

Model Flying Hawkes Bay



Newsletter # 173 Oct '25

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.

VINTAGE NDC November 2025

Nov/25	160	VINT	RC Vintage E Rubber Tex
Nov/25	161	VINT	RC Vintage 1/2E Texaco
Nov/25	162	VINT	RC Classical IC Duration

In this Issue.....	Pages
Opening / Calendar / Contents	1 -
Reports, Notices etc	2 - 4
Club Activity	5 - 10
CLUBNITE / Great Spring Auction Sale	11 -16
More Sharp Magic. Pt 7.	17 -19
Monospar	20 -22
Clive's Corner "A Tiger Story"	23 -25
Tortuga High Speed Delta.	26 -27
"Tail Low – Tail Heavy" Conundrum	28 -31
"Waco Build" looking for a new Home	32 -34
Vintage Report	35 -39
Soarchamps 2025 Report from B Bridge	40 -44
For Sale	45 -47
A Closing Smile	48

Contributors to this issue; Brett Robinson / Barrie Russell / Marty Hughes / Ash / Norm Murton / Stan Nicholas / Phil Sharp / Colin Stevens / Kevin Botherway / Stu Sturge / Barry Kerr / Clive Baker / David Kenwright / Mike Edgecombe / Mike Harris / Rob Lockyer / E&OE



From the Editor's Desk;

Greetings All, Only 56 sleeps till the big feller pays a visit and rewards us all for all our goodness during the year ? I hope !

What's on offer this month, well **Norm Murton** called in for afternoon tea and we had a long chat about old times. **Norm** having being a very long standing member of HBRF and MFHB in years past. That resulted in a couple interesting articles about his Monospar and his proposed Waco build. **Clive** has joined in with another whimsical and interesting article on the evergreen Tiger Moth. Club Activity again is a little sparse due to those Nor'westers that blow across the stopbank. Get ready for another record breaking Auction Sale Clubnite on the 12th November, we have a large and exciting offering some of which is listed following. **As usual** Phil fronts up with some more magic moments with his 6 cyl motor build. **Colin Stevens** from the UK has contributed an interesting article to test your appreciation of aerodynamics and balance. Nice too to hear from **Mike Edgecombe** our recent visitor from the UK. The Vintage Report contains more exciting news of the new builds taking place with even Motor Man **Phil** indulging in a little Vintage Therapy. Come and join the Vintage Gang members, the Nationals and the year ahead is going to be a load of fun.

How fortunate we are to have a member of the calibre of **Kevin "Rowdy" Botherway**, National President, MFHB Committee member and the driving force behind the Soaring SIG, and whose hard work and enthusiasm for all aspects of our sport is legendary. He even finds time to go fishing ! Kev was recently in Wellington for a face to face meeting of the MFNZ Council and sent the following picture of those who are prepared to give their time and expertise to represent our great hobby.

Model Flying NZ Face To Face Meeting 2026



From Left rear row:

David Griffin, Darrin Thompson, Alan Walker, Chris Jackson, Peter Randerson, Paul Clegg

From Left front row:

Behram Bajan, Maurice Job, Kevin Botherway, Frazer Briggs, Peter Brown

Meeting Notes;

OCTOBER 2025

The whole Committee met under the leadership of President Hughes. It appears all is under control apart from the weather, with mower repairs, and spraying being completed. Thanks to those involved. We've had interest from a couple of prospective members, and welcome a couple of new members.

Work will proceed on the stop bank, but will not interfere with Warbirds 2026. HBRC is still aware of our wish to have an operating camera in the pump shed. It's a work in progress!

On the matter of Warbirds, the Committee will be applying for the necessary CAA authorisation immediately. Again, we will need help with working bees prior to the event and people to be on the gate.

"CLUB NIGHT" We are looking to hold a club night at National Services Club in Hastings on **12 November** for an **AUCTION** of at least 15 aircraft and an extensive **GIVE AWAY TABLE**. This event has been enabled by Barrie Russell and Mike Shears who have coordinated all the sale content which has been given to the Club.

"CHRISTMAS DINNER" This is set for 4 December also at the NSC, so pencil this in. An entertaining speaker has been organised.

Barry Kerr, Secretary.

CLUB TROPHIES

Can we locate the old Club Trophies please? We are thinking of the President's Board, along with trophies for the best crash, etc. Please contact a Committee Member if you have any information.

AWATOTO FIELD BBQ

Recently, the BBQ was taken from the shed to be used. It was found to be in an appalling state, having not been cleaned after its last use. Mice just love left over scraps and meat fat, but we sure as heck don't want to serve up sausages and hamburgers with mouse droppings on the side!

If you use the BBQ: Clean plates with boiling water, Turn plates over when clean.
Empty drainage tray(s). Spray and wipe all surfaces.
Cover tray with tin foil . Notify a Committee Member if gas supply is getting low.

MFHB Committee.....

Prez Sez;

Well what a windy month that was. Rod and I have been hitting the field early on Sundays to try and beat the wind and have had the Bi Planes up before the wind gets too strong.

The planned BBQ and Radian comp was a blow out but we still ran the BBQ with limited numbers but as it was too windy for the Radian comp it was cancelled. However as Stan turned up with his Radian, It was decided that Stan took out first place by default and took home the prestigious Moro Bar.

You will notice that the field is being knocked into shape with the summer season upon us. The grass is thick and well mowed every week by the grumpy one and the perimeter fence line and car park weeds are beginning to curl up and die.

So just a bit of housekeeping. Can the first one to the field on Sundays please put the cones out along the taxi way along with the engine stop sign and the trolley with the first aid kit. This is a requirement in our rules to have it set up on club days. And the same goes for the last person to put them away.

With warbirds fast approaching and a lot of work being done behind the scene to ensure a great event, it's now time to think about if you can help in some way. If you can spare an hour or two over the weekend to help on the gate then please contact Barry Kerr who would love to hear from you.

Look out later in this Propwash for the posters for the Massive Spring annual Plane Auction/Sale/Give away Club Night and also for the Christmas get together. A great time to get together with all our members and wives and partners for dinner and enjoy the entertainment of our guest speaker.

Awatoto will soon have some resident Chipmunks at the field, compliments of Seagull Models. Rod Hughes has just completed his and is waiting for some calm weather to maiden it, Stan Nicholas has started the build on his and mine is on the HOT indent order through Firebrand Aero RC and will arrive in February. Ryan Groves from Wellington is part way through a build on his and will have it at Awatoto in Feb. These Chipmunks run a DLE35. Fully aerobatic and very price friendly. So if you are thinking you need a new piece of kit in your Hangar and have an old plane with a DLE35, For less that \$1000 you can swap everything over and come join our Chimp Munk Squadron.

Now lets get and there and play toy planes.

Marty.

MODEL FLYING HAWKES BAY

JOIN US AT THE

NATIONAL SERVICE CLUB

HASTINGS

CHRISTMAS

FUNCTION



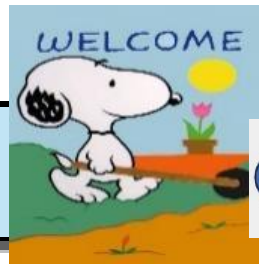
CHRISTMAS CARVERY

\$39 PER HEAD

7PM THURSDAY 4TH OF DECEMBER

RSVP KERRBP@XTRA.CO.NZ

CLUB ACTIVITY October '25



Sunday 5th Oct; First Sunday dawned fine and light winds and remained so all morning until a cold easterly chased us home around 1.00pm. Moderate turnout of the usual suspects with **Stu and Rob** test flying their new vintage Stardusts and showing great promise. I threw my Stardust into the mix and there was some nice buoyant air up there, though the local hawks were doing better than us ! **Rob Lockyer's** here below, a very pretty model.



Pits scene looking east with **Rod H's** SE5a awaiting another flight, looks and sounds just great in the air



David Kenwright had this interesting aircraft, a Tortuga, fully moulded composite construction and powered by a 6S Lipo. Has elevons and a small functional forward canard and a pusher prop configuration. A high kv motor and revving up to 40,000 rpm on a small pusher prop.

It needs the ingenious bungee / launching ramp to get airborne and flies ultra fast, purportedly capable of reaching speeds in excess of 300 kph !

Mike Shears was having fun setting up this E Flite Ultra Stick **for Clive Baker**.

Supposedly a slow flying trainer. Certainly flies well, but one wonders the value / logic of a trainer aircraft with so many expensive and fragile parts, I guess time will tell and prove or disprove the theory of these ARF "assisted flight" machines !





"Tuesday Morning in the Shed" 7th October, remains popular with our increasing number of retirees !

.....

Sunday 12th Barbecue Day, No reports forthcoming, understand conditions were good then marginal till about 10.30 and then the Nor'wester set in over the stopbank and for few who were there, the flying ceased.

Friday 17th Oct. Perfect morning, light easterly and time for Dave Cantell to bring his "Butterfly" out for a test flight. With Mike S on the sticks, the model performed faultlessly. On a 3S 1300 lipo it had a good rate of climb and a very nice flat glide, success all round.

Very pretty model Dave. ED.



Saturday 18th. Drove to have a look at the **Soarchamps** currently under way at Black Bridge field. Weather was picture perfect with F5J under way and what an interesting competition that is. A 30 second electric motor launch window, and penalty points for the higher your launch motor off height, a ten minute flight and 100 landing points available. The clever ones are able to launch at low level and thermal their way up into the blue. Took a few pictures whilst there;



Andrew a picture of concentration, and **Rowdy** looking a bit worried as he realises his rudder and elevator have stopped working at about 300 meters ! He did an exceptional job of getting back home just using a mixture of ailerons and Camber/ flaps.



The skill and the organisation of these guys is something to behold. The morning ran like clockwork, great to watch and no just sitting around waiting for the paint to dry, it's all on and obviously enjoyed by the flyers.

Labour weekend, it might be windy, but it sure doesn't stop the **Father and Son Duo of Rod and Marty** firing up their biplanes and having fun in the moving air. As Rod says, *"the plane doesn't know it's windy" !!*



Tuesday 28th, Quiet morning the shed apart from the noise of a massive passing thunderstorm, with hail and rain.

Rod brought out the nearly finished "Dancing Wings" Tiger Moth, all covered, what a beautiful creation at 38 inch wingspan and weighing about 35 ounces with battery. Wing loading around 11 oz/sq/ft.



Rob Lockyer has been making the most of the prevailing windy conditions and writes;

Hi Barrie, While the wind has been blowing, I have been working on a new Extra.
A Pilot RC 330LX, 93". Up front is a DA70. Pictures to date;



The GREAT SPRING



SALE



MODEL FLYING HAWKES BAY ANNUAL MODEL AIRCRAFT AUCTION



**SALE TABLE
AND GIVE AWAYS**

**WEDNESDAY 12TH OF NOVEMBER
NATIONAL SERVICE CLUB HASTINGS
STARTS 7PM**

PUBLIC WELCOME TO COME AND BID

Club Night / Auction Sale / Give away Tables

Wednesday 12th November 7.30pm

National Services Club, Hastings.

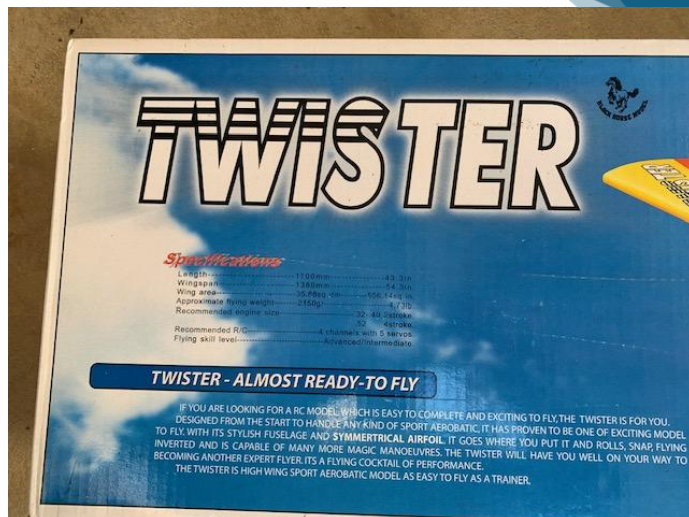
The following is an overview of the aircraft and gear being offered for the **Auction, Donation, and Give Away tables**. This has been collected from members, gifts and estate clearances and contains some excellent and near new models and equipment. Members, friends and interested buyers from other organisations very welcome, please spread the word. Once again our ace auctioneer **Marty** will be swinging the gavel, there will be a social half hour prior and supper served at the conclusion of the auction.

*If there is outside interest in bidding for any of these items, Please phone **Marty** the Auctioneer on 021 427 380 and register name and phone number and we can contact you during the auction.*

MFHB Items currently held in the shed for Auction/sale or donation/give-away.



1. **Apache**; 1440mm span high wing trainer complete with Super Tigre 46 2-stroke engine and servos. Excellent condition.
2. **Cap 232; World Models** 1440 w/span new ARF with slight hangar rash, No gear but plane complete and ready for installation



3. **Twister ARF**; New in Box 1380 Wing span 40 sized mid wing model.

4. **Trojan**; 1200 span, Complete and ready to fly



5. **E/Powered sailplane**, 2.2 metre w/span, V tail.



6. **Radian Sailplane** in flying condition with a complete set of spare wings.



**7. Fly Boy high wing electric model
1300 w/span complete with servos &
40 amp ESC**

8. ARF Spitfire, some damage and no gear.



**'arold 'n Dad 'n 'orse are coming
along to help being a family
occasion. They're keen to take what
doesn't sell ! They'll be lucky !!**

**9. Assorted partly built models
etc give-away to good
homes/workshops !**





10. Assorted gear for the Donation Table. Plus plus plus, there's lots more !!!



11. & 12. Two RV 7's One brand new complete with Receiver, The second has had one flight, slight hangar rash. The current replacement cost of these models is in excess of \$500.00 each !

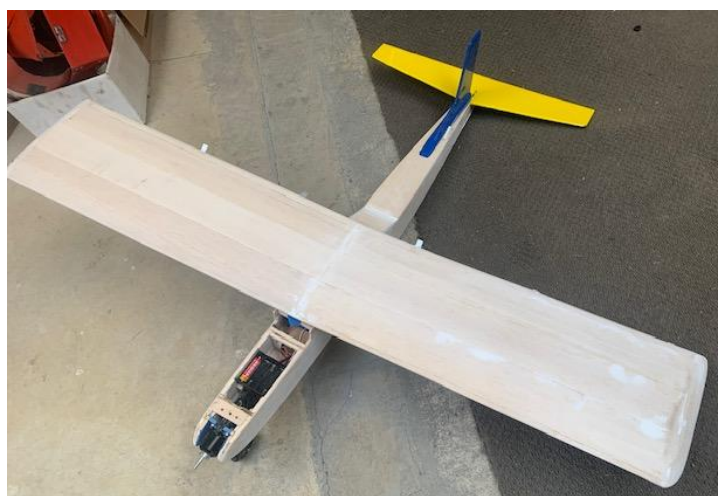
E-Flite EFL01850 RV-7 Sport 1.1m
EP BNF-B w/ SAFE Select/AS3X



13. Sig Senior Cadet, the best three channel trainer ever. Hang a prop and RX, fuel up & go.



14. Biplane, not flown, all servos and gear and a brand new OS 46 AX 11 Motor installed.



15. very nicely built "something"

16. Partially built hi-wing trainer electric with gear

"More Sharp Magic" Pt.7 Oct' 25

Again, Phil doesn't disappoint and reports on another productive month in his magic workshop, here is the progress to date;



17

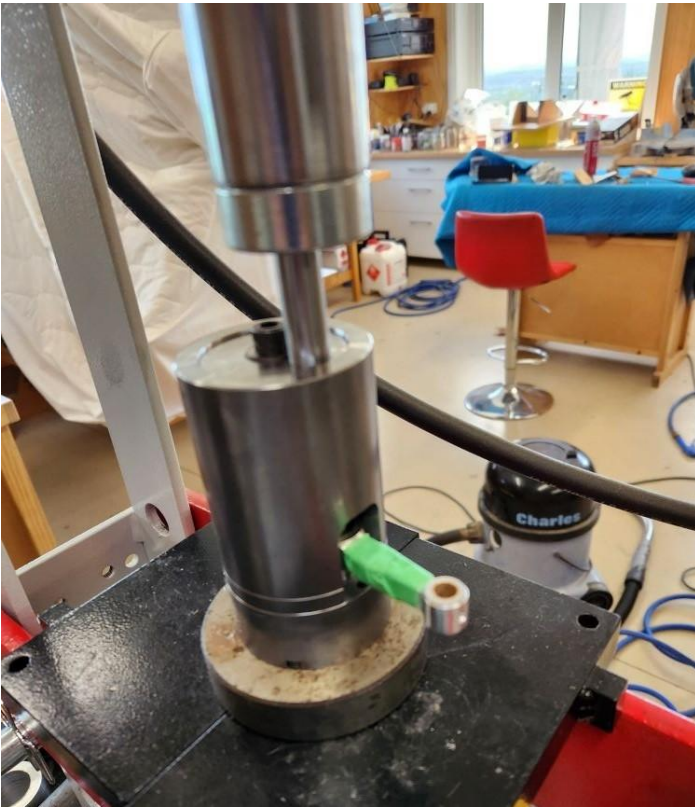
Hi Barrie, Here is this months update, and a little "light relief"

Firstly progress on the engine. Most of the work this month has been finishing the two crankshafts. I finished machined all the journals (12 of them) and made some more parts for the press tooling for final assembly, as well as a mandrel to press in the needle roller bearings to the conrods. Once that was all completed it was time for assembly. It takes 3 to 4 tons to press in the crank pins, and they are held in line by the tooling. This worked well (better than the V4) with only a small amount of corrective straightening required. I now have two smooth running crankshafts, which is a big relief! Once each pair of journals are assembled with a conrod, they are then bolted together with three M5 cap screws, and a hollow dowel pin. Each crankshaft runs on four double row ball races, so they are well supported.



1 Crank journals and press tooling

I also did the final assembly of the prop drive support. First job was to set the crankcase on the mill, and set up each half of the gear case exactly at 90 deg to the top surface (cylinders) and then drill and fit two 4mm dowel pins. this was repeated for the prop shaft support. Next was to bolt it all together and epoxy in the carbon joining tube. (I used JB Weld for this) Another job ticked off!



2. Pressing in the crank pin and rod.

3. Grinding the top of the cylinder liner



4. Finished Crankshaft

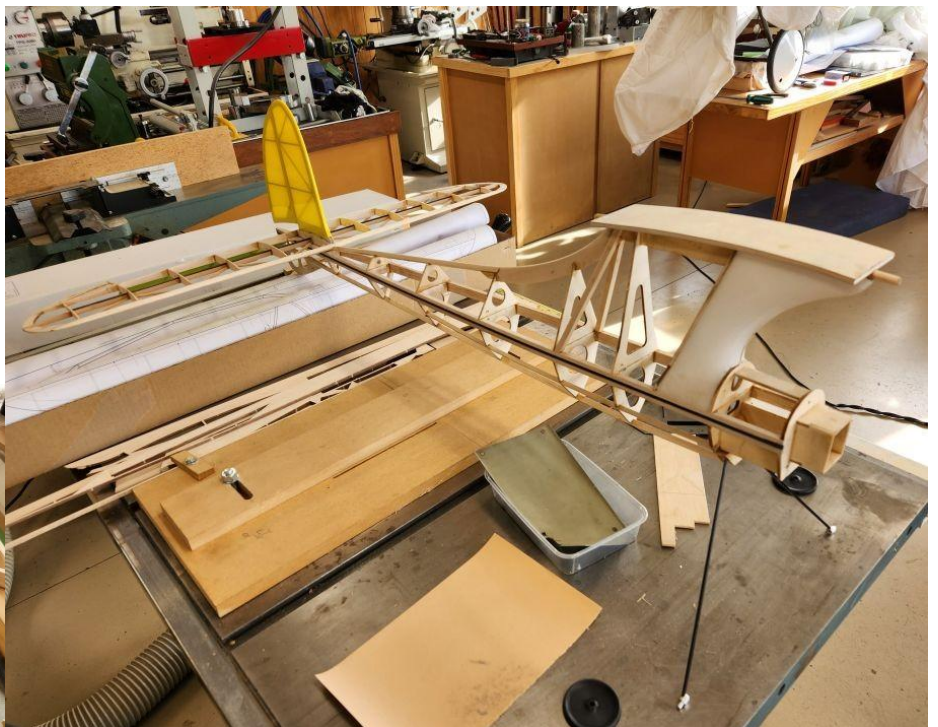
It is nearly at a stage where the bottom end can be finally assembled, I am just waiting for some Titanium cap screws to arrive from Aliexpress. It might seem a bit over the top but there are about 90 M4 cap screws, and the Titanium ones are half the weight, so every little bit helps.

Then it was on to the cylinder liners, machined from SG iron. The blanks were cut from 40mm bar and bored to 32.5mm which is 0.5 mm under the finished size. These were then mounted on a mandrel in the lathe, and turned slightly over size, about 0.2mm. They were then ground to finished size, about 0.05 interference with the cylinder bore.



The cylinders were then heated to 200 deg and the liners frozen. They were then fitted with a little help from the press!

The assembled cylinders were then mounted back in the lathe to have the bores ground to 0.1mm under size ready for final honing.



Needless to say after all the encouragement from a certain quarter, for a bit of light relief otherwise known I'm told as "Vintage Therapy", my Stardust is taking shape. Sufficient to say I am looking forward to some relaxing flying, with a little competition as well!!!

Regards,

Phil

Congrats Phil,

I sense some serious competition coming on. Ed.



The Monospar ZK-AAF



The [Monospar](#) was a family of British light twin-engine touring and utility aircraft produced by [General Aircraft Ltd](#) (GAL) in the 1930s, known for its [monospar wing construction](#) featuring a single-spar cantilever design. These innovative aircraft, named after the ST-4 "Monospar" design by Swiss engineer H. J. Stieger, were popular in the 1930s for their light twin-engine configuration, excellent forward visibility, and economical operation, making them suitable for air taxi, passenger, and small airliner roles.



Key Characteristics

- **Innovative Wing Structure:** The "Monospar" name comes from the patented monospar (single spar) cantilever wing construction, a pioneering concept for its time.
- **Light Twin-Engine Design:** It was the world's first light twin-engine aircraft, powered by two de Havilland Gipsy Major or Pobjoy Niagara engines.
- **Good Visibility:** The pilot and front passengers sat ahead of the wing's main spar, providing exceptional forward and side visibility.
- **Utility and Versatility:** The cabin was designed for easy conversion from passenger transport to freighter or air ambulance use.

There is an excellent Video here about the history of the aircraft; [Control/Click here.. Monospar Video Link Click Here](#) NZ Aerial Mapping purchased their Monospar in 1937 ZK-AFF and flew it extensively until it was retired in 1946 when it was superseded by a Beechcraft. It was hangered at Bridge Pa for some 22 years before being refurbished by Temple Marting and his team and then displayed at airshows around New Zealand by Piet Van Asch. A Link to NZ Aerial Mapping and their Monospar; [Control/Click here.. NZ Aerial Mapping Link HERE](#)

A past member, **Norm Murton** scratch built a 1/5 scale model of the Aerial Mapping Monospar back in the early 1990's which flew successfully at Awatoto field. Notably during one of our early Warbirds over Awatoto Rallies whilst airborne a throttle linkage to one motor became stuck on full throttle. Needless to say, closing one motor to Idle and having the other at full wasn't an option, so **Norm** had the option of flying it around for the next half hour, (it had a large tank!) or trying to land at full throttle! He gave control to **John Sutherland** who did a great job of managing to get it back on the deck after a number of full throttle go arounds, with minimal damage.



. Seen here posed with the Aero Commander that superseded the Beechcraft at NZ Aerial Mapping.

Sadly the full sized Monospar was destroyed by fire in 1988 at Bridge Pa during maintenance work.



Norm, who has given up modelling and flying, has donated the model to the Bridge Pa Aeroclub to be displayed in their club rooms / museum seen above. **Ed.** (Picture by Jerry Chisum.)

I think my wife has
started to show
the first signs of
dementia...

She said she cant
remember what
she ever saw in me.



How to design an aeroplane.

I first noticed how some planes had their wings swept back while watching Tiger Moths doing circuits at Omaka Aerodrome. I understood a bit more while waiting for a flight in a Blanik glider at Wigram airport. I was a bit focussed because I had been to a wedding the day before. My pilot was the Father of the Bride and he really had had not much time to sober up from the post function party before going flying with me.

I thought that the Blanik was a bit strange with its wings swept forward but somebody explained to me that it was built that way so that it flew the same when the training instructor got out. The instructor was positioned over the centre of gravity you see.



The Father of the Bride flew around for a while and then we did two successive loops. He didn't sound very well as we went over the top of the second loop and we landed shortly afterwards.

Which brings us to the development of training aircraft in the UK during the interregnum between world wars 1 and 2, and how the Tiger Moth got a swept back wing.



De Havilland developed a three seat touring aircraft during the 1920s but then realised that a two-seat version was a better option. They had also developed a more powerful engine, the Gipsy series. The Gipsy was inverted by automobile standards with the propeller shaft at the high point. This resulted in the DH 82 which the RAF formally adopted as their *ab initio* trainer.

One of the main things they required to be changed was improved access to the front cockpit by a pilot wearing a parachute. The fuel tank was directly above the front cockpit. A further problem was the proximity of the rear cabane struts. The solution was to move the upper wing and fuel tank forward but sweep the wings back to maintain the same centre of lift. See Mr President it wasn't to break the sound barrier.

The operational mechanism for the ailerons was adjusted to the point where there was no significant movement on the down-going aileron in a turn but more on the upgoing one. This counteracts the effects of adverse yaw.

The Tiger Moth was fitted with twin strakes just in front of the elevators which I thought were installed to prevent spinning but in fact were there to permit rotation in either direction.

The Tiger Moths went into service with the RAF in February 1932 and a total of 8,838 were built. De Havilland in the UK put their entire resources into the production of the Tiger Moth. They encouraged the production lines to be sent up in Canada who promptly modified the cockpit with a full-length canopy. Gets cold in that part of the world. I remember that the tug for my flight in the Blanik was a Canadian Tiger moth with the full canopy.



Australia and New Zealand also set up production lines. The de Havilland factory building located on the Wellington Airport served as the Air New Zealand terminal building in the early days of the operation of Wellington Airport.

In the early days of WW2 one of the UK greatest fears was that of a full scale invasion of Britain. A modification was made to the Tiger Moth to enable it to carry bombs to use against an invasion fleet. It

was never used mainly because no attempt was made to invade Britain by the Germans. The only good thing about it was that the Tiger Moth qualifies for Warbirds over Awatoto.

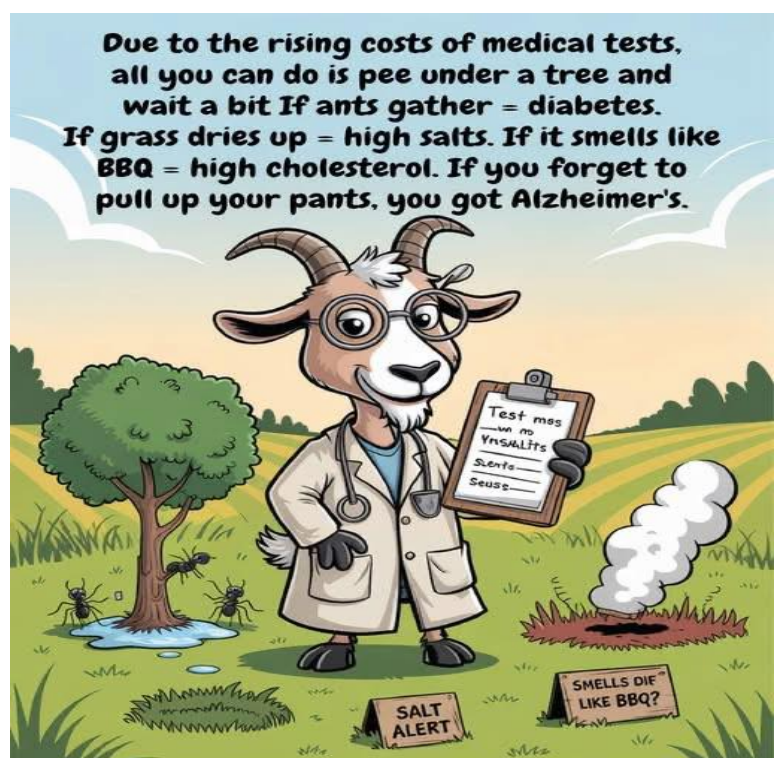
Interestingly enough New Zealand modified the de Havilland Dragon Rapide for use against the Japanese if they had attempted invade NZ.

The Tiger Moth remained as the basic trainer for the RAF until 1952. The surplus Tiger moths remained in use around the world for use in Flying Clubs. In New Zealand they were popular for the growing agricultural industry despite the Government efforts to develop large scale aircraft for this purpose

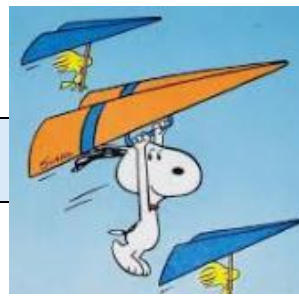


De Havilland in the UK converted Tiger Moths to Fox Moths. The Fox Moth was a four passenger airliner or freight liner (white bait carrier in NZ). The swept back wing was not retained as parachute drops were not encouraged.

Clive Baker.



TORTUGA A High speed Delta



David Kenwright had this interesting aircraft at the field a couple of weeks back and has supplied the following information in response to my questions;

The Tortuga is one of six high-performance airplanes made by **SAB Italy**, / Control Click on <https://sabitaly.it/en/airplanes/airplanes-kit> who are best known for their Goblin Helicopters. The Tortuga is the only one that is prop driven, all others are high-performance jet turbine models. SAB's planes are designed to look futuristic and supposedly from a post-apocalyptic future where robodrones are the only type of aircraft. They have even written a sci-fi short story to describe the history of their planes called the "Tale of Antarctica". I guess that makes the Tortuga a scale warbird for the Warbirds over Awatoto event, right?



The Tortuga is a fully moulded one-piece airplane. If you pick it up, you will think "yikes that's heavy" because it's got a whopping 6S battery and Neu (German) in runner brushless motor that can swing small props up to 40,000 rpm. Due to its weight, and the fast spinning prop at the rear, hand launching is not recommended with this model! I built a custom catapult from PVC drainpipe that uses a 12m long 10mm diameter bungee cord. It takes a decent effort to stretch the bungee and latch it onto the catapult.

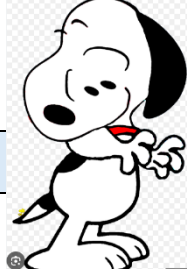
I've flown the Tortuga a few times and to say it's fast is a serious understatement. It sounds like an angry wasp in the air and the on-board GPS recorded a speed of 280kph on my most recent outing. That was with the low pitch prop installed. With the high pitch prop fitted to the Neu motor, the top speed will be over 320kph. The fluoro orange paint scheme is essential to see this tiny 840mm wingspan aircraft as it rips up the sky. The creators of the plane have a word of warning when flying the Tortuga -- "Minimise Blinking".

Regards,
David.

PS. An interesting video here of the same company's Havok vectored thrust turbine model
Control/Click here... <https://www.youtube.com/watch?v=ofkxJEPBWSA>



The “Tail-Low = Tail-Heavy” Conundrum



Colin Stevens, one of our regular readers from the UK, sent me this interesting article he wrote for his club newsletter a couple of years back, re-printed here for your interest and comment. **Ed. Colin writes**

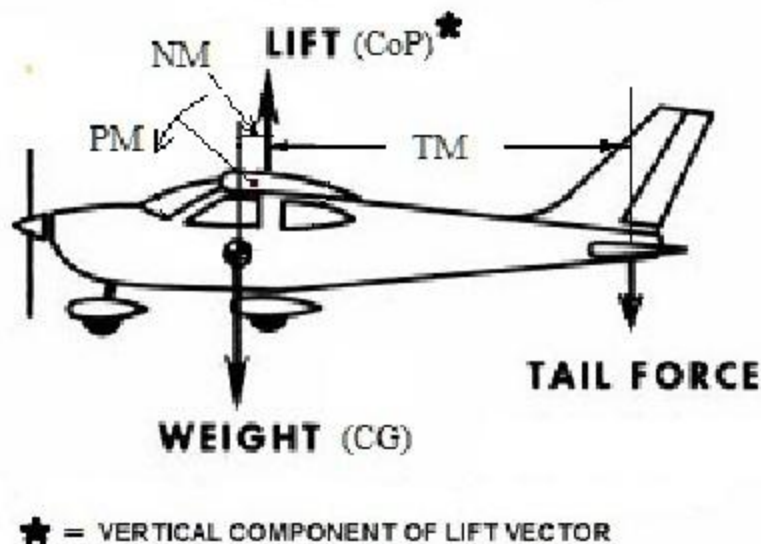
It all started with a shout to a new member - "Look, it's hanging its tail. Shove some lead up the nose". Hmm? I went home uncertain and decided to give it some thought. This then, is my take as an unqualified but enthusiastic amateur in this field, on what is one of the more complicated topics in aerodynamics, and so criticism and comment are very welcome.

A remark often heard when a model is seen flying tail-low is that it must be tail-heavy and so needs more nose weight to compensate. That appears logical enough, and fits what we observe, but so often in aerodynamics things aren't necessarily quite what they seem. My belief is that the reverse is the case, that is, a low tail usually indicates nose-heaviness. I hope to show why in what follows, since I've not found this topic covered in text books. We should be concerned, because nose-heaviness ultimately contributes to unsafe handling and increased landing speeds.

Balance and Stability in a Well-Trimmed Model

FIG. 1

Acknowledgement - Dauntless Aviation



For convenience, I'll use abbreviations for the various effects after their first introduction.

To set the stage, and not wishing to teach grandmothers to suck eggs, for positive stability in pitch, conventionally we would have the model weight centred a little ahead of the position on the wing where its distributed lift can be said to apply at a single point in normal flight, the wing's Centre of Pressure (CoP). The position we choose is thus the Centre of Gravity (CG). The distance between the CoP and the CG sets the Static Pitch (or Longitudinal) Stability Margin (SPSM), greater distance providing stronger self-recovery. Doing this works well-enough generally, but if we seek

more precision, we must also take into account other forces acting at the nose. I'll discuss these shortly.

To achieve balance, the down-force acting at the nose has to be corrected by a smaller balancing down-force at the tail. It is smaller because it is applied at a greater distance from the CoP than that of the nose down-force – it's really just a matter of levers or see-saws, treated here as "moments", being force times distance.

I have adapted Figs. 1 and 2 to show the Nose Down-Force Moment (NM) and Tail Force Moment (TM), and the wing's Pitching Moment (PM), one of the additional effects mentioned above.

We now have a configuration where, should the model's nose drop and its speed increase as a result of the lift vector tilting and its vertical component reducing, the tail down-force will increase, rebalancing the model by depressing the tail and raising the nose again, a comfortable reaction for many of us. (I think this action in relation to wind-shear and gusts is worth further study sometime!).

For those of us with nerves of steel, we could equally site the CG at the centre of the CoP for neutral stability, needing no force in either direction at the tail.

Examining the additional factors that affect the balance as set-up by the placement of the CG:

- 1/ The wing itself presents a small varying down-force at the nose, arising from a twisting force (torque) derived from its PM. The pitching force is created by a component of airflow "effectively" circulating around and backwards over the wing when lift is generated. Thus the pitching force on the wing is the reaction to this circulation, in the forward direction. It is centred at approximately the 25% chord position, which is relatively constant with varying Angle of Attack (AoA), but its force increases with increase of AoA.
- 2/ Depending on the thrust-line angle, the propeller may apply a force in the vertical plane, more usually a down-force from engine down-thrust.
- 3/ Also affecting the overall balance can be a residual degree of down-force at the tail caused by the tail operating at an increased negative angle of attack due to the down-wash of the wing.

It seems in practice that these additional forces do not have an overbearing effect on balance and SPSM. In any case, we are wise if we submit the model to the "dive-test" to assure ourselves of this margin.

The Effect on Pitch Attitude When Nose-Heavy

A model flying tail-low, and so with a presumption of excessive tail weight, would need to have the tail providing positive lift to support that weight and to keep the model balanced in pitch. The tail would thus be flying at a positive angle of attack. This would solve the fore/aft balance problem, but is almost certainly unstable in pitch, and the flight would be adventurous, but short! I say "almost", because there is situation where a small amount of tail-lift can be made stable, with the proviso that the wing must produce a greater rate of lift increase with rising airspeed than does the tail. However, we are into specialised lifting-tail set-ups in this situation, a real can of worms that I'm not ready to poke at this stage.

If we are now ready to accept that the model is more likely to be nose-heavy, and is stable in tail-down flight, then what different conditions must apply?

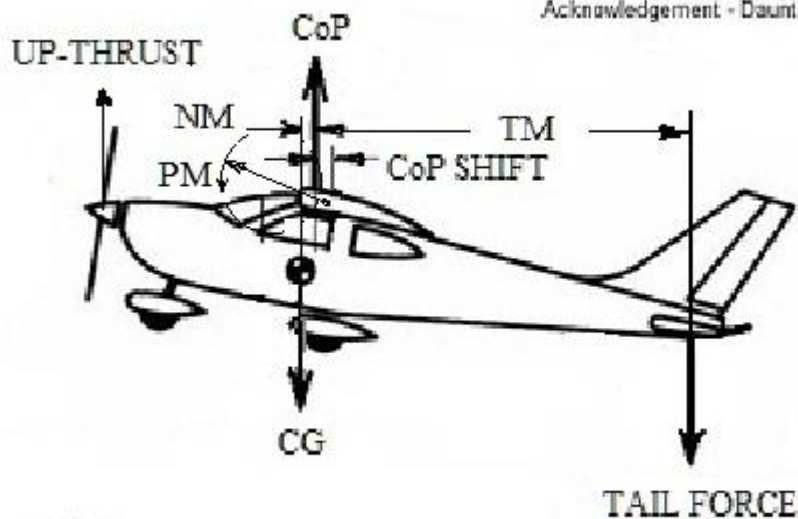


FIG. 2

If we now grossly increase the nose-weight, we would expect to have to maintain a correspondingly increased down-force at the tail to restore balance. In fact, we don't. The key factor coming into play that obviates this and gives rise to the tail-low/nose-high condition is this -

The wing's CoP can move with AoA variations, and with the nose high, it is centred at a more forward position. Thus the distance between the CoP and the CG is shortened, reducing the nose down-force moment NM, lessening the need for heavy down-force at the tail, and so the model adopts a stable nose-up attitude. To this we must also add the increase in value of TM, which, although being small, assists the effect of CoP movement.

It's important to note straight-away that the above effect applies only when the wing section has positive camber (lifting). A wing section having no camber, (i.e. fully symmetrical or flat plate), has no significant CoP shift with AoA change, and so the effect will not occur, and the nose will not rise, and a heavy down-force will need to be maintained at the tail.

As ever in aerodynamics, there are other modifying effects to be taken into account, and referring to FIG.2:

4/ The thrust-line is raised by the tail-down attitude, so an upward vertical component of engine thrust is created, reducing the effects of NM and PM. At +5 degrees thrust offset, the up-force at the propeller is 9% of the total thrust, and that is appreciable. Conversely, we can see also that excessive down-thrust will add to nose-heaviness effects under power.

5/ At this nose-high attitude, the increase in nose down-force produced by the increasing value of PM adds to the effective value of NM.

Everything discussed above concerns the effect of excessive nose-weight on pitch attitude but, of course, the tail can sit low under benign conditions, e.g. when a high lift coefficient is required of the wing when flying very slowly, or when the model is excessively heavy.

The Nose-Heaviness Effect on Landing Speed

This is quite straightforward. When the model is flying with a very forward CoP and the tail probably operating close to its stalling-point by virtue of its new AoA, there is little margin to allow the increase in AoA needed to maintain lift in low speed flight or in landing. Thus our landings can be a little "hot".

Proof of the Pudding

Some years ago, we had a new member experiencing this hanging-tail problem with his trainer model. He progressively added nose-weight, and soon got to the point where the CG was at about 12% of the wing chord, the model being only just flyable, hanging from its nose in turns and landing at high speed. Based on the insights above, he accepted the suggestion to strip-out most of the nose-weight until the CG returned to 28% of chord as a re-starting point, and the model was then transformed.

Had he continued to add still more nose-weight, the model would have been precariously close to the stall, and in trying to pull more lift into a turn, it would certainly have dropped into a spin.

Thanks and congratulations to those who have managed to stay with me to the end!

Colin Stevens.

Breaking News, Further to last month's accident on the Chichester Bypass. Drivers are advised that the carriageway is limited to a single lane owing to delays in the clearance. Word has gone around that the custard has solidified, and work is now being hampered by many visitors arriving for a jolly good junket.

(Sorry!) Best Regards, Colin.

.....
And for a little bit of light relief, have a look at this video clip of the Devil (Mr Bean), sent in by Mike Harris.

Control Click here;

<https://www.youtube.com/watch?v=N9NCyGaxoDY>



WACO Build looking for a new home.



Some years ago, **Norm Murton** a well respected past member of Model Flying Hawkes Bay, commenced the scratch build of two Waco Biplanes which belonged to the NZ Long Range Desert Group in Egypt during WW11. Norm a Draughtsman by trade drew the plans to 1/5th scale and commenced the build concentrating on Waco YKC, but at the same time making duplicate corresponding parts for Waco ZGC. Due to some ongoing health problems, Norm has had to give up building and flying but would dearly like to see his project taken to fruition with at least one of the models completed to a scale standard.

Here is where the build is to date, nothing has been fixed or glued, the fuselage has just been very accurately "Clipped" together and awaits gluing, fairing and the stingers (supplied) fitted.

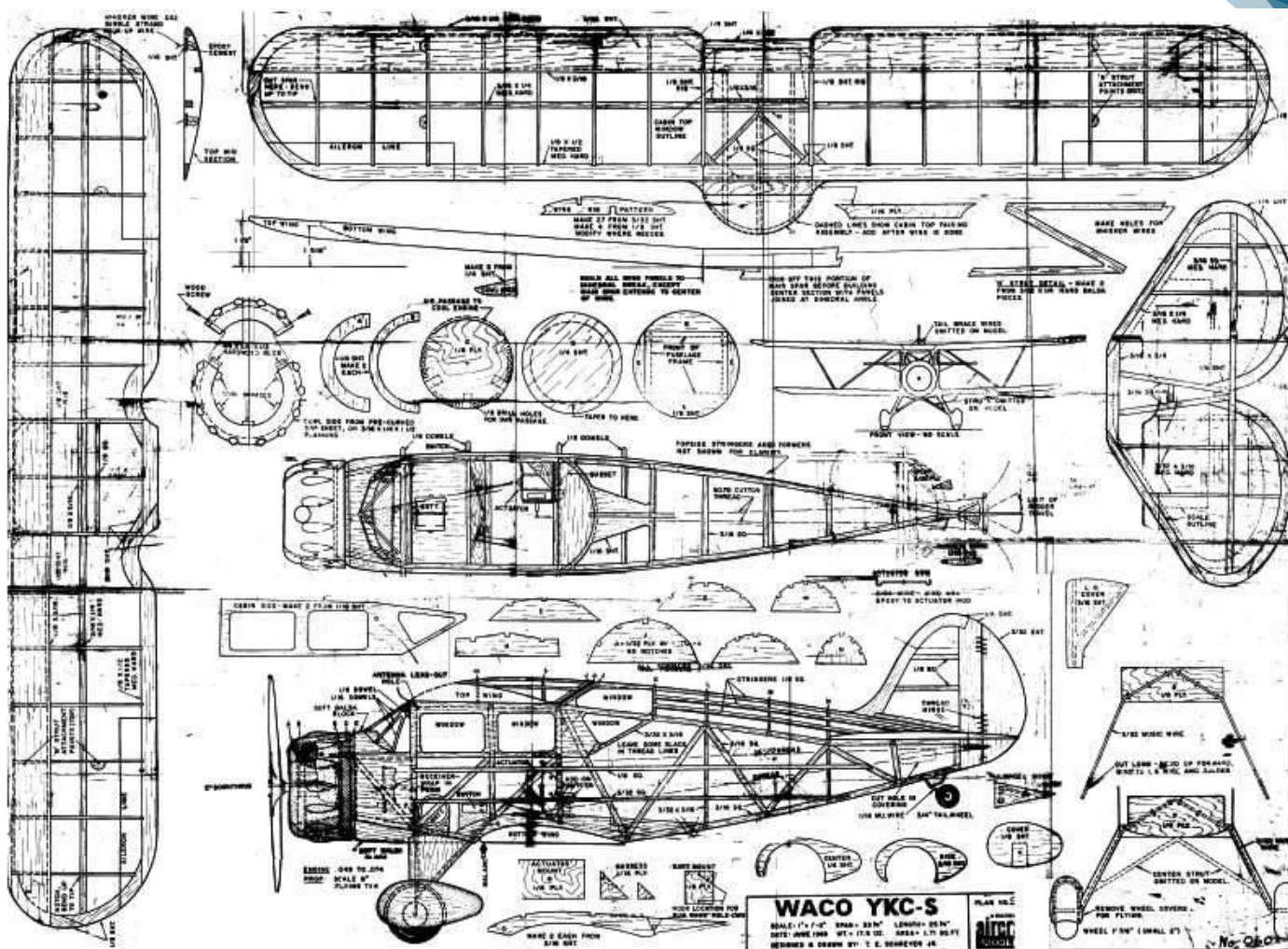


Undercarriage and tail wheel assemblies are built and the cowling and firewall moulds ready. There are some drawings and Norm has all his own 1/5th scale drawings available on a memory stick.

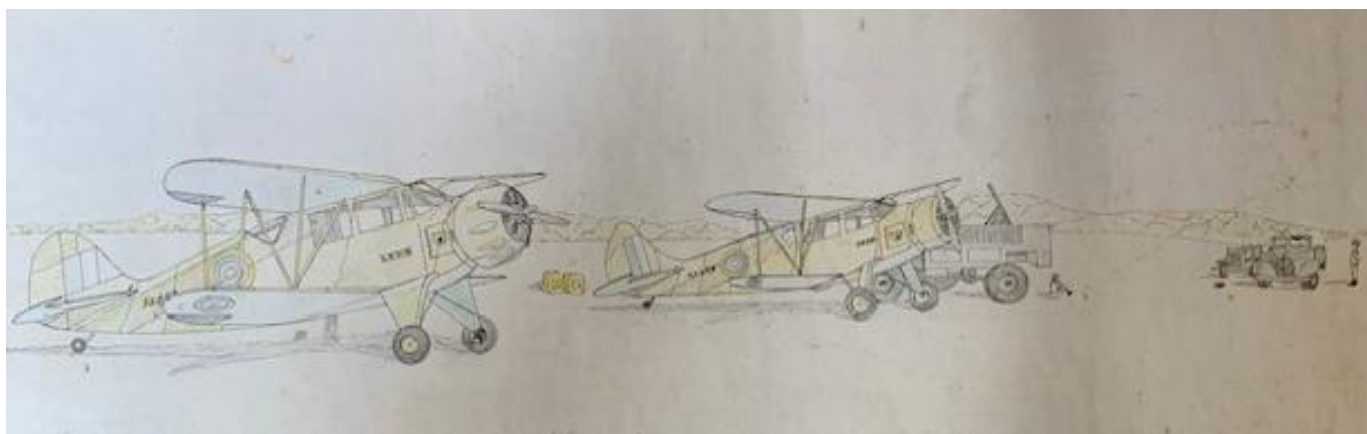




As can be seen, the build is quite advanced with all the planning and fitting well on the way. Below is a Waco plan for your information. The plan featured below is not the plan Norm has built to, but included here to give you an overall feeling for the aircraft construction and build.



This aircraft has a very significant place in New Zealand aviation history.



If anyone is interested in taking over this build and completing the model to either flying or static standard, would you please get in touch with the **editor on; Mobile 0274 542 523.** for further details and a viewing. It would be a great pity to see all the work to date going for nought, and everything is available **FREE** to a good home. **Ed. MFHB.**

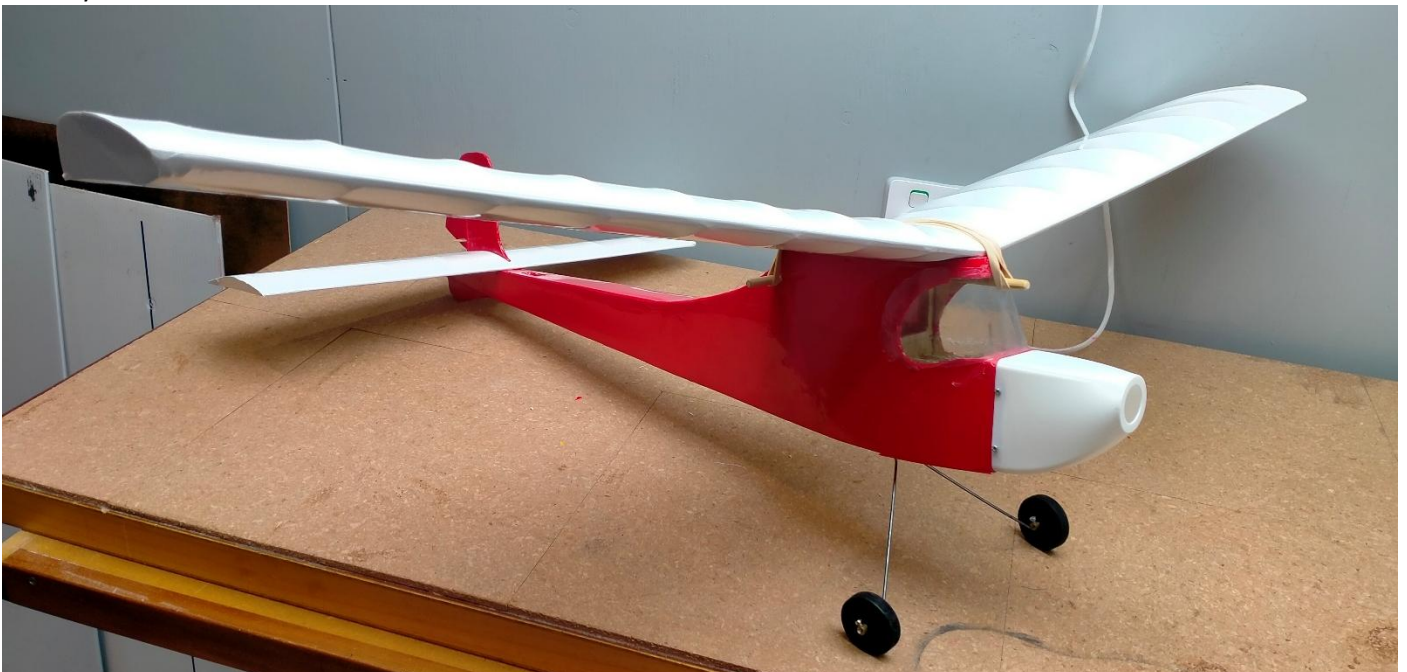
Vintage Report. Oct'25



The Stardust builds have been very successful, had a call from **Stu** for a fly on Wednesday 15th for a morning fly, conditions were good early on until a stronger 'nor easter set in later.



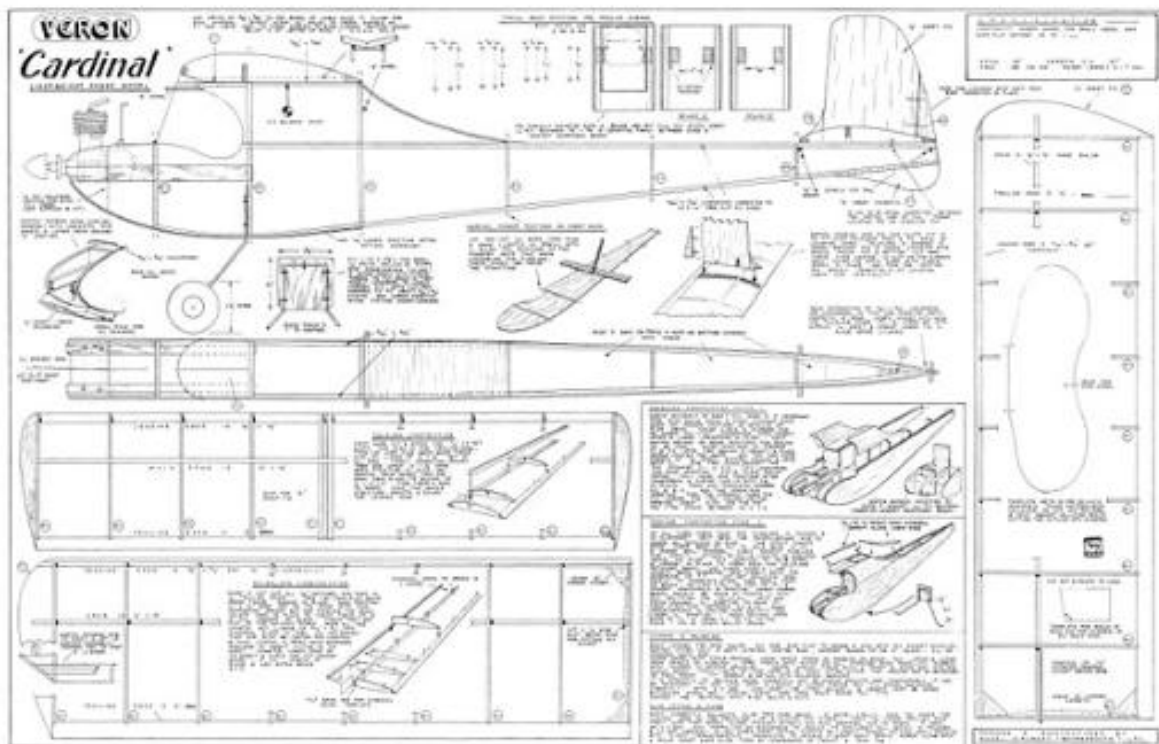
Three new models and they're all performing well, Stu and Rob are using 3 cell lipos at this stage and happy with their climb out and getting good results. Both **Rob and Stu** have set theirs up with 11x6 folding props in readiness for the new rules at the Nats and mine is about to be converted. We have the added bonus of having **Rowdy** able to 3-D print the suitable cowlings to order !! **Motor-man Phil** is into Vintage therapy and has made a start on his and **Graeme Rose** is building. Add in **Stanley** and **Ross B** and we should have a flock of ~~Starlings~~ Stardusts at the Nats in January 2026.



After trying to get **Stu** to build a sports Cabin Texaco model, with much shaking of his head saying “maybe, one day”, he finally came clean and sent me this picture of a Veron Cardinal that he has just finished at 38 in span and now awaiting the power train. What a rascal !! but great news, another string to our bow here at MFHB. Being just a little competitive, he’s seen the fun **Rob and I** have had with our Courtesans and **Stan and Brett** with Tomboys, he wasn’t going to miss out !!

That does look pretty and if I’m not mistaken could that be another “Rowdy” 3-d printed cowl ? There’s no end to these guy’s talents ! Plan available on Outerzone https://outerzone.co.uk/plan_details.asp?ID=4418

Nice model, why not build one and give Stu and the rest of us a run for our money. Nothing like a challenge !



Had an interesting note from **Michael Richardson** (the late Dave Richardson’s son) who has borrowed my Tomboy Senior plan. He writes “Just a few photos of the Tomboy senior. Steady progress has been made.





The wing has been altered to fit a top spar with 1/32 sheet webbing added also. As you may see I have covered the wing with a very thin heat shrink material (15 microns). This will then take on tissue offering a reasonably puncture resistant vintage finish.”

You’re a Chip off the old block Micheal, that looks Superb, Ed.

.....

Stardust # 9 is well on the way with “**Phil the Motor Man**” taking on a hearty dose of “Vintage Therapy”



** AVANZ NEWS **

Readers, May I draw your attention to the **Vintage SIG** Bi-monthly publication; **AVANZ NEWS**. This is an excellent Newsletter covering all things Vintage here in NZ and often Internationally. It is edited and published by **Bernard Scott** our well respected and experienced Vintage and Free flight aficionado ex-Hawkes Bay and now Hamilton. **A simple email request asking to receive to Bernard at ; scott.scott@xtra.co.nz** will ensure you are on his notification email list and will keep you up to date on all Vintage happening here in NZ. I thoroughly recommend you taking a moment to email Bernard and enjoy the regular Vintage story. You never know, you just might become hooked and I can assure you, **it is great fun. Ed.**



Committee Notices



#209 CONTENTS

Committee Notices
 Irregular Comments
 NDC
 Next Nationals
 Rules Simplification
 Levin Report
 Model Trailer
 Gastove 1956
 Readers' Models
 Hawkes Bay Vintage
 Single Channel
 Over Powering
 The Great Grape Gathering
 Power 1947: *Swayback*
 Small Power 1954: *Swayback*
 Glider 1964: *Justin*
 Scale 1964: *Bristol Brownie*
 Aerobatic 1963: *Caravelle*
 Aeromodelling Challenge #7
 2025 Leader Boards
 AI's View of Model Airplanes
 The Last Straw

Greetings to All,

The Silly Season is approaching fast (and I don't mean Christmas) so thoughts of the Nationals should be starting to come to the fore in your aeromodelling mind.

Not only do we have a new RC site, but also the 2026 Nationals will be the first use of the changed approach to some RC events after these were voted in. Both will add novelty to the Nationals.

From a CD's perspective I look forward to the changes with their reduced chance of events falling below the minimum official entry level to score Championship points.

Change is sometimes more difficult than staying with the status quo, even

when the existing way might not be working too well. It is heartening that Vintage RC fliers have been flexible and generous enough to accept changes, even when some of those changes were not exactly as they would have wanted in a perfect world.

Directions for finding the new RC rules on the MFNZ website are on Page 7.

On the Vintage FF side, all proposed changes were rejected. I fly only a couple of these events at the Nationals, so this does not affect me much, but I do wonder how long we can continue to run events that have few fliers. The existing rule for combining events will be used in VFF to reduce the possibility of some events becoming unofficial.

Check the Vintage Nationals programs on Page 6. Please decide which events you intend to enter and advise me (email address below). This is not just for interest, it also helps with preparations for the Nationals.

Also, check if any of the modifications to RC rules apply to the events you will be flying. Open Texaco fliers, for example, may have to adjust their fuel tank size as fuel allowance is now by weight rather than by wing area. (Rather than making a new tank, a model might be ballasted up to match the required weight for the existing tank. Or, it may be possible to remove existing ballast to match the new fuel allotment).

Allan Knox

COVER Ian Monro launching his *Simplex* at last year's Bob Burling Memorial Vintage Event, Levin.
 Photo by Ross Gray

CONTRIBUTORS to Issue 209

Allan Knox Wayne Cartwright Roy Smith
 Barrie Russell Ross Gray Bob Reynolds

SIG CHAIRMAN SIG SECRETARY AVANZ Plans COMMITTEE

Allan Knox allan.j.knox@gmail.com
 Allan Knox allan.j.knox@gmail.com
 Mark Venter avanz.plans@xtra.co.nz
 Barrie Russell barrierussell@xtra.co.nz
 Dave Wilkins dave@jacobsonprojects.co.nz

TREASURER AVANZ News MFNZ COLUMN

Wayne Cartwright rwcwright4@gmail.com
 Bernard Scott scott.scott@xtra.co.nz
 Wayne Cartwright rwcwright4@gmail.com
 Ross Gray rossajgray@gmail.com
 Bryan Treloar bryan_treloar@hotmail.com

NDC looking ahead to 2026 when the new Vintage rules will come into force, we're looking at a new and exciting 2026 **NDC** schedule with plenty of competition for everyone in all classes. This is currently the draft proposed schedule which will be confirmed before the end of the year.

VINTAGE **NDC** Calendar 2026 (Proposed)

Month	Event #	SIG	Event Name
Jan/26	103	VINT	RC Vintage 1/2E Texaco
Jan/26	104	VINT	RC Vintage Open Texaco
Jan/26	105	VINT	RC Vintage Precision
Feb/26	110	VINT	RC Vintage 1/2A Texaco
Feb/26	111	VINT	RC Vintage E Rubber Texaco
Feb/26	112	VINT	RC Vintage Duration
Mar/26	116	VINT	RC Vintage 1/2A Texaco
Mar/26	117	VINT	RC Vintage Precision
Mar/26	118	VINT	RC Vintage E Texaco
Apr/26	121	VINT	RC Vintage 1/2E Texaco
Apr/26	122	VINT	RC Vintage Precision
Apr/26	123	VINT	RC Vintage A Texaco
May/26	127	VINT	RC Vintage and Scale Texaco
May/26	128	VINT	RC Vintage Duration
May/26	129	VINT	RC Vintage Open Texaco
Jun/26	134	VINT	RC Vintage Precision
Jun/26	135	VINT	RC Vintage and Scale Texaco
Jun/26	136	VINT	RC Vintage E Texaco
Jul/26	138	VINT	RC Vintage E Rubber Texaco
Jul/26	139	VINT	RC Vintage Duration
Jul/26	140	VINT	RC Sport Cabin Texaco
Aug/26	144	VINT	RC Vintage scale Texaco
Aug/26	145	VINT	RC Vintage Duration
Aug/26	146	VINT	RC Vintage A Texaco
Sep/26	149	VINT	RC Vintage 1/2A Texaco
Sep/26	150	VINT	RC Vintage 1/2E Texaco
Sep/26	151	VINT	RC Sport Cabin Texaco
Sep/26	152	VINT	RC Vintage Precision
Oct/26	155	VINT	RC Vintage Open Texaco
Oct/26	156	VINT	RC Vintage Duration
Oct/26	157	VINT	RC Vintage E Texaco
Oct/26	158	VINT	RC sport Cabin Texaco
Nov/26	161	VINT	RC Vintage E Rubber Texaco
Nov/26	162	VINT	RC Vintage A Texaco
Nov/26	163	VINT	RC Vintage Precision

Take a screen shot of this page members, print off a copy and hang it up in a prominent place in the workshop.

Soarchamps 2025



Soarchamps 2025 MFHB Black Bridge. "Rowdy" reports;

This was our usual second biggest event for soaring during the year with a total of 22 people showing up to fly. We had seven different events scheduled over the four days of flying, ranging from eRES built-up two meter, to discus launch, F3B and much more. It was nice to have David Griffin from the South Island, and good representation from all around the North Island. Although we had some good rain on the Tuesday before the event the forecast looked great!



Rocket Lab at play early morning.



F3B on hold DJ and Rob snoring not soaring

F3B (3 Task Winch launch)

We started SoarChamps with the formula 1 of soaring, F3B. We had eleven entries which would make it easy to run the course with our new F3B wireless gear. The wind was predicted to be quite blustery. Surprisingly the wind started from the opposite direction, but by the time we got into the event it blew from the expected direction. We managed two rounds of duration, then the wind came up. The direction was over the treeline, making it difficult to land safely. We all agreed to abort the competition due to conditions and spent most of the day on hold and constant review. Sadly the conditions continued to deteriorate so we called a halt for the day.



Morning Winch setting up for 200m Launch in F3B



eRES 2M (Electric Launch 2m rudder, elevator, and spoiler)

This classic balsa airframe event is getting popular, with many around the country building the kits or buying the ARF. There were many spectators and some had come through just to watch this growing event. We had 14 entries in this event. To get the best calm conditions, we scheduled eRES in the morning, before the afternoon breezes would pick up. The conditions were perfect, with light winds and thermals to be found (most of the time). We completed four rounds with three groups per round. Round three started to mix the scores up a little with quite few missing a full time flight and the last round the winner was 4:10 flight. The best flight was Joe Wurts 4.59 flight and 50 landing.

1st Joe Wurts. 2nd Chris Kaiser. 3rd Peter Glassey





F3J (Winch Launch Thermal)

The next day the weather was just as good, and it took a little while to set up with mostly Maxa's to assemble and lots of little screws to lose. The winch lines for this event are 150m long but we space the winches in lanes to give a little launch separation as the pilot group all start launching at the same time. In the very first round Joe's boom on his Maxa failed on launch. The best score was 9.56.6 and 99 landing by Joe Wurts and lots achieved times and the scores as usual very close at the end. With plenty of great flights and thermal action with a light sea breeze at the end of the competition. We completed 4 rounds of 3 groups during the day which was heaps of flying for all. Super thanks to Andrew and Jane Hiscock's for a barbecue and meal that evening a great night!

1st Kevin Botherway. 2nd Peter Williams. 3rd David Griffin.



F5J (Electric Launch Thermal)

This was our second electric launch model competition for the weekend and again the weather was great! This is a reasonably technical event with three measures to rank the flight, using launch height, flight time, and landing for scoring. We set up and set a cut off for the event so we could fit the other day's events in. Kevin had an elevator and rudder stop responding in round two and managed to get it down in one piece from a 1000 odd ft with using only wing controls, landing outside the time with a zero flight. Fortunately, there is a discard with five rounds!

The best flight was 9.59 flight time, 50 landing, and 32 meters launch height by Joe Wurts. It was a day for low launching at times and thermal activity was great if you picked it right. We managed 5 complete rounds of four groups in each round.

1st Joe Wurts. 2nd Kevin Botherway. 3rd Chris Kaiser.



Myles Moloney with Andrew Stiver

Rob Morgan with Dave Ackery

ALES Radian (Electric chilly bins)

We decided to do this Class next as the wind was getting a little stronger and the radians had a little better penetration and it was a relaxed event for the end of the day. We flew 3 rounds of 30 minutes time slots and had 11 pilots in the competition. A few had max scores (7:00 flight and 50 Landing) as usual fun had by all and the event took 1 1/2 hours to complete. Over the complete competition many found enough air to get a full 7 minute flight time along with a fairly good arrival or landing.

1st Peter Williams.
2nd Stewart Cox.
3rd Andrew Hiscock.

After this it was a night out at the local for a great dinner and relaxed catch up with everyone on all the other topics in life.





Peter Williams during Launch

The last day.

F3K (Discus Hand Launch) and **F5K** (Electric Hand Launch)

This was another stunning day in the Bay. We set up and prepped all our models in some nice air with thermal activity and a light breeze. The tasks were scheduled and we planned to run at least 3 complete rounds of F3K with two groups then of F5K which had two groups in each round. The air for F3K was very fluky and thermals hadn't really formed strongly which meant many flight times were shorter than the maximum. With slight overcast condition the thermal never really got going but one or two pilots managed to hook up.

The wind started building from the West towards the end of F5K which again we went into a holding pattern for a while and finally completed 3 full rounds again with eleven contestants.

F3K - 1st Joe Wurts. 2nd Peter Glassey. 3rd Kevin Botherway

F5K - 1st Kevin Botherway. 2nd Joe Wurts. 3rd Andrew Hiscock

Overall champion – Joe Wurts - Soarchamps Air NZ Champ trophy

Overall if you flew every event you got heaps of hours flying in competition mode! That's without warm-ups and practice and calling others - WOW no wonder we deserve a beer... A super big thanks to Joe Wurts who is the man with the computer for all the scoring and draws, and special thanks to Kevin Botherway for keeping the timing gear in great nick and doing the setup and teardown every day. To everyone for making it a seamless relaxed competition. Lastly the weather was unreal. It was a super successful Soarchamps.

We now have a whatsapp group for all the soaring people so we can keep in touch on the competition scene with any forward planning. Let us know your details and we can pop you on there. Once again thank you all so much see you at **Hawkes Bay Nationals 2026!!**

All results on glider score; <https://www.gliderscore.com/OnLineScores.aspx>

Soaring Rocks !!!

FOR SALE October'25



ON BEHALF. Ex-Member David Moore is clearing out the balance of his modelling history and wishes to offer the following as a "JOB LOT";

SPEED CONTROLLERS / ITEMS FOR SALE 3 x Turnigy Plush-32 30A (2 - 4 S) brushless speed controller W/BEC. \$37 each 20A UBED 2 - 4 S brushless speed controller. \$20 High Tech Super MAG8 ESC30A \$100

HobbyKing brushless speed controller 40A SBEC 2 - 6 S. \$55 **VARIOUS** 2 x Turnigy Aerodrive 1650KV brushless motors. \$80. each

Quantum Gyro - Flight stabilisation for planes. (\$34 Lipoly Low voltage Alarm 2 - 4 S. \$6 Turnigy Micro FPV video camera. \$82

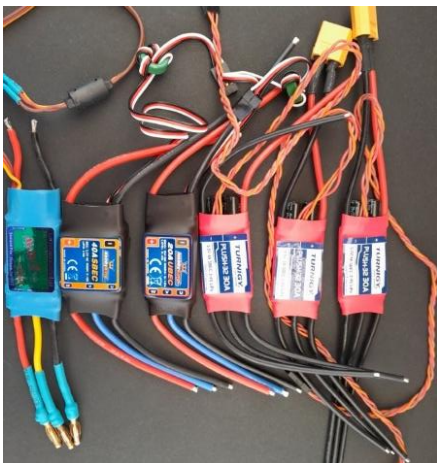
Mixed servo leads box Servo Consistency Tester with battery. \$20 Servos Mixed (mostly 9GR). 4 Battery connectors XT60/XT90 Box of mixed hinges for wing/servo connections.

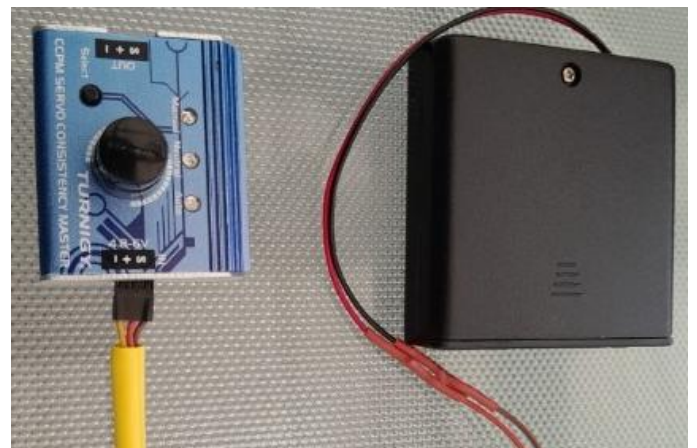
PROPELLERS (box of mixed !,2, NS 3 blade) 12 large sb. 260/280 mm, 7 small sb. 160 mm, 5 small three blade

LIPO BATTERIES (10) - Some brand new. Most used. All held at storage voltage. 2x Leopard Power 3S 11.1v 2200 Mac Brand new. \$60 each 2x Zippy 2s 1300mAh Turnigy 1300mAh 3s 2x Turnigy 2200mAh 3s Hobby City 2200mAh 3s Hyperion 1600mAh 3s Turnigy 2200mAh 4s

BATTERY CHARGER/DISCHARGER eXtreme X-605 Li-po balance charger/discharger with instruction manual and leads. \$50

Plus, many other 'odds and ends' which I'm very happy to donate to the club, eg metal storage boxes (5) for lipo batteries, box of mixed propellers (25), large and small (see above), battery voltage testers. I've conservatively estimated the value of the above, including the "gifted" odds and ends to be around \$700 - \$900 so would accept \$300 for the lot.





All the above is offered as a job lot for: **\$300.00 ono.**

Please contact David Moore on

Ph; 0274520020

email; davidmoore1926@gmail.com

Stan Nicholas is offering the following;

FOR SALE: 1. Lanzo Bomber Wing Span 64" ESC Turnigy 45amp . An excellent Vintage model complete and in good flying condition.

\$150.00



FOR SALE: 2. Seagull 80" Pawnee, I did fly it with a petrol engine but converted it to electric haven't flown it since. 60amp Brushless outrunner motor C3548 900kv I was going to put a 4cell lipo in but never got round to flying it I did fly it with a petrol engine All servos included just needs receiver and prop and good to go.



In excellent condition, just like all of Stan's aircraft but surplus to requirements.

\$350.00 Ph Stan on 027 353 8106

A CLOSING SMILE. October '25



Not a “Funny” but it might make you smile.

Have you heard of or know the meaning of the word “ **mondegreen**” ?

A mondegreen is a mishearing or misinterpretation of a phrase in a way that gives it a new meaning. Mondegreens are most often created by a person listening to a poem or a song; the listener, being unable to hear a lyric clearly, substitutes words that sound similar and make some kind of sense.

In 1954, Sylvia Wright published an essay in which she recalled learning a traditional Scottish border ballad, “[The Bonnie Earl O' Moray](#)”. The first verse of the text goes:

Ye Highlands and ye Lowlands,
Oh where have you been?
They have slain the Earl o' Moray
And laid him on the green.

But Wright as a fifteen year old heard the words of the last line as “ **And Lady Mondegreen.** ”

Lots of examples on the web, some funny and some not so. Well Ho Hum, we’ve laid that one to rest.

And on that note, one more issue before Christmas so please let me have your reports and copy before the end of November and then the next stop might be some time in the New ear.

No that wasn’t a mondegreen, just a typo.

See you round.

Barrie the editor. October 2025.

