Model Flying Hawkes Bay

PROPWASH

Club Newsletter #164 October'24

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November; "What's On" Activity Calendar

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Sunday's; Club Sundays Awatoto Field
Sunday Barbecues; To be notified by email prior.
Tuesdays; Club Shed Mornings.
Vintage Mornings; Any time as the mood takes
Committee Meetings; Second Tuesday in month
Soaring; Black Bridge ph; Rowdy or Joe.

Aerobatics, IMAC &PATTERN.
Norsewood Saturday 2nd November

GLIDER FUN FLY. Levin Sat 30th Nov

Vintage & Soaring NDC November.

Nov/24	160	VINT	RC Vintage E Rubber Tex
Nov/24	161	VINT	RC Vintage 1/2E Texaco
Nov/24	162	VINT	RC Classical IC Duration
Nov/24	163	VINT	RC Vintage Precision
Nov/24	437	SOAR	F3K Tasks B,D,G,H only
Nov/24	438	SOAR	ALES 200 Class M
Nov/24	439	SOAR	Thermal H (2 Metre Glid
Nov/24	440	SOAR	Class R, eRES 2M

***Contributors to this issue**; Brett Robinson / Barrie Russell / Marty Hughes / Trevor Doig / Barry Lennox / Barry Kerr / Clive Baker / Ash / Russ Nimmo / Blair Jepson / Rowdy / Joe Wurts / John Sutherland / Graham Dawson / Stew Cox / Phil Sharp / Frazer Briggs / E&OE /*

The Editor's Desk;

Greetings All, We have an interesting and varied offering this month. An update from John Sutherland on his long running FW Dora scale build nearing completion. Phil with yet another episode on his V-4 engine build, a different twist this month with his efforts covering building a machine to help build the machine ! Clive gives us another interesting piece of aircraft history and something allied but different from Graham Dawson on his 3-D printed build of a fishing drone. No club news sadly but there is an updated copy of the Club Field Rules for your information. We have the usual reports and info, and a letter from a new member with some interesting comment. I hope you enjoy the read and my thanks to all those who have contributed this month. I look forward to your continued support with lotsa copy, comment, reports and pictures.

Cheers, Barrie the editor.

PREZ SEZ;

Hi all, Once again this month end has come way too fast. Not a lot to report this month as due to work commitments I haven't been to all the club days. The ones I have attended have been fantastic and nice to see the field being used on Sundays. One of the highlights was seeing Russ Nimmo's creation take to the sky for the first time but I'm sure that will be covered later in the bulletin. (Sept Propwash actually)

The newly completed Deans shelter is getting some good use and is doing its job well. I'm still wanting to get out and do more weed spraying around the perimeter of the field but sadly I'm time poor at the moment but if any of you retired gents with a seven day weekend would like to give it a shot I really wouldn't stop you. I also won't be at the field this weekend but I'm sure we can get another BBQ in during the month. Happy flying

Marty

CLUB ACTIVITY Oct 2024

Hawkes Bay Radio Flyers. *Sunday lunch barbecue*, **2008 style**

Model Flying Hawkes Bay. *Sunday lunch barbecue* **2024 style**

Sunday 13th October. Barbecue lunch, another delicious burger offering from **President Marty.**

Fine day and a moderate turnout with members just doing their thing.

C/Wise From top Right; Pits scene with **Sir Rodderick's** Tiger in the foreground. /

Phil Sharp caught on fly past, must be on Auto-pilot. /

My Extra 300 out for it's first airing in this year 2024. !

Shed morning conference where the world is put to right and all matters modelling are sorted out !

For those of you who may have missed it here is Marty's radio interview link;

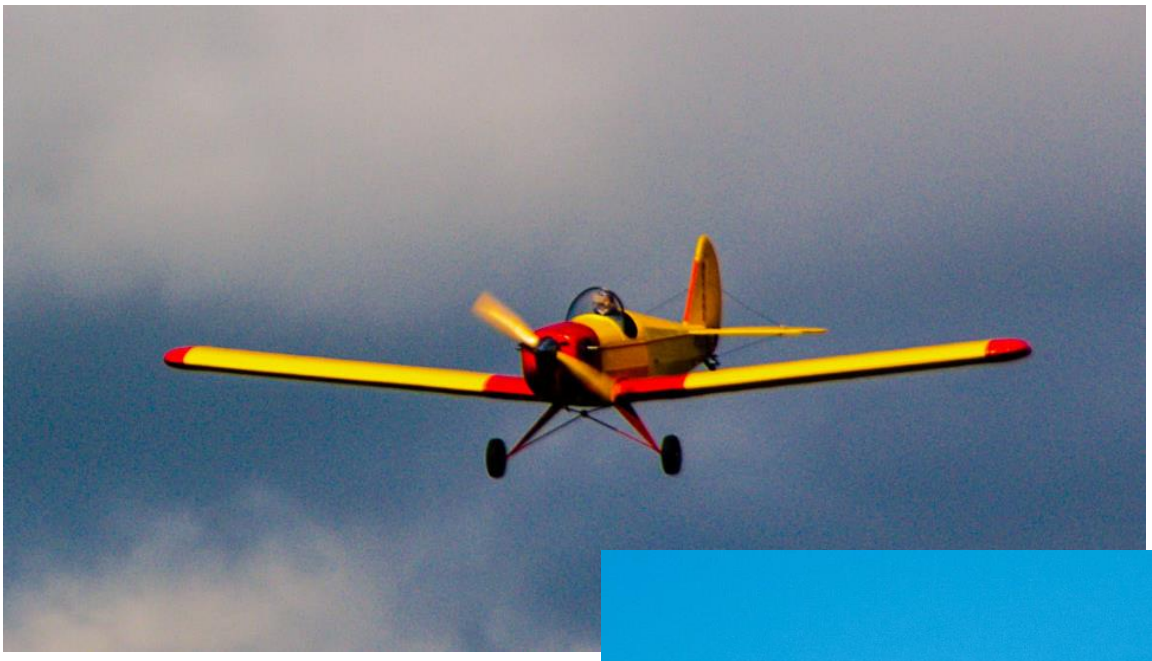
Hi members, in case you missed it on the radio, or if you are interested in hearing it, below is the link to the interview I had with Martin Good from the Breeze to promote our club .

https://omny.fm/shows/the-breeze-hawkes-bay/marty-hughes-15102024

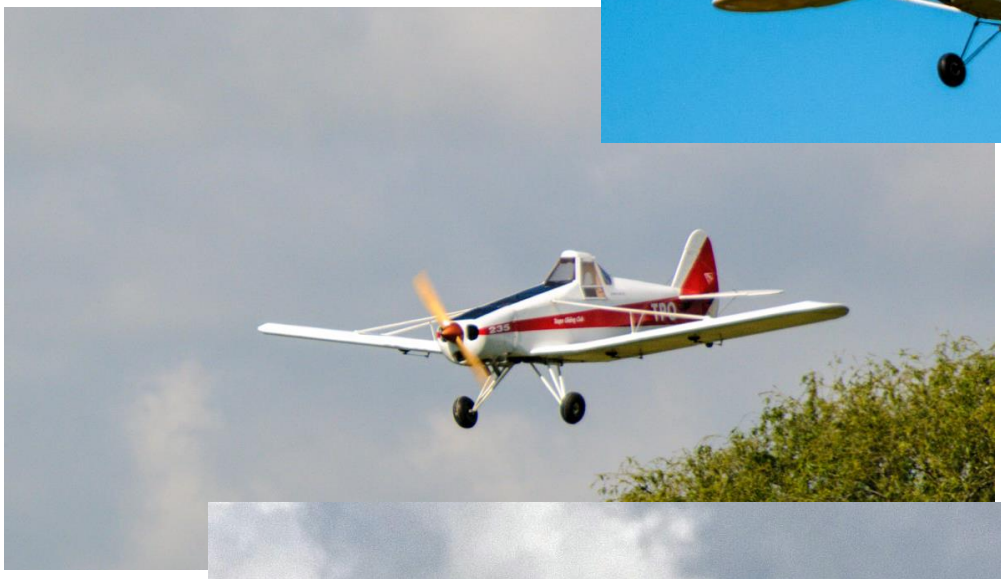
Marty Hughes, President.

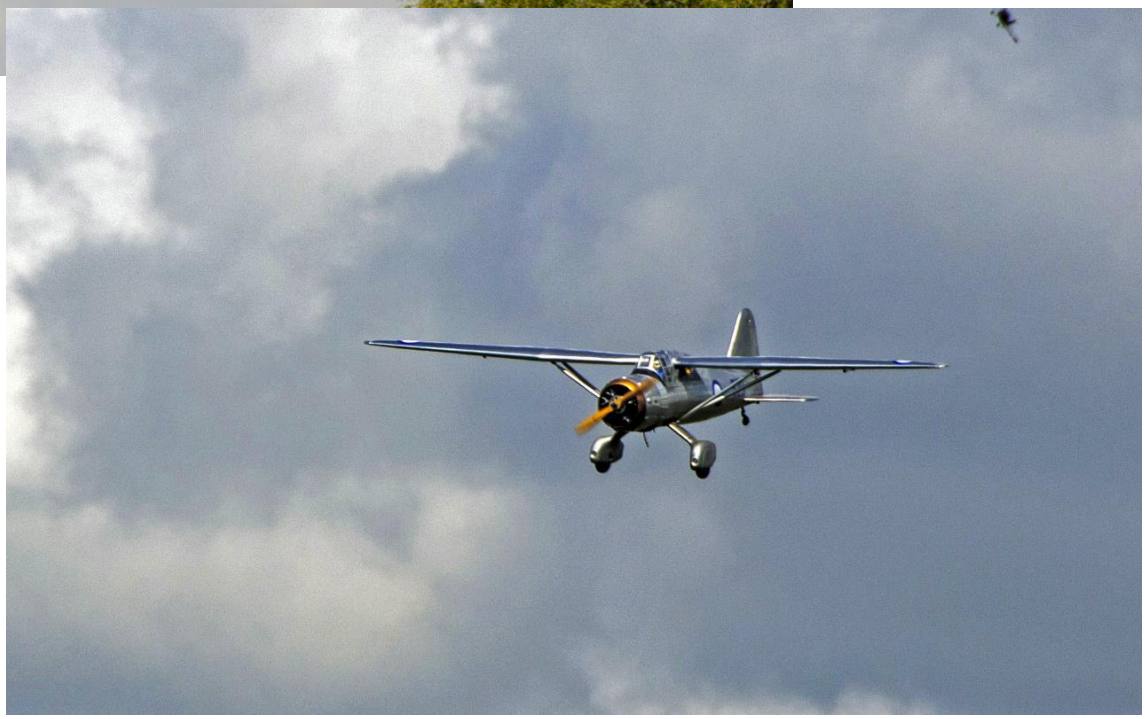
Sunday 20th; Another glorious Hawkes Bay day, smallish turnout. The field is in great condition with Lance keeping the grass low and Marty tailoring the taxiway. A few pictures of the morning's activity;

Clockwise from top left; Pits views east and west. / **Bill Kershaw** brought out his old 46 sized Cub which must hail from Highway 50 days ! Still looks pristine **/ Stuart Sturge** returning home with his recently acquired Calmato low wing trainer.

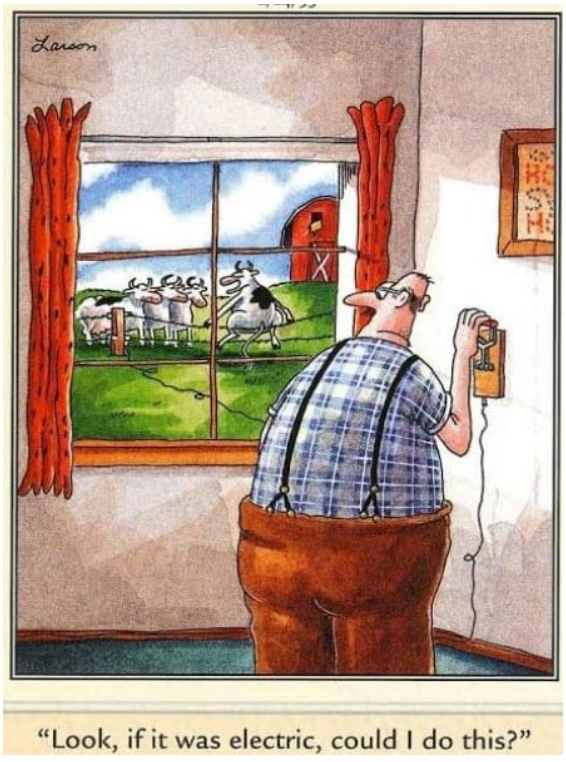


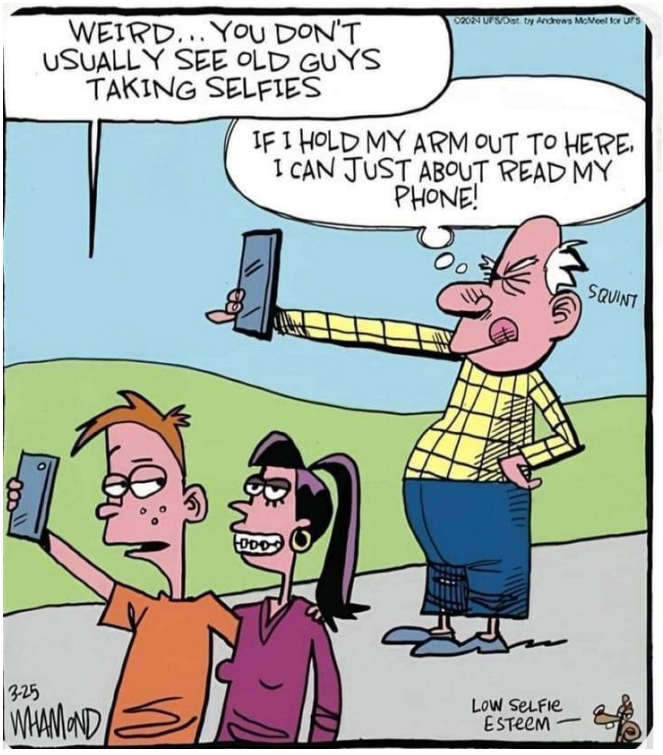
Clive our resident photographer was in business and sent in these great aerial shots from the morning's flying.





Rowdy sent me this picture of the fire in Ravensdown smoke stack. Looks like some useful thermal rising air there, I wonder who lit the fire ?????





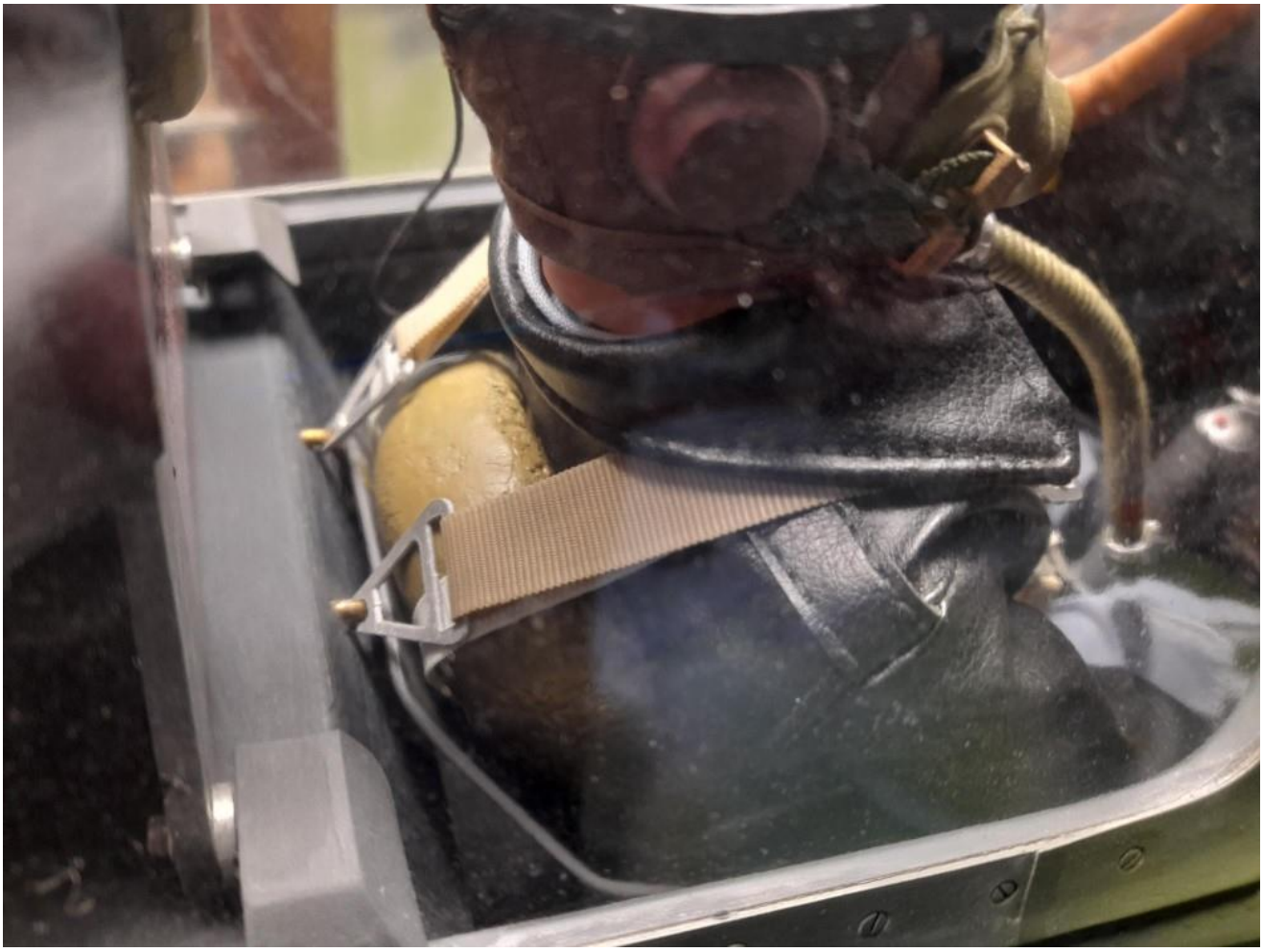
AROUND the BUILDING BOARDS. Oct '24

John Sutherland is close to the finishing straight on his long term build of the FW 190 Dora, he writes;

Hi Barrie, *latest photos of the FW not long to go now. Just nearing completion after a long build time. Currently have just reinstalled engine and fuel tank . Have also finished inside cockpit and pilot with straps. Cg is in a good spot so will trim shortly and do a fuel test to see how the cg moves full to empty. There are some stencils to do and small paint trims and a little finishing work. Then I will weigh it and see what I have, 22 Kg I hope. There are 20,000 stick-on rivets on the surface a lot of work but I think worthwhile.*

Cheers John.


P5
L3



The latest from **John,** he writes; *Hi Barrie as you requested aircraft is completely fitted up and have just done CG as well all looking good . Just waiting for some stencils to paint then some engine runs.*

Cheers John.

"SHED NEWS" Oct 2024

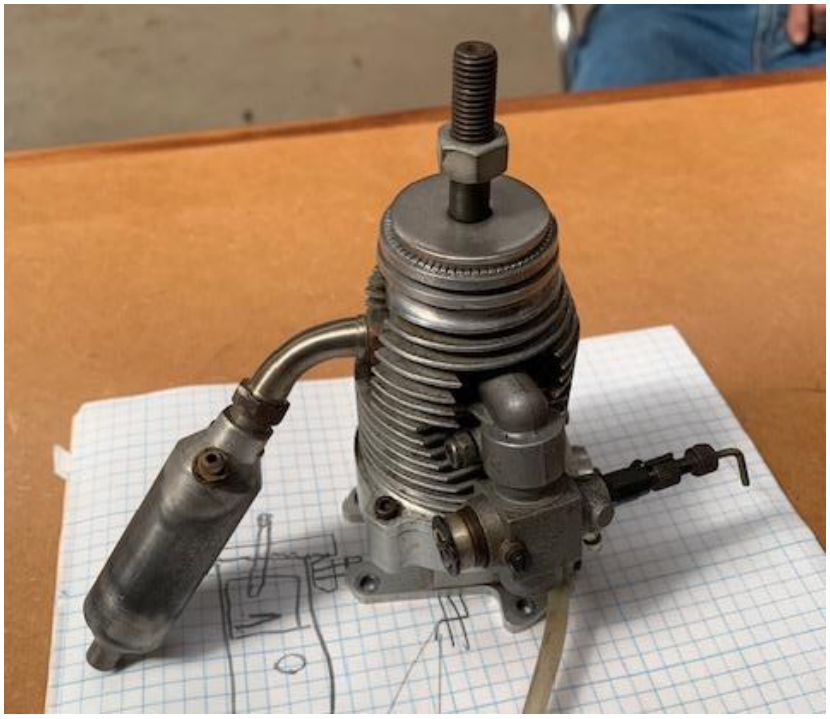
The Brains Trust in session. Tuesday 22nd, morning tea time with **Dave, Tony and Nev.**

An email to club members for a suitable trainer aircraft to replace one recently lost brought some interesting response. **Nev Fargher** brought along this partially built Citabria model below, together with an ASP 52 Four stroke motor. Not necessarily a trainer, but **Dave Cantell's** eyes lit up and he's taken it home to finish off.

Graeme Rose, very generously gave us this new and almost complete Seagull Arising Star trainer, ideal for the purpose, just need to construct a new tailplane and rudder and fit some gear and we're away flying.

Tuesday 29th.

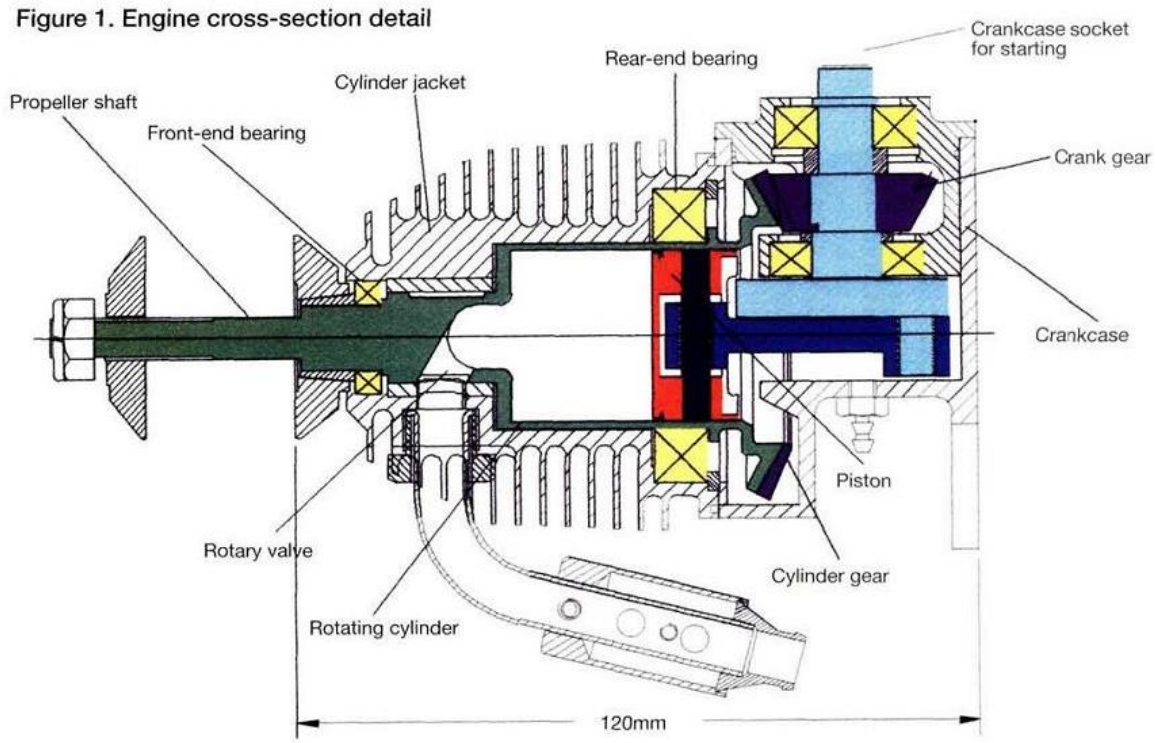
Tony W brought out this interesting RCV motor that he purchased off **John Aitken** some years ago. He is in the process of putting new bearings in it, though it had not much use but was sitting around for some years.



It is a four stroke glow motor that has a rotary cylinder as opposed to overhead valves and a rack and pinion gear below the piston which drives the rotating cylinder which has the propellor drive shaft attached at the top. It is supposedly a high torque low revving motor that drives a large propellor. Tony thinks it's a 90 size which would have an 18x13 prop recommended. (Still to be determined !!) We're looking forward to seeing it running.

For more information, click here https://sceptreflight.com/Model%20Engine%20Tests/RCV%2090-SP.html

Figure 1. Engine cross-section detail



How NOT to learn to fly RC.

An interesting letter to the editor from a "Newbie" to RC flying showing the perspective from the "other side of the fence".
Trevor Doig writes;

At the age of 70 I learned to fly and bought an aeroplane. My friends thought I was stark raving mad learning to fly at the same age that most pilots give up. They were speechless when they learned that before I had even got my license, I bought a new plane. So was my wife, bless her heart.

When licensed I flew about twice a week with trips from North Cape to Stewart Island and just about everywhere in between. However, at about age 83 I just got too old to fly an aeroplane and sold my plane. To say I missed it is an understatement, so two years later my long time RC flying son, let's call him Bruce because that is his name, recently suggested that I try radio-controlled aviation. Geez, it has to be easier than a real one. **First mistake.**

Anyway, it sounded intriguing so I wandered down to Awatoto to have a look around. There was a guy flying a glider, it looked quite easy as he chucked it around the sky like Biggles and I thought, "I can do that". He told me about the club and suggested that I buy a Radian glider to start with. He said he might be able to find a second hand one for me.

I talked to my son about my day and he said, "don't even think about it till you have mastered the simulator" so, he put a Phoenix SIM in my computer, I bought an Interlink DX controller and he set it up for me by remote control. He lives in Auckland.

Ok, hmmm, this turned out harder than I thought. I nosed it into the ground, I crashed into trees, I cartwheeled, I lost sight of it. I crashed this thing more ways that I ever imagined possible. But I slowly learned and the crashes became less and I finally mastered it. More or less.

So, let's get real I thought. The Radian looked like it was not going to happen so I bought a new T1400 glider from a hobby shop in Auckland. You will have gathered by now that I am a bit impulsive. Then the Radian arrived, gosh, now I had two planes. I bought a charger and a nice box to put all the bits in. Bruce gave me some batteries and I was ready to fly. He set them up for me while on a visit home and flew it at my daughter's lifestyle block at Pakowhai, then let me have a go.

But wow, it was a lot harder than the sim. At least I could sit in a comfy chair and it didn't matter if I crashed. But I did ok and Bruce was reasonably impressed. Shortly after that a kind soul helped me at Awatoto. I had two brief lessons with him tucked away down the end of the strip.

So smarty pants me thought I would have a go at Pakowhai with the new T1400. It was a nice still morning, I know how to fly, what can go wrong. **Only everything !!!!**

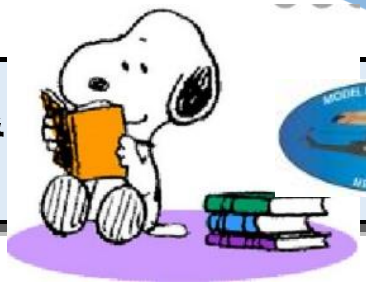
My daughter chucked it for me. Not too hard, gently does it I said. Gravity prevailed and It nosedived into the ground. Not enough power I thought, and perhaps some more elevator. She chucked again, the thing shot into the sky like a Russian missile headed for Ukraine, it promptly stalled and dived into the ground at about a million miles an hour. Now I only have one plane.

I found out later that probably the poorly mounted battery moved forward during the first nosedive, the second time it only climbed because of excess elevator and stalled when I reduced power. But that is making excuses, I paid the price for my impatience and now must get trained properly.

That is not easy as I only have two Sundays a month free from other commitments. And then when I can I rush down to Awatoto I usually find it is too windy for me.

This RC thing is not as easy as it looks, but I will persevere. **Trevor Doig**.

Info, Hints and Things October 2024



Another Trojan woopsee ! Fortunately quite easily repaired with a creamy epoxy bog mixture and a few lengths of masking tape to secure things whilst the slow epoxy sets. A little Red Devil filler and a spot of test pot paint and we're ready for the air again !

This CAA Drone notification in from **Russ Nimmo** for your information.

Email notification

This is a notification that the following information has been added to the CAA website, aviation.govt.nz:

New brochure: Flying your drone safely

A drone is an aircraft, so if you fly one, you're a pilot

They're commonly referred to as drones, but they're also known as unmanned aircraft or remotely piloted aircraft (RPA).

If you were to carelessly launch a drone from your backyard, there's a chance that you could be creating a hazard to other aircraft, and people on the ground, as well as breaking aviation law.

Our new brochure includes information on:

- General rules for flying drones
- Training
- Areas where you can and can't fly drones
- Preflight checklist

Flying your drone safely [PDF 8.4 MB]

Check out updated content in the Drones section of our website.

Click here for the publication. Flying your drone safely [PDF 8.4 MB]

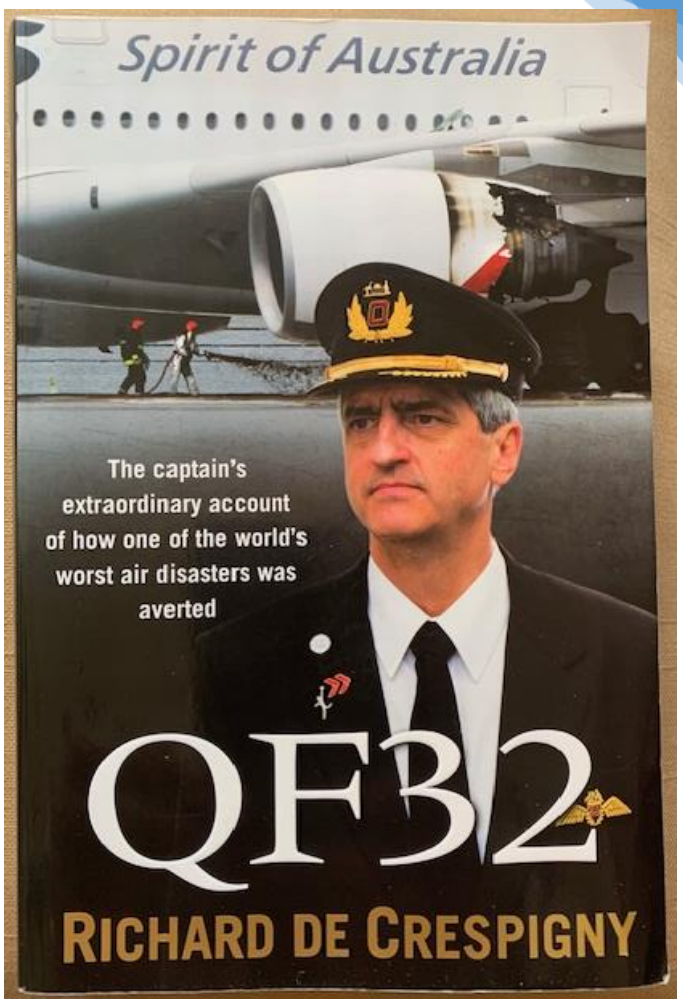
Another great read this month, picked this up also at a club sale, best $2 worth ever !

I flew in an A380 from Singapore to Auckland and it would have been the quietest and most comfortable aircraft ride I've experienced.

I was at the EAA Airshow in Oshkosh when they brought one of the earliest ones in for a HARD landing and the wingtips almost touched the ground ! Needless to say it was parked up for the rest of the week !

This book gives a very graphic account of the saga unfolding when their No2 engine blew up shortly after take off and destroyed most of their fly by wire systems. Also a very interesting and informative account of De Crespigny's aviation journey.

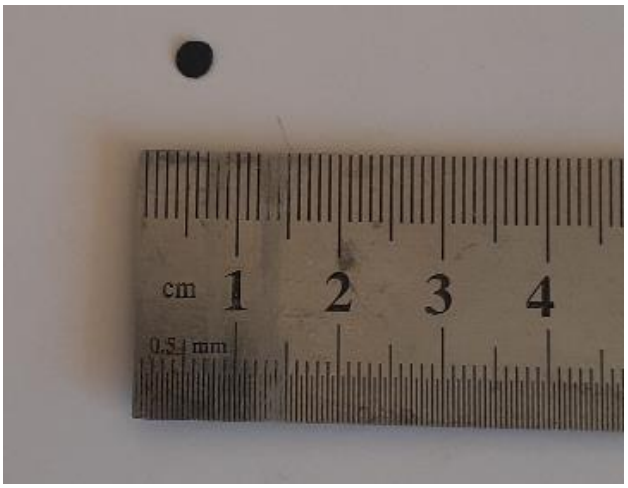
Once again, give me a call if you can't get a copy or you'd like to borrow it on a promise to return basis. Also Rebecca Lochraine's SKYBOUND is still here. Ed.



A couple of months ago, **Vic S.** posed the question and only fielded a couple of incorrect answers, he's back again and writes;

Let's try again who can answer the question.

"Found in the crank case of my cranky DLE55. Rubber type material about 3mm dia. First to come up with the correct answer as to what it does in the running of the engine gets a chocolate fish."



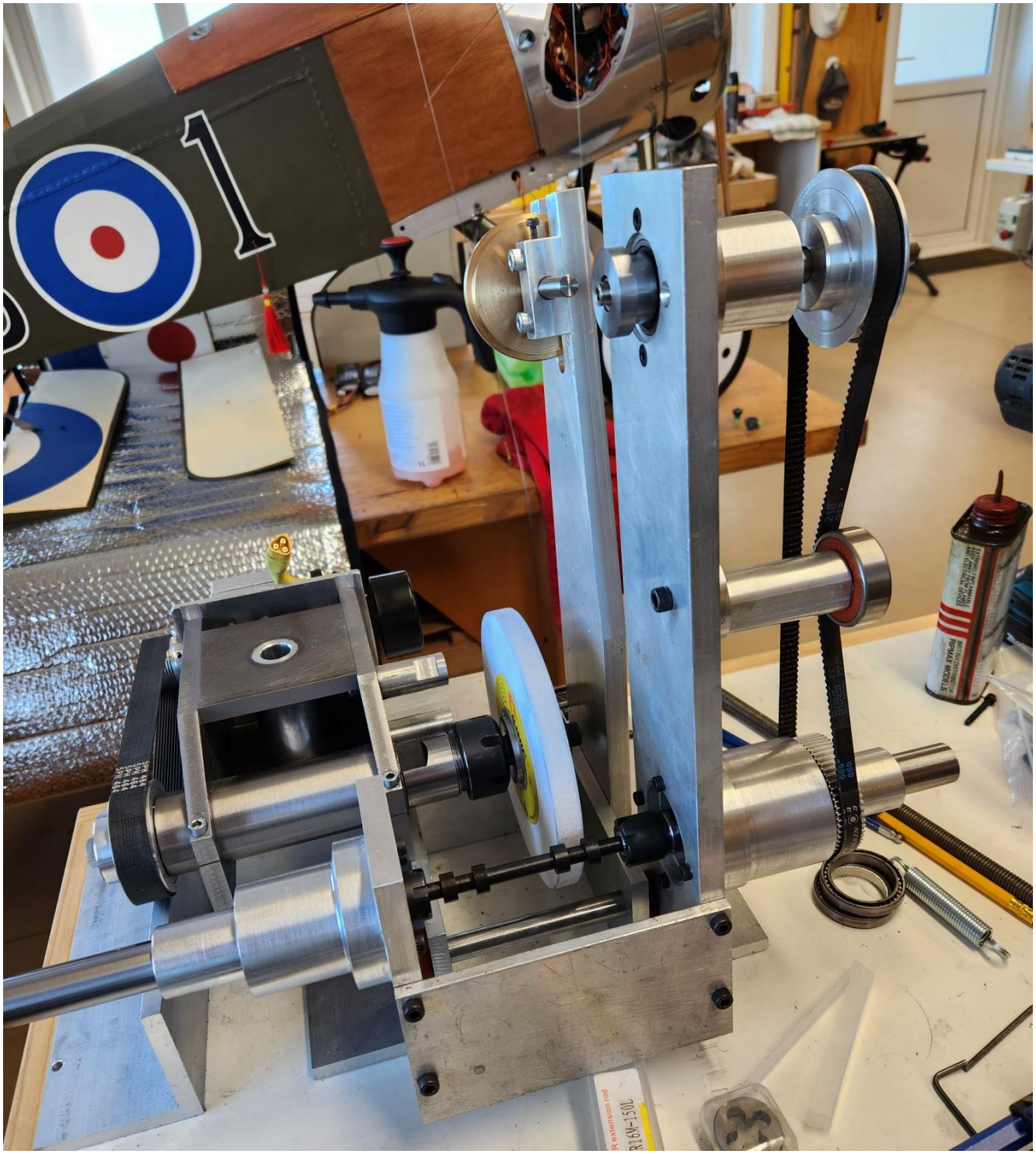
"A clue: The engine won't run without it."

Vic S

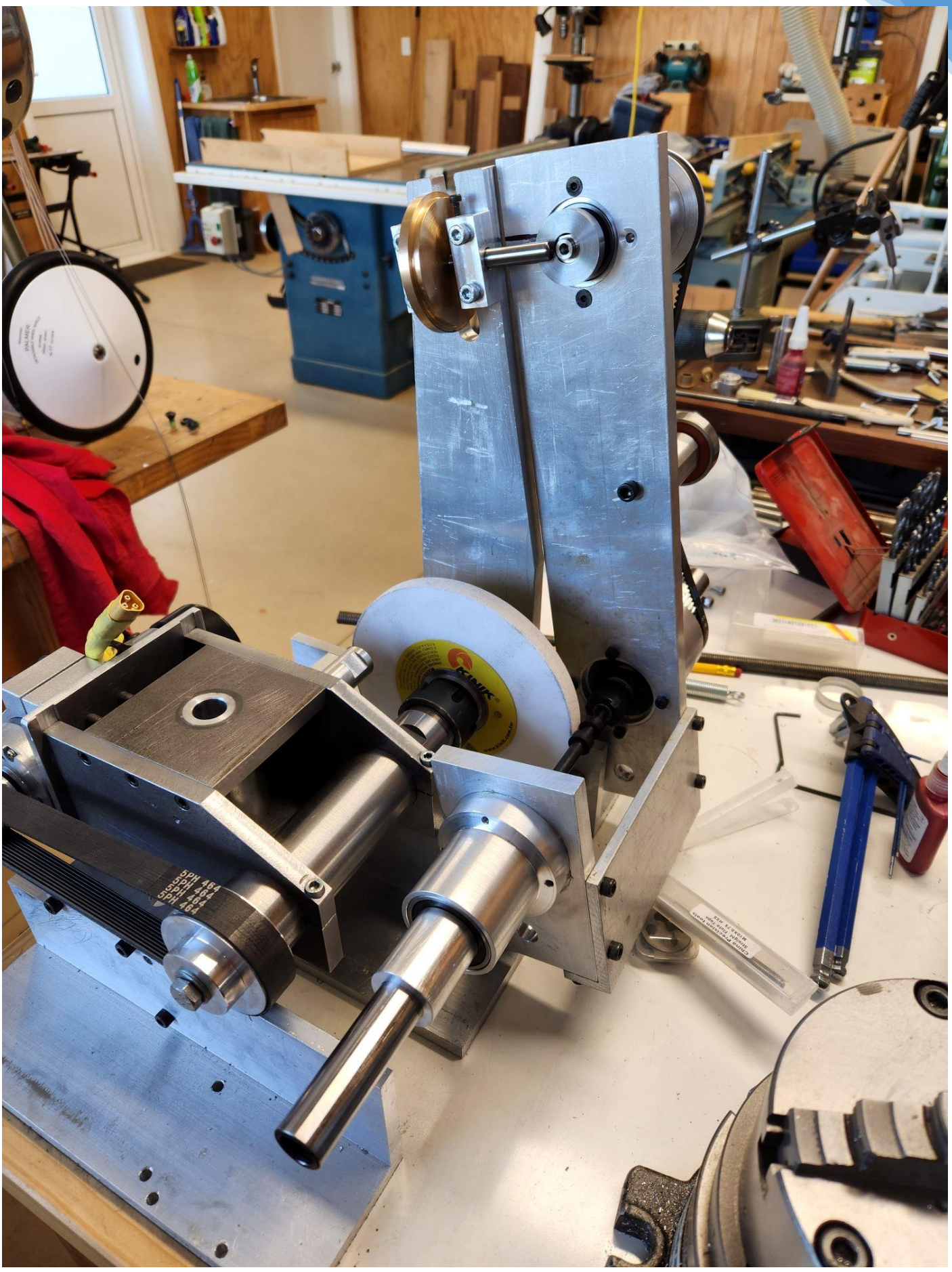
Phil's V-4 Magic Pt 6.Oct 2024

*I think **Phil's** factory cum operating theatre has taken on an AI look-alike stance. He now has built a machine to make a machine, where is this all going to end, watch this space ! Maybe there will be motors making motors, wow, maybe we should be putting our orders in ? **Phil writes;***

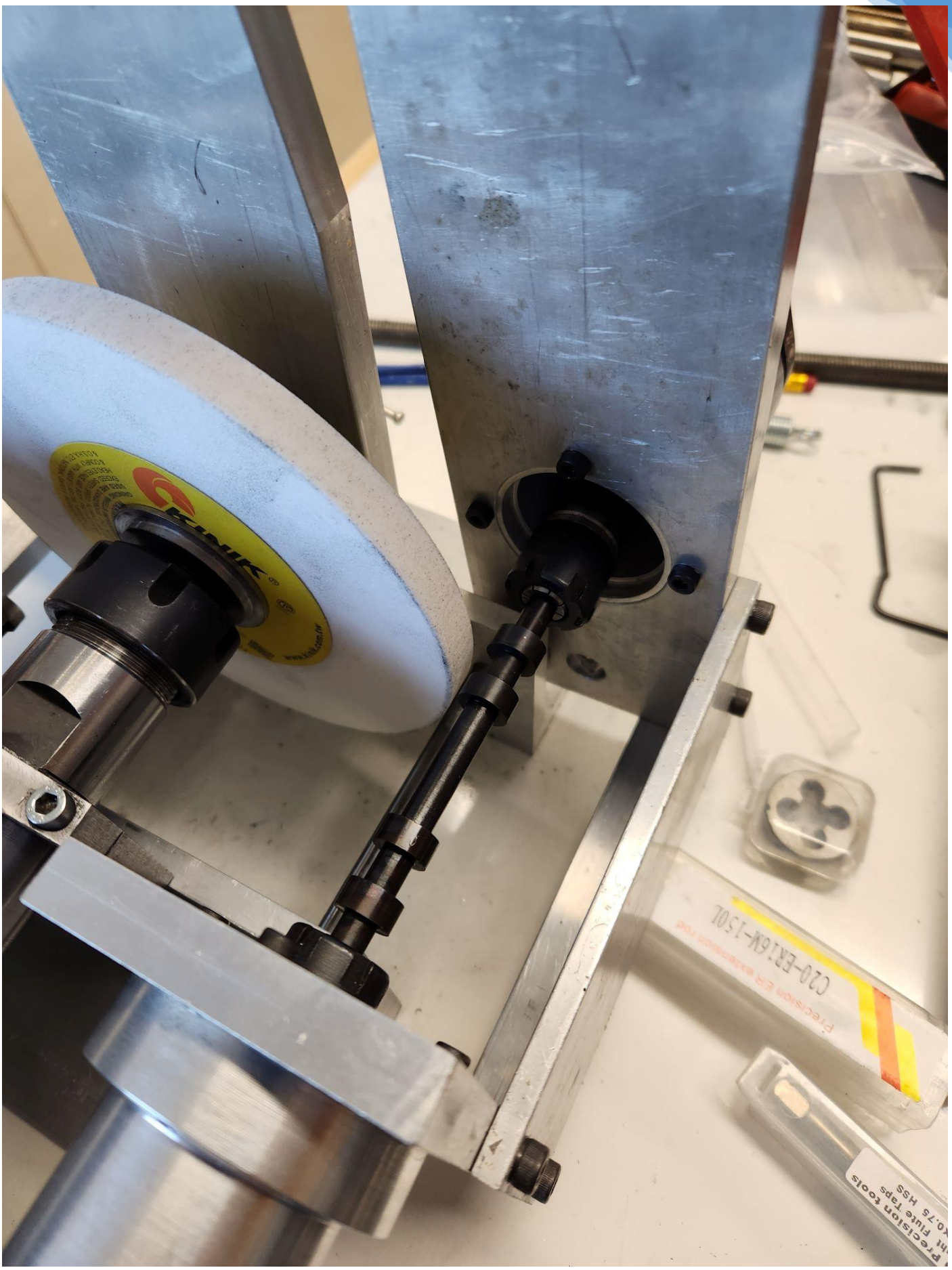
Hi Barrie, Just a short update this month, no more engine bits as I have been working on the cam grinder.



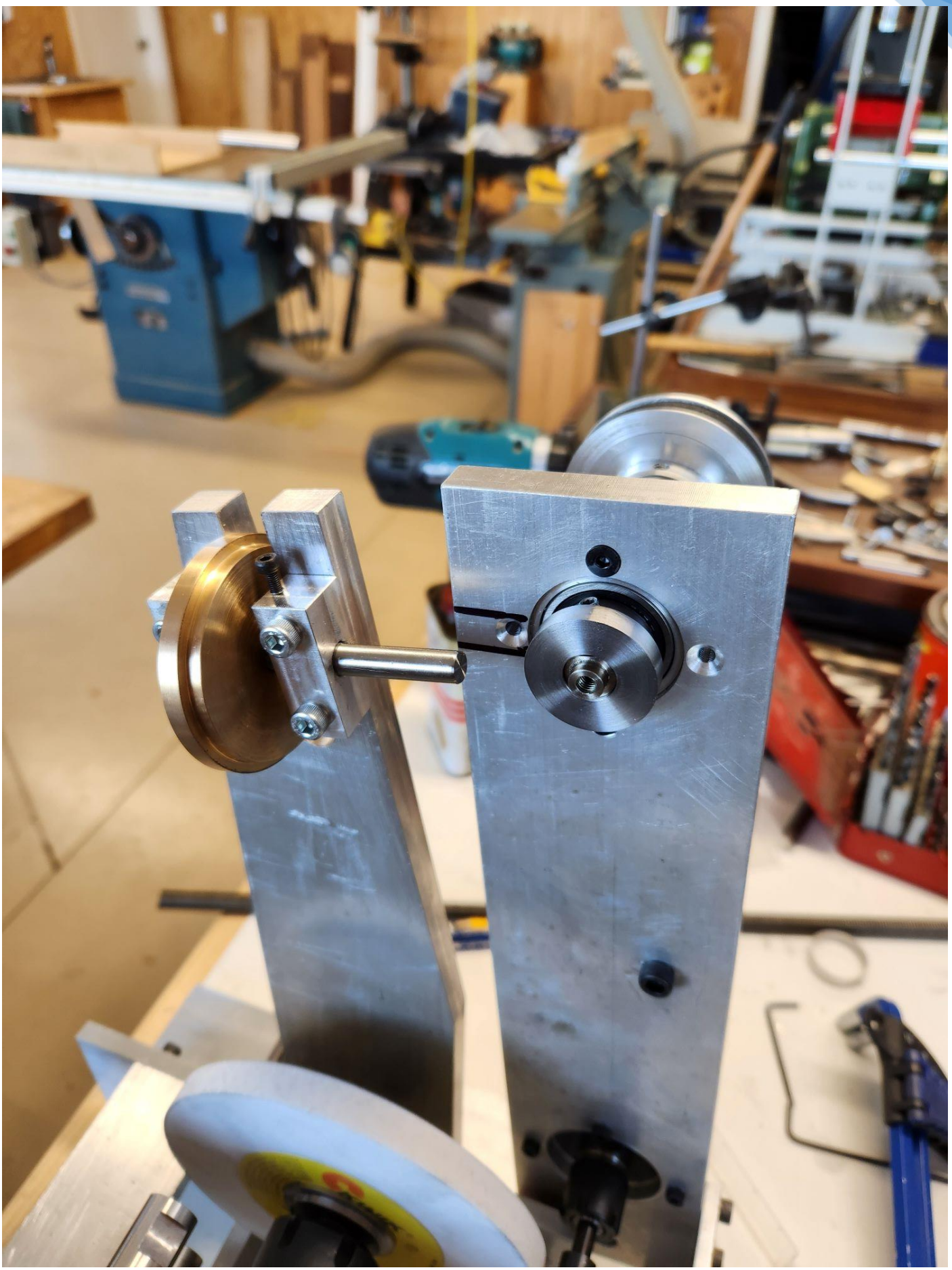
The Cam Grinder.



Adjustment



Cam held between collet chucks

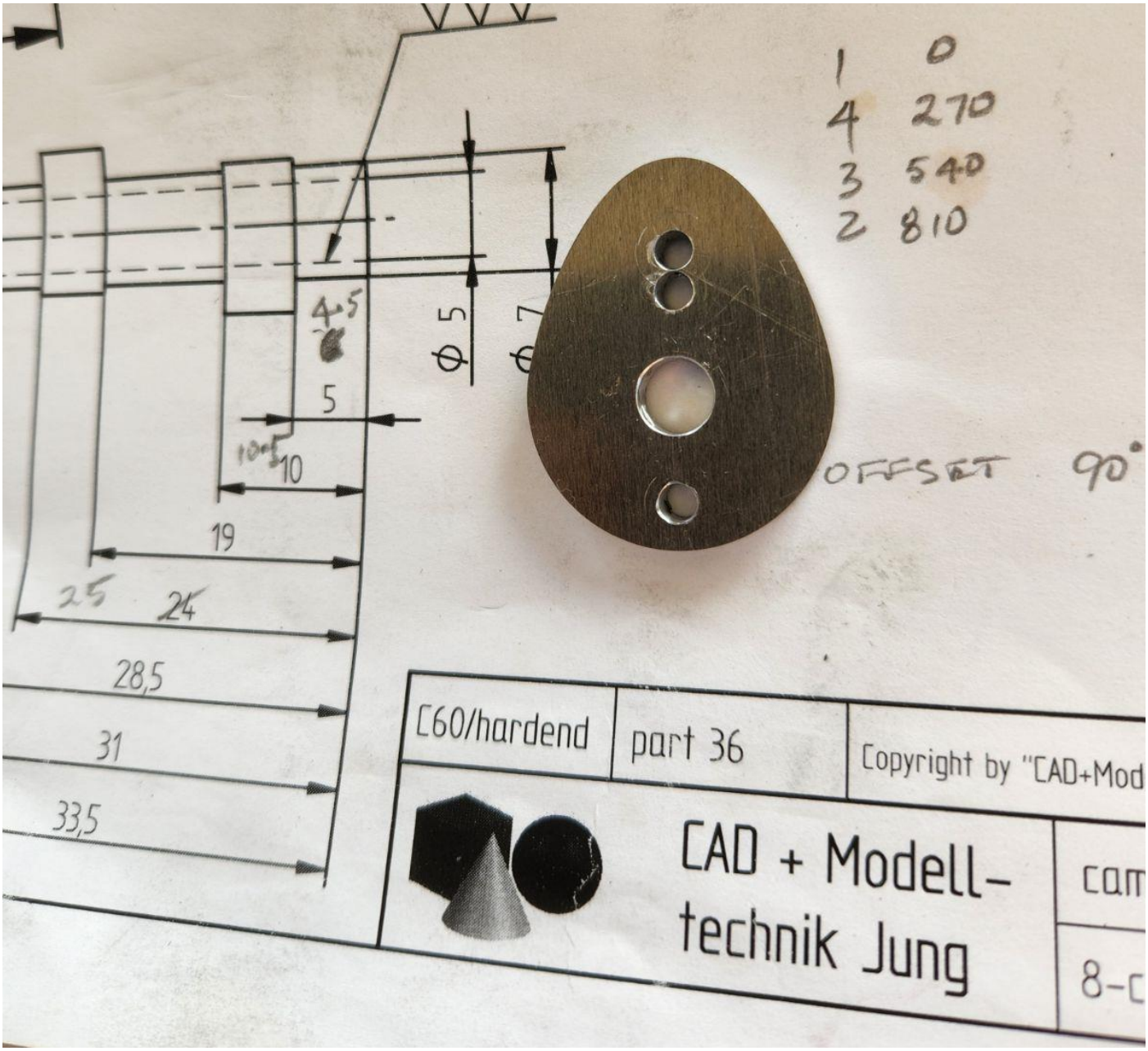


Another view

It's nearly there, just a couple of small bit's left, and the master cam to make.
The master cam is four times the size of the finished cam, and is mounted on a lever arm at a 4 to 1 ratio.
There will be a spring to hold the arm against the cam, with a very fine adjustment (the brass wheel in the pic) which has a 0.5mm pitch thread. This should allow adjustments of about ¼ thou at a time at the cam.
The master cam and the camshaft are connected by the toothed belt to keep them in sync.

Hopefully it will all work!

Late News; In addition to this morning's update, a completed master cam;



Regards

Phil.

Ed here, *If you're a little bitty overwhelmed by all this mechanical speak, (like me), don't hesitate to button hole Phil for a simplified run down, I'm going to. It sounds easy when Phil explains it all and I know he is very happy to oblige. BJ.*

"Scoota" A $272 3D Printed Fishing Drone.

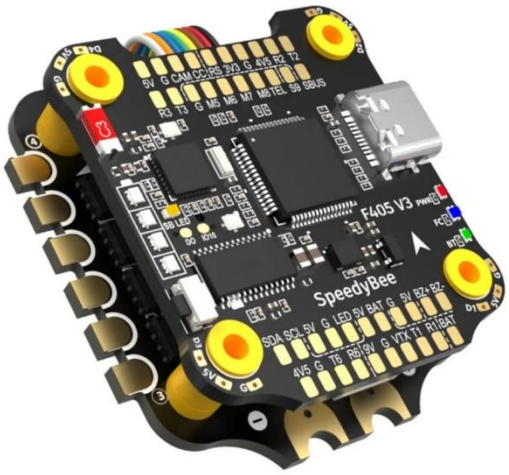
From **Graham Dawson**, Waipawa.

Just received this very interesting article from Graham, our member of 3-D printed aircraft fame with something a little different for our "Fishy members" ! Read on…..

I first built a fishing drone about 5 years ago based on a S500 quadcopter frame using 2212 size 980 KV motors and a DJI Naza Lite flight controller connected to a FRSky receiver with SBUS. I designed up a release mechanism and battery holder that I could 3D print in PLA. It used a 4S 4000 Lipo . It could take a rig of 5 hooks attached to 80lb braid out to approx 400M. At this distance I was running out of braid and was finding it hard to maintain visual contact for control purposes. It's still fully operational and last caught Snapper in April.

Original fishing Drone based on S500 frame. It has lasted 5 years.

Catching fish on a Northland beach. Note the large box used to lug it around. I had always wanted something a bit more compact and capable of taking a line at to at least 1000M.



I wanted it to be relatively low cost (less than $300) so it is not a major if you lose it out at sea.

Speedybee had developed a range of Quadcopter flight controllers with integrated ESCs allowing for a more compact and tidier build. These controllers use INav which is a relatively user friendly software system which integrates nicely with GPS.

Speedybee F405 V3 controller with 4 x 50amp ESCs

I had also been looking at ELRS which is a new open access radio protocol that has a decent telemetry capability, excellent range and very cost effective transmitters and receivers from multiple suppliers.

I found a 450 size 3d printed quadcopter on “Thingiverse” and I used this to get me started on the design for the new fishing drone. I used screw on props which are easy to take off. 2312 motors. I built a small GPS tower which keeps the GPS with its integral magnetometer well clear of high current conductors. The magnetometer is essential for accurate return to home navigation. I designed mounts for the Flight controller and an integral cover and top support for the arms to project the Electronics while still providing airflow to keep the ESC board cool. I conformal coated all the flight controller and ESC board to protect against salt spray corrosion. The drone is printed with Esun PLA+ filament. All components apart from the filament were purchased via Ali Express.

I modified the battery holder and release mechanism that I designed 6 years ago to fit this new model.

The release mechanism using a servo and piece of piano wire.

The final product - "Scoota” 3d printed fishing drone.

I purchased a ELRS module for my Radiomaster TX12 and a Radiomaster RP1 Nano receiver which uses CRSF protocol. This setup allows for full telemetry on the display of the TX giving me the number of Sats from the GPS, flight controller status, current, voltage, distance, altitude, milliamp hours, heading etc. I have also programmed it to provide a voice output of distance and if required altitude.

I fitted a strip of 5 LEDs on the rear to give a visual indication of when has sufficient Sats acquired to "Arm" and help identify the drone in low light conditions.

There is also voice feedback when any of the switches are operated and a special "Bombs Away" announcement when the line release button is pushed.

Tiny RadioMaster RP1 ELRS receiver

There is a bit involved in programming and tuning the quadcopter with INav and getting to grips with ELRS for the first time.

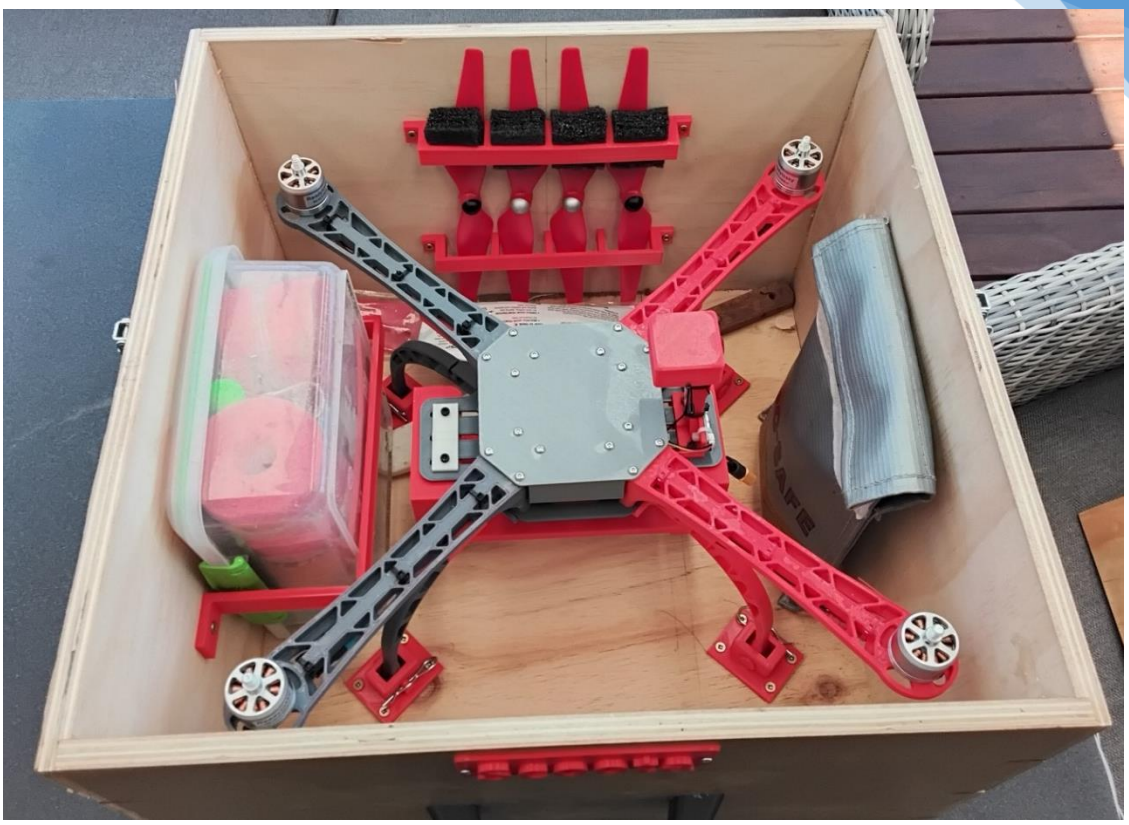
We had our disasters. I accidentally covered the opening on the barometer with conformal coating which destroyed the altitude control function. The result was the drone climbing extremely rapidly like one of Peter Beck's rockets. The only action I could take was to disarm it which caused it to drop like a stone from about 50m destroying about 75% of it.

Another disaster occurred with a faulty XT60 connector. One of the male pins was not connecting properly. Pins needed to be spread a bit more. This was one I built for my brother-in- law. It was lucky that he was practicing in a park and it only dropped from about 20m so that was only a 30 % rebuild. However with that steep learning curve in INav, ELRS and a lot of testing I am pretty happy with the finished result. I have had it out to 350m so far but no fish as yet.

My brother in law is catching fish. He is using a Radiomaster Pocket ELRS TX which is very compact and fits in the 400 x 400 storage box along with the traces hooks etc. These transmitters are low cost and absolutely ideal for this application.I have one on order so I don't get sand in my TX12.

The cost worked out quite well. The "at risk" component, ie quadcopter less battery came to $272. The total cost for my brother-in-law setup was about $550 which included all the components, 2 x 4S 4000 lipos, charger and Radiomaster Pocket TX. Part of the deal was that he was to build me a box to keep everything together. I designed and printed all the attachments hold the quadcopter, fishing gear, props and TX securely in place.

Brother In Law's fishing drone with RadioMaster Pocket Transmitter.



Scoota securely secured into its box with 3d printed holders and pegs etc.

The copter performs well and is very stable. There is a lot of natural stability inherent in the design. I take off in Angle mode and then once all the hooks and traces are airborne, switch to cruise mode and move forward and climb to about 30 - 40m. Once you are established in height, speed and course you can fly hands off. Once you reach the release point flick the “Return to Home” switch and the line releases, the copter climbs to the set altitude and returns to the takeoff point and lands without any further input to the controls. Very straight forward.

There are a couple of other things that I am trying. Bringing fish in manually from 400m is bloody hard work. From 1000 m it will be no doubt on another level. Electric reels are expensive and most drone fishers have them. So being a bit different I have designed an attachment that connects my battery drill to an old TLD 25 game reel. Yet to be tested!.

Poor man's electric reel.

The other is to replace the 4S 4000 Lipos with a lithium ion battery with 4 X 21700 5000 milliamp hour lithium ion cells which are welded up into a 4S pack. These will be cheaper, less flammable and about 120 grams lighter. The drone is drawing just over 10 amps inches hover so we'll within the capabilities of some of the better 21700 batteries.

So that’s about it. The project was quite challenging technically but once I had it sorted it became reasonably straight forward to build and test the second one.

My brother-in-law who has no RC or electronic experience but a lot of common sense has mastered the drone flying with “Scoota” quite well.

For those interested with 3D printers I could make the design available and work through setup and programming details etc .

Regards, **Graham Dawson.** MFHB. October 2024.

Model Flying Hawkes Bay Field
Regulations and Guidelines

Purpose

The primary purpose of these Regulations and Guidelines, along with links to Civil Aviation Authority (CAA) and Model Flying New Zealand (MFNZ), is to signal the priority Model Flying Hawkes Bay (MFHB) places on safety and the importance for Members to have read and follow any such rules and documentation. Accordingly, MFHB promotes the MFNZ Wings Badge scheme and encourages all members to actively participate in the policing of all such regulations and guidelines.

Introduction

MFHB is fortunate to have two flying fields. The Awatoto field is primarily utilized by powered aircraft, and the Black Bridge Field is restricted to either electric or unpowered flying. A strong benefit of having two fields is to separate circuit style flying or aerobatic flying that uses a runway, and the soaring style flying to minimize airspace conflicts. Due to field closures from scheduled activities or unforeseen events, the rules do provide for soaring activities to occur at Awatoto, as well as for circuit flying at Black Bridge if the most appropriate field for these activities has been closed.

General

1. It is the flier's responsibility to ensure appropriate aircraft and transmitter functionality prior to flying. Some rules necessarily apply to all members, as they fall under current CAA regulations (Refer Addendum).
2. No aircraft shall be flown higher than the CAA approved 120 metres (400 feet) unless approval has been given to the Club on application, and the requirement to land or avoid full size aircraft near the field shall be followed.
3. Any action or activity that compromises another person's safety is strictly prohibited.
4. Unaided line of sight shall be maintained, with an observer for FPV flights. Flying shall only occur during daylight hours.
5. Aircraft shall never be launched towards other people.
6. Situational awareness needs to be maintained and assisted by observers where required.
7. Any pilot who does not hold a wings badge must have a current wings badge holder as an observer while flying and that person must be able to fly that aircraft.
8. If flying a certified aircraft, that certificate must be current and should be on hand to present if requested.
9. Pilots flying in the Western and Eastern flight areas should not cross the main flight line when the flight line is in use.
10. Any dogs at the field must be always tethered and under control.

General – Awatoto Field

11. The last person to leave the field needs to ensure the shed, car park and field gate are padlocked.
12. IC aircraft and engines are only to be started in the starting gates with model restrained in the correct procedure. Electric motors can be run in the Pit area with the propeller removed.
13. Safety should be considered when transitioning (flying) between flight boxes over the centre field and taxi ways. This is a restricted area and if there are pilots in the main flight line pilot box this is a no-fly zone.
14. Flying over pits and carpark must always be over 30 metres in height.

Main Flight Line

15. Circuit flying on the main strip is required when there is more than one model in the air at one time. Circuit direction is determined by take-off direction creating either a clockwise or anti clockwise circuit. Circuits shall be flown with aircraft making the upwind pass over the runway turning out and making the downwind leg pass out over the river.

16. Aircraft using the main flight line should never venture behind the pilot box.
17. When 2 or more aircraft are intending to use or are using the main flight line, the taxi strip shall be set up by a circuit flier to facilitate entry to and from the flight line (Cones, fire extinguisher, etc.)
18. Fliers using the field for circuit flying shall indicate their presence on the flight line and announce their intention to land and take off.
19. All pilots using the main flight line must fly from the provided pilot box.
20. An alternate 45-degree runway may be set up on very odd club days when the main runway is unusable due to conditions this will be advised by field officer and use of cones.

Park Flying Area, (Eastern and Western)

21. On the rare occasion that non powered gliders are flown from the Awatoto site on a club day, winches and bungees shall be anchored towards the upwind end fence line, so the aircraft is released from centre field. This is a restricted area and if there are pilots in the main flight line pilot box this is a no-fly zone. Landing approaches shall be conducted upwind with consideration for maximum safety. Take offs and landings, including low level flights, shall be a safe distance from the Deans Shelter and car parking areas.
22. If flying from the Western or Eastern areas, Pilots should congregate together so communication between said pilots is possible.
23. With the stop bank being a public access way, pilots must always keep their aircraft at a safe distance. Overflight of the public at low levels is prohibited.
24. Only suitable aircraft should be flown in these areas. e.g. Slow, light, fixed wing powered aircraft, Gliders and Vintage.
25. Quad racing is to be set up near the fence line in the Eastern area.

Helicopter, Quad Copter and FPV Area

26. Helicopter, Racing Quads and all FPV aircraft shall only be flown within the immediate environs of the marked area (such as cones) if there are any other flying groups on the field.
27. No person shall enter the Helicopter, FPV flight area while any flight is occurring.
28. Pilots shall announce their intention to commence flight.
29. An observer for each FPV flier shall be maintained.

30. Spectators shall not enter the flying area at any time.

General – Black Bridge Field

The Black Bridge field is restricted to soaring and electric powered aircraft only for noise abatement reasons.
1. All gates are required to be left in the same condition (locked, shut and or open) as found on entry.
2. Soaring flying is normally conducted from the location shown on the map below. When soaring flying is occurring, the circuit flying shall avoid flight towards the soaring area. If there are circuit flyers operating at the Black Bridge circuit flying location, the soaring flying shall consider that location a nofly zone.
3. Awareness of whether there are people on the stop bank is always necessary. Overflight of the public at low levels is prohibited.

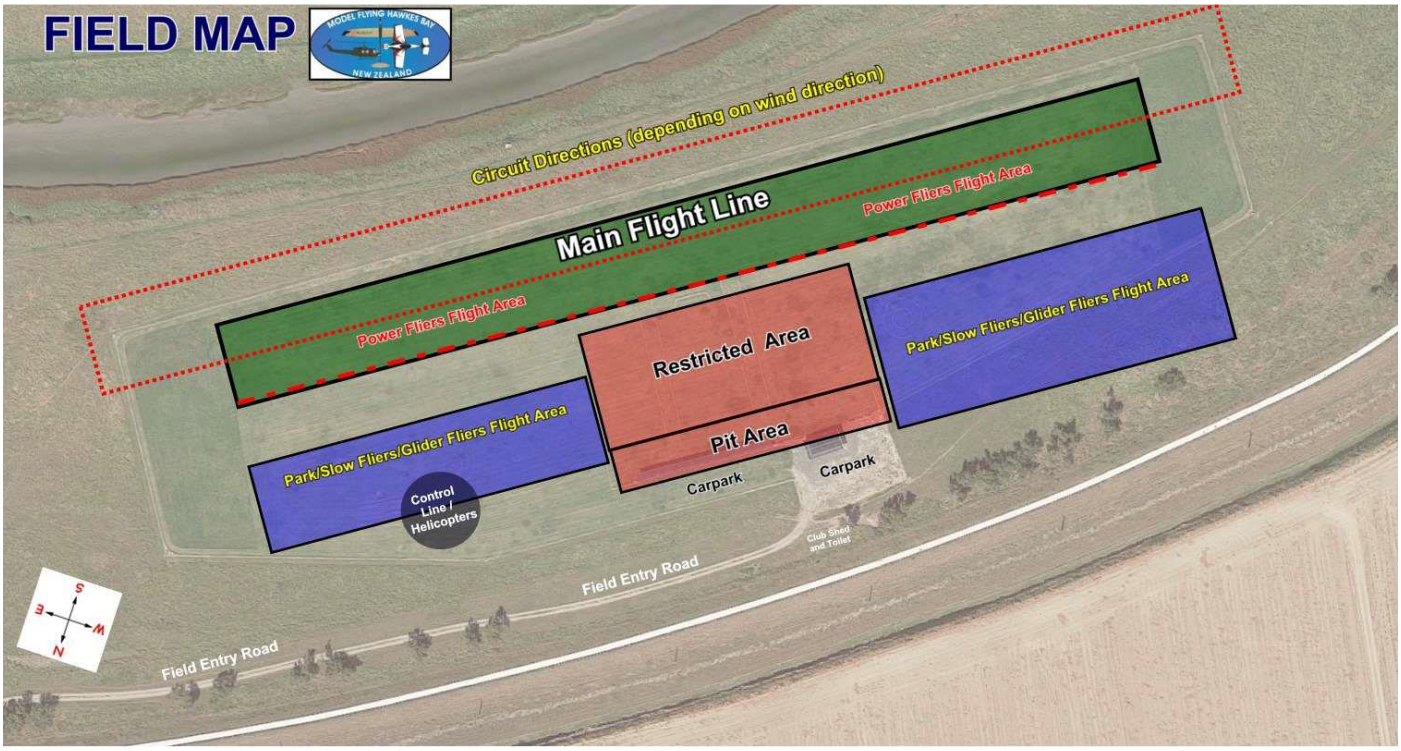
Conclusion

The adoption of these Rules and Recommendations, along with high operational situational awareness, will ensure safety is a priority for both members and others in the environs, and follow CAA and air traffic obligations. Education and co-operation are paramount.

Addendum

The following are links to CAA and MFNZ, much of which applies to MFHB Members:
https://www.aviation.govt.nz/drones/regulations/part-101-rules-for-drones/ provides a good general introduction.
https://www.aviation.govt.nz/assets/rules/consolidations/Part_101_Consolidation.pdf - Sub-part E is applicable to MFHB Members, particularly pages 21 through 26.
https://drive.google.com/file/d/17SjoPArGZ9bBmDHvISBYe0UdI2gcNAdU/view
https://drive.google.com/file/d/10hoW2HqSSxO4FrJis5nyOIP-zeHlpVby/view

Awatoto Field Layout



Black Bridge Field Layout

Oct-24

CLIVE'S CORNER #20 Sept'24

Another interesting contribution from ***Clive****, who's motto is* ***" I love aeroplanes, it's just flying I hate"***

The Percival Proctor *et al.*

I first became interested in aeroplanes when my parents moved our family to Blenheim in 1951. Up to that time we had lived in Auckland and no aeroplanes flew over the suburb where we lived.

Despite having only 11,000 people living there, or perhaps it was because of its sparse population Blenheim had two airports. All air traffic had to fly over the town to go anywhere, aircraft from the Woodborne Air Force base flew to the north of our house and those flying to the south came from Omaka. I knew about Omaka because I had a copy of High Adventure by John Stannage who had been Kingsford-Smith's radio operator on his Trans-Tasman flight. They had landed at Omaka on one of their flights.

In our house you found out quickly from my Australian mother that Kingsford Smith was not popular in his native land. He was accused of faking a crash landing in the outback. Two of the search crews looking for him were killed.

The aircraft leaving Omaka aerodrome flew over our house. Apart from training aircraft two small aircraft operated commercial flights.

There was a Miles Gemini. While not sleek it was an attractive plane. The crew and passengers sat in a huge bubble that gave an all-round view. It was powered by two Cirrus Major engines and was equipped with twin rudders (hence the Gemini name) and had taken part in races in the UK. In the air it was recognisable by its flaps which were mounted behind the trailing edge of the wing like a Ju87.

The Miles Gemini

In the early post war year Miles Aircraft had been successful, they sold 130 Geminis before it had flown but in the early 1950s they became embroiled with an experimental supersonic project. In the end they became manufacturers of Ball point pens.

If I can digress a little another supersonic project was the Bristol Type 188. It looked a little bit like a Meteor on steroids. It suffered as research project as it could only carry enough fuel for a flight time of 15 minutes. Civil aviation rules in Britain at the time stated that any aircraft in flight carrying less that 15 minutes fuel had to declare an emergency and land immediately. Oh Dear

Back to Omaka in New Zealand. Alongside the Gemini was a Percival Proctor.

The Percival Proctor.;

The Proctor Had been used by the RAF during the war as a radio and communications trainer. It had been developed from a long line of racing aircraft for short course races and international proving flights. Notably an early version of the Proctor, the Vega Gull had been flown by Jean Batten from England to New Zealand and England to Australia and return.

I had seen photos of her before I got to Blenheim. Most of these were taken when she had arrived somewhere and her flying goggles had left deep depressions around her eyes. I didn't think she looked like a movie star as the newspapers claimed. Her aircraft is now mounted in one of the airport buildings at Auckland. It always seemed to me a pity that it wasn't maintained in a flying condition. Perhaps if it was carrying 8 machine guns it would be.

The Proctor was a simple wooden structure pulled along by a 6 Cylinder Gipsy Queen engine. It gave the impression of being in a hurry. Over a thousand had been built during the war of which 9 came to NZ. Two are still airworthy.

At the end of WW2 Percival saw that there was a market for an ab initio trainer for the RAF. While the Proctor was tried and proven it was decided to produce an all-metal version. During flight testing the Prentice as the new trainer was called was shown to have serious handling problems. To get rid of these problems required major changes to the size of the rudder as well as other changes. The result was that was an attractive aeroplane as a Proctor became a real ugly duckling as a Prentice. The name Prentice was short for Apprentice or somewhere where you learn stuff.

The Prentice retained the three-seat arrangement of the Proctor. The pilot and trainee sat side by side with the third seat behind. Controls were not provided for the third seat. It was used for radio training or for a second learner pilot to observe procedures. Strange eh?

The new trainer first flew in 1946, it was manufactured until 1949 and it was retired in 1954.

The Percival Prentice;

In the Uk the early 1950s were a time of rapid development. The Hawker Hurricane, and the Gloster Javelin fighters, the Valiant Vulcan and Victor bombers all went into service around this time. The English Electric Lightning which could climb vertically above the speed of sound was under development in 1951 and first flew in 1955.

It almost seemed that training was a on a wild goose chase. Percival produced a new design that first flew in 1951 and went into service in 1954. The Provost was powered by a radial engine produced by the Alvis car company. It was capable of over 300kmph but it was anachronistic and left big step up to the Hunters and the Lightning. It retained what was seen as desirable in a trainer, side by side seating for instructor and trainee. It was also important as the next step for pilots which was to the Vampire which also had a side by side configuration.

The Percival Provost

The last production Provost was delivered in 1956 although some remained in service to the 1960s

In parallel with the production of the later Provosts the design of the Jet Provost took place. This meant that components from the piston engined version could be transferred to the jet simplifying the design process. Further modifications took place progressively as a result of discussions between Percival and the Air force. Flight testing was made part of this process and the first order of 40 production aircraft was made in September 1955.

The Jet Provost;

The Jet Provost was the first jet powered ab initio trainer to be adopted by any air force and it remained in service with the RAF until 1990s. Ironically they were replaced by the Bull dog piston engined plane.

But there was another chapter in this story. The Jet Provost had been sold to several countries, mainly in the Middle East. Counter-insurgency operations were included in their capabilities by equipping them with machine guns.

BAC undertook a further redesign of the Provost which became the Strike master. The new aircraft was equipped with an up-rated Viper engine, wing tip fuel tanks, ejector seats, hard points under wings for machine guns, rockets, bombs, and additional underwing fuel tanks. The RNZAF took delivery of 10 Strikemasters in 1972 and a further 6 in 1975. They were withdrawn from service in the early 1990s when fatigue cracks were found in the wings. ***Clive.***

Soaring Report.

Soarchamps 2024

What a wonderful four days of weather for flying Soarchamps this year in Hawkes Bay! We had an ambitious schedule for this year's Soarchamps, with a total of seven events scattered over four days. We flew all events, with zero weather issues, other than a winch change on the first day, which was expected due to the weather prediction for the day. It was very nice to see a couple of new faces to Soarchamps, as well as a few that had not been for a few years.

David Achery

Peter McEvoy & Joe Wurts

Aneil Patel & Chris Kaiser

Day 1 Thursday F3B the Formula 1 of Soaring! The weather forecast had SW winds in the morning, changing to NE around 11 AM. When arriving on the field, the SW wind as moderately strong, so we set up to launch into the wind, knowing that we would be changing later. Everyone was helpful in getting the sighting bases set up, and we started with flying duration, with 11 competitors. After a single slot, the wind changed as per the weather predictions. So, we flipped the winches 180 degrees, and the sighting base A became base B and vice versa. We flew two rounds of duration, then broke for lunch which was catered by Joe with smoked brisket sandwiches. Rowdy got the perfect flight award for an exact 10 minutes and a 100 landing, taking some points off Joe.

Peter Glassey & Peter Williams

Andrew Hiscock & Richard Thompson

Rowdy procured a new wireless signal system for distance and speed, which was used for the first time in this event. There were a few niggling issues, but the consensus was that it will be a far superior system once we get a couple details sorted. Thanks Kev! After lunch, we flew two rounds of distance. It was very surprising that we had so many ties in distance, so many 1000 scores! David James did the highest number of laps during the two rounds with 24 in the second round, with Stew Cox getting 20 laps. Stinky did a great job taking a lap off Joe for one of the few non-tied slots in the first round. Then we flew two rounds of speed. Joe flew a clean 16.64, with Richard Thompson doing 18.01, Peter Williams with 18.20 and Andrew Stiver at 18.76 for the sub 20 second flights in the first round. In the second round, Joe did 17.53, with Peter Glassey close at 17.73, Kevin Botherway at 18.64, and Peter Williams at 19.68.

F3B Results

1.Joe Wurts	5942	7. Andrew Stiver	5168
2. Peter Williams	5795	8. Stew Cox	5126
3. Kevin Botherway	5729	9. Pete Brown	4471
4. Peter Glassey	5693	10. Andrew Hiscock	3878
5. Richard Thompson	5691	11. Rob Morgan	3273
6. David James	5576		

Day 2 Friday eRES and F3J. We started the morning with flying eRES, with 11 competitors. The conditions were nice with little wind. That is, after the first slot which had some very difficult light thermals. After a couple of rounds, it was apparent that landing accuracy in both time and position were going to decide the results. Joe ended up with two perfect flights (5:00 and 50 landing), with Kev having one perfect flight. Friday's hot lunch was pulled pork with various sides and was well received.

eRES Results.

1. Joe Wurts	4000	6. David Ackery	3824
2. Kevin Botherway	3994	7. Stew Cox	3817
3. Peter Williams	3980	8. Andrew Hiscock	3788
4. Richard Thompson	3962	9. Rob Morgan	3638
5. Wayne Bilham	3829	10. Peter Glassey	3601
		11. David James	3508

It was nice to return to flying F3J. There is something special about executing a high tension F3J launch correctly, followed by a change of pace to doing efficient thermal flying. There were thermals around, so launch time was important. Landing accuracy was also very important. For landings, Joe dropped five points over four rounds, Rowdy dropping fourteen points, and Peewee dropping eighteen points. Joe had the two longest flight times of the contest, with a 9:56.8 and a 9:56.9, securing the win. Rowdy was close behind in second, with Peter Williams in third and Peter Glassey close behind him in fourth. It was nice to have a newcomer to F3J, Pete Brown flying in his first every F3J event. He isn't a newbie, just new to these fancy composite soaring planes. If only he did not have to depart a couple of rounds early to burn kerosene, he could have finished much higher!

F3J Results;

1. Joe Wurts	4000
2. Kevin Botherway	3991
3. Peter Williams	3977
4. Peter Glassey	3949
5. Richard Thompson	3695
6. David James	3617
7. Andrew Hiscock	3567
8. Stew Cox	3309
9. Wayne Bilham	3262
10. Rob Morgan	3160
11. Pete Brown	1926

Friday evening had a very nice BBQ and social hosted by Andrew and Jane Hiscock. They always provide an excellent feed that should not be missed.

Day 3 Saturday Radian and F5J. Time for the events that are most hotly contested. It is interesting in that one event is the most low-tech event with aircraft that have not been in production for quite some time, and the other event is a rather high-tech event with fancy composite aircraft. We started in the morning with Radian, with good conditions, light winds, sunny, and fluffy thermals. It once again became apparent that both timing and landing accuracy would determine the results. After the first round, Stew Cox was in the lead with a perfect flight, followed by Joe, Rowdy, and Andrew Hiscock with a single second error in landing. In the second round, Joe was the only person to get a perfect flight, with Rowdy a single point behind, with Richard Thompson and Andrew Hiscock just three points behind Rowdy. Both Joe and Rowdy had perfect flights on the third round so they finished 1st and 2nd, with Richard Thompson pipping out Andrew Hiscock by a single point in the last round. It was a great morning to fly Radians!

Radian Results;

1. Joe Wurts	1409	7. Stew Cox	1370
2. Kevin Botherway	1408	8. Peter Glassey	1351
3. Richard Thompson	1404	9. Rob Morgan	1147
4. Andrew Hiscock	1403	10. David James	1119
5. Peter Williams	1396	11. Wayne Bilham	1022
6. David Crook	1379		

After the Radian event concluded, we flew two rounds of F5J before lunch. The first two rounds had low wind, but the thermals were a bit difficult to sort out. There were a few sub-100-meter launches, with Joe doing a 44m launch in the first round, followed by a 33m launch in the second round, with Peter McEvoy doing a 55m launch in the second round and Rowdy doing a 95m launch in the first round. The hot lunch was smoked chicken with streaky bacon. After lunch, the sky turned cloudy, and the wind off the ocean picked up. There were only a few sub 100m launches in the last four rounds as the wind picked up and the cloud cover increased. It even got kinda cold! Rowdy did an excellent 49m launch in the third round, which unfortunately ended up as his dropper due to a late start from

technical issues. Joe did an 89m launch in the fourth round against Rowdy's 114m launch, with Joe and Rowdy doing 78 and 82m respectively in the fifth round when flying against each other again (both received 1000 points in round five as Rowdy had two more seconds flight time). Round six had Joe with a 91-meter launch with a full time with nobody else getting more than six minutes. Rowdy launched to 94m in round six which was a challenging slot. Chris Kaiser showed fortitude in this slot, climbing out from a rather low height while being rather downwind. There were many memorable flights from many pilots. It was a fun flying day overall. After the flying concluded, most of the pilots met up for a social and meal at the Dukes in Taradale.

F5J Results

1. Joe Wurts	5000	9. Chris Kaiser	4470
2. Kevin Botherway	4982	10. David Ackery	4164
3. Peter Glassey	4874	11. Rob Morgan	4005
4. Peter Williams	4850	12. David Crook	3974
5. Andrew Hiscock	4792	13. Wayne Bilham	3705
6. Dave Larsen	4788	14. Richard Thompson	3548
7. Peter McEvoy	4756	15. Aniel Patel	2837
8. Stew Cox	4621	16. David James	1564

Day 4 Sunday F3K (Discus hand launch) and F5K (Electric Hand Launch)

This was again another stunning Hawkes Bay forecast with light winds and sea breezes. The plan was to run 2 rounds of each discipline back-to-back. Miles Moloney entered for only Sunday as he had the flu during the early days of **Soar Champs.** With a short day scheduled, we managed four rounds for both F3K and F5K. There were nine entries in F3K and eight in F3K. Thermal action was weak at the start in F3K, Despite that, six of the pilots managed to get a 5-minute flight in 7m working time. Another short task was then flown 2 x 3-minute flights in 7m working time which half of the field achieved. F5K was the same first task as F3K, although launch height came into play to provide an extra differential on the results. Round two of F5K was a 1,2,3,4 flight which as the wind built was proving tricky to get a three- and four-minute flight. Then back to F3K for 3 x 3minute flights with Joe, Peewee and Andrew Hiscock full flights, and scores were starting to separate. Then the 1,2,3,4 for round four, which had much more score separation. Lunch was prepared and served by Joe (pulled pork returned by popular demand), a great spread

as usual. The wind was getting stronger, which made for a bit more challenges in the last two rounds of F5K. The third round was all up last down four minutes and three flights. There was heaps of score separation. The fourth round was three flights with 3, 3, 4 minute maximum in challenging conditions, providing even more score separation. Stinky did extremely well, finishing in second place only a wee bit below the first place position. Final flights were around 2.00pm on Sunday in time for pack up refreshments and prizegiving.

F3K Results

1.	Joe Wurts	4000
2	Peter Glassey	3930.5
3	Andrew Hiscock	3890.2
4	Richard Thompson	3674.0
5	Peter Williams	3669.5
6	Miles Maloney	3581.4
7	David James	2998.4
8	Stew Cox	2373.1
9	David Crook	2079.4

F5K Results

1	Joe Wurts	3979.1
2	Andrew Stiver	3939.1
3	Kevin Botherway	3825.7
4	Peter Williams	3771.1
5	Richard Thompson	3224.7
6	Peter Glassey	2987.3
7	Andrew Hiscock	2794.7
8	David Crook	766.9

Joe had flown very well throughout Soarchamps and had well deserved wins in all the events cleaning the complete table of trophies, including **Soarchamps Champion!**

Thank you so much to everyone for a great turnout with lots of enthusiasm and fun throughout a great weekend of soaring.

Soaring Rocks !!!

Vintage Report. Oct 2024

Not much to report **Club wise**. NDC only catered for Classical E Texaco for members here this month.

On the **National scene**, to get around small battery procurement and C Rating difficulties the Rules governing power supply for both Vintage and Classical E Duration classes are now being changed to “Unlimited” battery capacity and cell count. Wow, I’m considering building a rocket ship, so that in 20 seconds of motor run I can get way above any commercial aviation and Fly Off flight times could be measured in hours rather than minutes. Mmmmm , challenging times ahead !

Now back to reality, nothing vintage from members, but an interesting pair of models from our South Island *correspondent**, Barry Lennox,** who writes;*

Been flying one of those blue foam Lazy Bee look-a-likes in the back paddock. Its Ok, but you have to be wary of the trees on the border. They are only seconds away!

These blue foam things were built by the hundred down here, many by Alan MacDonnell, who I knew in the RNZAF as an electrician. He used to have quite a large house in Belfast, with dozens of the things in various stages of construction. We caught up with him recently.

The 150% Cherub is about ready to fly now as well. The spray can was described as Baby pink, but it's more like a muted red. I should go and demand a refund when I've finished the can. An old Scots trick ! It has an older brushed AstroFlight motor/ESC and a 2.3:1 gearbox turning a 11" prop. It shifts a lot of air around the workshop!

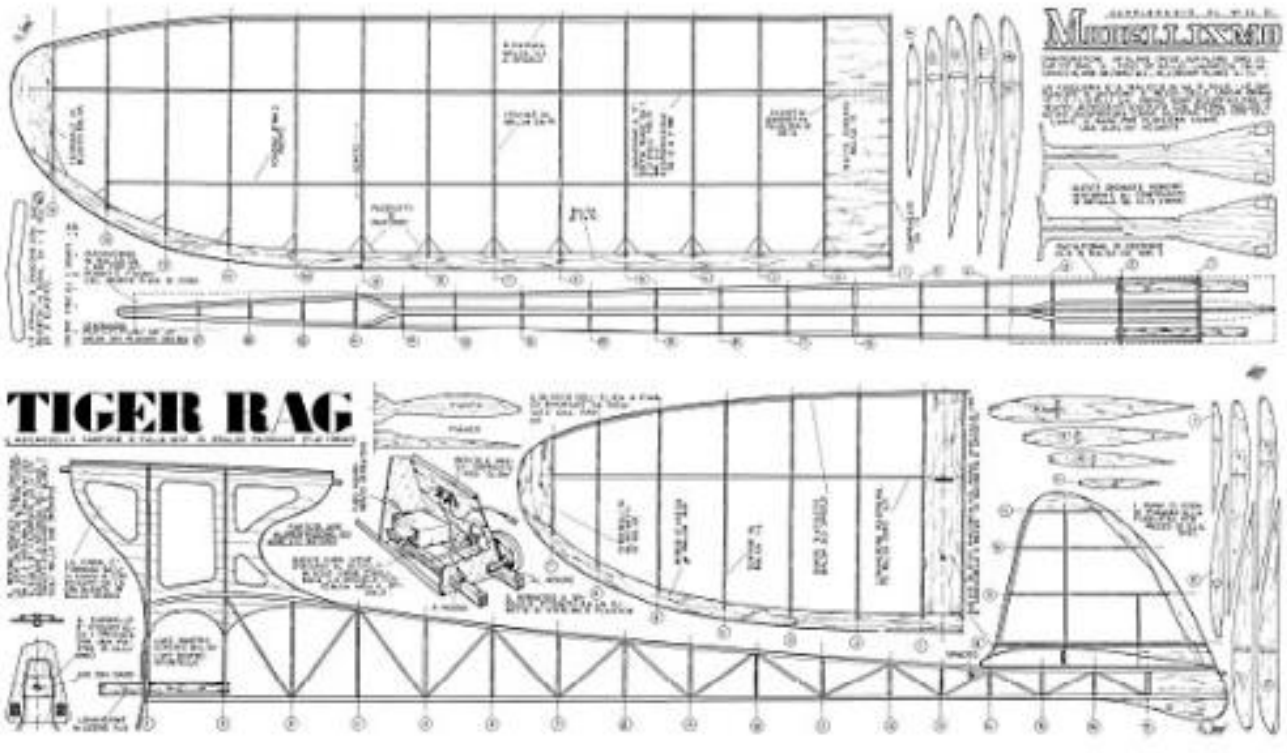
https://outerzone.co.uk/plan_details.asp?ID=3841

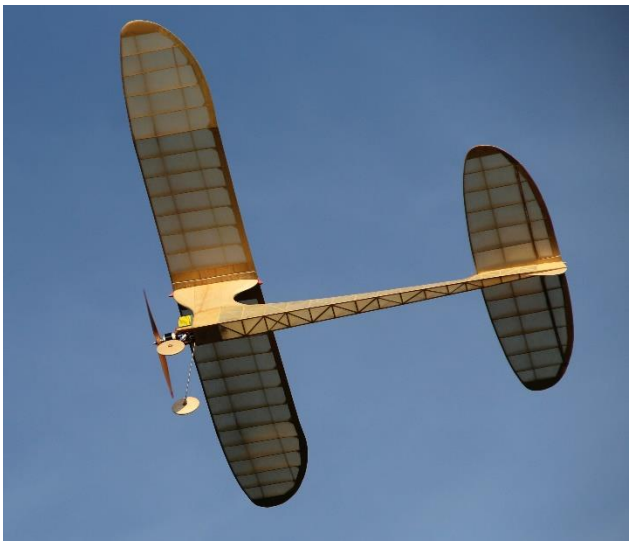
Regards, Barry L.

I've been looking for a suitable model for the **Classical ½ E Texaco** class and found this Tiger Rag, a picture featured in the latest AVANZ newsletter.

An Italian model published in February 1951 in Modellismo. The download is available from Outerzone at

https://outerzone.co.uk/plan_details.asp?ID=9336





This model above built by Slovakian modeller **Tomas Matus** for his wife to fly . You can have a look at the Slovakian SAM site here; SAM 119 Slovakia **https://www-sam119-sk.translate.goog/?_x_tr_sch=http&_x_tr_sl=sk&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc**

The model has a 52 inch (130cm) Wingspan.

I've got some 3mm square carbon tube (0.5 mm wall thickness) for the fuselage longerons, my first foray into that world, will be interesting to see how the weight and strength work out. **Ed.**

Levin Glider Fun Fly / Aerobatics Norsewood

Open Invitation to attend Levin Glider Fun Fly

Saturday 30 November 2024 - 9.30am start (Wind date Sunday 1 December)Format:

Fun fly for soarers. Dig out those gliders or electric soarers that may have been tucked away for months or years! Bring along your electric, winch, bungee or hand launched glider and go soaring. All welcome. The day is about having fun flying soarers together no matter what your ability or sophistication of model. We anticipate Radians/Gentle Ladies right through to F3B soarers. Help available on the day, don't hesitate to ask the organisers.

Location: Levin flying strip, Tararua Road. Turn over the railway line opposite the Allied fuel pump and then immediate right at the T intersection, continue along Tararua Road past JB's on the right and Trayla on the left. The field turnoff is on the right about 50 metres past the 80km speed sign – you can see the clubhouse and the hay barn from the road.

BBQ:The Levin MAC will be running a sausage sizzle at lunchtime at purely nominal cost so bring a few coins.

Cancellation notification: The lower NI Glider Email List will be notified of any postponement on the Friday afternoon (if you want to be added to this Glider Email List please advise Stew at Flierstew@gmail.com). This will also be advised on the Levin Club website Levin Model Aeroplane Club - Home (sporty.co.nz)
If uncertain on the day, feel free to ring …. **Stew Cox on 027 548 1894 or Kevin Daly 027 446 3822**
Hope to see you there! Stew.

Aerobatics in the Bay … The Hawkes Bay that is … at Norsewood

This coming Saturday November 2nd,

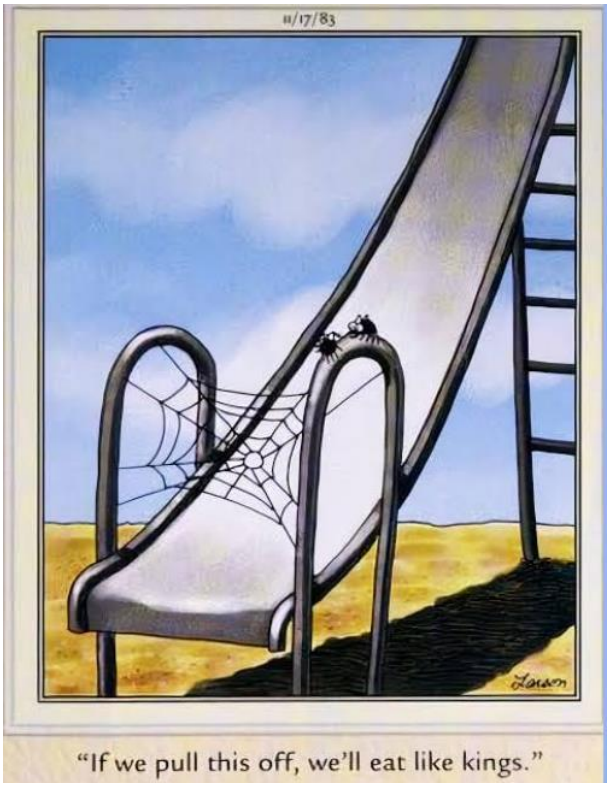
iI you are in the Hawkes Bay Region / Palmerston North / Woodville / Paihiatua / Kapiti …. (there are a heap of you guys down that way, you know who you are !!) then get along to the Galloway Farm for some Aerobatics to kick the season off.
Here is a link to the event so you can register. Aerobatics in the Bay (Norsewood) – NZ RC Aerobatics
Contact Hamish Galloway nzwormzz@gmail.com
Hamish and Sean are fresh back from a very successful trip over to ozzy, so get your gummies on and get flying.
Sundy is schedule for Rain Date.

Following that on **November 9/10** we've got Pattern and Pylon up at Airsail MAC. Registrations for that one are open too. Here is the link for more info: Pattern & Pylon @ Airsail / Pukekawa – NZ RC Aerobatics

That's all for now !!
Cheers
Frazer

NZRCAA

A CLOSING SMILE. October 2024



Yes, well that's it for another month, hopefully we'll all catch up before Christmas.

On that note, happy reading, building and flying,

Barrie the editor, mfhb October 2024.