

航空雜誌



August/September 2014

Issue Number 2, Volume 5

ALL ARTICLES/QUESTIONS/
COMMENTS, SEND AN
EMAIL TO:

rcjetmad@gmail.com



AEROBAT

VOLUME 5, ISSUE 2

JUNE / JULY 2014

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From the Editor's Desk...

Wow, recently every time I have booked a flight from North Shore Aero Club and been keen to go I get a phone call the day before due to the weather and its cancelled, Talk about bad luck.

The other day I finally got to go back up in the air, Man I have missed it over the past couple of months, next on the flight list is circuits then solo!!!!

Every Tuesday and Thursday I'm now attending a night theory class, at the moment it's the best one of all, ATK or Aircraft Technical Knowledge preparing of the exams soon to follow.

And finally after about 4 months the jet has seen the air, and

about time too, its been too long leaving it all sealed up keeping the dust off it, Having that power again is just awesome.

Scott Purdy

*Cover Photo is of a
CARF Viper Jet shot
from a DJI Phantom 2
vision + Quadcopter*





From the Presidential Suite

Well the winter is halfway over and we have had some good flying days, must admit though after a week of gales and rain I am finding it hard to remember them . But we do have a golden lining for you lucky people, we can always look forward to indoor flying on the second Sunday of the month 7:30 pm in the youth centre which is behind the Estuary Art centre. \$5 per person if you are flying or free just to just come on in and have a look its good fun .



I have decided my Lysander must be finished to a flying stage as soon as possible (Gulp). So have finished the so-lartex covering and fitting the controls etc as I write this. It should have had its maiden flight by the time we are reading this mag. Fingers crossed I will be a happy lad finishing the painting and all the detailing etc. not wanting to tempt providence. Must admit though sometimes I think my self control has retracted somewhat to that of a five year old.

Earlier this week I was on the net just looking, yes just looking, at Tony Nijhuis Design site I've been looking at his 62 inch Hawker Typhoon Plans for a little while , but this time lost control of my finger on the mouse, consequently a set of plans with the CNC pack of wood etc are on their way over to my building board , so that's my Birthday present for for the next couple of years gone "if she who shall be obeyed remembers" but hopefully it will keep me out of mischief for a while, well that's my excuse. But what a grunty looking aeroplane.



The new flying times will be detailed in this issue. It is being trialled for a 3 month period starting from the 7th July, hopefully we'll have good weather so we can see the gliders in action now and into the future. The noise control monitoring is still on-going. We have sourced a decibel monitoring meter so it is work in progress.

Lovely to see the new models that were brought along to our July meeting Ross Purdy's Dynaflyte 1/4 Scale Super Decathlon, Hayden Purdy's Eflite Beachcraft Bonanza and Wayne Drinkwater's cheepass float plane is a very interesting unit Wayne

we just want to see it flying !!!!

OK that's all for now folks Happy reading and Landings to you all .

Regards

Pete Denison

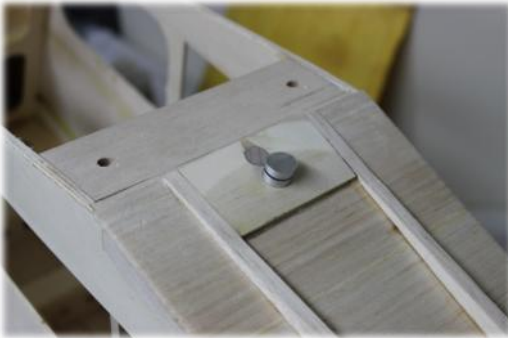


From The Building Board

Building a 1/4 Scale Super Decathlon Part II

Since the last newsletter the fuselage construction has been completed.

During the build process we came up with a few new requirements which meant some modifications to the original design. The first thing we wanted was some hard points outboard under each wing to mount a camera, this was easily done by adding a ply plate with a couple of blind nuts. Now we can mount a GoPro facing in any direction which should give some excellent views from the model in flight.



The next requirement was to be able to use the model for glider towing. Having never done this we turned to the internet to see how others have achieved this. Gener-



ally most people have the tow point just behind the wing on the top of the model. You need to be able to release the tow line from either the tug or the glider in case something goes wrong during the tow. First thing I had to do was beef up the top of the fuselage to take the load. Quite a bit of plywood was used and tied back to the wing saddle. This also provides a mounting platform for the release servo. I machined up a bespoke release mechanism from aluminium and used a 10.5kg torque servo to operate the release pin.



With all the construction completed the next task was to fit out all the servos and linkages (not one of my favourite tasks). The model has one servo for each half of the elevator, one for rudder, 2 for ailerons, one for the throttle, and one for the tow release. After some discussion Scott finally convinced me to also add a servo for the engine choke instead of the usual piano wire poking out of the cowl.

From The Building Board Building a 1/4 Scale Super Decathlon Part II



Because the engine is a spark ignition engine I also needed a way to control the power to the ignition module.

Now this became a bit of a problem as the receiver I have for the model is either an 8 channel (normal PPM output) or 7 channel + SBUS depending the mode it is configured for. As an aside Futaba is going away from multi PPM output receivers and the 8 Channel with SBUS is the way to go now.

So the model has 8 servos in total plus the ignition kill switch plus the lights that I wanted to control. It is best not to Y lead the servos together so you can correctly match each control with the Tx settings – also allows you to do aileron differential movement very easily. The only solution was to use the SBUS for these extra functions. I'm not sure you can buy such devices so after a bit of research and some experimentation (and a bit of tricky software) I've managed to build my own SBUS compatible kill switch and light controller. The light controller turns on the Nav lights (Red/Green) and also does the strobe light flasher for the wing tips using Mega bright LEDS. Now that all the servos have been fitted and are operating the control surfaces it is on to the covering.

To be continued....

Ross Purdy



My Dream Plane, The Rifle 1m

I have been dying to get my hands on one of these planes for at least 2 years and it will arrive to NZ next month



The aircraft is made by Great Planes and is the second rifle that they have made, the original rifle was around 700mm wingspan and was a bit too small for its speed. Stock, the original would be getting past 100mph, but the problem was there was no carbon

spar in the original and the wings would clap hands, People modified them to what was known as a Super rifle inserting a carbon spar in the wing. Two years ago they released the rifle 1m with a carbon spar inside already - basically a super rifle but bigger. I have only once seen it come in in stock at Tower Hobbies and it was sold out before I was awake

The rifle 1m is claimed at a stock top speed of 130+ mph but most of the videos of them are getting to the 150-160mph with the stock setup which is what I have coming with the plane. A 28-45-3600 Brushless Motor with a 50amp



castle creations lite esc and a 2200 3s 35c Hyperion Lipo spinning a 4.5 by 4.1 prop at 35-40 thousand rpm and savox 3.9kg 9g servos all round.



The construction is all fiberglass fuselage and balsa sheeted wings, so its tight to get a battery pack in - they even supply it with a shoe horn

Cant wait for it to arrive, as I have been waiting for that moment for over 2 years, its going to scream!!!!

Scott Purdy



Waynes OS20 Max



You may remember that a few weeks ago I was given a cruddy muddy OS MAX 20 and after a bit of tinkering I got it running

At our last club night I asked the best way of cleaning it up and Ross Purdy said to boil it in anti-freeze ?? I admit to being skeptical thinking I was being set up for a windup and the whole Purdy family having a big laugh at my expense, but Ross advised me to do it on the BBQ as the smell was strong!

Any way I bought an old stainless pot from a charity shop procured some used antifreeze from work as we always put new stuff in when servicing the cooling system.

Today I boiled the anti freeze which took ages to get to boil as it's designed NOT to boil anyway popped the motor in and left it bubbling away for about 40 minutes it smelled like an overheating car !! as I suppose it would.



The results speak for themselves, the motor looks amazing. During the process you can see the little bits of crud floating to the top of the pot..!



Wayne Drinkwater

Ross Mac's Time Travel



This may be the answer to the glider launch at the field.



Totally my own design. Wood is stripped from an old wire weave bed frame. Motor is a 25cc weed eater complete with magnetic fly wheel and pull start. I once spent about 1 minute hovering above the fence line while trying to land as there was a head wind. Flew at about 15 MPH.



The Weather Witch after another successful flight

Ross McDonnell



Photo's from around the club



My Stash of bits and pieces



Waiting for one on final



Wingtip Cam from an eflight Pulse 25e taken from a gopro



Thermal Thaw smackdown.



Nigels Lawn Dart.

Club Calendar

Date	Day	Event	Where & When
4 August	Monday	Club Night	Whangaparaoa Guide Hall 7-30 Pm
10 August	Sunday	Indoor Flying	H.B.C. Youth Centre 7.30 - 9.30 Pm
1 September	Monday	Club Night	Whangaparaoa Guide Hall 7-30 Pm
14 September	Sunday	Indoor Flying	H.B.C. Youth Centre 7.30 - 9.30 Pm

Member Contacts

At the end of this month (August), I will be sending out a membership list to all members containing our members names and phone numbers. This list will be sent via mail, and to members of the club only.

If you do not wish to be included on this list, please contact me via email or post (listed below) and let me know.

Thanks;

Hayden

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