



<http://www.kapitimodelflyers.org.nz/>

Kapiti Aeromodellers' Club Update --- June 2016



Q500's

Just some of the racers out there. I know there are others because several others have been spotted getting race tuned down at the strip. They haven't been on display so I guess they must have some fancy go fast technology in them that is being kept under close wraps . I'll have to take some covert photos when I get the chance. Looks like the racing is well and truly underway. I have heard some stories of a couple crashes and even a fly away, although fortunately the model was found relatively unscathed.

Rumour has it that the latest most popular search on Google is:

"How to get 23 000 rpm out of an OS 40 LA"



The Presidential Podium

From the Prez.

New financial year has got off to a great start with a few good flying days, although lately been a bit miserable.

New committee have had their first meeting and all looking up for the year ahead.

We achieved much last year, and shouldn't need as much done this year. However, we must make sure maintenance does not fall behind.

The committee is positive that the club is in good health, so let's crack on and make it work for all of us.

New Weather Station

You will recall last year that I researched a replacement weather station. Something that would work in our environment and be reasonably cost effective. Something also that was a commercial unit we could get support for.

It was a bit on the expensive side and given the rest of the work we were doing last year, wasn't going to happen.

Well, the question came up again and further research was carried out. Johnathan found a unit out of Hungary, about half the price of what we proposed last year, more features and installed at a number of new Zealand sites. Particularly gliding, hang gliding, balloon sites as well as ski fields.

Alistair Haussmann and Johnathan did some research and found all users very happy with what they have and the support they have been getting.

Station is very reliable.

So after further discussion, we agreed to buy a unit that not only has the wind configured, but rain as well and a camera which will allow us to gaze contentedly at the sheep grazing or the presence of other flyers.

The running costs are similar to what we currently pay for our unreliable unit.

We expect to take delivery in 2 – 3 weeks. It shouldn't take long to get it up and running after it arrives.

If you want to see what it all will look like, go here.

<http://holfuy.com/en/data/358>

This is the site Alistair has set up for us. Obviously no data as yet. APPS are also available.

Mid-Winter Dinner.

As mentioned, Cookies is the place, 25/6 is the date.

Put it in the calendar.

We need 25 people to have them open for us on a Saturday night.

Names will be taken in a couple of weeks.

At the Park.

Warner, Don and I met with Wayne Boness a few weeks ago to discuss what is going on.

Salient points:

- The increased rabbit problem was reported earlier by us as well as the Pony Club. Wayne has had their pest controller out to have a look. Hopefully they will be able to do something.
- They are hopeful aerial spraying will recommence later in the year. That would be good for us as they will do the Blackberry.
- Tree planting in the park. They intend to have a couple of big efforts as they did last year, rather than a larger number of small efforts. Wayne will send me a planting programme and we can select one of the planting days we can support as a club.
- Wayne is making available some more flaxes for planting at the Northern end of the runway, by the cycle lane. To replace those that have died.
- Warner suggested we look at a hedge along the Eastern boundary fence, on our side. Would serve 2 purposes. Give a better visual line and also soften things in the event of a mishap.
- Wayne was asked if we could source suitable plants through their buying programme. GWRC have included 100 extra plants in an order with Porirua nursery for our use. The park will meet the cost.

And that's all from me.

Steve

Safety at the strip.

Gone are the days that we can just say "she'll be right" and get on with it. These days everything has to be looked into and there is a big push on safety. Most of this has no doubt been driven by the poor safety record in some industries, especially forestry. As mentioned in the April newsletter, the club, (as requested by MFNZ) has completed a Risk assessment as well as a Safety plan. It was also suggested that the club have a nominated "**Safety Officer**". Yes!... I can see you all rolling your eyes, but it's a fact of life.

I'm pleased to advise that **Roger White** has offered to take on this role. Roger has plenty of experience in this field and will be re-assessing hazards at the field, as well as assisting with some training. Things like, do you know where the fire extinguishers are kept?. Do you know how many we have, and what type?. Where is the first aid kit located?. Simple things but worth knowing. Roger will also be tapping you on the shoulder if he thinks that you are operating in an unsafe manner. Yes! roll the eyes again...

Please make Rogers job easier, by being pro active and keep safety in mind when you at the strip.

Rescue and recovery missions.

Rebuilding the SIG Cap 231 ex... by Steve Hutchison.

In early 2015 I watched John Ellison pull this magnificent looking model from his car and assemble it ready for flight.

Talking with John, it was the first flight after a reasonable repair, one of several he had done over time. The engine was run up, everything checked, and the model took gracefully to the air. A few clicks of trim were all that were required and John was hands-free.

Sadly the engine stopped, the model tip stalled and arrowed in the backside of the sand hill opposite the clubhouse. The many pieces were re gathered and John offered the model to anybody who could be bothered to repair it. Terry and I both put up our hands and I won the coin toss.

John stripped out all his gear over the next few days and delivered the bits to me.



As can be seen, it's hard to get an appreciation of all the bits there were. The wing was put to one side and the covering carefully removed from the fuse in an endeavour to save the decals. The covering from just in front of the stab back was left, as this area was undamaged and lots of decals. It's easier to repair the front end of the fuse before trying to put the 2 halves back together. The engine bearers had driven back into the firewall, creating a concave fracture across the middle, but all the stringers were still attached as were the fuse sides. Rather than remove the firewall and have to get all of those mounts square again, a plate was placed behind and in front of the firewall and a clamp used to pull it out. It didn't look too bad, so the fractures were opened up a little and expanding urethane glue used to glue back together and the clamps used to keep it straight. When dry, slots were cut thru the firewall across the fracture and 3mm ply was glued to better keep the pieces together. When that was dry, another firewall plate was cut from 3mm birch ply and glued to the repaired firewall with epoxy and fibreglass cloth sandwiched in between. The pieces behind the firewall which were broken were soon repaired, the former at the wing leading edge replaced and the sides of fuse that weren't great were cut out and replaced.



Keys as used in the firewall and front fuse sides to add strength.

The panels below the firewall and across the bottom for the undercarriage mount were replaced and the undercarriage mount redesigned to (hopefully) be stronger.

It was now time to join the back and front halves together. I removed a number of items from the internal fuse to make it easier to repair. Cut a new wing bolt plate etc. As the fuse had broken towards the front one side and back other, it was going to be reasonably easy to repair strongly, but a challenge to get straight. A jig was built to line up the 2 pieces and a string line run from the fin, down the centre of the fuse to the firewall. Centre marks had been made on the fuse progressively along the top so as long as the string line touched those, we were straight. Measurements were taken both sides to make sure there wasn't a twist. With the broken pieces of fuse carefully lined up and in place, a few drops of CA were used to lock the pieces together. Doublers were then cut to strengthen from the inside and when all glued, the external joins were reworked. In places triangle stock was cut to strengthen the inside joins and fibreglass cloth also used. The messiest piece was the broken plate underneath the cockpit. It was too hard to remove the old to cut a new, so it has new on top of old.

Repairing the cockpit was another challenge. Although the clear canopy itself wasn't damaged, the painted plastic frame it attached to was. One side was in a number of small plastic bits and part of the front was gone. The side that was broken had all the plastic bits that the bolts went thru, still attached to the bolts. I mounted the whole thing on the fuse and viewed what was missing. Because the frame actually fitted over some balsa mounts, I was able to get in behind it. I cut a piece of litho and glued behind the pits held in place by their bolts and what was left of the ends. When dry, I mixed a filler of epoxy and micro balloons and filled in between the plastic bits. Sanded it came out not too bad. The missing curved piece at the front was another challenge. I used plastic tape to fill over the broken bits and cover the missing bits. I used this as a mould of sorts and fibreglassed a curved piece the same. After some sanding and trimming, this was glued into place. A bit of epoxy and micro balloons to smooth the finish.

The original was painted. I carefully cut Oracover and glued over the finished article. Not perfect, but not bad.

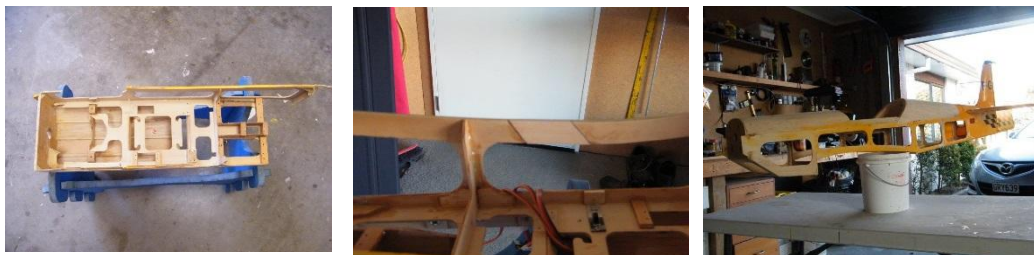
Basically the fuse was now finished and hung on the wall and forgotten about for some months. I really didn't want to start the wing. The time came when the wing came out and studied at some length. The problem with the wing was missing part ribs and the double taper. Eventually I was able to think my way around it with straight edges and stuff and the wing repaired and the 2 pieces put back together. Fortunately the decals on the wing were mainly untouched and I kept the recovering requirements to minimum.

More time passed by and given lousy flying weather lately it was time to get it out again. Everything was checked over, engine mounts, throttle cable guide, tank mount checked, servos mounted etc. All much easier to checkout without any covering.

The model was then covered in matching Oracover. I then had the challenge of the decals. The 'Breitling' for one side was intact and I was able to take measurements for letter spacing. These were taken directly onto a piece of masking tape which was then stuck down to the fuse. Each of the letters were cut out from the original decal, which in most part were still stuck to the original covering. Each letter was then glued to the new covering using PVA (not too much). The reason for the PVA is simple. PVA will react to an iron and stick. As we already had original covering behind most of the letters, this meant that when dry, I was able to run a covering iron over each letter. Warm enough to activate the adhesive, not too hot to create problems with the original decal.

All the decals were cut out and installed this way, except for the diamond pattern at the front. These were individually cut from solar trim.

I was very lucky with the cowling. John had purchased a new one when he had damaged the original a previous time, so that save a lot of repair work.



The model is now finished and just needs balancing. The power plant is a Saito 125 4 stroke I purchased from the 'net at the right price. Servos are Turnigy 1258 TG, Titanium geared, coreless jobbies with lotsa torque. These were on sale at HobbyKing at the time. Research shows them to be good enough, but we shall see.

Just need a fine day now.



Club Night-- May 2016

Andrew Farrow gave us a talk on the building of his Fokkewulf 190. One soon realises that building scale aircraft is a very time consuming affair. There is so much research to be done , and a lot of experimentation with getting things to work right. I now know why they are not for the faint hearted and questioning why I have started building two scale models. Andrew has done a brilliant job with this model. He did touch on some things that he would not again, so if you need any tips on scale models or "how did you do that", just ask Andrew.

PS: (we have some very talented model builders in our club , so of you ever get stuck don't be scared to ask , after all why try re-invent the wheel).

Roger White gave us a brief update on what he intends doing in his newly appointed role of "Safety Officer" . More to follow on this in future editions.



Andrew and James Farrow along with the FW-190

Thanks guys for your contributions.

If you have something to share on club night , please don't be shy. Get hold of a committee member and they will get it arranged.

Couple interesting links ...from Wayne Elley

- 3D printed military drone that can be made anywhere & launched:
<http://www.mindkits.co.nz/blog/SULSA-3D-Printed-Unmanned-Aerial-Vehicle>



[A-](#)

Ed's note: *I've heard of "bind and fly" but "print and fly" ?... now there's something different*

- Quad copter that can land in and take off in water:
https://youtu.be/-5MxUmLwg_A

The quad copter looks a bit like , "something fishy going on here " , but you can make up your own mind.

Buy, Sell ,Swap...

Roger Bunkenberg is having a major clean out . Herewith is a page of photos of the stuff he wants to relocate to someone else's place.

Photos and brief overview by Paul Buckrell.

- The glow engines are in the range 0.4 - 0.46 and need tlc as they have not been run in quite a while and need cleaning inside and out.
- The radios gear is on 40MHz, don't know the exact channel. The Futaba 8UAP transmitter is in very good condition.
- I've seen the F-15 fly and it was good, but again, the engine now needs attention.
- One of the gliders has two good wings, one with and the other without spoilers.
- The hovercraft has been flown in the KAMCI clubhouse.

So looks like some bargains to be had. Some 40 size glow motors , ideal for converting into a racing engine for any budding Q500 pilots.

Roger can be contacted on 04 934 3997. He lives in Newlands, Wellington.

I've made collage of the photos to try keep the file to a manageable size . If you want to have a look at any photos in more detail, flick me a mail , and I'll send though the individual file. Better still give Roger a call , and go have a look first hand.



Aborting the take off.

We all know how to take off, after all, we've been doing it for years, and we've got our Wings badge. Just hit the throttle, yank in some elevator and we are flying. Easy as.

think there are some finer points missing from the above ...

- How well you are tracking down the strip? Is your model veering off the centre line? and heading towards the pits or the clubhouse or the fence? .Have you got it all under control?
- What's your speed like?. Is your model wanting to fly or does it feel like it's been glued to the strip?
- Is the engine running properly? or is it coughing and spluttering and not getting to full power?
- Does the model feel different to previous flights or take offs?

If any of this is happening , or things don't quite feel right for any reason, then don't be afraid to **abort**. Shut down the throttle, get the model back under control, taxi back and if the engine is good, start again. If it still feels odd, abort again and go check it out in the pits.

I have seen too many take off's at our club where the model is heading off the strip but is still yanked off and climbs out either over the dunes to the East or worse still, over the clubhouse or the pits. Sometimes they are yanked off with insufficient speed, and with the increased angle of attack the models stalls. It usually gets ugly after that.

So challenge yourself next time you take off , see how nice and straight and smooth you can make it. Keep up the speed , gentle on the elevator, and don't forget the rudder.



If you have something you'd like to put in the newsletter. Please send it through to me or one of the committee. I need items at least one week before the end of the month please. It doesn't have to be long or fancy.

And that's it for another month .

Fly hard ... land soft.

Cheers
Don