

**NEXT MEETING IS ON  
TUESDAY 8th APRIL 2008**

The Newsletter of WRCS Inc.  
PO Box 349  
Brookvale NSW 2100

Warringah Radio Control  
Society Incorporated  
(Incorporated under the Association Incorporation Act 1984)



# **NEWSLETTER**

**APRIL 2008**



**Did you say it needed 250 turns?  
David Pound watches Mike Minty  
"power up" his rubber-band model  
(Xmas '07)**

**MEETINGSMEETINGSMEETINGSMEETINGSMEETINGS**

**The next meeting will be on Tuesday, 8 April  
2008 at Tennis Cove, Eastern Valley Way, start-  
ing at 7.30pm. The next meeting after that will be  
on Tuesday, 13 May 2008**

**POSTAGE  
PAID  
AUSTRALIA**

# SCALE DAY



## Sunday, 18 May 2008



**Classes: Military,  
Civil, both Small  
and Large Scale.  
Scale helis welcome**

**There is *NO* special manufacturer  
category for this competition**

**THIS IS A FUN EVENT WITH SAFETY  
PARAMOUNT**

**Competition Director - TBA**

*If prevailing weather conditions make you uncertain as  
to whether the event is being held or postponed,  
please check the Website on the morning of the event.*

### Warringah Radio Control Society Inc.

|                    |               |                |              |
|--------------------|---------------|----------------|--------------|
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# SOARING CORNER

by Stephen McMahon

Saturday 24th February, Mark ter Laak performed an amazing feat during aerotow operations with his Spirit 100. On release, he managed to sustain a thermal flight on the north-eastern ridge for almost 90 minutes which must be close to a record for thermalling at Belrose. Unfortunately the flight was not timed but the aerotow operation commenced at about 1120hrs and landing of the Spirit was close to 1300hrs.



Mark's fag break!!!!

There was only one problem, Mark's nicotinic acid blood levels

fell so low during the flight, he had to pass his transmitter to Colin to look after the Spirit so he could suck in a quick fag!!! With regained blood levels, he completed the flight in fine fashion.

Congratulations Mark!



"The master" (David Foster) in deep concentration during last month's electric glider contest with Peter Coles as the official timer.

David Foster is one of our most seasoned glider pilots at Belrose and has just announced his latest purchase, a secret weapon for next year's electric glider event. More about this next issue!

## Val Wins!

Val Pinczewski won the Sportsman Class in the NSW State Championships Pattern Competition held at the Illawarra Model Aero Club at Wollongong.

The competition was held on the 1st and 2nd of March. The conditions on Saturday were far from perfect because of the strong cross wind but Val handled this very well throughout his 4 flights that day. The next day's weather was much better with 2 more flights to do.

There were 22 competitors in 4 classes, 5 in the Sportsman Class, this meant that 2 flight lines had to be run simultaneously so there was time for everyone to complete the required 6 flights. The centers of the flight lines were about 40 meters apart. This did cause us some concern however once flying your concentration centered on your own model.

**CONGRATULATIONS VAL**

## IF WE NEED A REMINDER!

The photo speaks for itself and should snap you out of any complacency about working with or near spinning propellers.



**Result:** More than 35 stitches and very lucky not to have lost fingers and not to have muscle tendon or nerve damage.

## COLUMN 9.9

(incl. GST)



Peter and Elaine Coles organised a coach trip for over 40 members, wives and friends to "*Wings Over Illawarra*". There was something to interest even the most discerning visitor with flying and static displays, R/C model flying, old car and bikes and brilliant weather! A great time was had by all, **THANK YOU ELAINE AND PETER.**

While we thank people who go out of their way to help the Club, Noeline Porman has AGAIN made the replacement wind sock for the western end of the field. **THANKS NOELINE,** much appreciated.



On a beautiful mid-week flying day, before Tom Wolf collected his engine-stalled plane after landing on the strip, it was hit from behind by the landing plane of Col Buckley, The spinning prop fairly shredded the tail, stabiliser, fuselage and starboard wing. Col's plane also suffered severe wing damage, probably from the flying debris .

# PETROL [GAS IF YOU ARE AMERICAN] ENGINES AND THEIR FOIBLES

by Tom ("The Burglar") Sparkes

These days petrol engines are rapidly becoming more popular, particularly as our models get bigger and more complex, and for some very good reasons.

They are more reliable than their glo cousins, but they do have their little idiosyncrasies.

The greatest difference lies in the carburettor set up. They have an inbuilt petrol pump, so you can mount your tank anywhere in the plane, height above the carby matters not a toss, and with the throttle closed you cannot flood the engine while refueling.

Also, because of the fact that you have a spark plug and not a glo plug, the engine can be mounted inverted with no fears of poor idling or poor running.

The one thing that can be a trap with petrol engines is the little balance port on the pump side of the carby. If it is in a position that can be influenced by different air pressures, like facing into the airstream or in a pressure void inside the cowl, erratic mixture settings will result during certain manoeuvres.

The insurance against this is, when installing a petrol engine, to always solder a short length of brass fuel tube over this tiny hole and run a length of fuel tube back into the fuselage, where you will not get sudden pressure variations. If you are unsure of the location of this hole, ask me or one of the other petrolheads in the club.

Whilst on the subject of fuel tubing, remember that you MUST NOT use silicon fuel tubing, you must use the TYGON fuel tubing, readily available from hobby stores or from lawnmower or motor bike shops.

It is also a good idea to put a small cable tie around every junction of tygon over brass tubing, because the tygon can stretch over time and slip off the end of the brass tube. Very embarrassing!!

Also, the stopper in the neck of your tank must be of the gas type and not the glo fuel type. Most tank brands will supply a gas stopper.

## FUEL MIXES.

Most makers these days like you to run the engine in on a higher ratio of oil to petrol mix, usually 25 or 30 to one, using a MINERAL rather than a synthetic oil, so that the surfaces get bedded in properly.

Later, when fully run in, use a top quality Synthetic oil which you can get from a Motor bike shop, one of the offroad racing synthetics is the go, and follow the maker's advice as to ratio, usually around 40 or 50 to one.

These engines are very frugal as well, you will get about twice to three times the run time as a glo engine on the same size tank. As you can see they are very cheap to run.

## MIXTURE ADJUSTMENTS.

These engines are a bit different to glo in the way you set the high and low mixture settings.

Set the high first, and run it a bit rich for the first hour or so, and remember that when setting the low speed needle, this usually affects the high setting as well, so if you richen up the low needle chances are you will have to lean off the high a bit as well.

Listen to the transition, if the motor "dies" on opening the throttle chances are you will have to richen the low speed needle, if it "hunts and surges" when you open the throttle chances are it is too rich on the low needle.

Don't forget that as you change mixture settings on the low end your idle speed will vary, so always adjust this after altering the low needle.

## STARTING TECHNIQUE .

If your engine is of the Magneto type like a Zenoah, don't even think about hand starting, the propeller has to do almost a complete turn before a spark is generated, so just flipping it over compression is a no brainer. Either use a starter or have the motor fitted with a spring starter, which spins it over several times quickly.

Close the choke FULLY and open the throttle fully, spin the engine and when enough fuel is pumped into the carby it will "pop" or just fire once. Then open the choke, put the throttle just above idle, spin it and it will start.

If your engine has electronic ignition and no magneto, then it is possible to hand start because the spark is generated at top dead centre by the ignition battery without the engine having to do a full turn.

However for my money and because I prefer my fingers to stay attached to my hand, I use a starter even on my electronic ignition engines.

In fact with the bigger engines, say around 80cc up, this becomes a case of preferring my whole arm to stay attached to my body!!!! ALWAYS have someone help you and hold the model, those bigger engines can develop a lot of thrust and power, on full power my 3W80 will almost drag my helper (Ron Clark) along the ground with his heels dug in!!!!

Good luck with your petrol engines !!!! If you need help just ask.

## SEVEN-HUNDRED-TEN

A blonde walked into the local garage and asked for a seven-hundred-ten. Everyone looked at each other and another customer asked, "What is a seven-hundred-ten?" She replied, "You know, the little piece in the middle of the engine, I have lost it and need a new one.." She explained that she did not know exactly what it was, but this piece had always been there.

The mechanic gave her a piece of paper and a pen and asked her to draw what the piece looked like. She drew a circle and in the middle of it wrote 710. He then took her over to another car which had its hood up and asked "is there a 710 on this car?"

She pointed and said, "Of course, its right there."



# THE INAUGURAL BOWYLIE LARGE SCALE RALLY

Gundaroo property 'Bowylie' of Dick Smith

Quite a few WRCS Members have registered entries to be among the expected 180 entries in this competition to be held on 12-13 April 2008.

Just to whet your appetite, here are a few:



Graeme Swalwell's Mosquito



Peter Coles' GB Y



Dean Riebolge's Pitts Special



Tom Sparke's Laird Turner



Tom Sparke's P-51 Mustang



Ron Clark's Ryan STA with  
GB Y in the background

*This is the artwork and the words to an advert for F and M Electronics Inc. of Albuquerque, New Mexico for their "Blue Box" digital radio transmitters from the "Radio Control Modeller" magazine of October 1966.*

## THE MAN WITH THE LITTLE BLUE BOX



I married a guy with his mind in the sky  
And a heart full of wonderful plans,  
But now I am told that these plans are controlled  
By the little blue box in his hands.

He belongs to a group, a most curious troupe,  
Whose principal purpose, it seems,  
Is to gather a crowd, and then gaze at a cloud  
While clutching a box full of dreams.



They work night and day, but to them it is play;  
They would rather fly airplanes than eat,  
The weather won't stay them, winds merely delay them,  
For their stuff is too stern for defeat.



The planes that they pilot are prone to run riot,  
If it crashes they don't seem to care,  
With some balsa and glue, and a gadget or two,  
They soon have it back in the air.



Some planes have been known to take off on their own,  
Sending pilots in hot hurried chase,  
It's a school of hard knocks, but they don't blame the box,  
And the wreck is brought home in disgrace.



But I'll stick by the man with the box in his hand,  
Though it may put grey hairs on my head,  
I will not complain; if it weren't for that plane  
He'd probably chase women instead.



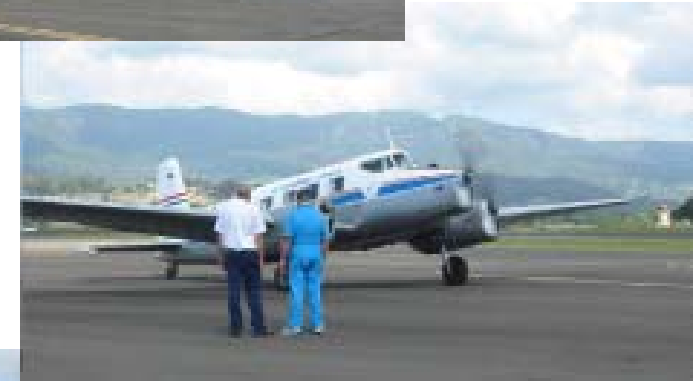
*The original advert did not reproduce well to fit into our Mag format, but I am sure your wife will agree that it is quite amusing ...Ed*

# WINGS OVER ILLAWARRA

Peter Coles reported to the March meeting that, following the very successful "Wings Over Illawarra Day" on 8th March, when a busload of Members, spouses and friends went to the Illawarra Airport at Albion Park (the home of the Historic Aircraft Restoration Society - HARS) to see fantastic aircraft fly (eg Connie, DC-3, Catalina, various Sukhoi's etc.)

After final accounting, there was some surplus kitty which was invested into an ARF Sea Fury and raffled off. The names of all attendees were put in to be drawn by a visitor, Mr Wayne Rogan, and Peter Barnes was announced as the winner. (Peter received his kit that very evening).

The only souring note to an otherwise excellent day was the unfortunate last day withdrawal of four members who had reserved seats on the bus previously and who could not be replaced on such short notice.





## THERE IS A MORAL HERE!



A C-130 was lumbering along when a cocky F-16 flashed by. The jet jockey decided to show off. The fighter jock told the C-130 pilot, "Watch this!" Promptly the fighter went into

a barrel roll followed by a steep climb. He then finished with a sonic boom as he broke the sound barrier.

The F-16 pilot asked the C-130 pilot "What did you think of that?"

The C-130 pilot said, "That was impressive, but watch this!"

The C-130 droned along for about 5 minutes and then the C-130 pilot came back on and said "What did you think of that?"

Puzzled, the F-16 pilot asked, "What the hell did you do?"

The C-130 pilot chuckled. "I stood up, stretched my legs, walked to the back, went to the bathroom, then got a cup of coffee and a cinnamon bun."

When you are young and foolish - speed and flash may be a good thing!!

When you get older and smarter - comfort and dull is not such a bad thing!!







## Another Model Cradle

Over the years I have used fruit boxes, solid MDF Channel type cradles and any assortment of devices to work on models.

All have been cumbersome, difficult to store and wasteful of precious shed space.

One evening I noticed an ad. in an American magazine which looked something like the above.



The cradle will adjust in minutes to hold most any model from a miniature to 30% scale.

I scribbled down some notes and after lunch the next day, a trip to Bunnings. Back to the shed and my prototype was complete by dinner.



It is easily collapsed for storage and whilst in use has a minimal bench footprint and tools and parts can be easily accessed.

I have found the cradle very useful. If you want to make one, the attached pictures really speak for themselves. The only parts you need to make are the four identical cross pieces, two at each end. The shape is like the letter "s" that has been put in a vice and squashed 30 to 50%. I used the top of a 55L garbage can lid to draw the radii and pushed out the top, bottom and the middle of each curve and made a few adjustments.



I did the sketch on a piece of approx. 12mm MDF, used a jigsaw to cut out the first cross piece, sanded it on a linisher, and then made three copies using the first as the template. Each cross piece is about 600mm high. The centre rod is 10mm all-thread.

I have kept cutting my rod shorter and shorter (sic) as you only need as a maximum the largest wing cord in your model collection or dreams as the case may be.

Any more and the overhang will catch on every cord or piece of clothing put in its way.

The capability for adjusting the cradle is simply created by drilling a number of 10mm holes around the centre of all the cross-pieces favouring one end. Also required for adjustment is a bottom restraining strap which is multi drilled at each end (5mm).

This strap can be any metal of 1-2 mm thick and say 30 mm high. Attach some doubler blocks to the top of each cross piece to support and restrain webbing which forms the base of the cradle and stick on wing tape (or similar - Bunnings) in the scissors to avoid hanger rash.

Good Luck  
Geoff Green

# The End of an Era - Multiplex discontinues Profi mc 4000

I was getting some help from Model Engines with my 4000 when I was told that a couple of the last batch of these Tx's is in-transit to Australia. So I guess if you always wanted one.....

For those that think 2.4GHZ is the future, third party modules are available.

This will provide a Tx with the endless mixing, flight modes and switching that MPX 4000 is famed for and the newer possibilities of the 2.4 stuff. Something old, something new?

I am told that these XTreme Link systems are very fragile and pre-flight procedure is mandatory.

I think I will wait a little longer and see the number of incidents at our club reduce a bit and/or what Hitec/Multiplex do. Hitec is due to release their stuff first later this year.

The capabilities of the 4000 are largely wasted on me but I do enjoy knowing that I will not run out of functionality if ever I make a model of the Spruce Goose.

I did find a UK website (<http://www.rc-soar.com/multiplex/index.htm>) which makes available some software from MPX which allows copying model memories both up to the Tx and down to your PC.

This requires a lead with a small circuit (less than 10 bits on the board) to communicate from the Tx (7-pin Din pug) to the PC (RS 232). I have made this lead and it works fine, (OK, after the # recheck of my miniscule circuit board).

The software is a bit ancient, operating in a DOS environment, but once loaded you wouldn't know and it provides a lot of visual screen shots of the effect of the programming and switching on your model.

Also by allowing you to print out the memory of a model you can see exactly what switches are active and all the control and servo adjustments and linkages which have been set.

Better to find out sooner than after retrieving your Rx from the big green bag.

Whilst I had my soldering machine out I also made another simple circuit which plugs into the Tx and provides access to the Rev counter function in the 4000.

I haven't tried this on an engine yet but I get a reading of 3,000 from a fluorescent light on 2-bladed prop selection so I am fairly confident this will work also.

Yeah I know you can get a small hand-held rev-counter. I got one. But it won't fit in my Tx case.

All this for the cost of \$100 in petrol and \$30 at Jaycar. Still heaps cheaper than buying it.....if you can get it.

So if there was any purpose in all the above ramblings it is to ask of any club members who are interested in talking about matters MPX a or thylacines you could contact me via e-mail at [gc.sage@bigpond.net.au](mailto:gc.sage@bigpond.net.au)

Geoff Green

