

# Model Flying Hawkes Bay



## PROPWASH



Club Newsletter #166 Jan/Feb 2025

In this issue .....

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## Monthly Activity Calendar

**Sundays; Club days Awatoto Field**

**Sunday Barbecue Lunches; To be notified by email prior.**

**Tuesdays; Club "Shed" Mornings**

**Vintage; Ring around any day the conditions are suitable.**

**General Flying; Any Day the weather's fine.**

**Soaring; Black Bridge. Ph Rowdy or Joe.**

**Committee Meetings; Second Tuesday.**

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## Important Club Announcement.

We now have a new Boom gate at the entrance to the Awatoto Field access road just short of the Club Tractor shed. As with our previous gate beside the pump shed, this gate must be **left locked at all times**. The Club Padlock is mounted on the plate and there is a short video here;... <https://www.facebook.com/reel/1156703899322465> which President Marty has posted on the club Facebook page on the locking plate's operation.

The gate was commissioned by Ravensdown with support from the Regional Council.

Ravensdown is our first port of call if we have any problems. The locks on the gate cover all legitimate users.

**Therefore the gate MUST BE CLOSED AT ALL TIMES.**

**Members, you must close the gate behind you. If it happens to have been left open then it must be closed.**

MFHB Committee. February 12<sup>th</sup> February 2025

**Contributors to this issue;** Marty Hughes / Barry Kerr / Brett Robinson / Barrie Russell / Ash / Bill Roydhouse / Rod Hughes / Clive Baker / John Sutherland / Dave Crook / Paul Buckrell / Barry Lennox / Rob Lockyer / Ian Lewis / E & OE ....



## From the Editor's Desk;

**Greetings All,** Welcome back, that was a nice editorial break and now we have what seems to be a bumper issue once again. Some important announcements regarding the new **entrance gate** and the up-coming **IMAC Rumble** and also exciting news that next year's **78th MFNZ Nationals** are coming to the Bay. We'll keep you posted on that score.

Congrats to **President Marty, Tony Ives and Lance H and their team** for a hugely successful Warbird Rally, the weather was kind, the field picture perfect and the support from visiting pilots and their aircraft just the be very best. Coverage follows.

We have a Sale with a difference. Gear has been gifted to the club and this is being offered to readers by Tender. A couple of special items with reserve and the balance unreserved to the highest bidder. All good kit etc, so let the moths out of your wallets members and let's see some spirited bidding/tendering. **Ed.**

## PREZ SEZ;

It seems a little late into the year to say Happy New year but here we are back with the first "Propwash" of the year after our editor has returned to the keyboard after a well earned break over the festive season .

I trust we all had a nice Christmas and didn't over indulge too much .

So, where to start. Well it seems we didn't really get much of a summer until Warbirds weekend. And what a weekend it was. 39 pilots registered and most with multiple aircraft to fly. We had over 2000 spectating public through the gates over the two days and I believe this is the most successful war birds since I have been steering the ship. The highlight for me was Paul Buckrell's Raptor. A 35 kg Jet flown by Andrew Stiver. Wow, just Wow !!

May I just say a huge thank you to the usual suspects who turn up to help set up and pack down . It's a big job but those that help make it easy. The gate roster is always the hard one to fill and we just scraped through . Thanks to the committee for all the work behind the scene. To organise and promote New Zealand's Premier Model Air Show doesn't happen by itself so we as a club can be very proud of what we have achieved .

It was great to see young Jarrod Briggs taking the baton from father and putting on a world class lunch time display . Next year is the 30th anniversary of Warbirds over Awatoto and it's going to be extra insane and special. Your committee will need help so please put some thought into if and how you can help. This is our annual fund raiser to help keep the subs down and keep the field up to the high standards that other clubs can only wish for.

Now that warbirds is over I'm now relaxing in Taupo and writing this in the sun with a view over the lake. On other news, our life member John Clarke has donated his beautiful Zirolu Mustang to MFHB on a long term loan ( it will remain the property of the Clarke family). Once we get the clearlite in the club house roof covered over with iron , the Mustang will hang up on display and come down for a static display for warbirds. If you have never seen this work of art then drop in, you will be very impressed with the detail . Well that's about my lot .  
Signing off from Taupo

Marty.



# The Rumble over Awatoto

**February** Friday 21<sup>st</sup> Saturday 22<sup>nd</sup> and Sunday 23<sup>rd</sup> (3-day event )

## Closure of Awatoto Field for the NZRCAA competition.

Model Flying Hawke's Bay is again hosting this event. This year it is IMAC (scale aerobatics) only, no pattern competition.

**A reminder to MFHB members that the Awatoto Field will be closed to general flying** due to a NZRCAA competition being held over the weekend Friday 21 February thru to Sunday 23 February 2025.

MFHB Inc. members are welcome to participate, so what's it all about?

IMAC (International Miniature Aerobatic Club) is the organization that grew out of the interest of flying scale aerobatics. For IMAC, the only aircraft requirement for classes above Basic is that it is a faithful scale model of a known aerobatic aircraft.

MFHB members are very welcome to come along and give it a go. BASIC is the sequence to start with, as you can fly any type of model. The IMAC sequence can be found here .... <https://mini-iac.org/downloads/sequences/2024-knowns>. Note that we fly the 2024 for the rest of our season. Look for "Basic Known".

I can think of at least 10 members that could fly the BASIC sequence. I am available almost any time to pop out to the field and help you go through the sequence. So, give me a call, and have a go.

If IMAC BASIC looks a little daunting we could do a couple rounds of Clubman. It's easier being centre stuff only, no spin either.

The Clubman sequence can be found here..... <https://www.nzrcaa.co.nz/pattern/clubman-maneuvers-explained/>

Although the above is a 3 day event you can just pop out for 1 or 2 days. I would think we will be flying a couple of rounds of BASIC each day.

In IMAC there are other classes where the models get bigger and the sequences get interesting (harder), so even if you don't want to fly there will be plenty of good flying to be seen.

There will be a BBQ lunch each day. Frazer is making it zero entry fee for local members and a chocolate fish for all BASIC and Clubman pilots.

Hope to see you there.

Rob Lockyer.

Ph 0274 483 559.

**If you are intending to enter, please phone Robert SAP so he can get your names registered with Frazer for the various IMAC classes in the competition schedule.. Ed.**

# CLUB ACTIVITY Jan/Feb '25



*Welcome to the NEW YEAR and here we go again. My participation over December and early January has been a bit sporadic and member attendance a bit quiet so the following will just be some snapshots of activity as I've been contributed to, come across or been involved with.*

The "Nationals" have been and gone with a successful onslaught from MFHB who came home with the Champion Club Cup Trophy once again. **Sean Galloway** was again Junior Champion, and **Rob Lockyer** performed admirably in Aerobatics with a first in IMAC Basic and 2<sup>nd</sup> in Clubman Pattern. **Sean** placed first in the ever popular Aggy contest, what it is to have young and powerful legs ! **Rob** was second in Intermediate Scale and **Hamish Galloway** 2<sup>nd</sup> in F3A Pattern. The Soaring boys **Joe W, Kevin B, Myles M, Kevin C, and Andrew Meyers from Oz** performed well and **Joe** took out the Soaring Champion Cup. The weather was somewhat disruptive with a couple of days washed and blown out, but they prevailed though numbers in some events , especially Vintage RC were down.

Full results can be viewed here [https://nats.mfnz.org/Admin/Event\\_Results\\_Detail.php](https://nats.mfnz.org/Admin/Event_Results_Detail.php)



**Above;** Sean receiving the Champion Club Cup for MFHB **Right;** Sean, Jnr Champion.

Before Christmas, **Graeme Rose** and I took on the job of replacing the Eastern end Shelter curtain. **Graeme's** sewing skills were put to the test and he performed with distinction on his back lawn on a nice sunny morning ! The curtain slides with eyelets on a top wire and is secured at the bottom by bungy chord loops around the fixed bolts. The club is arranging a padlock to secure the chain around the curtain and side pole when not in use. As previously, the curtain must be folded back and locked in place before the last member leaves the field.





Activity installing the Eastern curtain just before Christmas. It is hoped to repeat the exercise and make another for the Sou-western end to give members comfortable shelter from the prevailing winds at Awatoto Field.



I understand **John Sutherland** has had his magnificent FW 190 Dora out to the field for motor runs and taxi trials and reports that all is looking good, with no overheating and good controllability. Just waiting for some suitable weather for the flying tests. What a sight that will be in the air over Awatoto. This is the culmination of an eight year-plus research and build resulting in incredible attention to accuracy and detail.

The "Shed" has seen some regular Tuesday morning activity, a good resting place for the retired, tired, confused and those just looking for some advice, company and a chat and a cuppa. Come along and join in, the atmosphere's fine !

**Rod's** SE5 is under scrutiny from Dave and Archie, whilst Nev takes on more of a supervisory role.



Progress is excellent, not far off having decals and detail applied as most of the gear and motor etc are installed.

**Mike S** responded to **Max's** plea for help in setting up some of his latest acquisitions. Where Max get's them all from is a source of wonder, perhaps we should have a clubnite in **Max's** garage/workshop, now that could be interesting ?





Just another morning in the shed, young Jason spent some quality time on the simulator, maybe a few of us should be doing a bit more of that also ?? The Shed is a great place for “show and Tell” and getting advice on “How To” .

## Welcome to new member Kris Pawlson and his family.

**Chris writes;** *A little about me: I am 42, originally from the Wairarapa, moved to Wellington for the middle part of my life where I met my wife Tamara. Wanting a family and coming from the Wairarapa we were looking for a place that was smaller and had that community vibe to it. We landed on the Hawkes Bay as it suited our needs well and we had family here.*

*I work for Scales Corporation and Mr Apple. 50% of my role is Security Officer for Scales corporation where I am responsible for Cyber Security for Scales and its subsidiaries (6 in total), the other 50% of my role is IT Operations Manager for Mr Apple, I have a team of 4 that manage the day to day IT systems for Mr Apple keeping the servers up and running and the users PC's/Laptops/Tablets/Phones and other devices operating. We look after everything from tech in the Orchards to IT systems in the Packhouses and general Office systems.*

*We have two boys, Theo (5yr) and Lincoln (2yr). We have recently been exploring hobbies that involve building, gears, electronics and problem solving. Some of these*



hobbies are Tamiya Mini 4x4 (1/32 scale build and go kits) which has been great to teach Theo the basics of gearing and mechanical systems. We have also been mucking around with RC cars which has been great for remote skills and how to fix things when they break.

We have inherited the Cobra Cub from Tony Reid my father-in-law, and as a result has sparked the interest further in the RC field. We have joined your club as we have learned that flying planes is not as simple as driving cars and we need a safe place to learn and fly. The times I have been down your members have been very accommodating and inviting and have had some great conversations. It looks like a great community to be involved in and I love the ideas and lessons it can teach myself and my boys. We're looking forward to the experience,

Regards, **Kris Pawlson.**

**Phil's** replacement IMAC ship, a new Extra is all together, trimmed out and flying well. DA40 twin powered.



**Rod** has been preparing his air force for the upcoming Warbirds and brought his Moraine Saunier out for some air time. Powered by a 55cc DLE it needs about quarter throttle to become airborne and cruise around the sky ..Fortunately the wing attachment system for that large parasol wing looks very robust for when the throttle gets opened up !





Clive captured this neat shot of the Moraine coming home, but “Where’s the pilot ?” he asks.



**John** / FW190 Dora, **Marty** / P-51 Mustang and **Phil** / Feisler Storch. Posing for “Warbirds over Awatoto.”

## Aerobatics Report;



## Soaring Report;

Carl was noticeably nervous during the hand-launch endurance event...





# MODEL AUCTION

**TMAC**  
Tauranga Model Aircraft Club Inc.

**Sunday 25 May 2025**  
Classic Flyers Aviation Museum  
9 Jean Batten Drive, Mt Maunganui  
Doors open 7.30 am. Auction starts 10.00am

For more information refer to website:  
[www.taurangamodelfly.org/annual-auction](http://www.taurangamodelfly.org/annual-auction)  
or  
Contact the Club Secretary - Garry Bentley  
Phone: 027 6432103  
Email: [taurangamodelfly@gmail.com](mailto:taurangamodelfly@gmail.com)



Would you believe there's a combined brainpower of some 325 years focussing on Rod's SE5A. What a lucky fellow, he must be in such good hands ... isn't he ????



## 78<sup>th</sup> MFNZ Nationals are ON in Hawkes Bay 2026 !!

The Nationals Team are delighted to announce that the coming 78<sup>th</sup> Nationals are ON! We have a new venue and location for the 78th Nationals and have been working very hard on sorting logistics. Our goals were to find a better location that is easier to find fields nearby, with all the functionality we need, in fantastic condition and which provides for closer accommodation, allowing everyone to mix-n-mingle more easily.

First, the dates. To hopefully hit a more reliable weather pattern and easier travel and allow new year celebration and family time, the dates will be :

- 3rd January (Saturday) Registration Day
- 4th January (Sunday) 1st days of flying events
- 8th January (Thursday) Final day of competitions
- 8<sup>th</sup> January, Prizegiving at 7.30pm

The venue is in Waipukurau, Central Hawkes Bay. Not only have we found an awesome site, but there are many activities and attractions in the region for those not actually competing, wineries, beaches, and more. Napier is less than an hour away. Waipukurau is an easy location to get to from North and South.

Highlights of the location include:

- A great sports complex with the facilities that we need for indoor flying, meetings
- Administration including meeting room for SIGs and most important, socialising. Baldrick's Burgers and the Prizegiving will be here.
- Right across the road is the local camping ground with facilities far exceeding what we have had in recent times including a very good Kitchen and dining area complete with freezers and fridges plus a laundry
- The camping ground has power sites and tent sites and some cabins
- There are three motels in town
- Fields are expected to be easier to find as this region peaks at a different time compared with the central Wairarapa. It's also Hamish Galloway's local area and he knows it and its Farmers.
- All the venues are within a block of each other so we can attend all functions with ease!

Charges will be reduced this year, reflecting the savings we are making in the venue costs. Full registration will be reduced by approximately 50%, that is \$30-\$40. Also, we are instituting a "Day fee" of \$20/day for those who expect to attend up to two days.

### **Waipukurau Holiday Park.**

This time, we will not be managing camping, the Holiday Park is an independent organisation, and we urge you to make your bookings as soon as possible, They are expecting us in large numbers; quote "MFNZ Nationals" so they know you are part of us. Look them up on this link. <https://waipukurauholidaypark.co.nz/>

### **Motels.**

There are three motels available: two are within 5 or 6 minutes walking from the venue, and another further away on the main road south. They are expecting us in large numbers; Look them up on these links;

Close by are:

- Tukituki motel on SH2: <https://www.tukitukimotel.co.nz/> Have 14 units, they have booked all of them for us, and if you quote “MFNZ Nationals” they will offer a \$10 discount
- Fergusson motor Lodge on Peel St: <https://www.fergussonsmotorlodge.co.nz/> and quote “MFNZ Nationals” so they know you are part of us.

Also in the town, a couple of km away,

- Thornton Lodge Motel: <https://www.thorntonlodge.co.nz/> is on the main road south toward Dannevirke, they have 16 units. Quote “MFNZ Nationals” so they know you are part of us

**We repeat, note all accommodation needs to be booked directly and we would suggest that you start planning for this now.**

The facility includes the Sports ground on the junction of SH2 and River Terrace adjacent to the Tukituki River and in this image includes



those labelled as Russell Park and if we need, the CHB A&P Assn.

Indoor Complex booked for 3 nights.

Town hall below



The town hall will be used for prizegiving supper and all functions after field functions with the availability for SIG meetings (in separate room)

As things develop we will keep you all posted via the Nats website.

**Get booked in NOW! January 3<sup>rd</sup> to 8<sup>th</sup> 2026**

**We have booked Hawkes Bay Weather**

And there's a great "Smith & Jones" video on facebook telling you all about

it, <https://www.facebook.com/modelflyingznats/videos/639798551895027>



# Warbirds over Awatoto 2025



Welcome to the 29<sup>th</sup> “**WARBIRDS OVER AWATOTO**” at Model Flying Hawkes Bay’s Awatoto Flying field here in the beautiful Hawkes Bay. Once again the Weather Gods have smiled upon us with a perfect three day forecast of sunshine and mild sea breezes. Friday dawned fine and was set up day.



The field looking a picture thanks mainly to the ministrations of **Lance H** and “**Big Red**”, his tractor/office . As usual members answered the call under **President Marty’s** CD-ing skills and the set up was completed mid-morning allowing time for the early comers to get in some practice flying. Again, a huge vote of thanks must go to **Tony Ives** and his band of helpers who did a sterling job of gate keeping and traffic management to the benefit of us all.

Without visiting pilots and their magnificent machines, the show would not go on and this year once again we were wonderfully supported by modellers from around the country. 39 pilots were registered with a huge number of aircraft, the quality of which was superb. The standard of the aircraft and the flying skills with only a couple of mishaps bore testament to the high standards now required for a public event such as this.

A very special occasion this weekend was this photo shoot of our oldest active Life member **John Clarke** with a collection of models he’s scratch built over some recent years. **John** recently has developed some mobility problems but remains active and interested and has a small band of hand picked pilots to fly his treasures for his and our pleasure. The magnificent DC3 under **John Sutherland’s** command is always a pleasing sight, and **John C’s** P-51 Mustangs never fail to impress, his latest build of his fifth one below in the foreground, finished just before Christmas is in **President Marty’s** stable.



Both days saw a large public attendance which certainly reinforced the image of aeromodelling in the Bay. The flightline was busy at all times with like model types flying together and interspersed with single aircraft displays. Perhaps one of the most spectacular being Paul Buchrell's turbine powered Raptor jet being flown by Andrew Stiver.





When we think back to the early days of WOA and the number of small and kitset built warbird models, today's pit scene is quite overwhelming. The size and standard of aircraft is something to behold. There is no doubt that the high standard of ARF models and semi finished kits have brought many skilled pilots into the aeromodelling scene. To balance that however it's great to see the number of scratch built aircraft on the flightline built to such a high standard, exacting detail and flying so well.

The roots of aeromodelling at the workshop bench are still alive and well !!

During the lunchtime breaks, **Jarrad Briggs** with Daddy **Frazer** calling put on a spectacular show of 3-D flying with his large Extra aircraft. Father's skill must be in his son's genes as **Jarrood** thrilled the crowd and us too with some great flying displays doing things with that aircraft that defied gravity and belief, **Thanks Jarrod.**



The following is a pictorial tour of the weekend through the eyes of my camera together with pictures I've borrowed from Clive Baker, Mike Shears, Peter Chang, Dave Crook and others I've stolen along the way.



The public turned out in droves, not disappointed and contributed nicely to the club's financial well being



The new club seating proved a hit and there was a regular procession of cars coming and going over the weekend. Fortunately parking was no problem with **Lance** having mown the area.

A moment of excitement for yours truly when filming the arrival of Steve Blackman's Lancaster. I suddenly realised it was getting very large in the view finder and eyeballing me. I instinctively ducked and the Pilots



safety cage saved me and arrested the aircraft !! The cause evident, the inboard motor out.



***Clockwise from Top Left;*** Phil Sharp's Pup / Marty Hughes Fokker Triplane / Gordon Meads Stampe & Alan Rowson's Fokker D 7 / Rene Redmond's Sopwith Pup. All performing well in the WW1 flypasts.



WWI in the start-up box, In the foreground Rod Hughes Moraine Saunier, the Gwyn Avenall's Fokker D 8 and Rene Redmon's Sopwith Pup. Below a pits scene looking east.



**Carl Hansen** flew these two Turbine powered helicopters giving some very impressive displays. The first one is a Russian Kamov KA-50 twin rotor, and the lower an MIL MI-24D single rotor turbine powered.



WW2 warbirds are always a favourite with the crowd, and this year they were bigger and better than ever and with a lot of old favourites.



*Clockwise from top left;* The **Brigg's** Mosquito / **Pete Brown's** SOSc Lightning (ex-John Clarke) / **Stan Nicholas's** P-51 BBD / the ever impressive John Clarke DC3 / **Bill Roydhouse's** Hurricane (ex-Bob Whitburn) / **John Sutherland's** magnificent new FW 190 Dora.



Let these photo shots all speak for themselves.

And again, the Jet boys wowed the public and members alike with their sight and sounds and speed. **Paul Buckrell's** Raptor flown **by Andrew Stiver** was awe inspiring.

You sure have to have big cobbles to be brave enough to fly that much moolah around the sky !!



**Pete Brown's** Vampire and **Ryan Groves** Aermacchi never cease to please and gave some great displays over the weekend.

**Pete's** Hunter below sadly had to stay in bed over the weekend as it had developed some tummy troubles.



Flying continued late both days, but the official program was wrapped up mid-Sunday afternoon with the prize giving for the various classes presented by **President Marty**.



**WWI. Gordon Meads. Stampe.**



**WW2 David Kenwright Sea Fury**



**Modern Military. Paul Buckrell F22 Raptor**



**Hard Luck. Steve Blackman Lancaster**



**Pilots' Choice John Clarke DC3 and P-51's & Static models**



That wraps it up for another year, one of the best in our 29 year history of Warbirds over Awatoto.

Once again, a huge vote of thanks to all those who made the Rally possible, Club members and helpers, Visiting pilots and their magnificent models and the public who turned out in droves and showed their continuing interest in our Warbird Airshow.

Plans are already under way for February 2026 when we will celebrate the 30<sup>th</sup> Warbirds over Awatoto.

Travel safe, Fly safe and we'll do it again next year. See you there.

**Ed.** MFHB. Feb 2025



**The End**

## AROUND the BUILDING BOARDS. Jan/Feb



**John Sutherland's** magnificent creation known as Yellow 10, an FW 190 D13 R11 all weather variant that only two were known to have been in service in April 1945, is finally a reality after twelve years of patient research, planning and building.

**John** writes; *It has a wing span of 2660mm. Fuse is 2600mm. Weight is 22.35 Kg with 1.2L of fuel on board. There is more detail to fit, this will happen over time. 12years in the making having started with a purchase of a book at Oshkosh in 2011 and then a purchase of the factory drawings on disk so I could produce my own plans and then setup a building board and start making all the parts to build the air frame. The Undercarriage was also purchased around this time and also a canopy so I could use it to make my own using only the centre part the rest I built as per full size only using wood not aluminium. Construction of the airframe is conventional formers and stringers, wing is ribs and spars as is the tail.*

**John** has completed the necessary documentation and test flights and the aircraft is flying exceptionally well, looking and sounding great in the air. Roll on Warbirds over Awatoto.



# Info, Hints and Things Jan / Feb 2025



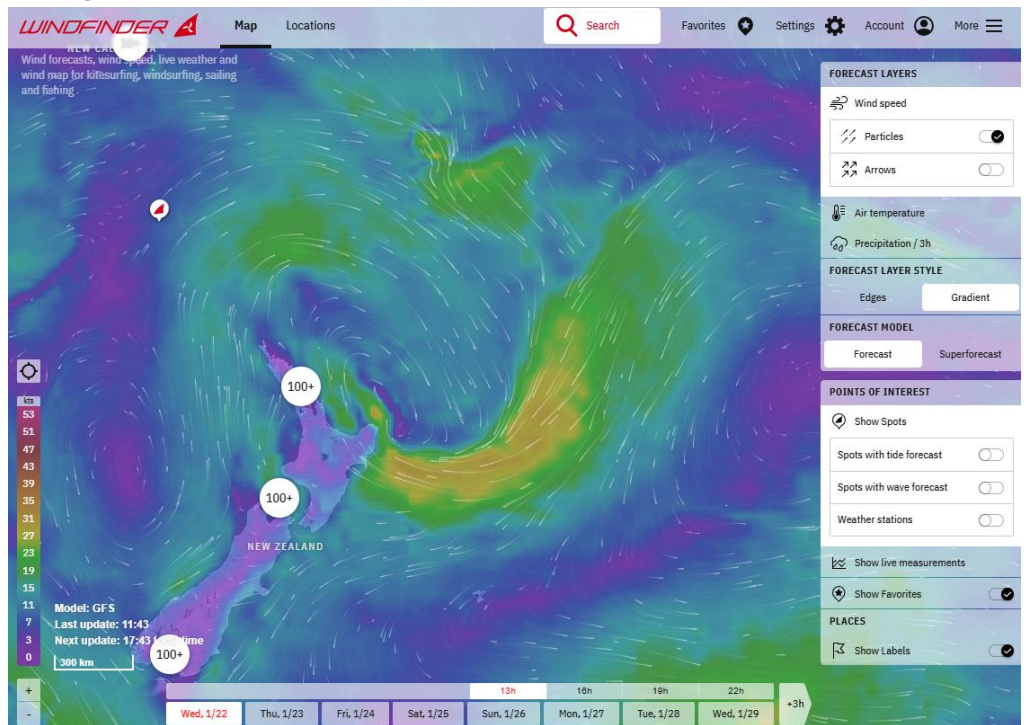
A useful weather site showing the wind patterns and forecast, maybe worth having on your phone.

[https://www.windfinder.com/?utm\\_source=windfinder.com&utm\\_medium=web&utm\\_campaign=redirect#7/-38.1950/174.7980/spot](https://www.windfinder.com/?utm_source=windfinder.com&utm_medium=web&utm_campaign=redirect#7/-38.1950/174.7980/spot)

Now here's a challenge for you, something

to build and ponder in your spare time ?

How about building one of these.



During WW2, the Germans built a fake wooden airfield with wooden aircraft, vehicles, and hangars in order to trick the Allies. The RAF, having known of the secret project for months, patiently waited for them to finish and then dropped a single fake wooden bomb on it



Our intrepid Sth Island correspondent, intent on preserving his Scottish heritage and lessening the financial strain of his aeromodelling activities is pursuing an ancient covering technique and shares his efforts.

**Barry ( with a why) Lennox** writes; Been thinking a lot about the covering for the Buzzard, as it should happen in a week or so. A while ago I found the attached article in RCM&E using polyester voile and spraying it with thinned PVA So, I got some voile from Spotlight, 1.5 M sq, for \$10 and tried it, but found getting the PVA the right dilution etc, quite tricky.



## HOME-BREW TEX

My main lockdown build was this one-sixth scale Sopwith Camel. By way of experiment, I covered it using net curtaining and the hot-melt properties of white glue. Of the several techniques I tried the following was the easiest and produced the best results.

The material I used was a 100% polyester curtain from the John Lewis 'Anyday' range (code 66150303), which provided 3.3 square metres of fabric for a mere £8! So, here's the recipe...

For, say a wing, cut panels to suit, leaving a generous overlap. Lay each panel out on a damp cloth and using a brush and/or a mini paint roller, coat it with white glue thinned with water to a cross between milk and single cream. The glue needs to soak right through the material without 'pooling'. Hang the panels up to dry and stiffen.

Paint the structure with the thinned glue wherever the covering will be in contact. Once the glue has dried, or is at least tacky, start with the undersides and lay the panels in place, smoothing and stretching it out as much as possible. Using the tip of a hot iron (220 degrees C) run around the outer edges to bond the voile and then shrink and tauten it by ironing the whole area. Keep the iron moving as any lingering will melt the polyester. Trim the edges flush and repeat the process for the topside. Overlap as appropriate and seal with the iron.

A couple of coats of well thinned shrinking dope will further tighten and stiffen the voile, resulting in a tough, drum-tight surface with just a hint of fabric weave.

The voile is light and could pass for silk. The only drawback is the absence of colours. I did wonder if adding some food dye to the glue might produce at least a tint? Something to try for next time, perhaps?

**John Norman**

Then I recalled this old article from Peter Miller. He wrote that brushing on thinned gelatine fills the pores very well and is a good key for most paints, so I tried it today. Firstly, it heat shrinks nicely, you can blow a hole in it, but you have to be careless. So far it looks excellent. The voile is very light at 52 g per M sq and has a reasonably open weave. So I mixed 1.2 g of gelatine in 30 mL of hot water and brushed it onto a couple of test panels about 9" square. When dry, it certainly stiffened the voile and was airtight.

Then I had to do a test of airtightness, so I used the blowgun off the compressor as a high speed air source. The bare voile was N.B.G., the air blew straight through it like it didn't exist. However the gelatin painted voile was excellent, no sign of air getting thru. To prove it, I used a patented "windicator" on the other side of the voile. Interestingly, I used two coats of gelatin in places and there was no improvement on one coat.



The attached pictures show all this, and all rights on the windicator will be aggressively pursued if I see knock-off copies. **By L.**

# Bill's Place.



Spent a very pleasant few hours with Mike S doing a large Model Inspection out in the Eskdale Highlands at Bill & Nan Roydhouse's country hide-away. Bill's Corsair needed it's licence renewal for the upcoming Warbirds, and all went according to plan. The motor started and ran like a sewing machine, it's first start since last year's Rally.

A few years back, Bill and Nan decided to become a bit more Urbanised from living up on the Blowhard and now have a nice Lockwood home up on the Kaimata Heights, Bayview, with great views up the Esk valley.



Nan's green fingers are evidenced everywhere, some great gardens, fruit trees and veges. Lots of out-buildings and Bill's modelling emporium has taken over the semi-attached garage.





**Guard Dogs !!!**



**Bill's Beloved Hurricane ( Ex-Bob Whitburn)**



A very successful and pleasant morning at "Hill Billy Roadhouse's" place. Ed.



# Paul Buckrell's F-22 Raptor project



*Paul has very kindly made this in-depth article available, first published in the Kapiti MAC Newsletter. Very topical as many of us had the pleasure of seeing it performing at our Warbirds Rally this week.*



This project started during Covid lockdown with an investigation into various manufacturers' F-22 ARFs, the good, the bad and the ugly. That quickly uncovered that fin failures were a problem, but that T-One Models, working with Pacific RC Jets in California overcame it by building them with a carbon fibre layup and increasing the number of rudder hinges from 3 to 7. A kit was ordered Dec 21 in PNP form through Pacific RC Jets (PRCJ) that included fuel tanks plumbed and installed, all servos installed with their linkages, pneumatic systems installed and a lighting system installed. The labour to get all that done at the factory was a few hundred dollars and well worth it given the paucity of construction info delivered with the kit. The bifurcated exhaust pipe, a foam model stand and wing bags came separately. There was a heck of a lot of to-ing and fro-ing with Youshop to get the last three items delivered.

The kit left China by air cargo 25 May 2022 and was received a week later. It came in three well-constructed boxes with hundreds of foam cubes. The wing, fin and stab bags were expected to arrive with the kit but didn't. It turned out that the manufacturer of those had gone out of business and a set was despatched from PCRJ in California at no extra charge.

The Kingtech K260 G4+ turbine was sourced from Paul Connor at Jet Centre. It took a while to figure out how to support the rear of the bifurcated pipe and to determine the pipe position so that the thrust vectoring mechanisms didn't hit the rear of the pipe. Once that was determined the position of the turbine could be found. It was not a drop in fit, some material at the rear of the bomb bay had to be removed and an equipment plate modified to squeeze the turbine in.

All pneumatic rams were removed and pressure tested in their retracted and extended positions under water revealing that 4 of them leaked in the extended position. They were promptly replaced by the manufacturer. Pneumatics are controlled by two HSD Jets multifunction valves and one dual action valve of unknown manufacture that opened missile and bomb bay doors simultaneously. One of the HSD valves controls canopy unlock, open, close and lock. The other controls gear doors and retracts. It originally also controlled brakes but

was a simple on/off valve that was unsuitable because it would instantly flat spot the main wheel tyres on tarmac. I set about changing the pneumatic plumbing, separating it into three circuits:

1. Gear and gear doors with 4 air tanks in parallel.
2. Proportional brakes with one air tank and a Jet-tronics lossless brake valve.
3. Canopy control, missile bays doors and bomb bay doors initially with two air tanks in parallel, later increased to 4 air tanks in parallel. I added another dual action valve to separate missile and bomb bay door operation.

The two air fill valves supplied leaked slightly and were replaced by three high quality Intairco units. A pressure gauge was installed in the brakes circuit as that only needs 48 psi whereas the other two circuits are pumped up to 100 psi. The two HSDJets valves have an inbuilt digital pressure display.

The transmitter is Futaba 18MZ that has seen a decade of faithful service. However, it was given a new battery October 24 just to be on the safe side even though the original was not showing any signs of deterioration. The mandatory two receivers for Cat 2a are Futaba R7003SB units each with dual antennae. The Sbus2 outputs of these feed into an Advanced Radio Smooth Flite ARXL unit that has several functions:

- Battery redundancy to all functions from a pair of 3400mAh 2S LiFe batteries
- Receiver redundancy (good, bad and failsafe packets are readable from the display)
- 3 axis gyro with automatic gain control derived from an accelerometer, compass and a barometer
- 3 sequencers of which the F-22 uses one to open missile doors, extend the AIM-9X missiles, retract the missiles and close the doors
- 26 freely assignable outputs.

The model uses 18 transmitter channels (16 proportional and 2 on/off) that are split out in the ARXL unit to control 24 functions that in addition to normal things like ailerons, rudders, elevators, vectors, flaps and slats provide:

- Gyro assisted steering
- Dual rudder brake (the rudders move inwards for the landing configuration)
- Differential aileron
- Vectored thrust switching (the model requires pitch vectoring on for take-off and off for landing)

The missile bays are each fitted with a scale AIM-9X Sidewinder from Strictly Scale (sadly that shop is now closed) and scale parts from Scale Print, Germany.

A pair of GBU-12 500 lb smart bombs are coming from Ultimate Scale Accessories for the bomb bays in February 25. Pylons for these will be made using the Philip Avonds pylon design as a basis from ply and 0.5mm fibreglass board.

Ultra bright afterburner LED rings were sourced from Unilight, Austria. These have their own 2S 3300mAh LiPo battery and turn on in the top ¼ of the throttle travel. Each LED has its own heatsink. They can be active on the bench for no more than 30 seconds as they rapidly heat up. In the air there is good airflow over them for cooling.

James Farrow 3D printed a holder for the Futaba True Air Speed pitot that is installed on the model centreline behind the bomb bay doors. That system worked well on the first two flights but since then the readings have been low and I have not been able to find the cause after examining the flexible tube and installing a new sensor module. It has been removed entirely.

Other modellers who have the same kit were consulted about control throws, expo and centre of gravity. Initial settings were made before taking the model up to Rene Redmond and Tarquin Brooks near Palmerston North for Form B inspection. A few things were picked up that show the value of other sets of eyes looking things over. For example, I hadn't noticed that the nose leg was fully compressed and that the strut needed air added to lift the nose to give a more favourable angle of attack for take-off. I had differential aileron settings back to front and there was no gyro on elevator when thrust vectoring was turned on. After fixing those issues the model was re-inspected and approved at a scheduled jet meeting at Tokoroa.

The model is 1/7 scale and weighs 34.78 kg fuelled with 8.2 litres of Jet-A1. Its wing loading is 0.218kg/dm<sup>2</sup> or 69.9oz/sq ft in old language. With the 260N turbine its power loading at take-off is 0.75 increasing to 1.09 when the tanks are empty. Hence some manoeuvres such as cobra are best left until late in the flight. Flights to date have been in the 10 to 11 minute range and even then one of the saddle tanks is ¾ full on landing. The model flies well at half throttle.

The model was presented at a KAMCI club night May 23. The PowerPoint is available here:

<https://www.dropbox.com/scl/fi/naybcls693dmetd8c0xje/Presentation-to-KAMCI-16-May-2023.pptm?rlkey=iwbmnqgbe87eorwliidu36p94l&dl=0>

The left wing got damaged on a fin retaining tab in transport that night and I'm very grateful to Terry Beaumont's for his skills and willingness in effecting a strong repair.

The maiden flight was done by Andrew Stiver 17 Feb 24 at Tokoroa. Some changes to throws and expo were then made. I made my first flight the same day. Andrew went on to accumulate the required 1 hour of flight time for a Cat2a model and was issued a Permit to Fly 16 May 24. I was not able to complete my own certification flights until 15 Dec 24 because conditions were unfavourable Sept -Nov 24 but happily 14 and 15 Dec had wind almost straight down the runway. My Permit to Fly was issued 17 Dec 24.

Over the weekend 14-15 Dec some data was collected using temporarily installed Eagle Tree telemetry that transmits to a ground terminal in the AU/NZ 900MHz band:

- Take-off speed 70 kph
- Hi-alpha flight with slats extended and vectoring on 70 kph
- Max speed over ground 255 kph
- Pitch G force 5.2 (it will be higher with vectoring on)
- Roll G force 1.94

Because the model came with little documentation, I decided to write a manual to help anyone else who may buy a PNP version for a single turbine installation. The document is available here:

<https://www.dropbox.com/scl/fi/liqgy0is2eyvm6vgro8m7/T-One-Models-F-22-Raptor-Manual-Rev-H.pdf?rlkey=xtj3bsklf02w3cjjedz5pif8&dl=0>

The final version of the programming is available here:

<https://www.dropbox.com/scl/fi/72pvyom9htudmf1bns3jn/F-22-Raptor-Programming.xlsx?rlkey=s9iibvb3mr59wloy1wul3tyb2&dl=0>

There was quite learning curve to climb with the ARXL after having previously used Powerbox units with their small screen. However, the ARXL performs exactly as advertised and the model is rock stable with the factory sport mode gyro settings. I will only use Advanced Radio units in future with a Smooth Flite 16 slated to go into my Fouga Magister replacing a long superseded Powerbox Evolution

As of 15 Dec 24, the model has had 17 flights and 172 minutes of flight time that excludes taxiing. Horizontal and vertical stalls and recovery have been performed. It is capable of all aerobatic manoeuvres except the flat spin that the full size can do with its control surfaces going every which way and that cannot be replicated with the model.

**Paul Buckrell.**



# Vintage Report. Jan / Feb 2025



2025 is upon us and the National Decentralised Competition under way again with the same schedule format as last year. You can download the RC Vintage monthly schedule from the NZMAA Site here; .....

[https://www.mfnz.org/wp-content/uploads/2025/01/NDC\\_2025.pdf](https://www.mfnz.org/wp-content/uploads/2025/01/NDC_2025.pdf)

The NDC is an excellent medium for those of us who wish to fly our vintage models in a competitive mode without leaving our home club. The Nationals this year were poorly supported as were most of the regional rallies that themselves are now few and far between. Levin seems by far the most successful drawing on a regional base of Vintagers. Age, travelling, costs, weather and other commitments seemed to have taken their toll. NDC certainly fills the gap for those of us who still want to fly with some purpose and Sport flying does the same for those who just want to enjoy building “Old time “ models and the relaxed flying experience.

The first half of the year’s NDC schedule is as follows, perhaps if interested you could take a screen shot and paste it on the workshop wall as a reminder.....

Jan-25	103	VINT	RC Classical 1/2E Texaco
Jan-25	104	VINT	RC Classical E Texaco
Jan-25	105	VINT	RC Classical Precision
Feb-25	110	VINT	RC Vintage 1/2A Texaco
Feb-25	111	VINT	RC Vintage E Rubber Texaco
Feb-25	112	VINT	RC Classical E Duration
Mar-25	115	VINT	RC Vintage IC Duration
Mar-25	116	VINT	RC Vintage E Duration
Mar-25	117	VINT	RC Classical E Duration
Mar-25	118	VINT	RC Classical E Texaco
Apr-25	121	VINT	RC Vintage 1/2E Texaco
Apr-25	122	VINT	RC Vintage A Texaco
Apr-25	123	VINT	RC Vintage E Texaco
May-25	127	VINT	RC Vintage and Classical Scale Texaco
May-25	128	VINT	RC Vintage Precision
May-25	129	VINT	RC Classical Precision
May-25	130	VINT	RC Vintage Open Texaco
Jun-25	135	VINT	RC Vintage Precision
Jun-25	136	VINT	RC Vintage E Duration
Jun-25	137	VINT	RC Vintage and Classical Scale Texaco
Jun-25	138	VINT	RC Vintage E Texaco

Earlier in the month and finally on Wednesday 29<sup>th</sup> saw **Stanley, Mike, Russ and myself** getting some results in for **Classical Precision, Classical E Texaco and Classical ½ Texaco**. Nothing too flash as the conditions haven’t been overly favourable, but at least we have some scores on the board for the club. **February** sees the more popular, **½ E Texaco, Vintage E Rubber and Classical Duration** available, so charge your batteries now and have them at the ready !

The results are in for the 2024 NDC Vintage as follows; **Vintage Individual Championship 2024**

Allan Knox	9 Christchurch M A C (INC)	148
Barrie Russell	18 Model Flying Hawkes Bay Inc	104.5
Bernard Scott	15 Hamilton Model Aero Club (INC)	81.5
Stanley Nicholas	18 Model Flying Hawkes Bay Inc	75.5



**Self, Russ, Mike and Stanley** after a morning's flying, captured by our in house cameraman and flight timer supreme **Barry K.**

### **VINTAGE SIG Matters.**

Following the poor showing of entries at this year's Nationals and the fall off of Rallies of recent times, Allan Knox, our SIG Chairperson has asked for thoughts and feedback on the Vintage scene. The following are some of my thoughts on the matter which I would like to share with you Vintage / Sport flier members ; .....

Although Vintage is all about re-creating the past, if the movement is to survive then I don't believe we can continue to live in the past. We need to consider the effects that social changes, ARF's, electronic devices, costs, inflation and aging etc are having across our aeromodelling world. Currently, less of our youth and young middle age have been influenced by an early aeromodelling experience as many of us older modellers were. As guardians of Vintage building and flying our mission surely is to promote this aspect of our hobby and I believe the best PR way to achieve this is to be seen actively building, flying, competing and enjoying vintage modelling at club level.

Over the past few years we've seen the steady demise of Competition Rally flying, largely due to time constraints, travel costs, aging and sadly the loss of some very active senior members. However, to balance that NDC continues to find favour and grow, and offers an excellent medium to promote Vintage and competition across the whole modelling spectrum.

I think our Precision competition ticks many boxes and gives ample opportunity to test our flying skills and with the long motor run available it allows all breeds of models to compete on a fairly level playing field. For the life of me I do not understand why we need the separate vintage and classical classes. Being the most popular class apparently and the least time consuming, surely say half a dozen NDC combined Precision comps a year would be welcome. For those who are concerned about age bonus points, so what, leave it as is and if you fly a model from the present Classical era, you get no bonus points. Remember, any Fly-Off has no age bonus points no matter what model or class you fly.

With regard to the two classes, Vintage and Classical in the overall picture, I'm back on my hobby horse again. It must say something if we consider that at the last two Rallies, Levin only managed to support one class (precision) and the Nationals only five classes out of the some sixteen available! Here at MFHB we have some twelve to fourteen members interested in and having built or considering building a vintage model. Most are there because of our encouragement and about six are interested in some competition as long as everything is organized for them. Some models have been chosen are because of recommendations for simple Vintage Duration and Precision flying, others because they've done some research and found a model they like, either the appearance or the build or just a memory from their past and they're not necessarily concerned about it's competitive ability.

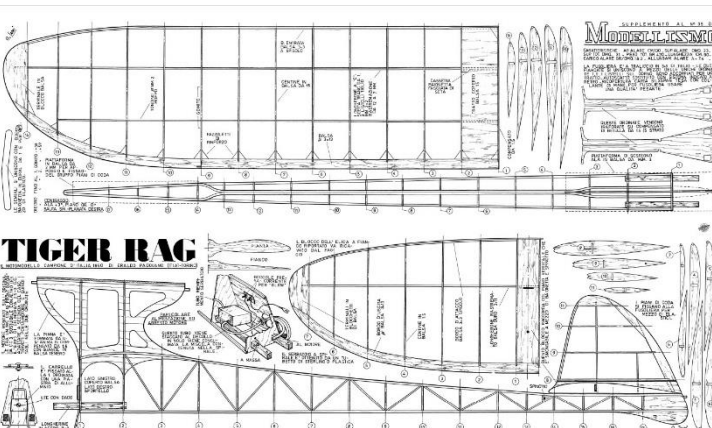
So my thoughts, well we have to stop living in the past, recognize that society and times have changed and encourage Vintage by making things simple. To that end, do away with the profusion of classes and consider combining Vintage and Classical so that the Vintage era is pre 1975. Further I would suggest we should do away with the Minimum wing loading rule which unfairly penalizes good building practice and results in the ludicrous situation of having to add weight to a perfectly safe build.

What is most important I believe is the building and flying of vintage models that we like for the building experience and the fun of flying, and if we can encourage and keep enough members doing just that, then Vintage and hopefully NDC and our own building and competition interest will prosper.

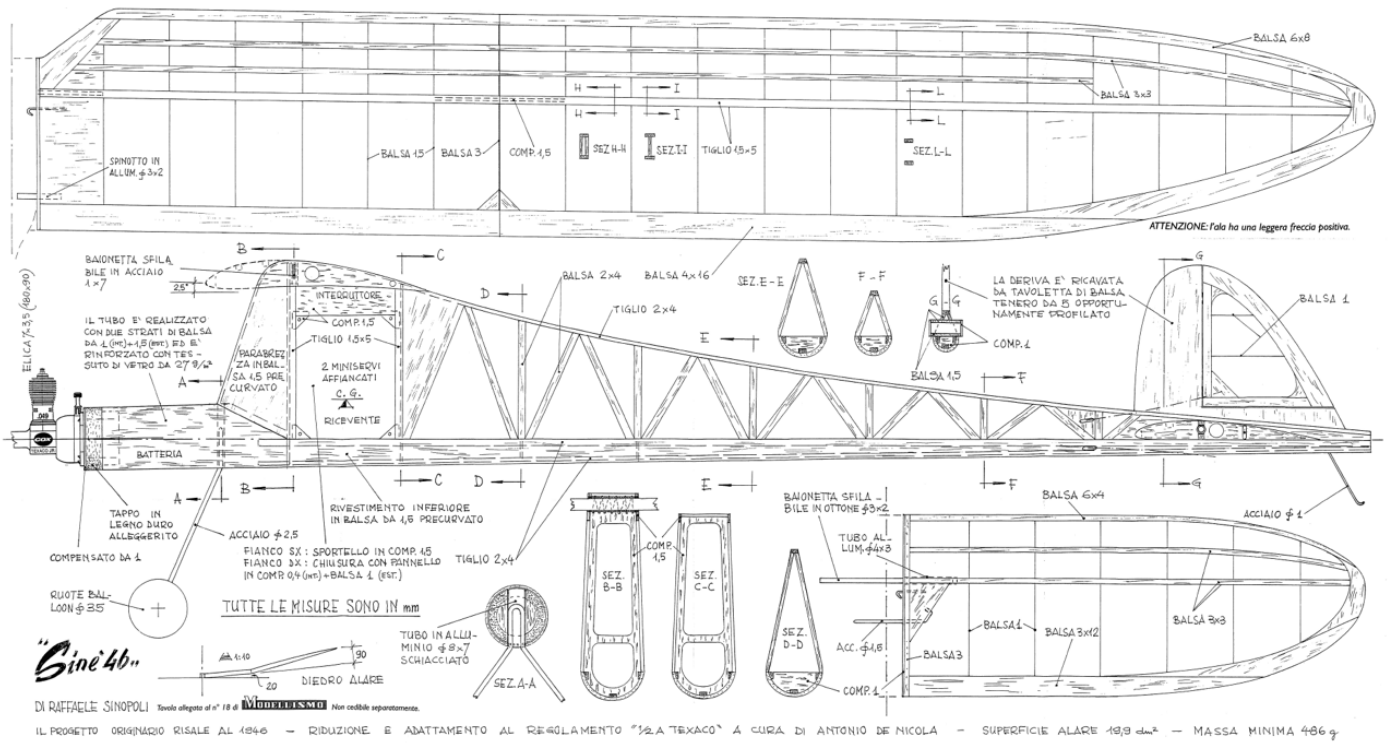
**Barrie Russell.** Vintage SIG Rep, Model Flying Hawkes Bay.

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Tiger Rag is proving a happy build, it flew off the board with no trim input. Being built from a 1951 published plan in Modelismo it qualifies for Classical ½ E Texaco.



**Sine 46** is proving an interesting build, another Italian design from 1946. This will qualify for Vintage ½ E Texaco, I think at this stage with a 2S 300mah lipo battery plus an Rx battery if it has a dry weight of a dry weight of 13.7 ounces ( I hope ! ) Flight battery calculation for a 2S Lipo is Dry Weight x 22= Mah. This is another Italian design from 1946. Just about at the covering stage. If anyone is interested, a copy of my building plan is available.



# FOR TENDER !! Jan/Feb '25



**TENDER 1.** Through the continuing generosity of our resident photographer, **Clive Baker**, we are offering for TENDER for “Shed” funds for club members’ benefit, a **brand new electric trainer**.



The model is an **ARF Seagull Boomerang** high wing electric trainer. This is a quality 61 inch span trainer aircraft which is currently selling for \$300 plus and if you add in the value of the HiTech 322 HB servos, & Scorpion3014/1220kv brushless motor and 50 Amp Durafly ESC, would have a current replacement cost in excess of \$500.00.

It just needs a Battery, RX and Propeller and you go flying.







The model can be viewed in the club shed.  
 If interested, please email me with your tender offers at;  
[barrierussell@xtra.co.nz](mailto:barrierussell@xtra.co.nz)

**\*\* The Rules of engagement for this tender \*\***  
**The highest or any tender may or may not**  
**be accepted.**  
**Tenders close on; 9.00 pm Monday 25<sup>th</sup>**  
**February 2025.**

This is an excellent opportunity to become the owner of a  
 high class trainer model at a fair below market price.

**Barrie the editor, MFHB.**



## **TENDER 2. Radian electric sailplane.**



Friend of the club, **Des Smith** has donated this **brand new Radian electric glider** to the Club. It is the latest model and just needs a battery and you can go flying. This model and it is fitted with a 6 channel Spektrum Rx. This is a great opportunity to get one of the best ARF gliders available, and brand new too !

The model can be viewed in the club shed.

If interested, please email me with your tender offers at;

[barrierussell@xtra.co.nz](mailto:barrierussell@xtra.co.nz)

**\*\* The Rules of engagement for this tender \*\***

**The highest or any tender may or may not be accepted.**

**Tenders close on; 9.00pm Monday 25<sup>th</sup> February 2025.**

**Barrie the editor, MFHB**

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**TENDER 3.** Through the generosity of member **Ian Lewis**, the club has been given a number of models, their pictures and details are listed below. These are also being offered for sale by **TENDER**, but **on this occasion, there is **no reserve**** and the models in each case will be sold to the highest **BIDDER**.



Radian-Includes everything except 1300-3S battery & TX. Has a Height limiter and Spectrum RX installed.

Parkjet- Includes everything bar RX, TX.& Battery, required a 2200-4S pack.

Sport 600 Fuse & wing- Balsa Ply covered construction. Bare airframe but does have aileron servos installed in the wing.

Mountain Models 3D park flyer. Bare Airframe. Requires a 2200mA-3S size power set to fly. Very light construction. Laser cut, covered construction.

Please email me your bids at [barrierussell@xtra.co.nz](mailto:barrierussell@xtra.co.nz)

Tenders close on Monday 25<sup>th</sup> February at 9.00pm

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# FOR SALE



44

On behalf of Club Member; Jerry Chisum is offering the following;

**STORCH.** This model is complete and ready to fly. Heavily modified landing gear for more scale and stronger. 3D printed pilot, gunner is "Elite Force" Luftwaffe Fighter Pilot. Bind and fly.



**Motors; OS 61 VR**

**Enya 15 BB**

**OS 32 NIB & 2x**



*Left;*

**YS FZ 63 NIB**

*Right*

**YS FZ 110 NIB**



For all details, specs, price and condition, on all of the above please contact **Jerry** on **021 490 172**

Blair Jepson is offering the following model **FOR SALE;**

Eflite 1.2m Ultra slow stick.

This is for sale used once, comes with spektrum smart receiver- safe and AS3X. BNF.

**\$270 ono**



All inquiries and offers to;

**Brett Jepson.**  
Ph; 027 406 1866

**Brett Robinson** is in receipt of some modelling goods from the estate of the late **Geoff Bartram** who some of our older members would have known. There is a collection of plans and modelling bits and pieces which Brett hopes to bring to the shed meeting next Tuesday morning. Anyone interested is welcome to help themselves.



## A CLOSING SMILE. Jan/Feb 2025



While on a golf tour in Ireland, Tiger Woods pulls up to a petrol station in the middle of the Irish countryside in his BMW. The attendant, having no idea who Tiger is, greets him warmly in the traditional Irish way.

“Top of the mornin’ to ye, Sir,” says the attendant. Tiger nods politely and reaches for the petrol nozzle. As he does, two golf tees slip out of his pocket and fall to the ground.

The attendant looks down, puzzled, and asks, “What are those?”

“They’re tees,” Tiger replies.

“Well, what in God’s name are they for?” asks the Irishman, clearly confused.

“They’re for resting my balls on when I’m driving,” Tiger explains with a grin.

The Irishman’s eyes widen in disbelief. ‘Faith be,’ he says,

“BMW thinks of everything!”



*That’s it from Me, see you in a month or so when there is more to report, Ed mfhb Feb 2025.*