



Ripping up the sky - Something we all enjoy watching! – Skillfully Controlled, Well Done Malcolm.

KAIAPOI MODEL AERO CLUB

March 2017

Editors Report

BIG thanks to those who have sent in articles & photos to share! Without your input we have no magazine! So keep`em coming!

Wow, this year is just cranking on past, almost the end of March already! I apologize; I have been reasonably committed with work, home & mostly largely involved in the recent Port Hills Fire (along with Allister, once he returned from his honeymoon). I am endeavouring to make it back out on a regular basis & get stuck into getting loose again. For those of you who are new & need some training – organize to give me a tinkle prior to the weekend so we can

get you up in the air, I am happy to train on both modes. Upcoming for me is another Beaver Tug for my other new glider! More on them next month...

Happy flying, Mark McCrorie.



Vice Presidents Building Board...

PHOTOS!!!

WE NEED PHOTOS!

Do you have some photos you want to share?

Email them to:
kaiapoimac@outlook.co.nz



Presidents Report

Hi Members

Well we had our club AGM on the 27th of February, and I would like to thank everybody who attended.

We have two new committee members, Rob Storer and Ross Pepper. Ross has a building background so he is going to be very handy when it comes to building our new deck and shade area around our containers.

Rob has contacts for machinery to help with our upkeep of our field, which will be also very handy.

As some of you know we have a sheep problem down at the field, so at the moment we are getting prices to put up a fence around our field to keep the woolly sheep out. We hope to make a start next month.

Once the fence has been put up we will be having a few working bees.

Don't forget subs are due in before the 31th March 2017.

Up Coming Projects

- Marking out the pits area that also needs a stone pick up.
- Marking taxi way.
- A deck to be built outside the portacom.
- Post and shade cloth to be put up around over the area of the containers, so we can get out of the sun on those hot days.

So you can see we have a few things to do to get our field up to scratch.

I will keep you all up to date with the progress of things, and we will be calling on you for some help soon.

That's all from me at the moment, so keep safe and happy flying.

Thanks

Mark Strawbridge



Presidents Project...

Slick 540 – 35cc

Well I have finally got up the urge to get myself another aerobatic plane.

This is an AeroPlus Slick 540 35cc, just got it last week. It's a very nice kit and it's going together very nicely.

Attached is a pic of how far I have got with it. So I have just installed the rear stabilizers, they have a carbon fiber tube going through and are attached with screws and epoxy. Will keep you updated with the build.

Mark Strawbridge

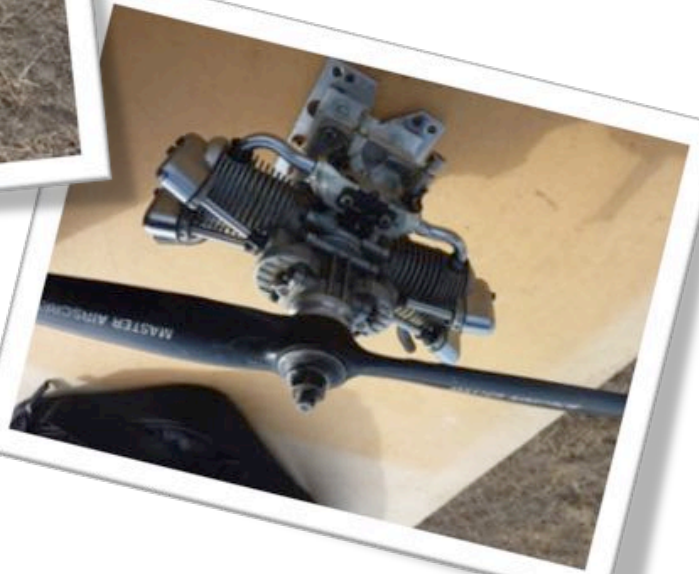
Neil MacDougall's **Final Wish**



It was one of Neil's final wishes that the Kaiapoi MAC collected all sorts of gear from his garage and was offered firstly to our members with the money going back into the club.

So come along and grab a bargain, that model the wife shouldn't know about, or just another project for the winter!

Remaining items will then be offered to out of club.



23rd April 10am

**KMAC MEMBERS ONLY
KMAC FLYING FIELD**



Small Job, Big Challenge...

A while ago I was given a Boddington replica Mills .75cc diesel motor that had no compression because the contra-piston was loose and was not sealing. When the motor was turned over oily bubbles came out round the compression screw. Someone had tried to make a new contra-piston, but it still leaked. I have a lathe, I have enthusiasm, but no experience or skill so it seemed an interesting challenge to have a go at fixing it

Five failed contra-pistons later I consulted uncle Google once more and found a method that looked as if it might work. Pictured right is the motor and the previous contra-piston attempts. The contra-piston is a mere 8.6mm diameter.

The ideal material is apparently cast iron, which is almost impossible to source in small size/small quantity but eventually I found an old coach bolt that that looked right. It turned out to be cast iron, and I soon learned that everything I had read about the material was true – it is a curse to machine.

The new method is to make the contra-piston like a miniature pot, with thin walls, and make it tapered wider at the open end. When fitted it should fit easily up to half-way in, then it should be too tight but the thin walls allow it to compress in to give a gas tight seal when forced home.

First I machined the basic shape but oversize, then bored out the center. I had to make a boring tool as the hole has to be flat bottomed, and is also not to a standard drill size. I ground an old 1/8" drill bit to the required shape and managed to do a reasonable job with that. The contra-piston was then parted off. Then I machined a mandrel from brass to fit into it snugly, and super glued the contra-piston on the end so I could mount it in the lathe for the final machining to size and the polishing – with the required taper.



The contra-piston on its mandrel



Polishing with wet and dry paper glued to the back of a chisel, which has a true flat surface for accuracy



Test fit the cylinder, it just fits on the end so more polishing needed to remove another thou or two



Perfect. Fits to half way now, so if forced in it will form a gas tight seal but still be able to move to adjust the compression. A bit of heat to cook the super glue and pop it off and we are done.

The motor was reassembled, oiled up to show any leaks as bubbles, then the moment of truth arrived.

No bubbles round the contra-piston – success!

Well not quite, still not much compression and bubbles showing in the exhaust port show that the piston seal is shot. Ah well, look forward to another article some day.

Brian Emslie



Altitude is your friend!

Be sure to maintain a safe altitude so you have time to react in the event something goes wrong.



PRE-FLIGHT CHECK LIST

AIRCRAFT BATTERY

- Are they fully charged?
- Are they properly plugged in?
- Is the battery hatch secured?

PROPELLER/FAN UNIT

- Is the prop secure?
- Is there any debris in the fan unit?
- Are there any cracks or imperfections on the prop or fan blades?

FUSELAGE AND WING

- Are there any cracks or loose joints on the fuselage?
- Are there any holes in the covering?
- Is the wing securely fastened to the fuselage?

CONTROL SURFACES

- Are all the hinges secure?
- Are the control horns and servo connections secure?
- When the radio is powered on, are all the control surfaces centered?

RADIO

- Do you have the correct model selected?
- Have you performed a full range check?
- Does each control surface move correctly, corresponding to the stick movements?
- Are all the switches (gear, flaps, etc.) in the correct position?
- Is the battery fully charged?



Conquer Workshop Clutter This Weekend!



This type of clutter is all too common in RC workshops across the country and subjects your models to unnecessary risk.



There is a better way to store your prized models.

More on this project at:
www.flyrc.com

