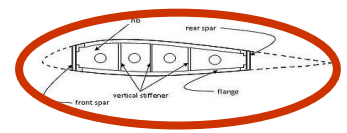


The Spare Rib News



**The monthly newsletter of the
Kapiti Aeromodellers Club**

October 2024

www.kapitiaeromodellersclub.org.nz



Kapiti Aeromodellers Club group

Notes from the Scribler



When I begin a new month's newsletter, I often read my editorial from the previous month. I could almost cut and paste from last month to this.

Those winds are still a challenge, rain has not been absent! Mowing the strip has been a challenge. We were only mowing every 3-4 weeks. Then suddenly we had growth! Problem was that growth coincided with challenging weather patterns. Getting to mow was a real waiting game. When we did mow, the grass was so long on the

Northern car park area, that the mower was stalling out. That done, the next mow provided the exact same challenges. Lousy weather interfering with mowing planning. Again, growth was longer than desired.

Hopefully things are now settling down.

A couple of flying days recently has worn away some of the rust, but we need more!

Steve

Strip marking.

Members will notice that there is now a marked line running across the strip approx. 30 metres from each end.

These were requested by the committee to serve 2 purposes. The strip line to the Southern end, is intended as a take-off beginning point when taking off to the North. This is aimed at slightly larger models, probably 60 size and up. The idea is that the pilot will be airborne around the pilot's box area and well above the track to the North, if crossing the track.

The line to the Northern end is to help with an aiming point when landing from the North. It is notoriously difficult when landing from the North to judge the threshold, so aiming to touch down around the line should help.

Just a reminder also, that if doing low passes anywhere near the track you need to know the track is clear and for this you will need an observer.

Gate lock

Just a reminder that if you're first at the strip and opening the gate, please close the padlock afterwards and turn it off the code. A number of times lately I have found the lock open and/or left on the code. That doesn't help security.

Also, remember not to lock out the park padlock. Treat that padlock as a link in the chain.

Thanks,
Steve

Presidential thoughts

Not the flashiest of flying weather, but I have been down twice in the past month.

I test flew the new 70" Corsair I assembled from a Hanger 9 kit. Powered by an OS120FS and with operative electric retracts it flew well with just some minor trimming required. I haven't tested the flaps yet.

I'm on the scrounge for some dope to assist covering a large model I'm building. If anyone has some in an old tin they won't be using then drop me a line. I'm covering the model with SIG Koverall, the first time I've used the product. Seems to go on ok. Adds significant structural integrity to the stiffness of the wing compared to the uncovered state.

And, if anyone has advice on what type of paint to spray over it I'd like to hear from you. You Tube and RC threads seem to suggest virtually any paint will go on as long as you do thin coats.

We had 15 turn up on a cold wet night for "engine night" at the hall this month. A few interesting motors, no electric though. Perhaps we need an electric night to enthuse those who fly that way.

Next month, October, we have Warren Tatham talking on the making of plastic canopies for planes.

Finally, if anyone has a plastic machine gun about 12 or so inches long to affix to a plane I'd like to hear from you, or where I can buy one.

Till next time.

John Pfahlert
0211509763

September Club Night

September club night was about bringing along any interesting engines you might have and discussing the same. The night wasn't the best weather wise, and numbers were down a bit. However, there was some interesting new and old engines on display and talked about.

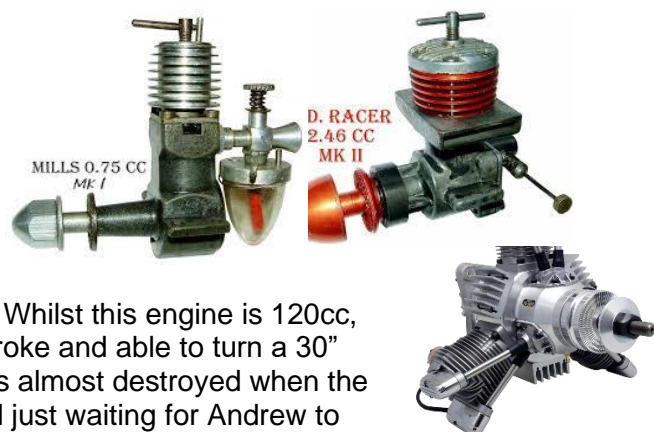
Andrew brought along his inline Valach twin. Whilst this engine is 120cc, it is massive and very heavy. It has a long stroke and able to turn a 30" prop. This motor was in his Tempest and was almost destroyed when the model was destroyed. It has been rebuilt and just waiting for Andrew to finish rebuilding the Tempest.

President John brought along his new Saito 33 3 cyl radial. He told us of the challenges of running in a petrol engine using a tank set up for glow fuel and finding the bung disintegrate.

David Puddephat brought along a DCD Super Merlin, his first engine, still in its box.

As well of tales and a show of engines, Gordon McArthur talked about his experiments with FPV and the flying wing he is using. Was fascinating.

It was a very convivial night and also yet again proved that club nights about the social interaction, not necessarily being all about the topic.





A bench of engines.

Andrew incredible Valach twin.

Gordon gives us the low down on his playing with FPV



Rally 2025

The date for the 2025 rally has now been set.

The rally for 2025 will be held on the 3rd weekend of March, 2025

Sat 15th and Sunday 16th March.

Come fly with us!

Kapiti Aeromodellers
Annual Rally
 Sat 15 – Sun 16 March 2025
Queen Elizabeth Park
 Mackay's Crossing
 Paekakariki

sport,
aerobatics,
scale, hell's,
jets, gliders

All aircraft & pilots welcome
 MFNZ Wings badge required
 No landing fee
www.kapitieraeromodelersclub.org.nz

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Shrinking dope

President John is asking if anyone has any nitrate shrinking dope or shrinking butyrate dope they would like to move on.

Thanks
 John Pfahler
 021 150 9763

At the strip lately

There have been a few maiden flights lately.

President John has maidenized both his Corsair and Hellcat in recent times. Both flew very well.

Alistair Haussmann has also maidenized his Bearcat. A beautiful beast. The pilot in this model is a 3D print of the man himself complete with hat and wings badge.



Congratulations guys. Good to see new models getting in the air!

Vintage

Last Levin Vintage Event For 2024

John Selby Memorial

Saturday 14 September

Wind date Saturday 28 September

NOTE: this event has been postponed.

For a combination of reasons, it has been decided to postpone the John Selby Memorial Vintage event to Saturday 26 October with a wind date of Saturday 2 November. Reasons include at least 7 regulars being unable to attend this Saturday and also the parking area being very soft with further heavy rain expected tonight. At least two cars have been stuck parking on the soft ground in recent weeks and required pushing out onto the firmer flying site driveway.

Hopefully the weather will be kind and we will get to fly on Saturday 26 October.

Lozenge Fabric

See last month's newsletter.

Well. John purchased. Carried out test etc. etc. Could get it to glue, couldn't get it to shrink! (ed)

Theres a new shop in town

Of possible interest is that Burnsco have opened an outlet in the old Super Cheap premises at the top of Ihakara St. It's of interest as they sell some different weights of glass cloth by the metre as well Norski and West System epoxy.

No doubt there are other things in there that could be of interest to the modeler.

It's a question of balance



President Johns simple jig

Recently the subject of balancing models came up. John Miller has a balancing jig that was originally built by Warner Summerton when he was here. John has been very good in helping a number of members balance their models, including President John. So, President John made his own recently to the same design and has offered to help members balance their models using it. Spreading the load so to speak.

So, let's talk about balancing and methods.

How complex a balancer do we need? With small models, fingers under the wings suffice but anything larger than a trainer size can become a problem,

A simple balancing jig consists of a piece of appropriate timber

with equal depth holes drilled in it. 2 pieces of dowl with rounded and cushioned ends as uprights. This simple jig is what I have used for years from small to 30cc models.

However, it is difficult with the larger models as weight

becomes a problem when trying to steady it. Ross Monk and Alistair Haussman have had Paul Buckrell's balancing jig copied. This is a state-of-the-art device and can be used on almost any model.



The simplest of all jigs



Great Planes jig

There are a number of commercial jigs available including the Great Planes jig (if you can still get it). This is a smallish jig and, in my opinion, easier to use for a smaller model.

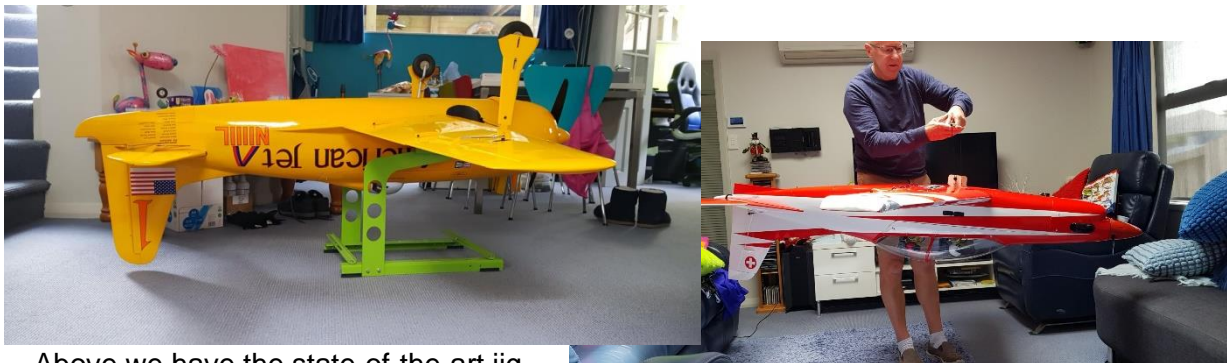
Every model must be balanced to its COG. There are many different methods used to do this. It's also good to start off with the realisation that in some cases, recommended COG for a model can be incorrect. We also bear in mind that a nose heavy model will at least land whereas a tail-heavy model may not live to fight another day. {Remember. If a fuelled model, balance with the tank empty and also try and have the tank as near to the COD as possible).



The jig that Paul Buckrell, Ross Monk and Alistair Haussmann have

This state-of-the-art jig as used by Paul, Ross and Alistair, will work with most models. Its big enough and stable enough to carry heavy models without toppling.

Some models also come with temporary fittings that mount on the wing root. A simple cord is then used to lift the model and see how it balances. (See below)



Above we have the state-of-the-art jig being used by Alistair to balance his Bearcat. Alistair balancing another model using template at the wing root.

Often necessity is the mother of invention. When I was balancing the Smith Mini Plane, I had a real problem. The COG is about 10ml back from the leading edge of the bottom wing. For balancing the Smith, I borrowed Ross's balancing jig and with helpful assistant John von Harttitzsch, we endeavoured to sit the model on the jig. Things like undercarriage were all in the way and the task seemed impossible. As the top wing is not swept and is square with the bottom wing, I levelled the fuse using a spirit level and dropped a plumb bob the from edge of the top wing. I then measured back to the COG point on the bottom wing. I then measured this distance back from the leading edge of the top wing, at the outer ends of the top wing. We then, very scientifically, used our digits to lift the model and found it perfectly balanced. Another trick I have used in balancing both a 30cc and 50 cc model, by myself, without a balancer, has been to drill a hole in one of the posts holding up my work bench. Inserting a dowel into the hole we have a very strong digit at that end. A dowel held in the hand at the other wing tip and lift it up. It works without being too cumbersome.

In thinking of putting this article together, I asked Andrew how they balance their large models.

Different models have different techniques for finding a rough balance point. Small models I just balance on my fingers at the wing root, inverted if that works better. Bigger models I might get help and do the traditional fingers at the wingtip thing. Some large models I may be able to hang the model from the balance point if that is convenient.

On the Corsair it was too heavy to lift on fingers, I used a two-point hanging technique called a Vanessa rig. (These are remarkably interesting. I looked to make one some years ago)

The other technique is to use a digital meter under each wheel and calculate the balance point with simple maths. I've never used this technique. The fancy folk use a digital balance meter, xicoy make one. It involves putting a weighing device under each wheel and entering the distance between the wheels into the device. It figures out where the balance point is in relation to the wheels and shows it on a digital readout.

Bottom line is that you need to build in anticipation of where the COG will be and roughly where it should be. Check that its close then go fly it. Most models will be controllable without the need for spare trousers even with significantly suboptimal CG.

I asked Don how he had balanced his Hurricane. That is a large and heavy model. Well, we've all seen photos of the model on its build stand. This was modified with an addition so that the model sits on the stand in a cradle that has a limited rock. The COG is at the pivot point.



Dons answer to a balancing jig

So, having found the COG, how do we know its correct? Some models give a range, and we guess what we want. Some models are just wrong in the COG recommended. Once flying, the COG, if it's wrong, can be seen in the air and shows up

when landing. Sometimes a small adjustment to the COG can make a huge difference, particularly when landing. A small piece of weight added or a battery moved slightly, may not show much on a balancer but will show up in the air.

When flying the model, do a COG check in the air. This isn't always possible on every model. Pull to a 45 deg upline, release the elevator and observe the model. If the nose rises, the COG is too far aft. The nose gently falls its about right and if the nose falls quickly, it is nose heavy.

There is much to tuning the model in the air. Read the Peter Goldsmith trimming guide which is on the club website

Some other comments on balancing. Is it necessary to balance a low wing model upside down? The answer is no, but it is easier. The COG is the same whichever way up it is, but with it being balanced upside down, the mass is hanging below the balance point, making it easier to handle and more positive in its balance. On larger models I find it can be difficult managing the model to get it upside down and have more often balanced them up the right way.

Lateral balancing is a thing. This will tell us if one wing is heavier than the other. Having offset weight in the fuse can also cause this. Lateral balancing, though, is easy to get wrong. I like to do it off a bench the model is on, with the prop removed. A loop is then passed over the crankshaft and the model suspended at the front. At the rear, it can be quite hard to find a good balance point that is central. Tail wheels and mounts are not always central.

Depending on the model, I have taken a block of wood with a nail in it and put this centrally under the rear of the fuse, providing a balance point. I've also driven a pin into the front of the stab and suspended the model from there. It's important to have all control surfaces centred so that they will not affect balance. If it is wrong, a small piece of weight added to the high wing tip will solve the issue.

Happy balancing!

Steve

KAMCI **Events schedule 2024-2025**

Event	Event Director	Saturday Primary date (Sunday rain day)
Kapiti Aerobatics intro Day	James F	19 October 2024
Kapiti Scale Fun Day	Andrew F	23 November 2024
Vintage rally day	Wayne?	7 December 2024
Warbirds day "Thunder over Kapiti"	Andrew F	18 January 2025 (Wellington anniversary weekend)
Tomboy Top Gun action spectacular	Terry B ?	15 February 2025

Kapiti Aerobatics intro Day



If you can loop and roll your model you have qualified in this introduction to basic aerobatics. Any type of aeroplane will do but we recommend an aerobatic type. James Farrow will direct the action and happily tutor those who want any help. Celebrity guest judge will be watching and there will be prizes.

The schedule will be based on NZ Pattern Clubman class and will comprise of the following manoeuvres.

- Take off
- Two-point roll (two half rolls)
- Loop
- Landing
- Half Reverse Cuban eight
- Stall Turn
- Full Roll

Field will not be closed to general club flying but event flying will be prioritised.

Kapiti Scale Fun Day

“From a distance it definitely looks like a Cessna”

If you can convince us that your model is an accurate representation of a full-size aeroplane you are invited to show us what you got. Static displays welcome too.

Secret judging may culminate in finale of breathtakingly valuable prizes.

Field will not be closed to general club flying but event flying will be prioritised.

Vintage rally day

“Pre 1970 models – for reasons”

Organisational details TBC

Warbirds day

“Thunder over Kapiti”

Calling all old Fokkers. This is your reason to blow the dust off that Spitfire that you’ve had gathering dust for years. See what it actually looks like with wings on in the bright light of day. Amaze everyone when you are able to still start the engine after all this time. If you are too nervous to fly it that’s OK, static display is very welcome too. Or simply hand the controls to someone who doesn’t give a damn.

Pilots will have opportunity to vote for their favourite models whose owners may be presented with highly coveted but worthless prizes.

Tomboy day

“Top Gun action spectacular”

Prepare for action as several barely controllable lightweight models battle it out to occupy the same piece of sky. And get your earplugs in as the Tomboys challenge the sound barrier.

Organisational details TBC

And that’s it from me.

As Don would say, ‘*Fly hard, land soft*’.

Steve

