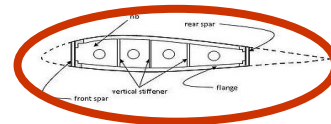




October 2019

The Spare Rib News



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

From the Scribe:

Last month was the start of spring and this month daylight saving. Almost as a teaser, Saturday the 21st was an absolute pearler, with several of us at the strip all day. There was only one 'major' repair job required, but maintenance for some going forward.

Barry Symonds had an incident with his Edge 540 which again proved that ARFs aren't necessarily built strong in some areas. A dead stick saw Barry get down onto the strip in good shape but tripped over his undercarriage. In turn the prop hit the turf. Prop didn't break, but the whole firewall was torn out.

For me, the little aerobat I blat around with from time to time, powered by an ASP 52 2 stroke, decided time was up and sheared the crank pin off the crankshaft. As this motor was built from parts of 2 ASP 52s (I can't remember why), I found the parts I had left includes a good crankshaft, so hopefully will be back in the air soon.

The Smith mini plane had a really good work out, but unfortunately the covering started to peel off the fin. This was taped down temporarily but recovering of those surfaces is getting underway. Elsewhere, John von had some great sorties with his new glider and ex Warner Tomboy and Alistair H brought out his new Pilatus PC-9 for field trials. Phil Patterson beat up the air in his usual fashion and a number of others enjoyed a great day.

Since then, the weather has been downhill and the only thing on the way up is the grass. In the middle of winter, we got out to at least an 18 day mowing time, 10 days at last turn around but by the latest growth spurt will have us back to weekly for a while.

The new-look and revised rules have been sent to all members.

This piece of work owes a lot to Neil and Mike who put a lot of effort into the documents themselves.

Weather has been against any Tomboy or Vintage flying this month, but hopefully October will prove to be a little more settled.

So then. Grab a coffee, put away the gluepot and have a read of this month's newsletter. If it's too short, read twice or send me an article for next month.

Cheers,

Steve



The Vintage Aviator

Last month I reported on the trial of Gene de Marco and a little on TVAL.

Our newsletter goes to various other clubs, and I received the following back from Lloyd Dickens, President of the Wairarapa Model Aero Club.
Thanks Lloyd, appreciate your input. – Steve



I read your comments in your magazine about the TVA.

While they have not been opening their collection to the public, they have during the 2018/19 Summer been flying once a month during the last weekend in the month.

As I understand they are still manufacturing aircraft.

There are moves in the Wairarapa to provide a museum on Hood Aerodrome that would house the TVA collection. This is subject to funding, but we are not being kept up to date with that process.

*Regards Lloyd Dickens
President Wairarapa Model Aero Club.*

A photo op from the past

Kath picked up a coffee table book we have the other night, called '*Remember when...*'. Written in 1999, it has a couple of pages featured for each year from 1900 through until 1999. In the year pages for 1944, the below photo was espied. The caption read: "*This Auckland Model Aircraft gathering shows the country's continued interest in aviation*"



Black Wire corrosion?

What started as a couple of simple emails, brought out quite a good article from Bob McGrath. I hadn't heard of black wire rot until I started back modelling and was unaware that the problem I had encountered on some old car wiring looms was, in fact, this.

*The following makes interesting reading and was supplied by Bob McGrath.
Make sure you read right through, as there are some twists.*

Recently I pulled out a couple of bags of generic "JR" servo leads that I purchased from HK a couple of years ago, these were all new and un-used and stored in dry conditions in the original plastic bags. It is worth noting that these leads did not have pre-stripped and tinned ends. On stripping the insulation ready for soldering I discovered that 50% (10/20) of them had black wire corrosion on the negative lead all the way from the plug to the outer end. Two bags displayed the same problem, so I think the problem is statistically significant, at least for leads of this age. if you have used these leads it may pay to check for blackwire, especially if they are used in a critical situation.

"There is plenty of speculation, quite a bit of science and a lot of people pontificating on forums about black wire syndrome, black wire corrosion etc, and it has been a known issue for well over half a century, but the important things are:

- Keep an eye out for the signs - the example above is classic for a radio control plane, but it would show up differently in a camera, or a radio, or a car or boat (yes it happens there too, and can seriously affect motor starting) - check the "earth" wire from the battery to see if it feels hard and rigid (bad) or soft and flexible (good).
- Voltage without a load doesn't tell you everything about a battery. It's a bit like taking the filler cap off your car. You can smell fuel in the tank but have no idea how much fuel based on smell alone. Voltage under load is more telling. If a car battery drops below 10.6v when starting the car, reach for the phone and the credit card.
- This corrosion usually happens on the negative wire, and will affect the whole wire, not just the exposed strands (there is some thought that the cable coating has an involvement in creating the problem).
- It can also affect the connectors and battery switches in the circuit.
- You can replace the wires - it's seldom worth it on nickel cadmium and nickel metal hydride batteries but is certainly worth it in a car or boat (and also worth using nice thick cables, and please use lovely braided cables on classic cars, if appropriate).
- You can't clean the affected wires or do anything to put it right or reverse the problem, once it is there, other than replacement of wires.
- It tends to occur more where a battery is kept below peak voltage, and no current has been flowing for a while.
- It is very hard to see without stripping some wire, but you can check it by setting a multi-meter to the resistance setting and comparing the resistance down the length of the red wire and black wire. You'll see no, or almost no, resistance down the red, and if the black shows a different result then the time has come to solve the problem.
- and, if it is of any comfort, it is happening just about all the time. Old cabling is generally not going to perform as well as new cabling, once it has been connected to a battery for a while".

Ref: <https://www.batterybusiness.com.au/blog/black-wire-corrosion>

It would be interesting to know if anyone has found the same problem.

So, having received the above from Bob in 2 instalments, I asked Bob the following question, which I am sure is in everybody's mind:

Hi Bob.

Thanks for that.

Really good.

Question: -

If these leads have been in a packet over time and not been used, how come the earth lead has that corrosion?

They've never carried power?

And Bob came back with the following: -

Hi, a good question indeed! I am no expert. There is some debate around the precise formulation of the plastic used on the negative wires (the black and brown pigments specifically) as a causative factor in black wire corrosion. I suspect that this occurrence may confirm that belief that no current is required to cause the corrosion. I tend to the idea that these leads may be a batch anomaly but am very suspicious, this is why I was quite specific about the time I bought them and the fact that the ends were not tinned. No, they have never carried power, in fact one bag was still sealed. It could be the plastic, or the copper itself I really don't know.

Not being content, Bob asked the guru on everything, Barry Lenox and received this reply: -

"I have come across this several times with new leads.

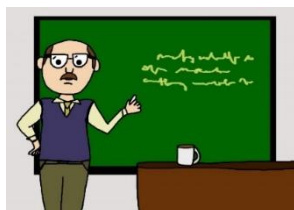
The answer lies in an obscure MIL-HDBK which I cannot now recall, but I have a paper copy in a metre-high pile. Anyway, there's an absolute prohibition in using PVC insulated wire in aerospace and military systems., for two reasons

1. It's flammable and releases nasty and toxic fumes when ignited.
2. It can release chlorine and related compounds by out-gassing. This combines with moisture to generate Hydrochloric and some other acids, which attacks the copper.
It seems to me that there's many different grades of PVC and some would be worse than others. Chinky Chinese stuff could be lower grade or excellent, but you never know what you are getting."

I always thought our wires were Silicone coated and not PVC, but it's an interesting discussion we can all learn from.

Steve

September Club night:



Quiz maestro Alistair Haussmann designed a really good, interactive quiz for the night.

Questions were often from left field, all aviation based, and I doubt anybody came anywhere near getting all of them right.

Some examples:

What was the first composite commercial aircraft?

Join the dots to link the nicknames of planes to the plane.

There followed a list of planes and a list of well known and not so well known nicknames.

The quiz layout was well thought out.

It was a really fun night, enjoyed by all.

Thanks, Alistair, for the effort.

Steve

October Club night:

At this stage I'll pull some video off the web so we can enjoy some of the large models out there as well as some of the 'unfortunate' mishaps.

If you have anything that you think could be included, let me know.

November Club night:

Will hopefully be some build updates on a couple of large models being built in the club at the moment.

Steve

Mouth to mouth resuscitation?



Problem glue joint?

I recently had a problem with gluing some hardwood longerons, finding (after the glue was dry) that they didn't line up as they should.

The joints needed to be taken apart, and that would be a major.

So I spoke with our resident woodworking guru, Colin, and found that having used epoxy, the joint can be destroyed by the simple application of heat.

Out with the heat gun, low setting, bit of pressure on the joint and all came apart effortlessly.

Re-aligned, reglued, and all is well.

September Weather Woes - The Von Report



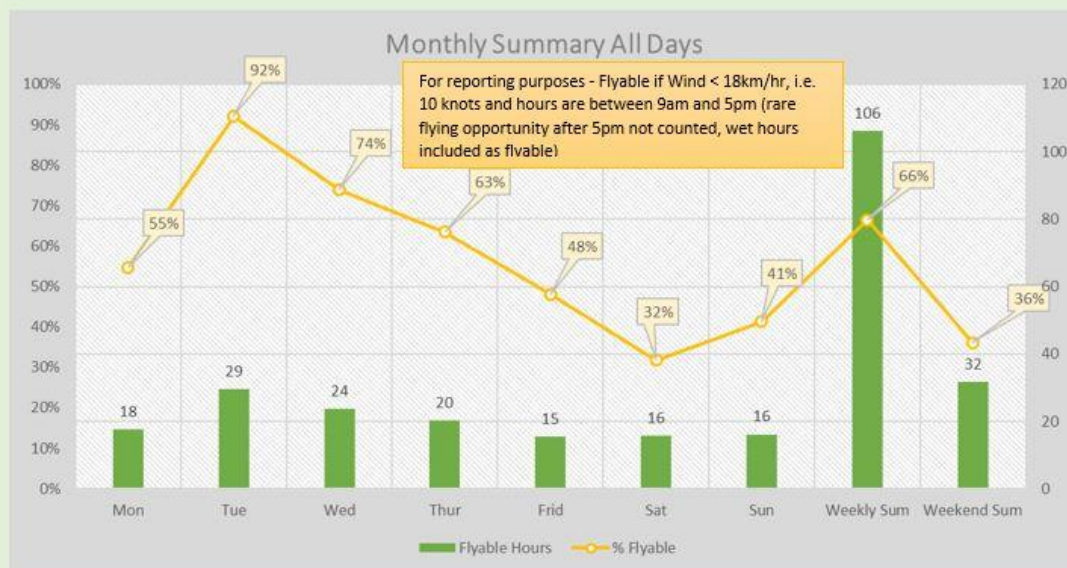
HOLFUY



Should I have flown this month!

Our weather watcher stats show conditions were again pretty good for a lot of the month. Best weekday Tuesday flyable 92% of available hours. While weekend flying hours were less than ½ that of the weekdays, with Sunday 41% flyable.

Monthly Thought from the Captain; "Take your time to get your model ready for flying, best to get things right on the ground, it never gets better in the air"



Alastair & Ian's visit to Barry Mansfield's hobby hanger.



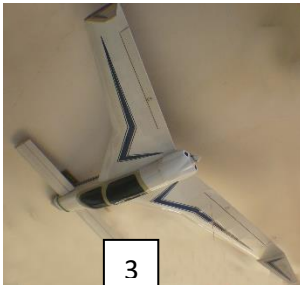
1

Barry and his wife Lynn live in a nice house in Whitby with two cars in the drive, indicating the garage is for more important stuff and we weren't wrong.

Barry started aeromodelling in 1952 the same way we all did back then and still has information books from that era, (1). Wellington Boys College sport grounds was one of his flying fields and his first engine was a .049 Cox and he built a 36" free flight Tomboy for it. On the first flight the motor cut as requested but then got caught in a thermal and that was the last he saw of it.

Barry's occupation was a panel beater with his own business and at some stage got involved with hang gliding and the building of. He got back into aero modelling again 20 or so years ago and some of what we saw in his garage and one bedroom was the result of the last 20 years of model building, machinery and other interesting stuff. Taking centre stage in his garage and in the process of being built is a large vintage Mercury Mk 3, fully balsa planked fuselage, fibre glassed over and like all his builds, is going to be one to admire when finished. (2)

Photo 3 is a Rutan canard 'Long Eze' which is yet to be flown.



3

We noted that a lot of his models are hung from the ceiling with plastic coat hangers. Photo 4 is a scale Primary glider and like the full size needs a heap of differential on the ailerons to get it to go around corners properly. Some covered part of the rear fuselage which helped lateral control. Photo 5 are a small drop saw and table saw made from Perspex.

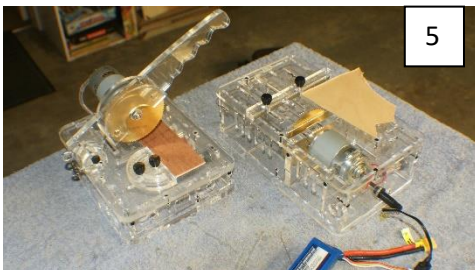


2



4

The kit sets were purchased from Hobby King.



5

Photo 6 is a thrust measuring machine which is a must for setting up electric power systems if the specs are unknown and most of Barry's aircraft are electric. Photo 7 shows models stacked in one of the bedrooms; large Mamselle, Red Zephyr, twice size Tomboy, Bristol monoplane, a Kwatz, a 4.2 mtr glider and a partly finished Fokker DR1 he purchased from Warner. Barry mentioned he has done a fair bit of slope soaring over the years but unfortunately has a nasty back injury

which prevents him from flying at our field as much as he would like to these days. It was a very interesting visit laced with coffee and we wish with him and Lynn all the best for the future.



6



7

I can just see Kath allowing me to take over a bedroom - NOT

And just because we can...



I want

Barry's workshop
(and models)



And that's it from me for this
month.
'tallyho' and 'chocks away'

Steve