUND THE CLUBS**

The contest at Knox on November 24th was for the Monty Tyrell Memorial Trophy and the schedule used was the Classic Stunt pattern.

In addition to the events for the day was the previously postponed Doug's Vintage Stunt Day. This contest was due to be flown on October 27th but was cancelled due to the windy weather on that day but there were no such weather problems this time and eight entrants lined up with a selection of models ready to take to the air. The original concept for this contest came from the late Doug Grinham and was for Australian designed Vintage Stunters. Over the years, the number of modellers with suitable models has declined to a level that the original concept was no longer viable in terms of numbers so this year any vintage model was allowed with points allocated for model design age and the age of the engine and two rounds were flown using the Vintage Stunt pattern. Club President Reeve Marsh was the contest judge.

Garry Whitbourne and Harry Bailey are newcomers to this event and gave it their best shot and managed to complete their flights without any breakages. David Nobes was not so fortunate as he suffered some dizziness during the overhead eights and lost his balance. His "Ramrod" model suffered some severe damage.

Murray Wilson flew his "Nobler/OS 35" for the best two flights of the day to become the contest winner.



MAAA VINTAGE STUNT			EVENT DETAILS				
	Contestant	EVENT SCORE	Static	Flight #1	Flight #2	Model	Motor
1st	Murray Wilson	171.00	9.00	154.00	162.00	Nobler	OS MAX 35
2nd	Ken Maier	159.00	26.00	133.00	110.00	Hearn's Hobbies Demon	Glo-Chief 29
3rd	Robin Hiern	148.00	14.00	134.00	134.00	Aeroflyte Thunderstreak	Enya 29 IIB
4th	Derek Pickard	141.00	16.00	62.00	125.00	All Australian Mk2 prototype	OS LA46
5th	David Nobes	130.00	11.00	119.00	0.00	Ramrod	OS MAX 20
6th	Harry Bailey	124.00	22.00	98.00	102.00	Jezebel	Taipan 2.5
7th	David Lacey	117.00	26.00	91.00	0.00	Cyclone	
8th	Garry Whitbourne	54.00	19.00	35.00	0.00	All Australian Mk1	OS Max 20



Dave Lacey's "Cyclone"



Ken Maier  
attained second  
place.

During the lunchtime break the KMAC club President (Reeve Marsh) gave an update on the actions that were planned by the Knox council regarding the maintenance of the clubs flying facilities





David Nobes prepares the vintage "Ramrod"

**The Monty Tyrell Classic Stunt** entries were smaller in number when compared with some previous years. Robin Hiern was the stunt judge for the five competitors who were content to only fly in one round.

Murray Wilson used the same model that he flew in the Vintage Stunt competition and once again his flying standard was above the rest of the competitors and deservedly attained first place. Harry Bailey flew his ex Doug Grinham "Dolphin/Double Star 40" and had "Robin the judge" guessing at some of the manoeuvres but Harry was happy and surprised at his second place.

Derek Pickard had been in hospital during the week due to a motoring accident and was happy to be able to take part.

Ken Maier's Elfin engine stopped before he completed the schedule.

Reeve Marsh campaigned his "Shark".

MAAA CLASSIC STUNT			EVENT SCORES				Single Flight			
	Contestant	EVENT SCORE	NOT USED	Round #1	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	Final SCORE
1st	Murray Wilson	539.00	0.00	539.00	0.00	0.00	0.00	0.00	0.00	539.00
2nd	Harry Bailey	367.00	0.00	367.00	0.00	0.00	0.00	0.00	0.00	367.00
3rd	Reeve Marsh	341.00	0.00	341.00	0.00	0.00	0.00	0.00	0.00	341.00
4th	Derek Pickard	309.00	0.00	309.00	0.00	0.00	0.00	0.00	0.00	309.00
5th	Ken Maier	149.00	0.00	149.00	0.00	0.00	0.00	0.00	0.00	149.00



Reeve Marsh with his "Shark"



Ken Maier with his Spitfire/Elfin



Action in the line pits.



Derek's "Phoenician"



Harry enjoyed flying the lovely "Dolphin" built by Doug Grinham



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*Apologies to our subscribers to the newsletter printed version late delivery last month.*

*There was a slight glitch with the printers and the copies were posted later than usual.*



*Have a good holiday period.*

*The newsletter will be back again in February.*

# For Sale

**Speed pans** for sale. 2cc size (\$25) and 21 size. (\$30)

Also small amount of Nelson type T/R pans. (\$25)

All pans in the "as cast" state. Not finished.

Andrew Nugent. [andrew.n5@bigpond.com](mailto:andrew.n5@bigpond.com)

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I can be contacted via Facebook or

Mobile 0404205562

Ray Harvey

Viko F2E RTF models X 6	\$100.00 each
F2D RTF lines	\$12.50
F2D engine mounts with bolts	\$28.50 pair
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Thunder Tiger 20 glow. NIB	\$50.00
Enya CX11 (6 runs)	\$150.00
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Bladders F2D	\$5.00
Straight engine mounts F2E & 1/2 A	\$25.00
F2D shut-offs. (Alloy)	\$42.00
Fora tool x1	\$28.50
Taipan propellers	\$4.50 each
Combat Streamers	\$1.80 each
2" Taipan Racing Wheels	\$10.00 each
1" thick Mylar Tape	\$5.00 each

Postage not included in above pricings.

Contact:- Greg Nelson 0435757710.

As some of you already know I have taken over the manufacturing of CL props for Supercool props.

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Contact Ian Thompson

[iandthompson@msn.com](mailto:iandthompson@msn.com) mobile 0451085325

Be considerate with phone calls. I am in WA & there is a time difference from Eastern States.



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There are std type 1/4x32 thread, Nelson style tapered seat with flat coils and the "turbo style" tapered seat.

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email: [ah Heath296@gmail.com](mailto:ah Heath296@gmail.com)

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