



July
2024

HAMILTON MODEL AERO CLUB

Flight Lines



NEW



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Cover Page:

A blast from the past, May 2018. A well-known DLG pilot from the Hawkes Bay puts his \$1500 carbon fibre model into the power wires.

Most impressive.... both for the bang, explosion and resulting (carbon) feather duster.

FLIGHT LINES

HAMILTON MODEL AERO CLUB INC.

July 2024

www.hamiltonmac.org.nz

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NEXT CLUB NIGHT: Wednesday, July 10 @ 7.30pm

VENUE:

Beerescourt Bowling Club

68a Maeroa Road - Hamilton

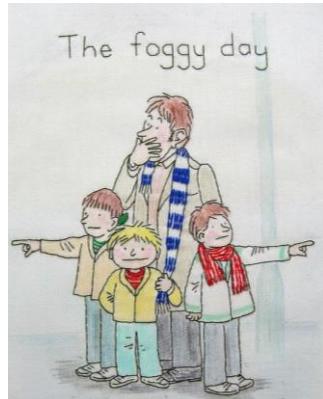
Club Night Theme: Show and Tell - Bring along those tools that make your life easier along with any aircraft creations nearing completion or finished since the last club night

Club Themed Flying Day: Bi-Planes and Multi winged aircraft

Presidents Report

Grant

Fog, Fog, glorious Fog.....NOT! Seems the weather gods only shone a brief ray of sunshine onto Matariki Friday, as the rest of the long weekend in Hamilton was far less than clear blue skies!! I'm told there was a good bit of flying happening on the Friday at the field, so that is great to hear. I'm not sure about Saturday, but I believe a few braved the cold overcast and foggy conditions on Sunday to make the most of what flying they could.



Hopefully we don't see too much more of this kind of weather pattern. Now that we are past the shortest day, at least the days are stretching out again. (By the way, FOG is another flying term that Frazer refers to often....best you ask him though !!!)

Flying events for the month saw the cancellation of the Aero Tow and Classic Pattern Competition/Training events called off based on the poor weather forecast for the weekend. The same weekend accommodated the Tauranga Model Auction where a good number of our members ventured across the Bay to grab a bargain or two.



Two of HMAC's finest make sure they get a front row seat

Mind you I did hear mutterings throughout the day commenting how nice the weather was and that the Auction should have been on the Saturday and not Sunday... can we ever be pleased.

The following weekend saw an abysmal Sunday forecast for our Float plane event. Gordon and I touched base at 7:45am in the morning with drizzly conditions present at both our homes. Thus it was no surprise that we both had the same thought....Cancel!! However, over time I've learnt not to trust the official forecast and just go for it anyway. So, with a quick consult of all the weather data available on line, fingers crossed and a good bit of luck, we went ahead with the event....and to everyone's surprise, the day turned out to be a stunner for lake flying. Gordons written about the event elsewhere, so I won't mention anything more, other than to say make sure you read the full story.



The coming month sees a couple more flying events on the calendar and even though we are in the middle of winter, there's still a good chance we will get some nice flying conditions. Our clubs themed flying day for July is based around Bi-Planes and Multi – winged aircraft. It's time to drag out those Tiger moth's, Waco's, Pups, Pitts, Gladiator's, Stearman's & Tri-Planes, and that's just Gordons lot, let's see who else can front up with a bi-plane or two. This will be a relaxed day of flying with visitors welcome to come and join in the fun. Another event on this month is the

three-day Aero-Tow Glider event at the goat farm at Matamata. Visit the web calendar for date & location details. Also, a mention of our next float plane day which is at Lake D on the first Sunday in August, please don't listen to the weather forecast, charge up your models regardless!

It's been a couple of months since our last club night and I'm sure there will have been plenty of construction items and aircraft creations nearing completion or finished since then. Hence, we invite you to bring these aircraft along for show and tell at our July meeting. We'd also like you to bring your favorite tool or a modelling item of interest" that you wouldn't want to do without in the workshop. We also plan to do a couple of live demonstrations, so if you want to demo your item as well, that would be greatly appreciated. If we run out of things of interest to talk about, I also have some pics from the Warbirds over Wanaka Airshow yet to be shown, but hopefully that won't be required!

Now on to field news. I need to say a big thank you to Sel and Gordon who in the last week have converted our Toilet to something much more user friendly. Water supply has been an issue for a while, so the flush toilet sadly is no more and we have now reverted to the more traditional style. You will no doubt appreciate the simplicity when you have need to use it, and we please ask you to keep this as clean and tidy as you can. Gentleman, need I say more than "in it....not at it"!!!



And a message from our groundsmen. When you put the fence down for your days flying, please unclip all of the handles from the steel end posts. This helps save models that over run and catch the fence tape and reduces the potential for damage to the model and the tape. Likewise, please avoid leaving the fence connected so that it shorts out on the ground, as that burns the tape and permanently damages the wire filaments. Remember the fence must go back up again at the end of all flying sessions.

Well, that's that, I've pretty much run out of things to add this month, so here's hoping for some fine weather and safe flying. See you at club night.

Grant

Editors Ramble

Dave

I'm sure newsletter editors everywhere hate this time of year. Events cancelled due to poor weather results in no reports and photos from those events which in turn makes it a real struggle to obtain copy. Another event that was cancelled in addition to what Grant has already mentioned was Auckland Soars Mid Winter



Thermal Thaw event scheduled mid June. I would have dearly loved to have reported on that so there's another few blank pages. All the more annoying when you have organised the time off and have sorted out your accommodation.

Nevertheless, if we are not flying we're all building something right? Or maybe not.

Easier these days to go to an auction or purchase an ARTF aircraft and a completed plane simply falls right out of the box.

There is a Horton Wingless if you're interested in building one, Bruce Pickering can give you the background to that. Also, our coastal modeller Malcolm Foster has also been tinkering once again but I'll let Malcolm explain that one to you and I'm currently beavering away once more with lots of balsa and merrily gluing my fingers together.

However, amongst all the fog and the gloom the club did successfully hold another float plane day and the Tauranga Auction was also a success.

Hopefully more next month. Till then, happy reading.



Aircraft I Dream About— the Horton Wingless

Bruce Pickering

Why is it that innovation and money can cause grown men to act like 12 year old kids fighting in the sandpit? Imagine designing an aeroplane that is so far advanced that a powerful billionaire and a man who would become president of the United States would do everything they could to get their hands on it and take complete control, leaving you unable to do anything about it, or even speak of it!

Such was the case of the *Horton Wingless Airplane*, invented by Bill Horton of Southern California in 1952. His story was kept hush-hush until, forty five years later, in 1997, when he finally publicly made known the events surrounding his design. Horton said he first got the idea for a wingless airplane as a boy. By 1938 he was working for General Motors when he showed his employers plans for the plane.



He called his bizarre looking vehicle ‘wingless’ because he maintained the entire aircraft was an aerofoil, providing all the lift necessary to fly. Unable to develop the idea because of lack of finance, Horton partnered with billionaire Howard Hughes and Harlow Curtis to back his project.



Nico Braas Collection

1000aircraftphotos.com

While working for General Motors Horton first met Howard Hughes, who himself was an ardent aviator. During an interview in 1997, Horton said that Hughes “Fell in love with the airplane. His big dream was to become the world’s biggest aircraft manufacturer. And if this wingless airplane could fly, it could take over aviation.” Enthusiastically, Hughes offered three million dollars to advance the project and told Horton to sell stock to raise what else was needed.

They established a workshop at what is now called John Wayne Airport in Southern California. “It took 11,000 hours to build the prototype,” Horton said. “Over 3,000 welded joints in it. And it was a steel frame airplane, covered with a fabric skin.” It is estimated that only a few prototypes were constructed, at least one with twin tractor propulsion, and another with single rear pusher configuration. They featured small retractable wings that could be extended from the body of the aircraft for take-off and landing.

In spite of being discredited by “experts” as being too unstable to fly, Bill Horton obtained government permission to make short hops just feet off the ground. Subsequently the FAA approved longer, higher flights. On one of Horton’s first flights he had on board the then Governor of California, Richard Nixon, later to become president of the United States. Sometimes Hughes would also fly with Horton.

However, the venture failed, not because the design was flawed but because Hughes wanted to take all credit for the patents and production rights. He declared the aircraft should no longer be called the Horton Wingless. In the 1997 interview Horton recalled about Hughes, “He said, ‘Bill, this is my money and it’s gonna be done my way. I’m gonna be the boss and it’s gonna be the Hughes Wingless, and you’ll be the chief engineer.’”



Feb. 14, 1956

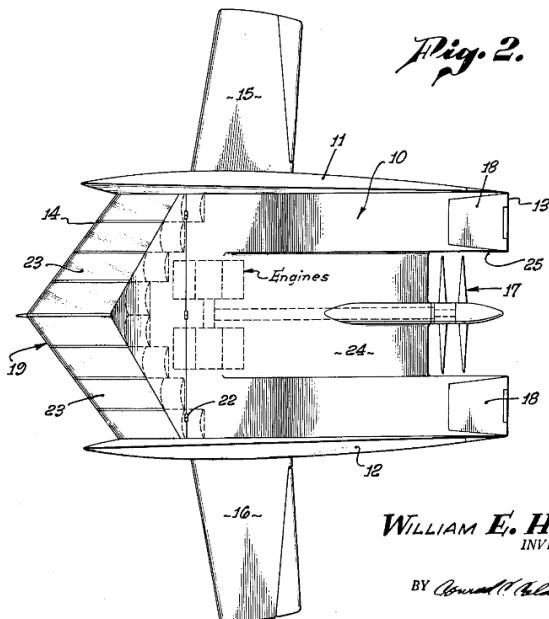
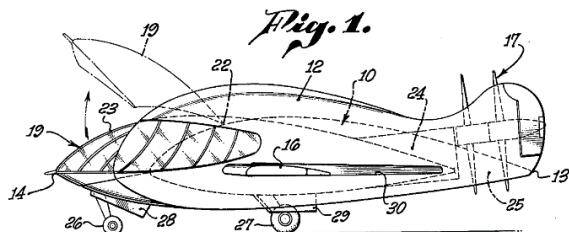
W. E. HORTON

2,734,701

AIRPLANE WITH RETRACTABLE VARIABLE-INCIDENCE WINGS

Filed May 13, 1952

2 Sheets-Sheet 1



WILLIAM E. HORTON,
INVENTOR.

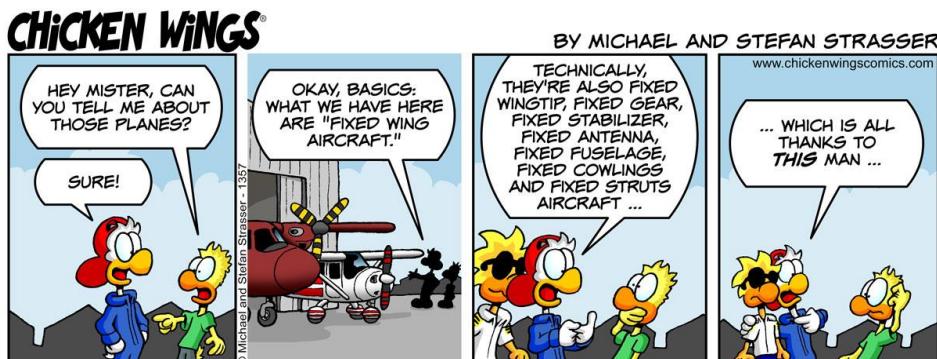
BY *Conrad M. Allard*

ATTORNEY.

Understandably, Horton refused to allow this, at which point the friendly partnership faltered. So moneyed Hughes sued Horton, effectively stopping further development of the aircraft. One claim of the lawsuit was that the aircraft could not fly, which was clearly discounted by photographs and movie film showing it in the air. Horton even served jail time for selling stock in a company for an aeroplane that “couldn’t fly.” The debacle resulted in several violent altercations with some associates of Hughes and Curtis because of injunctions resulting from the lawsuit. The Joint Chiefs of Staff had expressed interest in the aircraft, which seemed to fuel Hughes’ attempt to take over the project and the patents. Horton said he went to Washington, DC, where he met with Hughes, Richard Nixon and other men who physically assaulted him. Horton said, “Nixon was trying to persuade me to do it, be sensible, you’ve gotta let Howard run this thing. And when I wouldn’t do it, they had me beat up again, there. Almost killed me.”

The real story of the *Horton Wingless* aircraft only emerged after fortyfive years of complete silence. What a disgraceful legacy for a such an innovative invention. That alone should be enough to warrant a flying model of this remarkable aeroplane.

<https://www.youtube.com/watch?v=WobX6ZMDzSE>



June Floatplanes

Gordon

There was a shocking weather forecast, 8am. Sunday morning, Grant & myself talking on the phone...do we try or cancel? Well, I said, it's raining here now, but maybe it will improve later. Righto, lets give it a try! The rescue boat was unprepared, so there I was putting on the motor, etc., in the rain. Must be mad??



Roared off out to the lake and woohoo, water like glass & sun breaking through! The day remained perfect weather, one of the best for the year! I think a few people may have been caught out as the numbers were down a bit on normal.

Flying was soon underway. There was a plaintiff cry from Wayne....I've left my good batteries at home and the ones I have are not charged! So, Grant & Gordon to the rescue with chargers, and he was soon underway.



*Wayne seen here
relaxing with his
Timber*



Ryno appeared with his flying boat repowered with a RCGF10 motor converted to petrol glow. He had a couple of short flights but all was not good, would not pull the skin off a rice pudding! A bit more sorting out required, I think.

Ethan & Andrew came out to fly for the 1st. Time off water. The Cub was initially not successful, but turning the float mounts around to the correct direction and it was away! Then the Seawind was flown and it went superb! Well done guys!



Phil Bell was flying the ex. Phil Hall Ugly stick. It was going OK until bit of an error too far away and it bit the water. It should be repairable though.



The club rescue boat continues to go well and fulfil its “duties” that always seem to be in demand! The removal of the windscreen has helped a lot with retrievals. We need some more drivers...put your hand up please. Aunty has put his hand up to be the ballast in the bow. Sure handles better when he is up front!!

Gordon.





*Rex brought
his boat just
in case*



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A weekend away in the Bay – Hawkes Bay

Dave

Matariki weekend being the 28th to the 30th of June this year just happened to be the date of the Hawkes Bay Model Expo, an event I regularly attend that usually takes place around Labour weekend. So, along with a couple of kits that I had done earlier in the year as well as a few “bigger” planes, I loaded up the car and headed off to the Bay to catch up with friends on both sides of the hobby.

As it turned out the weekend weather was brilliant, if not a little on the cool side to start the day. All this while I heard Hamilton was cloaked in FOG. Oh dear.

After recently finishing my 2 metre E Medina for the Soaring E Res class the plane was in need of a test flight. Yes, I know it was a long way to go for a test flight or six, and it could have rained, but it didn’t. All I can say is that the Medina performed nearly flawlessly and only needed a few minor adjustments for trim while the degree of elevator compensation needed when the spoiler comes up is still a work in progress.

Also at the field Joe Wurts, Kevin Botherway along with a number of other MFHB members flew NDC ALES Radian. So what’s the difference between a Radian and a Medina? The Medina is approximately half the weight.

A great long weekend away which came to an end all too soon.





*It flies.
Thank God for that*

*Kevin Botherway
(Rowdy) manning
the stopwatch for
Joe Wurts in ALES
Radian*





No top placings for either my Apache or Vampire. The standard was very high

Coastal Aeromodelling News Report

Malcolm Foster, the Marine Modeler

Greetings from Whakatane!



There have been some great flying days down here in the Bay, - and some wet and windy non-flying days, where it's just the best idea to get into the workshop and build, or renovate, or sharpen all the modelling tools! I have finally got my Kawasaki Hien sorted, with the floats off permanently and the electric retracts working well. I have included a non-scale modification to strengthen the gear, adding a folding strut to each main leg as in the Hawker Hurricane. This will certainly discourage any rearward movement, as I have been needing to land "ever so gently" to make a good job of it, and not pull the gear out. I can pull it off most of the time, and taxi back to the pits, but the occasional early flare or unexpected gust of wind has caused some grief. I've also replaced the bottom aluminum pan of the radiator, which was crumpled up from several un-scale belly landings after takeoffs from the dolly, before I refitted the retracts. (you might remember I was fond of the dolly with my old Curtiss P40. Some would say at 67 I am too bloody old to be playing with dollies.....)

Another plane which I have been having a lot of fun with this last month is my own-design, somewhat-scale, "Fokkered-if-I -know -what-it-is...". model, as pictured. It is exactly 60" span, and weighs less than a pound of butter without the flying battery, so as you can imagine it's a floater. Fully braced with eight thick "wires" top and bottom each side, set in two balsa wing spars, it's easy to transport and has more drag than Ru Paul's TV show! It can climb vertically at 3/4 throttle, fly forward at 1/4 throttle, backwards in a moderate breeze, and descends "almost vertically" with power off. You could land it in a very small back yard. Great fun, and

challenging because it has no ailerons, being rudder, elevator and throttle only.





The dihedral keeps it stable though, and barrel rolls are possible, along with tight loops. When it comes to landing, the main wheels have rubber bungees and quite a bit of travel, just like the originals in WW1, so it doesn't tend to bounce. The front battery cover is held on with two tiny magnets salvaged from a shot outrunner motor, so they're some sort of magic rare-earth types. You should pull your little buggered outrunners apart and reclaim all those little magnets - they're very strong, and useful.



The front cowl is a cottage cheese pottle, and the control runs are dental floss "pull-pull" off 9gram servos. This, along with Depron and polystyrene helps keep the weight right down. If you're tempted to build one (go on, go on, go on,...you know you want to....) keep the motor, wing and tailplane incidence all at zero-zero-zero, AND (this is really important....) make sure to have some structure bridging the gap between each wing's spar ends. Years ago I made a plane like this which has a lot of nothing between the two wings, and nice strong bracing top and bottom, and it looked quite drastic when it crumpled in midair under flying loads, and the two lots of wing spars "met in the middle" Still, if you want to have someone video such an event, you might find a ready market from a film producer like Peter Jackson. Especially if you can contrive some smoke at the same time. And maybe a dummy pilot falling to his death....

Hey, May your modelling knives be ever sharp, and your epoxy set completely until we catch up again,

Malcolm



Tauranga Model Aircraft Club Model Auction



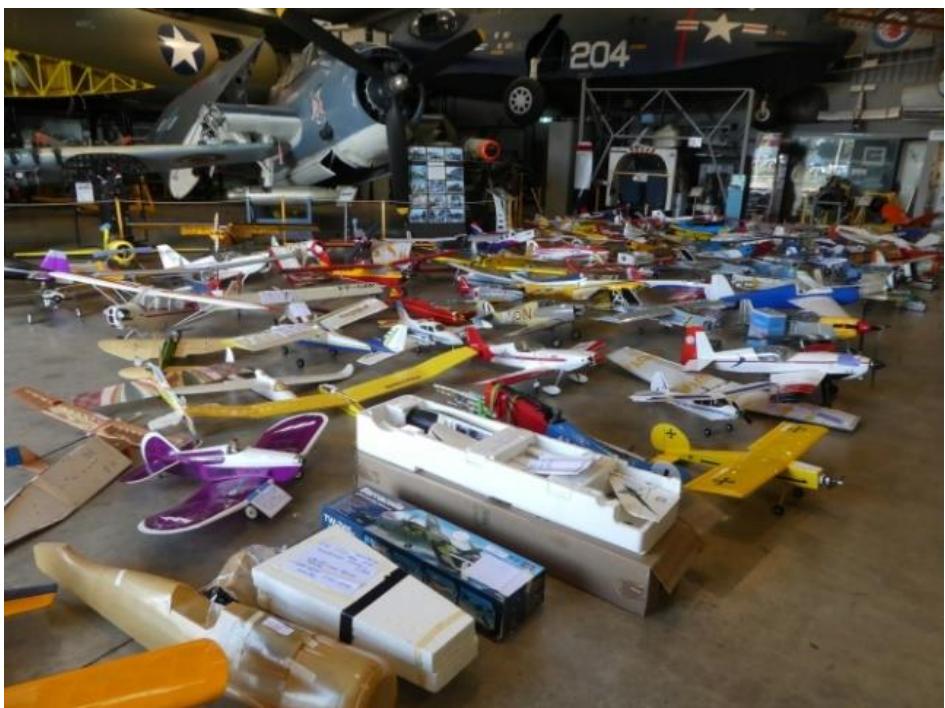
The Tauranga Auction has now been and gone for another year. For those that successfully bid on what you were after, well done. If you got it at a bargain, even better. For those of you that made some money, good on you also. A great turnout once again so thanks to the Tauranga Model Aero Club for putting on a great event from all of us here at HMAC.

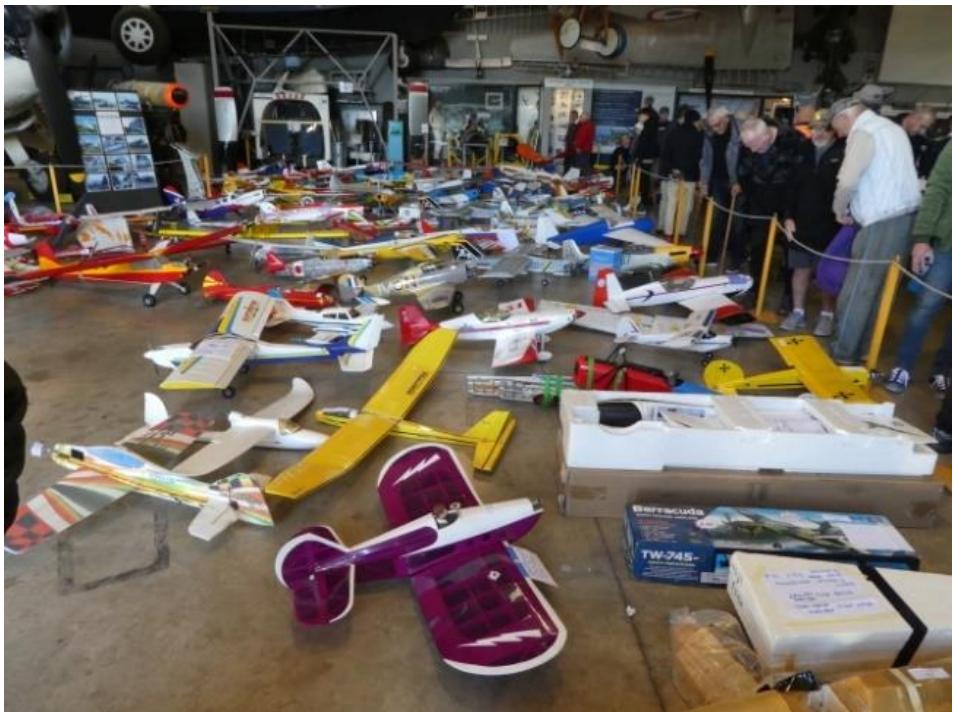
If you weren't able to make it, here's a little pictorial of what you missed.











And what's been happening at the field

Next to nothing to show you in the way of field happenings this month unfortunately. Obviously too foggy. We'll leave it at that but just a reminder not to leave it to the same one or two people to take all the photos.

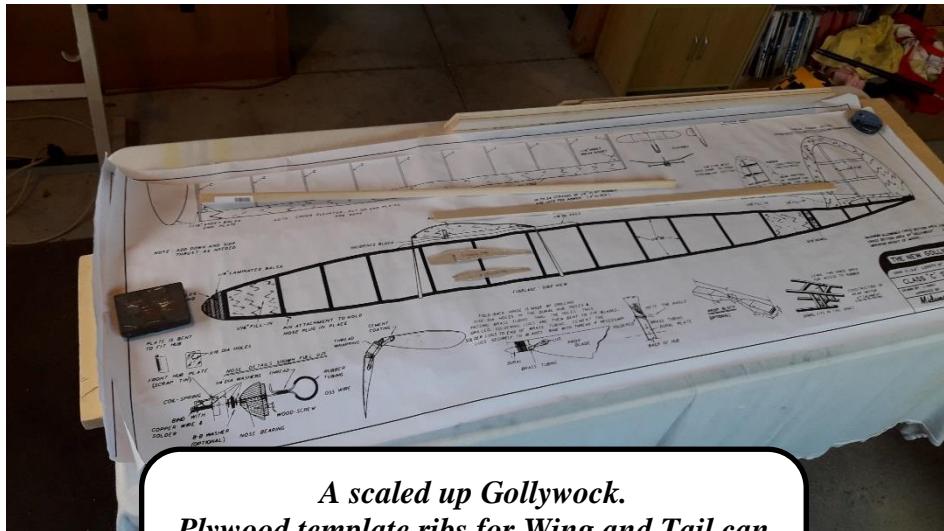


*Bryce's deconstruction
attempt...blames the kids for helping
with the preflight setup...yeah right!!*

From the building board

Dave

Unfortunately I won't be able to make it to club night. However, other than Malcolm Fosters "Fokkered-if-I-know-what-it-is..." aircraft recently off his building board (page 20) your editor is currently embarking on an up-scaled Vintage E Rubber Gollywock.



**A scaled up Gollywock.
Plywood template ribs for Wing and Tail can
be seen.
Decide what battery size you want to use,
then work backwards**

Under the current Vintage Rules for E Rubber Texaco the size of the battery for power is based on model size (measured by wing area) to achieve a maximum flight time. The maximum manufacturer's rated battery capacity for the drive battery for LiPo cells is $1.8 \times WA/S$ mah where WA is wing area in square inches and S is the number of cells connected in series. In competition the motor may be stopped and started in flight and its speed may be adjusted. The final score is the aggregate of 2 unlimited flights, each scored as one point per second with age bonus and landing bonus added.

Barrie Russell of Model Flying Hawkes Bay currently leads the 2024 NDC E Rubber Texaco standings with an aggregate score equating to approximately 46 minutes. I.e. around 23 minutes per flight. On a fine summers day flight times approaching one hour have been achieved. Not bad when you consider the battery size is usually around the 2S 360 – 550 mah range

Tired of ARF's and want to give E Vintage Rubber a go? If you're keen I'm sure either Wayne Cartwright or Bernard Scott are more than willing to help.

Here are just a few examples of E Rubber aircraft currently flying.



From the Barrie Russell Vintage stable:

Top – Voo Doo

Bottom – Flying Minutes

*Page 33
Top left – Flying Pencil*



*The editors
Toots*



Trevor Glogau, Wellington, holding his 1939 Streamliner for E-Rubber Texaco

Picture courtesy of AVANZ News

Parting Shot



Back in 2002, Phillip Duncan showed us how to really make the most of the Club Facilities...unlike today where we just read a Magazine...ah Sel!!!



Coming Events 2024

What's On, When and Where



July

Time	Event
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Wednesday, July 10

7:30pm - [HMAC CLUB NIGHT MEETING](#)
10:00pm

Sunday, July 14

all-day [HMAC Bi-Plane Fly in Day](#)

Friday, July 19

all-day [RC Glider Aerotow-Matamata Goat Farm](#)

Saturday, July 20

all-day [RC Glider Aerotow-Matamata Goat Farm](#)

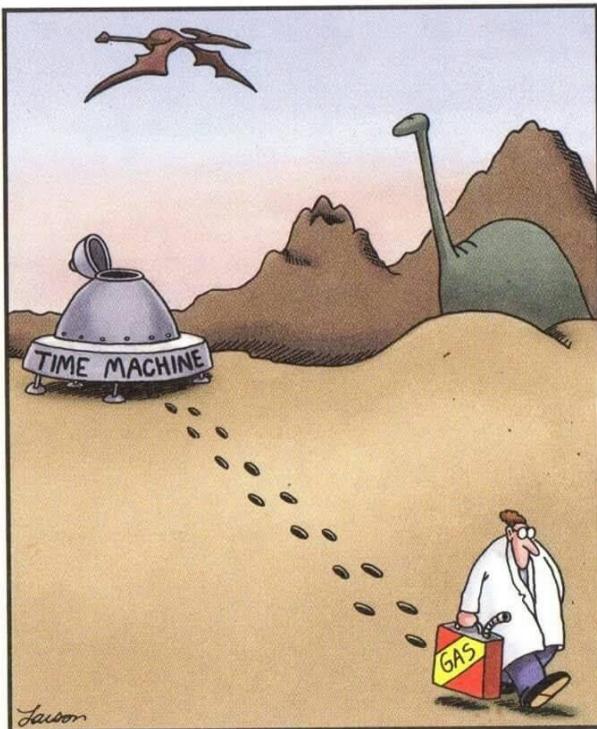
Sunday, July 21

all-day [RC Glider Aerotow-Matamata Goat Farm](#)

August

Sunday, August 4

all-day [HMAC Float Planes @Lake D \(Confirmed\)](#)



Till next month, stay safe
Don't sniff Methanol or Nitro

Please refer to the clubs website for any cancellations or additions to programmed events

Next Flight Lines August 2024
Newsletter deadline – Wednesday 7 August 2024

For further up to date event info please visit:
<http://www.hamiltonmac.org.nz/>