

Wingnut's

News, reviews, stories and more
from Dubbo Model Aircraft Club

<http://www.dubbomodelaeroclub.com>

Volume 1 No 3.1, November 2008

A long time coming.

This edition of *Wingnut's Wisdom* (its full name) is rather late. The last one was way back in May and since then lots of things have happened many of which are not in here because your editor has a terrible memory. Sorry. If you would like something in the next edition, please send it to the editor ASAP. mike@leys.id.au

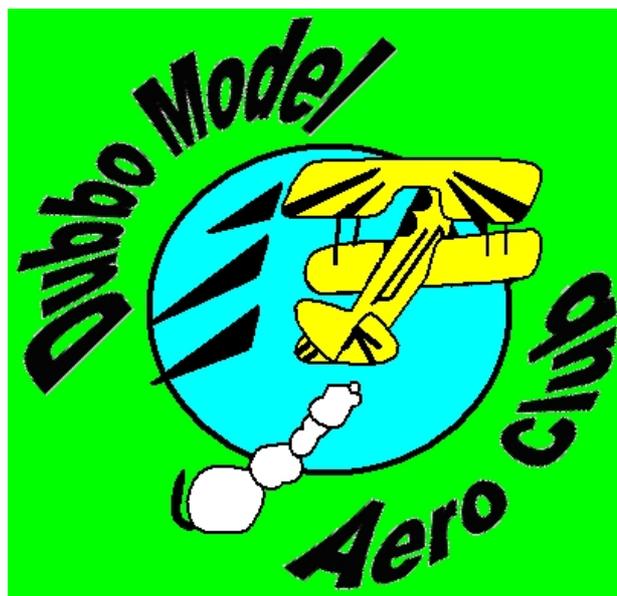
The two previous editions of *Wingnut's* have been posted to you. Mike paid for the printing and Rod paid for the postage. This edition is being sent to you as a PDF file to save paper, ink and postage costs. It is still being sent to those few non eMembers by post.

Rod's Ramblings

Presidential Pronouncements and Patter.

As we all know there is the Large Scale competition on 28th to 30th November and we need to do some final setting up so we are all ready to go on the day. Next Sunday (16th November) we will be holding a working bee to set up for the comp. Thanks to the regular crew who have helped out so far – it is really appreciated. This should be the last one for a while as with the hot weather approaching, we need to get out early to fly – not to work.

As a follow up, there will be an Executive Meeting at the Pastoral Hotel at 7.30pm the following Wednesday (19th). All are welcome to attend.



We will need people to staff the canteen over the competition days Friday, Saturday and Sunday. As this event will benefit all members, please try to donate some time to this and not leave it up to "the few". Please let Rod or Scott know the days you can help ASAP.

If anyone has a spare OTTO bin that we can use over the weekend, please let Rod know ASAP.

Contact Details -

Scott 0428 658 844 anytime.

Rod 0432 074 855 Before 2.00pm or after 8.30pm weekdays (sleep time in between) – anytime weekends. If no answer, please text and we will return the call ASAP.

Club Fuel Supplies

Incase some people are not aware, Scott Toddy handles the club fuel sales. If you need fuel, give him a call and he will organise it for you.

Glenn Bellamy has offered his place of business (Dubbo Gas & Welding in River St next to Bridgestone driveway) as a drop off point for fuel containers that need filling.

Large Scale Success

There have been a couple of large scale aerobatics events since the last *Wingnut's*. In the one *Wingnut* has heard about, DMAC's

contingent of Matt D, Scott and Alex have been doing very well indeed. Wingnut believes that Alex has been winning his class, Matt has been also doing some winning and Scott has also been acquitting himself well. As the Wingcommander used to say “Jolly good show chaps. Spiffing stuff eh what?”



Scott and Alex at Temora freezing their nadders off back in winter. (Photo from DMAC website.)

Jabiru Pilot

There are rumours that one of our number has recently earned his real wings. Matt A has been receiving instruction from former club member Rob the Chef at Narromine and has now soloed in the Jabiru Ultralight. Wingnut hears he now has 35 hours in his logbook. Well done. Spits next.

Cowra Diesel Days

If you flew model aircraft back in the 1940s and 1950s, you almost certainly used a model diesel engine. They are not really diesels – real diesels have fuel injection - but are really compression ignition engines. They rely on a fuel which explodes readily at low temperatures and to help this happen, most “diesel” fuels contain at least 30% ether. The rest is kerosine and oil with the possible addition of a small amount of ignition improver. Historically, Europe was Diesel Land and America was Glow Central. This was mainly because methanol and nitro methane were not easy to get in Europe. Times have

changed and these days, most engines are glow but with an increasing number of petrol engines especially in larger models.

Diesels still have their uses though. They will swing larger props than glow engines, do not need batteries to start and are extremely economical for their power output. As a result, they are still king in some control line racing events, with free flight devotees and are still popular for old timer events.

The Diesel Days at Cowra were set up so that the gradually diminishing number of diesel addicts could get together, swap ideas (and engines) and have some fun and really get their hands oily and smelly. Burned diesel fuel smells pretty horrible.



Mike's Magnum XL 46 with diesel head in Great Planes Big Stick 40

This year some 30 crazy oily handed people turned up and flew a wide range of control line, free flight and radio control models. Dubbo MAC was represented by Mike who flew his Great Planes Stick 40 with a Magnum 46 converted to diesel. Its first flight was OK but after some specialist tuning by a Bob Fisher from the Wyong club, it really tore up the sky on its second flight. Mike also flew his very light Sig Kadet Seniorita with its PAW 15 (2.5 cc) diesel. This engine is marginal for the quite large Seniorita but still managed to hold its own in the windy conditions.

Mike also took a case full of engines (mostly diesel) for which he had no real use and the oil

hand people swooped in and made him quite rich. He did buy one 6cc (.35 cu in) PAW diesel though. Full story at www.cowramac.asn.au

ASAA Championships 2008

As you are no doubt aware, the ASAA Championships 2008 for large scale aerobatic models and their pilots is being held at our field in from 28th to 30th November. As a result, lots of things have been happening so that this event can run well. A working bee was held on the 5th of October and lots of painting, fence building and general tidying was done. Earlier, Scott, Dave, Rod and Mike collected a large trailer load of pavers and Scott has started paving the area to the east of the clubhouse.

To allow for the large number of vehicles and trailers coming, the strip is temporarily being moved further south (down the slope) and Matt D has been seeding, fertilizing and mowing the temporary strip.

This event will be a big showcase for our club and also an opportunity for us to make some real money which we will then plough back into better facilities for the club. How about aircronditioned pits? Please offer what ever support you can to this event. Naturally there will not be any club flying over the weekend of 28th to 30th November.

Cowra Fun Fly

Glenn, Rod and Mike took part in the *Central West Fun Fly* which was run by the Cowra Club on 12th October. And what a great time we had. The blokes at Cowra really know how to put on a great event. This was a “fly anything you bring” type event but with three competition events just to add a little interest and to help us improve our flying.



Some of the planes in the pits at Cowra Fun Fly. Mike's red and Yellow Kadet Senior top left.

First event in two parts – (1) Do as many loops in 60 seconds as you can and then (2) land as close to “the spot” as you can. The third event was a climb and glide. Start your engine, climb for 30 seconds then shut off the engine and glide for as long as you can. You also had to use the same plane for all events. For the full story and pictures see www.cowramac.asn.au

Tyro Tales

Craig is now well on his way to his bronze wings. He has been flying at every opportunity and as a result has really come along well recently. His Kadet LT25 is now hauled around by an AX 46 which Mike put back together with Araldite (no kidding) and he is now confidently flying his Phoenix Classic Trainer which has not recently needed any new additions of epoxy. Hidden in Mike's shed is a very nice Kyosho Kalmato low wing model and a Thunder Tiger 46 Pro which he is waiting to build and also a slightly used Skyraider Mach II with an ASP 52. Excellent progress Craig.



Craig's Sig LT25 trainer when it was new with an Enya 25X for power. Now has an AX 46 for total overkill and a few more ounces of epoxy. It

is an excellent trainer – forgiving, tough and easily repairable when the inevitable happens. Mike has recently bought the larger LT 40 version and powered it with a Saito 56. It flies really well.

Fastest Learner in the West.

Mike was recently approached by a couple of Craig's friends who are hoping to join the club. Angus lives near the airport and Malcolm lives near Dunedoo. Mike put together a model for them to learn on and also set them up with the free simulator FMS. To use this simple program, you need a cable to connect your radio to your computer and a copy of the FMS software which can be freely downloaded.

Mike set all this up about two months ago and gave Angus a couple of flights on his Kadet Senior and then left him to play on the simulator. Angus also went out and bought an Electrafun – a small electric foam model. Craig and Angus test flew the Electrafun and about two weeks ago they test flew the model Michael had put together. **AND THEY DID IT SUCESSFULLY.**

This little story has a few lessons for all learners

1. Get some good advice – don't go it alone.
2. Get the right model/engine/radio combination so you can solo quickly and so get lots of stick time.
3. The use of a simulator – even a very simple one – greatly increases the chance of learning sucessfully and FAST.
4. Small cheap electric models such as the Electrafun (which is one of the better examples of its type) are excellent learning tools.

New Models

Quite a few new models have been seen at the

club since May. Alex and Scott have a pair of very nice Extras with large petrol engines, Matt D's Sukhoi is particularly impressive and amazing quiet for such a large powerful model.

At the smaller end, Rod built, flew and sadly lost a very nice Sig Four Star 60 powered by an OS 91 Surpass. It met its end when it flew into the sun and before Rod could work out where it was it shredded its self in the trees. Very sad. But on a happier note, his new Sig Rascall 110 with its mighty Saito 180 has had several happy outings. This large high wing model brings back memories of the Golden Age of aeroplanes in the 1930s with its elipical wing and stylish cabin design.

Tom too has been flying new wings. His largish Untimate bi-plane has been seen several times but is still having some teething problems. Its ASP 120 two stroke has more than enough power but tank position problems are causing some grief. Wingnut suspects it needs some fuel supply regulation or perhaps a header tank or the existing tank could be converted to Uni-flow. (See below).

Jim is building a new Tiger 60. It is nearly ready to go and we are looking out for it.

Mike has been churning the models out. What it is to be retired. Most recently he has built a Sig Astro Hog and another Kadet Senior. The Astro-Hog is Sig's version of a 1957 competition winning design. It was one of the first radio controlled models to have both a low wing and ailerons. Radio control back in 1957 was extemely crude and it is a tribute to the design that it flew at all. Models of this period had a life expectance of about ten flights and were built tough. The Hog flies really well but is no modern pattern ship. Mike has also flown his new Kadet with a Saito 62. The engine was still running in when it was flown at the Cowra Fun Fly but it still managed to do 19 loops in one minute and glided for more than six minutes after a 30 second engine run – much better than all the other planes except the specialist gliders. Mike's latest effort is an AFT Sig Kadet LT40.

This excellent trainer is a little smaller than the Senior and is powered by a Saito 56. It is a pity this model is not readily available in Australia as it is a near perfect trainer and would only need an OS 40 LA to fly it really well.

Mike also finally got brave and test flew his quarter scale Hanger 9 Cub. This is an excellent kit with great attention to detail. Mike has powered his with a Saito (what else?) 120S which effortlessly hauls the large model around. On its first flight, Mike was doing some taxiing tests when it hoisted its tail into the air at about walking speed and tried to take off. The 120S is total overkill for scale performance.

Field availability - *By Rod*

I have been asked by a couple of newer members as to the club field availability for flying so I think I would mention it here in case others are not sure.

Happily we are in the enviable position where we can fly seven days a week with no time restrictions. Sundays are the main club flying days and other days are for who ever turns up.

We do ask, however, that if large scale planes are there on Saturdays that they be allowed to fly their practice and test sessions in clear air – that is on their own. This will allow them to practice their complicated patterns without having to dodge your plane. Thanks.

Tech Talk

Most engines these days have the crank shaft supported by ball bearing races. These little wonders will spin at 30,000 rpm with minimal lubrication and last for several years of hard use but they do need some care and eventually need to be replaced.

There are basically three types -

1. Ones made of bearing steel
2. Ones with stainless steel balls and or races

3. Ones with solid silicon nitride ceramic material balls and stainless steel races.

Wingnut has a number of Saito engines and recently had to replace the bearings in an engine less than six months old as being the old forgetful person he is, he left the engine and its plane in his ute for a couple of weeks in the wettest part of winter. There must have been some fuel in the bottom of the crank case and the methanol in it sucked up some water and then set about rusting the rear bearing. It has a quite noticeably tide mark on it and is completely knackered.

So what do we learn from this?

1. Make sure you run your engines dry. Fuel left in the engine will attract water with disastrous results.
2. Don't leave your engines in damp places
3. Use After Run Oil (good old auto transmission oil is a good cheap alternative) to flood the crank case, especially with four strokes.
4. If you are not going to do this – learn how to change bearings. It is quite fun and bearings from www.rc-bearings.com in the USA are surprisingly cheap and their service is excellent. Postage for two sets of bearings was US\$5 and the complete set of bearings for a Saito 120 was US\$6.97. Superior ceramic coated bearings for the Saito 65 were US\$13.97. Plain steel bearings were quoted for the 120 here at over AU\$75 from a bearing supplier and over AU\$30 from the Saito supplier. I'll take the AU\$6.97 every time.

If you need some bearings changed, ask Mike for help or to do it for you. The hardest part is usually to get the propdriver off its Morse taper.

Dead Throttle Servo

Rod was recently test flying his GB Sportster with an SPE 43cc petrol engine in it. The

engine was not very happy and was missing and generally carrying on but it did get into the air. It was, however, not a happy camper and about 5 minutes into the flight the throttle became stuck pretty much full open. Luckily some desperate throttle lever action had the throttle drop enough and the plane was able to land. Examination of the Hitec 311 servo showed it had stripped gears! The vibration from the poorly running engine had torn the gears off the servo.

The Lesson - *Throttle servos are under more stress than you may think – especially on large engines which are running badly.*

Event Proposal

How about this? Next year about 19th April we run a *Warbirds for Dummies* event – a Fun Fly for Warbirds. The event is for ARF and smaller scale models of military aircraft with a limit of 135 engine size. Everyone has at least one Spitfire or Mustang in their collection so why not encourage people to get them out and fly them with us.

This is not an event for the “true” scale modeller but for the rest of us who like scale models to fly as sports models and are not really into scale competition. Of course, any “real” scale modellers would be welcome so long as they bring their smaller models so we don't feel too intimidated by their amazing skills.

There would be a simple competition similar to the one run at the Cowra Fun Fly. Maximum number of loops or rolls say, and a spot landing and perhaps a climb and glide or something similar. Perhaps a bomb drop onto a target? Or best Australian aircraft? (Chosen by a pilots' choice.)

Let Rod and Mike know what you think and dust off that Mustang or give that old Cub a coat of Khaki and turn it into a Grasshopper.

Uni-flow tanks

The Uni-flow tank has been around forever in control line circles but is less known in radio control use. It uses two clunks or two tubes connected to one clunk and just a piece of tube in the end of the second tube.

The tank is set up in the normal three pipe arrangement. The breather goes to the top of the tank, the muffler pressure line and the fuel outlet lines both go to clunks. The outlet from the the muffler should be about 1cm away (shorter hose) than the outlet to the engine.

For a more information see the following site http://www.fraserker.com/heli/uniflow/how_uniflow_works.htm

or do a search for “uniflow” on <http://www.rc-universe.com>

Tom – you read this? This could be the solution to your Untimate fuel problem.

Website - www.dubbomodelaeroclub.com

Editor Mike Leys mike@leys.id.au for corrections, suggestions and contributions. Send me some photos with some words and you won't have to look at all my pictures!