Model Flying Hawkes Bay

PROPWASH

Club Newsletter # 148 May 2023

JUNE	MFHB Activity Calendar June 2023
Sun 4th	Slope Soaring and/or Roy's Hill Reserve. TBA.
Sat 10th	Aerobatic training day at Galloway Farm, Norsewood. TBA.
Sun 11	Roy's Hill Reserve.
Tue 13	COMMITTEE MEETING
Sun 18	Norsewood Galloway Farm
Wed 21st	Clubnite 7.00pm Nat Services Club HASTINGS.
Sun 25	Roy's Hill Reserve.
Working	Bees at Awatoto Field to be advised.

NDC VINTAGE & SOARING for JUNE 2023

June/23	135	VINT	RC Vintage Precision
June/23	136	VINT	RC Vintage E Duration
June/23	137	VINT	RC Vint & Cl Scale Tex
June/23	138	VINT	RC Vintage E Texaco

June/23	419	SOAR	ALES 200 Class M
June/23	420	SOAR	F3K Tasks B,D,G,H
June/23	421	SOAR	ALES Radian Class P

Contributors to this issue; *Brett Robinson / Barrie Russell / Marty Hughes / Derek Whelan / Barry Lennox / Mike Anderson/ Ash / Dave Cantell / Russ Nimmo / Gavin Shute / Norris Kenwright / Graham Dawson / Graeme Rose / Clive Baker / Bernard Scott / Kevin Botherway / Rod Hughes / Derek Whelan / E &OE.*

In this Issue.....

From the Editor's Desk; May 2023

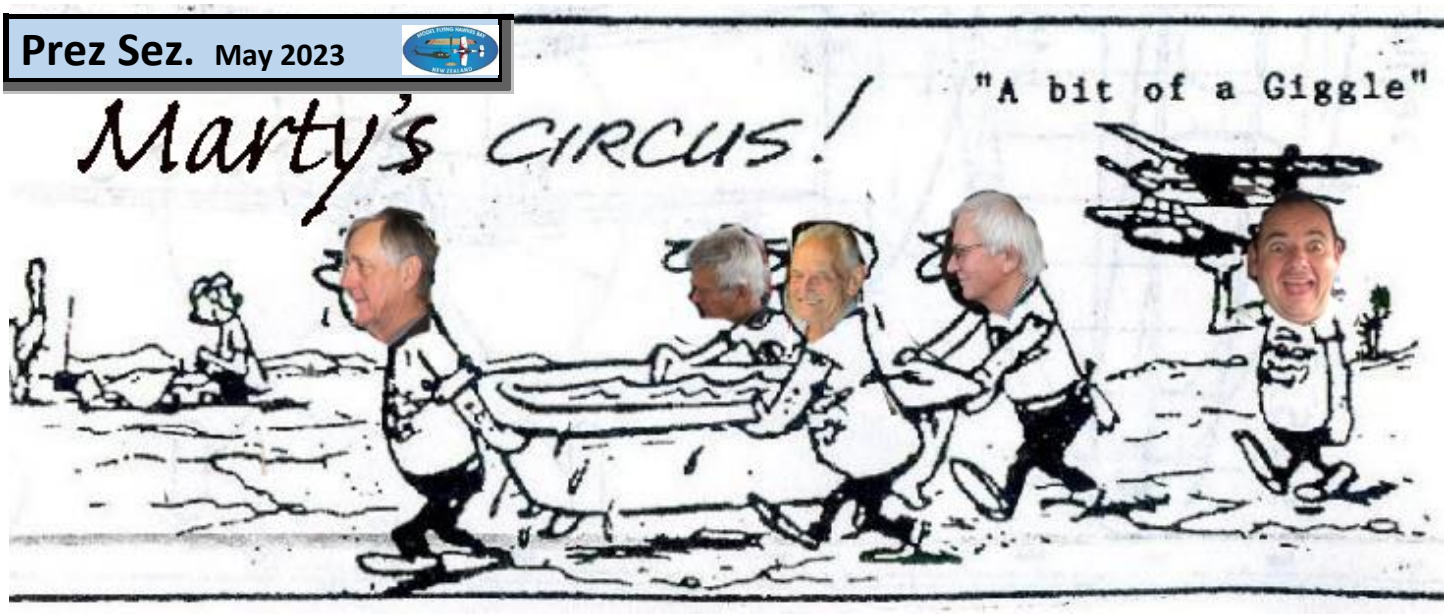
Greetings All, It never rains but it pours as they say, and this month I'm truly blessed with copy from the membership and outside readers. Thank You, I hope you enjoy the read, quite a line up with an interesting couple of contributions from Bernard Scott, our one time Secretary and Bulletin editor. There is my follow up on Norris Kenwright's Delta Flyer article now modified to our Club Delta. It has raised some interest so we're going to convene a club building session at the next Clubnite on Wednesday 21st June. Have a read of the article and get a team together (two or more members) and come and enjoy the fun and go home with a very inexpensive piece of flying foam.

Included also is a great article from Graham Dawson covering his experience with 3D printing, is this the new future of aeromodelling ? We are all aware of various parts etc being printed, but whole aeroplanes ? read on.

We have our usual reports and updates, my thanks to all who have contributed and look forward to your continuing interest.

Barrie the editor mfhb. may 2023.

Prez Sez. May 2023



Here we are into June and it's starting to get cold.
The AGM has been and gone and I looks like I'm in the hot seat for another term.
We have some new blood on the committee so I'm rather excited about that.
This is where we stand;
President; Marty Hughes
Secretary; Barry Kerr
Treasurer; Ross Brinsley
Club Captain; Derek Wheelan
Field Officer; Lance Hickey
Committee; John Sutherland / Myles Maloney / Rob Mitchell / Gus Black
A great line up keen guys so I'm looking forward to what is ahead.
A copy of my Presidents report, in case you weren't there is contained in the AGM Report.
Marty.

Webmaster Reports. May 2023

Hi everyone, As in my last report, just doing the normal update work on with the website at present, mainly around updating Prez Marty's Events Calendar and making changes for the (now regular, it seems) inclement weather. Also updating notices on the site for the membership advising on the field condition (or lack of it!)

Some stats from the website are included in this report and they do make interesting reading and the following observations:
Looking at the current January to May 2023 stats against those for the same period in the 2022 year, we had an increase in Total Hits on the website on most months by over 1000 hits!
Newsletter downloads per month has also increased a bit over those in 2022 as well.
Looking as to what locales (which countries) look at the website, we see NZ, not surprisingly, is again top of the heap.

Monthly Hits January - May 2022

Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2022	2,397	11,817	42,673	67,577	5.97 GB
Feb 2022	2,341	10,907	58,976	82,408	5.89 GB
Mar 2022	2,628	13,522	49,288	71,192	9.11 GB
Apr 2022	2,825	14,443	58,666	76,829	4.16 GB
May 2022	3,532	14,287	49,944	70,581	6.92 GB

Monthly Hits January - May 2023

Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2023	3,872	11,558	48,897	86,481	9.32 GB
Feb 2023	3,167	12,052	65,923	110,980	9.41 GB
Mar 2023	2,760	11,910	62,506	78,875	5.02 GB
Apr 2023	3,747	13,627	31,621	45,922	5.53 GB
May 2023	2,402	9,318	27,233	39,533	4.26 GB

Locales (Top 25)

Locales		Pages	Hits	Bandwidth
United States	us	8,145	9,584	913.24 MB
Japan	jp	4,215	4,215	6.80 MB
New Zealand	nz	3,341	12,714	2.43 GB
Canada	ca	1,750	1,750	2.73 MB
Great Britain	gb	1,424	1,553	87.26 MB
India	in	1,226	1,328	39.73 MB
Russian Federation	ru	1,060	1,061	8.61 MB
Sweden	se	932	940	9.02 MB
China	cn	714	1,255	39.67 MB
Indonesia	id	593	593	1.54 MB
Germany	de	450	451	20.96 MB
Switzerland	ch	428	428	2.12 MB
France	fr	333	335	13.42 MB
Netherlands	nl	289	289	1.96 MB
Vietnam	vn	241	293	3.77 MB
Italy	it	189	243	25.09 MB
Ukraine	ua	137	165	2.39 MB
Malaysia	my	135	135	1.93 MB
Brazil	br	125	151	3.00 MB
Turkey	tr	123	127	85.18 MB
Spain	es	118	202	6.97 MB
Bulgaria	bg	112	112	549.87 KB
Australia	au	101	263	41.39 MB
South Korea	kr	92	92	825.96 KB
Poland	pl	76	100	1.99 MB

Top 10 Downloads (as of May 2023)

	Hits	206 Hits	Bandwidth
/wp-content/uploads/2023/04/Issue_147.pdf	160	411	1.82 GB
/wp-content/uploads/2023/02/Issue_145.pdf	13	7	148.50 MB
/mfhb/wp-content/uploads/2021/09/Issue_118.pdf	11	0	87.25 MB
/wp-content/uploads/2023/03/Issue_146.pdf	10	2	87.52 MB
/mfhb/wp-content/uploads/2021/09/Issue_104.pdf	8	0	45.80 MB
/wp-content/uploads/2023/05/PROPWASH_Intro.pdf	8	0	9.64 MB
/wp-content/uploads/2021/11/Rules-October-2021.pdf	8	0	923.60 KB
/wp-content/uploads/2021/11/Constitution_of_Model_Flying_Hawkes_...	7	1	2.45 MB
/mfhb/wp-content/uploads/2021/09/Issue_109.pdf	7	0	24.87 MB
/wp-content/uploads/2023/01/Issue_144.pdf	7	20	116.78 MB

As I've said before, this locales list is only a small fraction of the Countries looking at the website, the full list was simply too long, so the one you see is very much a cut down list. Hope these stats are of interest and they do show that the website is being used. I'm still doing the monthly updates on the Members and their Model Website Page. (After the latest Newsletter comes out.) Now have a total of six now and their workshop/models on the page thus far. Thanks yet again to Clive Baker and others for their assistance with photos and/or info for this web page.
To have a look at the page…. go the MFHB home page – either hover over the About link in the top Menu and right at the bottom of the drop-down list is a new page: Members and their Models. Or go straight to it using this link: https://mfhb.org.nz/members-and-their-models/

Another change/addition to the website is the addition of an Old Propwash Newsletter Archive. Thanks to past member Bernard Scott, who has been scanning some old issues, I've now created a webpage to store them on. Only One loaded so far, but more will be, when Bernard scans more and sends them through. The page can be accessed from the link below or just hover over the 'Newsletter' Link in the top Menu and then select the 'Old Propwash Archive' from the java dropdown. https://mfhb.org.nz/newsletter/propwash-newsletter-archive/

Finally, from my soapbox, I say yet again, if you have any thoughts or suggestions on any additions, events, updates, changes you feel need to be made or added to the website, then just let a member of the committee know.
It is after all, as always, **Your** Club Website! **Webmaster Brett . May 2023.**

Club Captain reports. May 2023

'Morning Members

May has come and gone and we find ourselves into June. I have just been laid up for a week with the flue (Covid), which was a first time for me. This was not pleasant but not life threatening but then I was otherwise healthy. This is not so the case for all our aging membership. For some, the task of staying healthy is more important than for others. Please keep this in mind if you are feeling sick or under the weather maybe stay at home in the shed rather than share the bug.

The AGM was held and was well attended. I would like to thank Rob Lockyer and Mike Shears for the work they have done over the years and welcome Myles Moloney and Rob Michell into the fold. The financial report tells us that our membership is down a little this year, but this was to be expected under the circumstances and as the year goes on we hope to see the numbers creep back up again.

I want to thank Marty for keeping the momentum rolling in regard to Sunday flying meets. I don't get to many of the electric meets a Roy's hill in favour of seeking out locations to fly my noisy petrol motors, but I understand that he is seeing good numbers equal if not at greater numbers to what we would normally see at the field on a Sunday. Don't know if it's the more settled weather we are seeing or the promise of a hot sausage again thanks to Marty.

The weekend of the 10th June Hamish Galloway and myself intend to hold another Aerobatics weekend in Norsewood. More training for those that want to take advantage of it. We will fly Basic and Clubman for those that are interested. If you have a classic and want to fly that we will fit that in as well. I will post more on the Facebook page as the weekend gets closer.

Stay well and don't pack those transmitters away just yet. There is still some good flying to be had.

Derek Whelan. Club Captain

MFHB Club AGM Wed 17th May 2023

The AGM was held at the National Services Club in Hastings on Wednesday evening 17th May.

There was an excellent attendance in excess of thirty-six members, reports presented and new officers nominated and appointed with all positions filled apart from a Vice President. For this coming year, they are;

President;	**Marty Hughes.**
Vice President;	**Vacant ……**
Secretary;	**Barry Kerr.**
Treasurer;	**Ross Brinsley.**
Field Officer;	**Lance Hickey.**
Club Captain;	**Derek Whelan.**
Committee:	**John Sutherland**
	Rob Mitchell
	Myles Moloney.
	Gus Black

President's Report; Model Flying Hawkes Bay 2023

Welcome members to the 2023 Model Flying Hawkes Bay Annual General Meeting. It's been quite a year filled with challenges, particularly due to the series of floods we faced. Despite these adversities, we managed to overcome and achieve success in various aspects of our operations.

One of the major floods threatened to cancel our beloved Warbirds event, but thanks to Lance's efforts, the field was restored just in time. This led to one of the most successful Warbirds events we've ever had, and we made the most of the limited sunny days that summer offered us. However, on February 14, a significant event occurred that will forever be remembered in Hawkes Bay's history. Cyclone Gabrielle

struck, causing extensive flooding and damage throughout the region, including our cherished flying field in Awatoto. The destruction we witnessed surpassed anything we had experienced before.
Fortunately, the field itself remained relatively unharmed, but the Deans shelter and shaded seating area suffered a near total loss. At present, we are unable to make any decisions regarding the recovery process until Ravensdown completes the necessary earthworks around the club shed and access road to the field. We have accessed the club shed and its contents but are awaiting responses from the insurance company regarding coverage and compensation.
Considering these challenges, we need to remain patient and resilient as we navigate the recovery process. Our priority is to restore the facilities and create a safe and enjoyable environment for our members to pursue their passion for model flying. We must work closely with the relevant parties, including insurance representatives and local authorities, to expedite the necessary repairs and renovations.
During this time, it is crucial for our members to support one another and stay connected as a community. We should continue to share our knowledge, experience, and enthusiasm for model flying. Although we may be temporarily unable to access our usual flying site in Awatoto, I am delighted to inform you that we have alternative
locations available to us. These include Glider flying at the Black Bridge site, Electric flight at the Roy's Hill reserve, Slope soaring at Burma Road. Gas and Glow at the Galloway Farm in Norsewood, Aero tow at Aorangi Road and float flying at the Galzebrook lake. These options allow us to continue our model flying activities and maintain our enthusiasm for the hobby.
I have taken the initiative to organize weekly events at some of these sites, and I'm thrilled with the support and attendance we have received thus far. At the Roy's Hill Reserve, we have been able to gather as many pilots, if not more than we would get on a club Sunday at Awatoto. This demonstrates the dedication and passion of our members.
Looking ahead to the coming year, I would be honoured to continue serving as your President. I will carry out my duties to the best of my ability and work diligently to support the interests of Model Flying Hawkes Bay. Together we can overcome the challenges we face and emerge stronger than ever before.
I would like to extend my heartfelt gratitude to the committee, volunteers, and any members who have generously contributed their time, energy and resources to support our club throughout this challenging year. Your dedication and commitments are truly
commendable, and its through our collective efforts that we will rebuild and thrive.
I would also like to recognize Robert Lockyer and Mike Sheers who will be stepping down from the committee to take a well-earned break. Thank you both for your outstanding commitment and service to Model Flying Hawkes Bay. Your contribution has been invaluable, and we are grateful for your dedication.
In closing, I would like to express my gratitude to each and everyone of you for your unwavering support. It is your enthusiasm and commitment that make our club thrive. I am excited about the opportunities that lie ahead, and I look forward to working with you all in the coming year.
Thank you once again, and let us continue to soar to new heights together.

Marty Hughes. President MFHB May 2023.

There followed significant discussion about the recovery of Awatoto field, and the message from Marty and Field Officer Lance is that we have to be patient and stay off the field and away from the shed. We are still awaiting resolution of our insurance claims. Ravensdown and the HB Regional Council are well aware of our plight but have enormous problems to deal with. Ravensdown are building a new settling pond area behind our shed and have requested that we keep clear until they give us the okay around the end of the month. Lance responded to a question of working bees, saying we will need plenty to be organised but not until we get the go ahead from the HBRC and in the meantime please keep away from the field. Members will be advised as soon as the committee gets the go ahead.

The AGM meeting was closed and refreshments and a social get together was enjoyed by all.

CLUB ACTIVITY May 2023

Sunday 30th April. Roys Hill Reserve saw about fifteen members and their aircraft out for a relaxed morning's electric flying. I think the day was more about camaradarie and capped off with another barbecue session supplied by our ever enthusiastic president Marty. A few pictured captured by Brett cover some of the morning's activity.

Clockwise from top Left;
Enjoying the sun / The Pits grandstand. / Marty's barbecue at the ready, served up great sausage sandwiches. / JC's twin Otter on approack over the vineyards / Marty enjoying a "Selfie" after a successful flight with the editor's latest Delta FB creation.

Spot the plane ? Rob'r hot liner went AWOL. Looks more like a Monet painting to me ! Vineyards.

Mark was strutting his stuff with his Foamie Timber4. Agood morning was had by all. Barbeque included.

Shed Morning Tuesday 2nd May.

Another good get together at the Napier Sailing Club, further enhanced by the appearance of a double batch of Golden Gem scones with lashings of butter from the kitchen od Commodoe Kerr. See, he's not just a pretty face after all ! One thing about the NSC, they get Piles of sponsors !

Nev brought his Trojan for some help with programming and Mike managed to get all the gremlins out of it.

Eleven retirees had a very pleasant and satisfying morning putting the club and world to right.

Sunday 7th May Roy's Hill Another excellent meeting of like minded souls, Fifteen plus pilots with visitors coming and going. Marty put on anotherbarbeque with his caramalised onions and sauce. Everyone came back for more ! (I think Bill has three !) Good to see Glenn Roberts out for a looksee. Now retired, Glenn was a member from 12 plus years ago and now wanting to get back to building and flying, I see a good Vintage prospect there !

Had an interesting talk with **Graham Dawson,** a relatively new member who we haven't seen a lot of, lives in Waipawa and flies with Crash 'n Splash quite a bit. He flew this very smart Fokke Wulf TA152 which he had 3-D printed. A remarkable model and achievment. Hopefully we will have more on Graham and his 3-D printing coming up, I asked lots of questions

The Helicopter pilots set up their operation a couple of hundred meters down the path and flew some impressive models of which I know nothing !!

Marty grabbed these pictures of the men and their magnificent machines.


380 SAB HELI DIVISION


630 SAB HELI DIVISION


SAB HELI DIVISION
BUDDY
380 SAB HELI DIVISION


SERIOUSLY?
NO WORRIES!
I'VE FACTORED IN LIFT, THRUST, DRAG AND WIND SPEED....
JUST NOT GRAVITY.
... IT'S ALWAYS SOMETHING.
Dist. by Creators
4-26-17

Sunday 14th May. Roy's Hill Reserve. Brett Robinson took over reporting duties and wrote;

Good day at the Roy's Hill field today. Very foggy in Hastings this morning though, I couldn't see the hospital from my place when I got up! But it cleared once I got over the Expressway roundabout.

Good turnout and a good range of models flown.
Mark Davis (New member) turned up with a very nice Agwagon type model, which Marty and Mike had to sort out on his TX as he couldn't remember what mode he flew last time ! Mike got all sorted and flew the model from his Tx (Mode 1) the real mode, all very successful.

John S few a Timber, Stanley most of the models that Danny and Anthony (aka. crash and splash) had on hand and his own Clubba. Some flew, some didn't!
Stan test flew Mark's new Bush Cub and that went very well, then Mark flew the model and is flying very nicely.

Vic Shaw spent some time bungy launching a glider from behind the cars, but there was no wind! Sad to say that didn't end well. But mostly it was just small electrics flown pretty well by the usual regular gang.
Good BBQ at lunchtime, Marty had hamburger patties with/without cheese and coleslaw.
Other than that a fine and calm day that got warmer as it went on and thoroughly enjoyed by all.

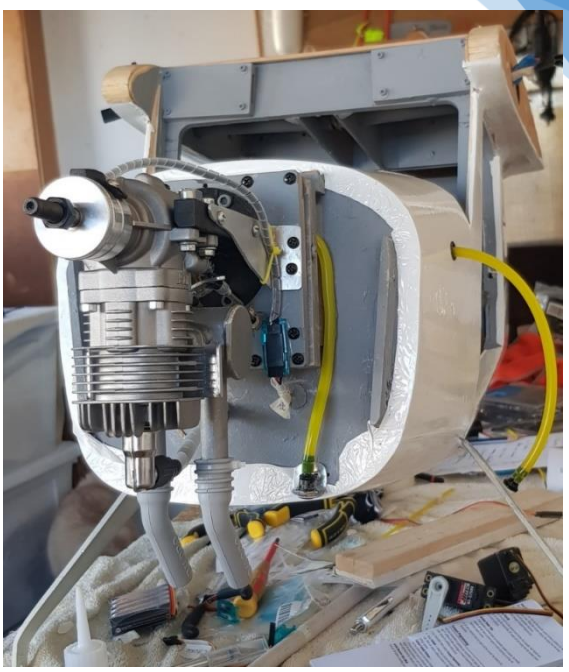
This neat aerial photo taken from a camera on **Rod Hughes** glider flying over the activity at Roys Hill.

Sunday 28th, saw some members heading off to Aorangi Rd at Maraekakaho to watch the Glider tow fraternity at work. A very pleasant day's outing in near perfect conditions. Full report next month. Ed.

AROUND the BUILDING BOARDS May '23

We've all heard the Quote; **"two into one don't go!"** Well **Rodney** is determined to prove that wrong, even if he's building a 1/3 scale aircraft in a 1/4 scale lounge. 1/3 Scale Morane Sauliner A-1 (40-60cc) 103" by Seagull Models.

It's still better than watching TV or porn, just that bemused look of "Pure Bliss" on **Rod's** face is worth a thousand words !!



Dave Cantell makes progress with his Cessna, he writes;

I finally have a few photos showing some progress on the aircraft.

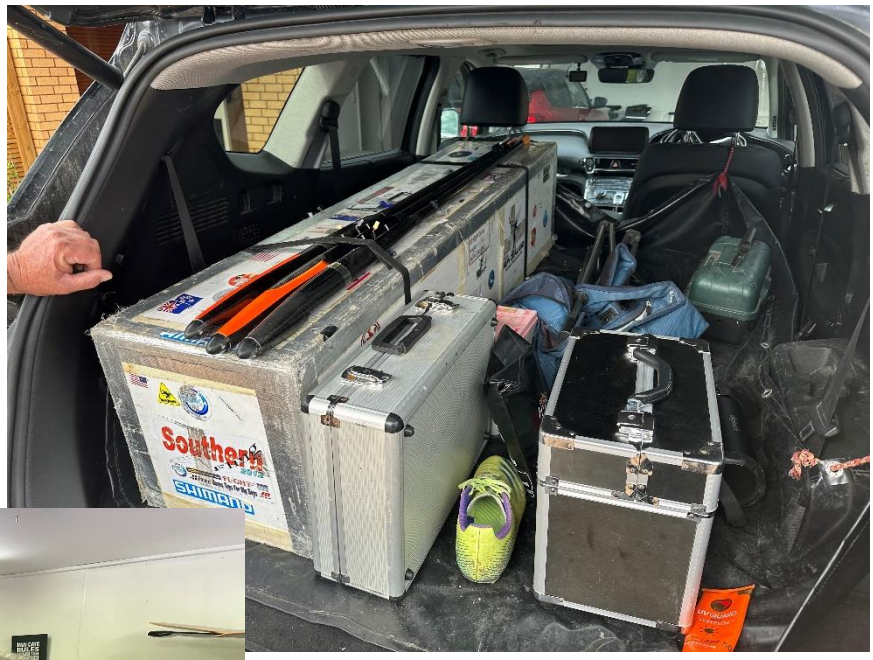
Have basically finished the cockpit only windows and the doors to finish. I have set up the battery system as two separate one for the receiver and one for the motor. The motor which I am going to use is RCGF Stinger 20cc it requires a v power supply of 7.4 to 14 volts which would not suit using the BEC voltage reduction. To achieve a 12volt input I have set up 2 x 6volt enloop batteries in series by making up a Y cord to join the two batteries looping the positive from one to the negative on the other battery. On testing it shows the 12 volt's I wanted. Hopefully by the end of June I will have finished painting the trim pattern in time for next month's newsletter.

Cheers Dave.

Marty's "Members' Workshops"#9 May'23

What has Marty got for you this month ? Marty writes;

This month we got up close and personal with a long serving club member **Kevin Botherway,** or better known as "**Rowdy."** So I wasn't even up the drive way before I got to see **Rowdy's** mobile hangar.

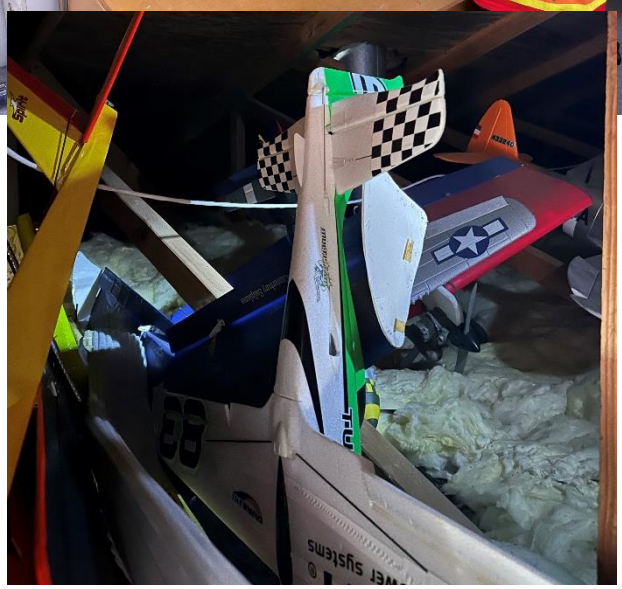


Marty, Hi Rowdy , I wanted to see some of your models , not your suitcase in the back of your car…. You off on Holiday mate???

Rowdy, Ha ha, I'm retired now Marty, Life is a holiday… I've got six models in that box in the car. They stay in there all the time so when the boys say let's go fly, I'm ready and gone.

Marty. Mate that's dedication. Show me your work shop would you.

Rowdy. Here it is, I've got other sheds full of stuff and a ceiling that's full but I just keep what I'm using in here.



Marty; Can you grab a ladder and let me see up in the ceiling and the treasure trove of unused models?

Rowdy, Sure thing.

Marty. Great stuff Rowdy, Tell me, how long have you been aeromodelling for and how did you get into it.
Rowdy. My father was a Pilot and since probably from about the age of 8, I've been messing around with planes and models. I went through the stage of flying power, aerobatic and even pylon but have now found what I enjoy most in the Gliding world.

Marty. Are you any good at it Rowdy, like have you ever won anything like a competition or anything **?**
(Rowdy looked at me with a stunned look and a slight smile). Rowdy is far too modest to gloat but the photos of the medals and the Hall of fame may give you an idea. But this is what I know. In the Soaring world champs **Rowdy** has won 3 gold medals and one Silver which is outstanding. Not to mention a list of other medals and comps.
Marty; Well as you can see**, Rowdy** is very dedicated to his craft. Thanks for your time.

If you think you are safe from Marty's Members Workshops…. You're not !….. I'm coming for you so keep them tidy. Marty. Prez MFHB.

Past President Alex just dropping in for afternoon tea !

This could be called "Getting rid of Dad" That's daughter Terina up front at the controls at 16,500 feet.

I think someone just said "Cheese" that smile looks a bit forced to me ?

It's a worry when you see a pilot wanting to wear a parachute !!

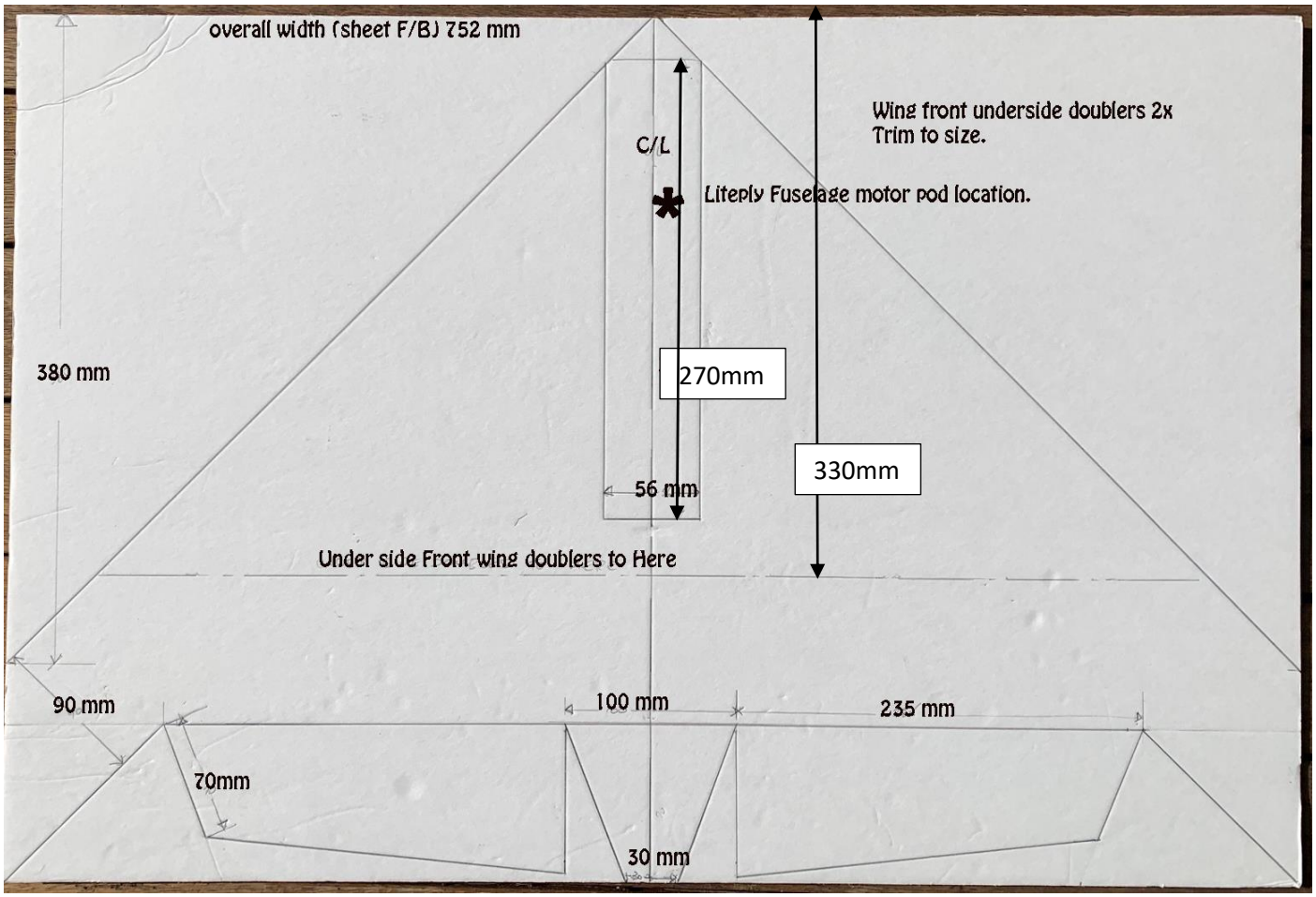
Build a Foam Board DELTA FLYER PT.2

*******CLUBNITE WEDNESDAY 21st June *******

This is the Mark 2 modification of **Norris Kenwright's** original design all finished and ready to take to the sky. What a fun project it's turning out to be with so much potential. So what do you need to build one, here' the list I've found to date to build the basic model;

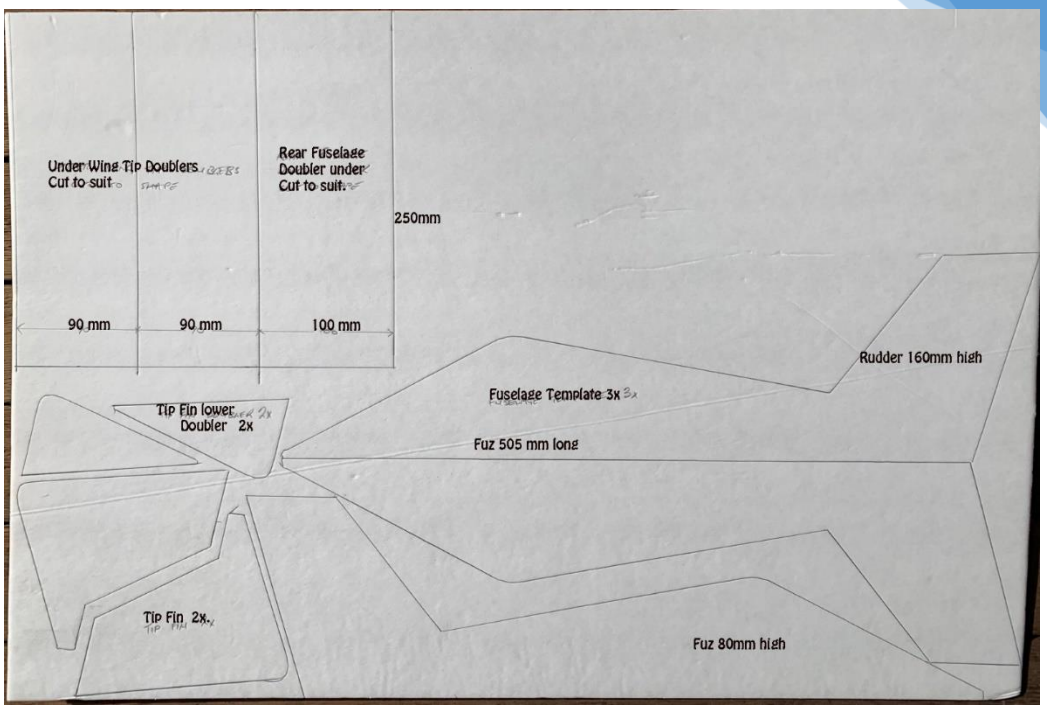
1. Two sheets of Foam Board (Uncle Bills Readiboard or similar cheap and light weight.)
2. A very sharp knife and spare blades and a straight-edge.
3. Hot glue gun and a couple of spare glue sticks
4. Some white and/or coloured cloth tape or similar.
5. A small amount of 3mm liteply to build the fuselage / motor/gear box.

First up, you can draw the cutting lines onto the foamboard from the following diagrams;



I have templates available for the fuselage and wingtip fins but you should be able to draw them up from below..

1. Make a start by cutting out the wing, leaving the ailerons attached at first. It's a good idea to remove the top surface paper say 15mm each side of the hinge line to allow a better adhesion of the tape to the foam. Run a strip of 50mm cloth tape along the hinge line on the top surface, then cut through the foam on the bottom hinge line. Crack the aileron up and cut a relieving "V" of foam to allow the downward movement. Fold the aileron up and apply a bead of hot glue along the underside join and wipe smooth with a piece of offcut foam. Once dry this seals the foam and helps makes a live hinge with the tape.



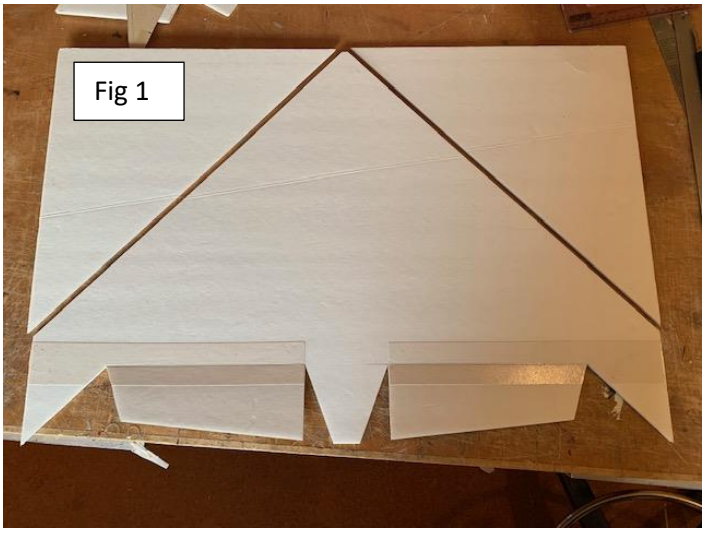


Fig 1

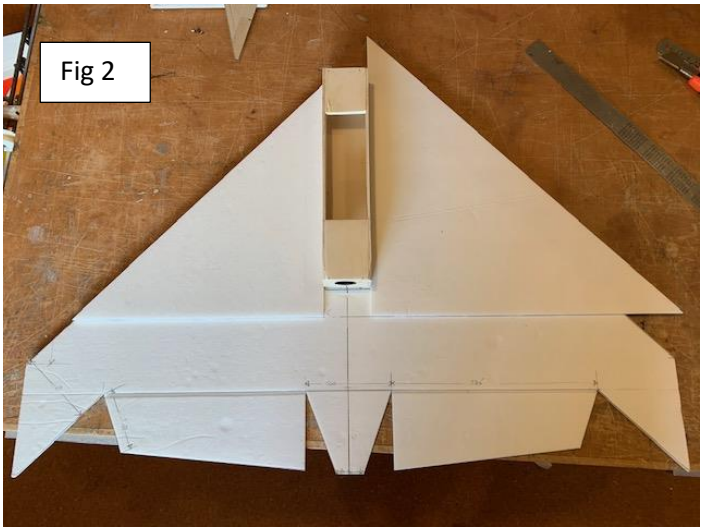


Fig 2

2. Next, hot glue the fuselage box (made from 3x (50mm x 320mm) strips of liteply with a 6mm firewall.) to the underside of the wing as located on the plan, and glue the wing doublers to the underside and trim to the wing shape.

3. Now glue on both underside wingtip doublers and also the centre rear doubler, all cut from the three rectangle templates. Once glued fast, turn the wing over and trim the doublers off to the wing shape.

When cutting the foam, a sharp knife is essential and use a slicing motion with the blade held low for a cleaner and easier cut.

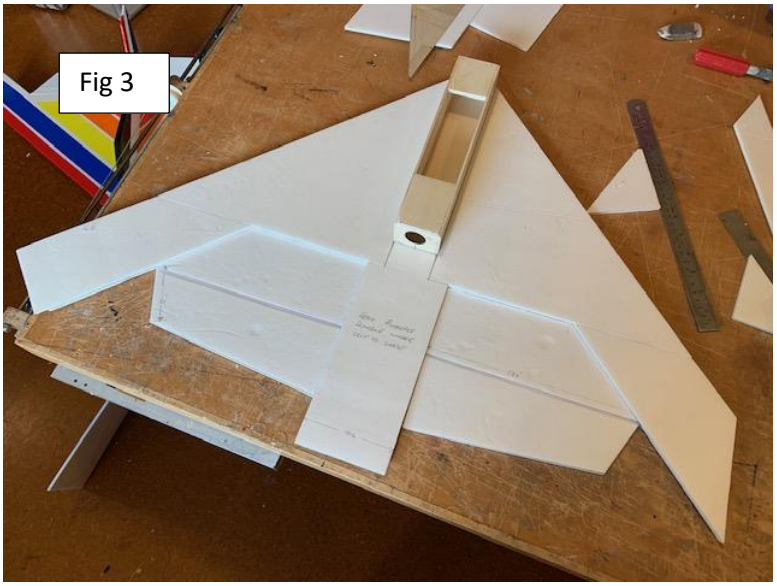
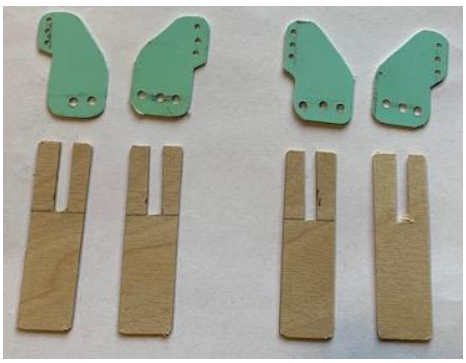
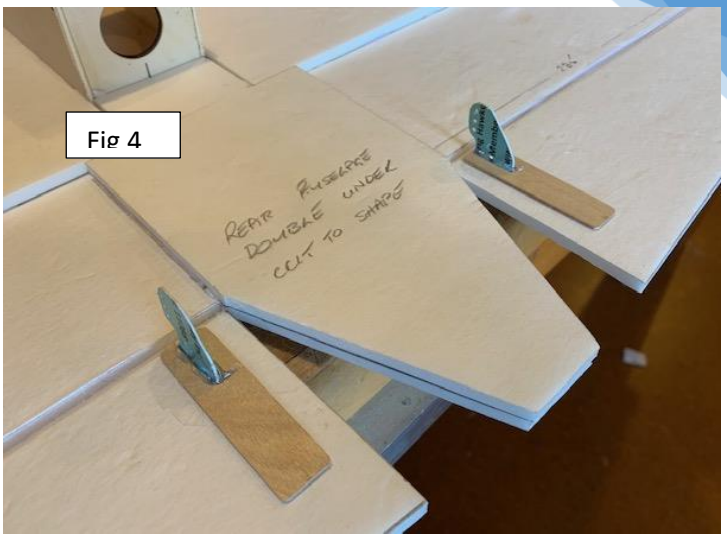


Fig 3

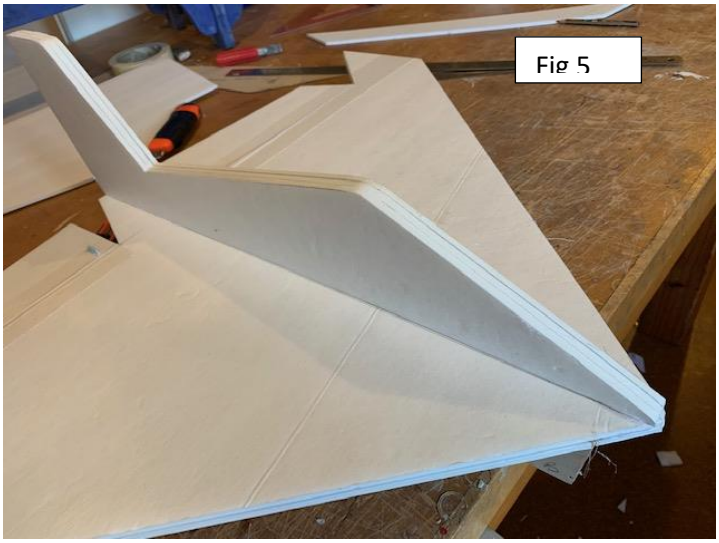
When gluing it is important to place the parts accurately before pressing together as the hot glue grabs and dries very quickly and you have little time to reposition the parts !

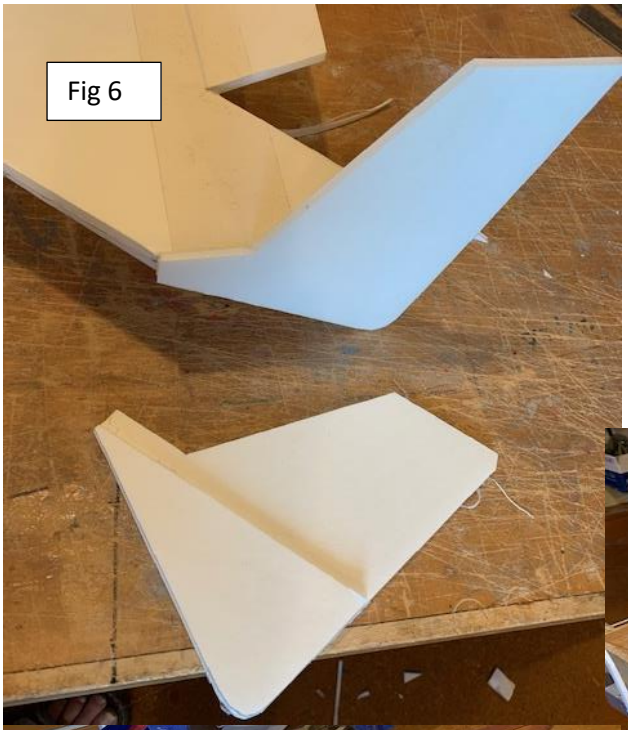
4. The horns I cut from credit card and I found it advisable to strengthen the aileron control surface with a piece of 1/32 ply. Both the horn and the ply panel are fitted with hot glue.

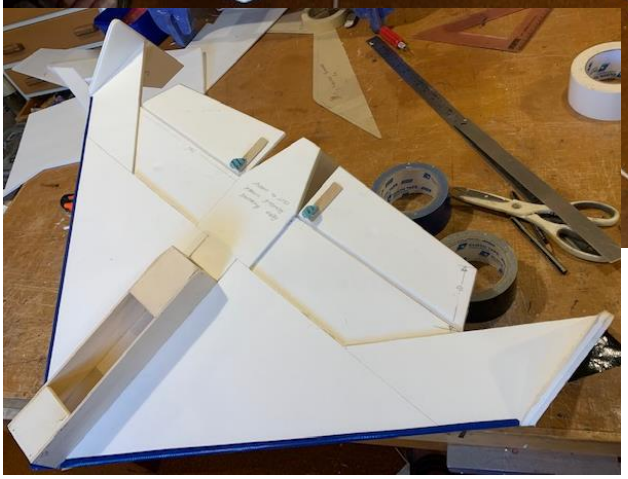




5. In the first model I had a single sheet of FB for the fuselage and rudder profile but found this started to crease and bend too easily. With three sheets laminated together with hot glue it is much stronger and presents a nice wide base to glue to the top surface of the wing. Now is the time to glue that together and attach.







6. Then the sub fin needs to be glued to the tip rudder and all hot glued to the wingtip. Just make sure you keep the rudder square to the wing whilst the initial bonding takes place. Also make sure there is a Left and a Right !

7. I rounded the wing leading edge cutting a chamfer top and bottom and sanding. A strip of 50mm cloth tape now finishes and protects the wing. Black cloth for the Cockpit which makes a good handle for an underarm launch.

8. The last job is fitting the servos and the gear, using 2Kg metal geared 12 gram servos and hot glue them into small sockets cut into the bottom surface of the wing and the connecting rods used are 2mm with a retaining clip and clevis.

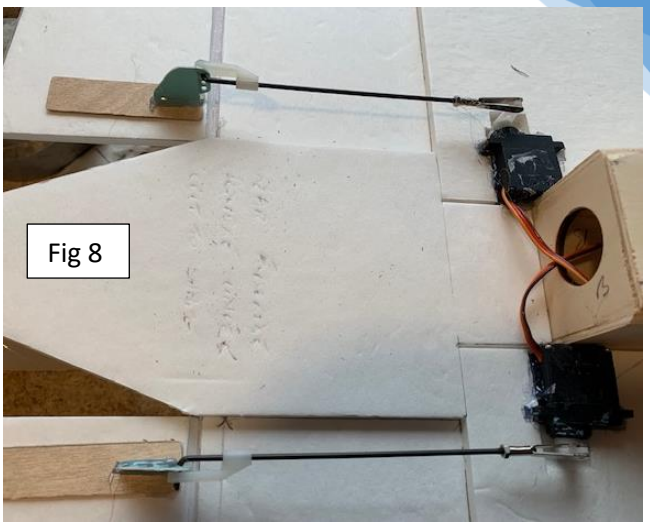


Fig 8

Cloth tape or coloured packaging tape can be used to decorate the model to the owner's taste.

I fly this set up model on a 3S 1300 lipo battery (as used in my Radian) and it gives a sparkling performance and reasonable duration depending how heavy you are on the throttle. The first flight of Mark 2 was almost a non-event and apart from a small amount of trim input it flew on rails.

Choice of gear depends on your performance requirements, I started out with a 2S lipo which flew okay but the 3S performance was certainly better and with modification the model has gained a little weight. I would certainly recommend going the 3S way. The first model I flew with a fixed prop and almost broke one per landing so then fitted a nose wheel U/C. Okay on a smooth flat surface but pretty hopeless if the grass was any length. Hence I have opted for a folding prop, done away with U/C's and have had no issues since. Most members will have some suitable gear lying around their workshops, however for comparison my set up was as follows;

Motor; Turnigy 2836/8 1100 kv Brushless **Propeller;** 10x6 Haoye folding with spinner.

ESC 30AMP Yellow ? El Cheapo Aliexpress (20 to 25 would be satisfactory depending on your Motor/Battery/Prop.)

RX, Orange 2.4Mhz. **TX** Dx9 Spektrum. **Servos;** Hobby King 933 Digital MG 2kg / 11grams

C of G; With the 3S 1300 battery at the **rear** of the fuselage pod the CG came out at **220mms** back from the nose of the model and mine flies just fine at that. I think the position is fairly flexible but both models to date came out about the same.

With the Spektrum Tx I set mine up in the Elevon Function and when I got the elevators correct the ailerons were reversed and vice versa. I had to resort to the book of instructions and found there were two elevon functions; Elevon & Elevon-B, so tried the B version and problem solved. I can't speak for the other systems but guess there are similar scenarios. My set up to date is;

Motor Downthrust; 10 degrees (Yes and it's all needed !) **Right** sidethrust 2 degrees.

Control surface deflection;

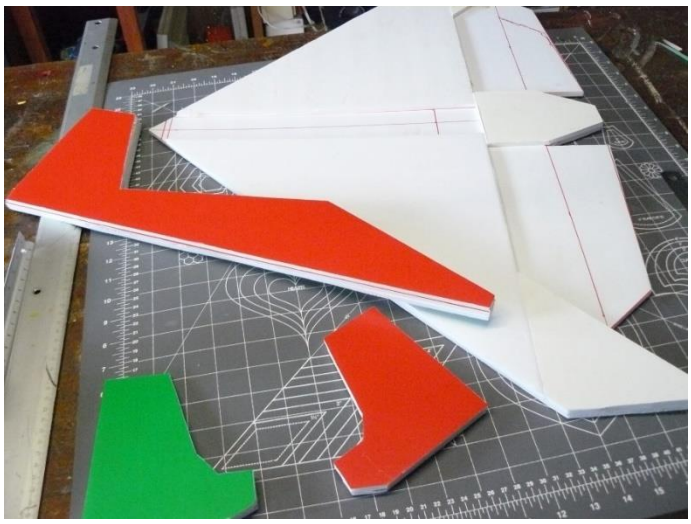
Low Rates, Elevators 20mm up & 16mm down / Ailerons 10mm up & down.

High Rates; Elevators 30mm up & 24mm down / Ailerons 18mm up & down.

Exponential; set at 50% for all functions. Being a flying wing, the model needs about 4 to 5 mms of reflex (up) on the elevons in the neutral position. I program in a 50% aileron mix to the rudder stick as I naturally use rudder on take off and landing. I'm considering building another with a central rudder to explore the effect, but that's for another day. Obviously all of the above can vary depending on your choice of gear, weight and flying skills and preferences, but have a go. It's a lot of fun and great little model to keep the fingers and brain functions in tune.

Mark Larsen has already built his one and once he got the downthrust (10*) and similar setup to the above, it flew

on rails at Black Bridge during the week. **Mark** covered his model with clear packaging tape which gave a nice waterproof and stronger finish. Also our distant scribe **Barry Lenox** is well into building his from local materials so



the March is on ! **Barry writes;** *Two pics' of Mk1 well underway. I used the Readi Board for the wings, and red and green for the fuse, the middle core being my cheap white 5mm foam, but with most of the centre cut out, leaving about a 10mm perimeter. The red and green and other colours are from a local "Looking Sharp 2buckshop."*

***********LATEST NEWS **********

Several members have flown my model and there seems to be quite a lot of interest in building and flying one, so to that end I've offered to convene a building session at the next clubnite planned for **Wednesday 21st June at the National Services club in Hastings.** Should be a fun night and already I have five teams (of two or more to a team) keen to take part in the build. With some things pre organised the build shouldn't take more than about an hour to an hour and a half and provide considerable entertainment for the assembled throng ! I will contact those building before the event to ascertain who is bringing what and what else we need to supply. The ply fuselage motor pods will be already made and available as will the control surface horns and strengthening plates. We will also have the cutting plans pre-drawn on the foam so this will speed up the building process.

Please feel free to give me a call 06 8353896 if you would like to join in the build (preferably with a co-builder) so I can make the arrangements to have the necessary gear available.

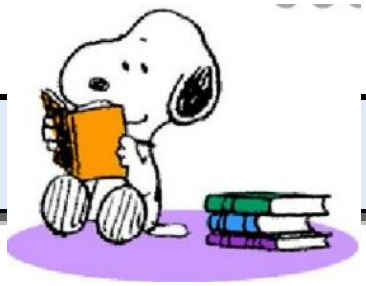
The evening will follow the usual clubnite format, doors open 7.00pm and **Prez Marty** will convene a general club meeting at 7.30. The building session will then happen and be followed by the usual supper. The bar will be open during the evening.

See you at the Clubnite; **Wednesday 21st June, National Services Club, Hastings.**

Put it on your calendar **NOW! AND GIVE ME A CALL TO ENTER THE BUILD.**

Barrie the editor May 2023.

Info and Things May 2023



A couple of good hints from Mike Anderson with regard to gluing Foam Board. He writes.

I would lightly score either side of a glue line, remove the paper, then run some parallel lines along a steel edge ruler with my wife's "sprocket marker" that she uses for sewing/dress making…..

Then the glue, regardless of whether it was hot glue, epoxy, or foaming gorilla glue, went into the holes and made a much better join…. 😊 *Also, I invested in a 'good' Bosch hot glue gun, which is much bigger than the small ones available everywhere in stationary shops/Mitre 10 etc.*

The advantage is it can deliver much bigger volumes of hot glue per squeeze of the trigger, allowing rapid delivery over a wider area before the glue starts to set. Found it invaluable when converting the Anko's ***"Lidls"*** *from K-Mart.*

Also from Clan Lennox in the Deep South in reply to my question of "how too", his thoughts on using laminating film as a light weight covering material. Barry writes..

The laminating film is great. I went to a place here in ChCh that supplies all manner of office supplies and graphic arts stuff. Too much choice! There's at least 2 types of base material (Polyester and Polypropylene) several weights form 10 to about 120 microns and 2 adhesives (regular and supermelt) and matt, semigloss or full gloss I whined until he gave me about 10-12 short samples. After a lot of experimenting I settled on 75 micron gloss supermelt. It is very strong (more than Solarfilm and the supermelt sticks like sh*** to a blanket. Especially if you put a light coat of thinned PVA on the wood structure. However, it does not take paint well and is very difficult to get round a compound curve. It is excellent within those limitations. I normally use a very light spray of colour on the inside. It does not seem to affect the adhesion, provided you keep it thin. More recently I bought a roll of 15 micron, matt supermelt. It's much lighter and really only OK for say up to 36-40 " models. Being matt is takes some spray can paints well. The best I have found is Krylon (Bunnings) The only real problem is the roll was 305 Metres! Yes, but it was only about $68, enough for 6 modelling lifetimes.

CC Derek sent in this interesting article on ; ……

SECRETS TO PERFECT LANDINGS The correct approach speed is key!

There are a handful of mistakes that nearly all recreational RC pilots make that stem from not having a plan before flying. This article is aimed at addressing the two bad habits that probably lead to more damage during landings than any others. Indeed, most pilots will immediately experience improved landings if they can correct just one of these two bad habits.

DON'T DIVE TO THE RUNWAY

The first bad habit goes back to the way pilots first learned to set up their landings, and it's why no two landings have ever gone the same since. Most pilots never give thought to flying a specific landing pattern to set up a landing. Instead, they loosely fly downwind, turn around, and try to get lined up and lose altitude before arriving over the runway. Of course, novice pilots would have been flying higher to stay safe, so when the decision is made to land, they are forced to let the nose drop appreciably during the base leg turn in an effort to lose the excess altitude. As a consequence, the airplane comes out of the turn carrying too much airspeed.

Approaching the runway too fast can been seen at clubs across the country in the form of pilots having to perform multiple go-arounds because they can't get the airplane on the ground without flying or rolling off the end the runway. All too often, frustration and concerns about fuel or batteries running low cause pilots to then try to force the airplane onto the ground at the higher airspeed with the elevator. As a result, even the best fliers in the country would have a hard time touching down smoothly when carrying too much speed, since the tiniest imperfection during the flare will lead to a balloon, a major bounce, gear damage, or worse. (Usually followed by blaming the manufacturer for not making the gear/plane strong enough). Similarly, we've all heard pilots complain about high-lift airplanes that tend to "float," and yet, unless they figured out a way to switch off gravity, a slow-flying trainer should be easy to land in less than 50 feet! Of course, the reason for floating is not the airplane, but letting the nose drop too much and building up excess speed.

Flying too high on the downwind leg and the resulting preoccupation with trying to lose the excess altitude is also the no. 1 reason why pilots struggle to line up with the runway centerline and often end up needing to make last moment corrections followed by a poor flare. Conversely, if a pilot is less consumed with trying to get the airplane down, he'll be able to focus more on his surroundings and judging whether the plane is lined up, thereby making the flare much easier. Surely you have noticed how much more slowly things seem to happen and how much easier the landing is when the plane arrives over the runway perfectly lined up?! An essential key to setting up better landings is paying attention to flying a lower downwind leg in advance of the turn to final. This frees you up to focus on positioning and coming out of the turn perfectly lined up with the runway. The combination of a good lineup and not fighting to lose altitude will then afford you more time to think about when to idle the motor to affect a touch down near the front end of the runway. Understand that it is standard practice to let the airplane descend slightly before, during, and after the turn, but also avoid building up excess speed and try not to let the nose drop more than a few degrees. If the airplane is not coming down at a sufficient rate to touch down near the front end of the runway, rather than dropping the nose more, a proficient pilot will reduce power to affect a steeper descent without building up excess airspeed. If turning lower to the ground is something that you're not comfortable with, it would be wise to acquire a more forgiving airplane and work on your fundamental turning technique. Remember, the plane doesn't know what altitude it's at, so if you can perform a reasonably level turn at altitude, you should be able to do it just as well closer to the ground.

DON'T APPROACH TOO FAST

The next common landing mistake occurs after pilots are warned to keep up enough flying speed during the landing to avoid stalling, i.e., don't let the airplane get too slow on approach to landing. Since these warnings usually come from people who in the past let a model get too slow and crashed, the recipient of this advice usually takes it to heart. The $64 million question is, "How do you tell what the right approach speed is, or, how do you tell when the model is getting too slow?"

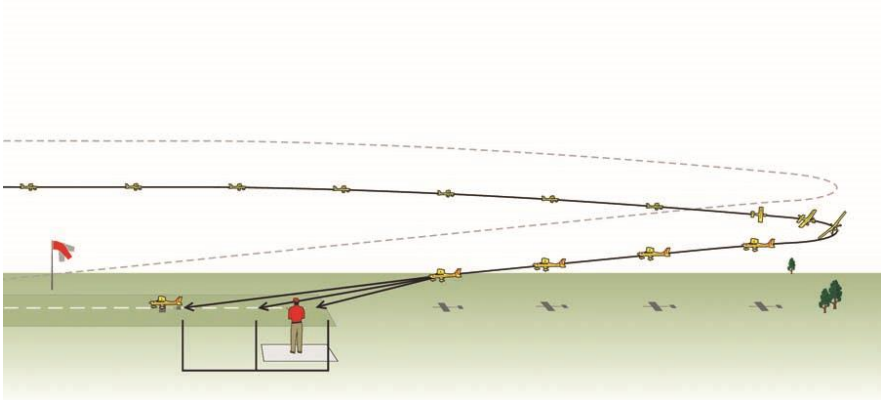
The reality is that due to varying wind speeds and directions, differences between airplanes, weight, and even the effects of temperature on airplane performance, there is no consistent answer and you won't be able to tell by appearances. For example, when flying into a strong headwind, a plane can have plenty of flying speed and yet look too slow, thus prompting a pilot to unnecessarily add more power and subsequently struggle to get the plane down. Or, it's quite common for pilots to stall during landing and blame the crash on a gust of wind rather than a stall because the plane "had plenty of speed," when in fact they were landing downwind. Of course, if you always flew the same model in the same conditions (e.g., early mornings in calm winds), you could learn what the proper approach speed looks like, but for most that's not the real world.

In light of the unknown, many pilots will tend to err on coming in for a landing with extra speed, especially when flying a new airplane or after being told that it is safer to land with more speed anytime there's wind. Once again, instead of being safer, carrying extra speed makes the landing exponentially more difficult and less forgiving. Plus, even if the plane does touch down smoothly, the odds are greater that it will still carry off the end of the runway! I have seen countless landing mishaps when the concern about rolling off the end of the runway became more important than touching down smoothly. The fact is that far, far more landing gears are torn out each year because of carrying too much speed than because of getting too slow.

Consequently, just as all full-scale pilots are taught, it is preferable for the airplane to touch down at the slowest possible safe airspeed. Not only does a slower approach shorten how much runway is used, it lessens abuse on the airframe and minimizes any bouncing if the touchdown is less than smooth. As a rule, the elite pilots who make it look easy use the same general landing procedure regardless of airplane type or wind. First, we'll establish a lower downwind to make it easier to control the eventual touchdown location. A throttle reduction is made on the downwind leg to begin a gradual descent while typically holding in and adjusting a small amount of up elevator throughout the landing setup to manage a gradual (approximately 3 degree) descent. Then, when we're confident that the plane will make the runway, we'll reduce power to idle or close to idle. So how do you judge whether the plane is getting too slow, since you can't judge the planes true airspeed by looking at it? The answer is that no matter what type of plane you're flying or what the wind is doing, the best way to determine whether the airplane has enough flying speed or is getting slow is by "feel." As most of you know, a wing will start to stall (lose lift) when the angle of attack becomes too steep relative to the flight path, and consequently the airflow no longer remains smooth over the wing. A high angle-of-attack stall is typically preceded by the pilot inputting more and more up elevator, usually to try to keep a slow or steep turn from descending too quickly, or to extend a glide. Stalls are therefore almost always preceded by the pilot pulling increasing amounts of elevator. Regardless of how slow or fast the airplane appears, if you ever find yourself having to add more and more elevator in a turn or on final approach and are urged to keep pulling more, don't! You are likely on the verge of stalling and need to reduce elevator and/or add power to keep from spinning into the ground. Conversely, if you're not holding in any up-elevator throughout the landing setup, or sense the need to push forward elevator to steepen the descent, you can be certain that the plane is flying too fast. Space does not permit going into all the details, but some might be interested to know that many of the loss of control mishaps that occur during landings that are attributed to getting too slow or gusts of wind are actually caused by adverse yaw. Adverse yaw becomes more pronounced at higher angles of attack, especially when the airplane features a high-lift flat-bottom airfoil wing. Thus, many pilots who encounter control problems during landing—and therefore think they need to land faster—actually need to mix or learn to coordinate some rudder with their aileron inputs.

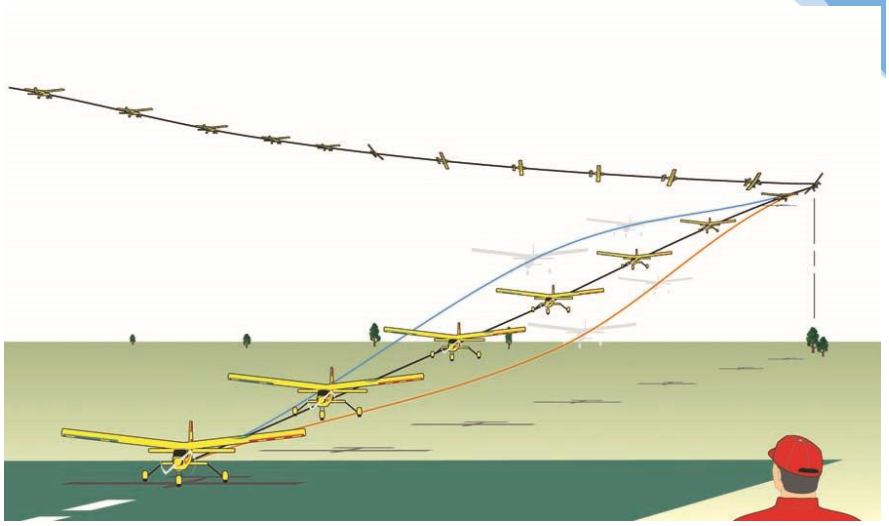
With all that said, the single best thing that pilots can do to mitigate these problems is so simple that it's often overlooked. That is, rather than trying to guess what speed to land at, take the airplane up to a safe altitude and slow it down until it stalls. It's always a thrill to test fly a student's new airplane and watch his nervous expression change to optimism and confidence when his plane displays milder than expected stall characteristics and remains somewhat controllable even with full up-elevator held in. Conversely, another model might display a sharp tip-stall tendency and a subsequent rapid loss of altitude until the elevator is reduced. While that may not sound very comforting, it reduces the fear of the unknown and does add to the owner's confidence to at least know what he's dealing with before attempting a landing. The notable exception to the standard approach procedures described above applies to anyone flying a very lightweight park flyer or foamy. Since very lightweight airplanes have less inertia, completely shutting off the power during a landing can result in the loss of nearly all forward momentum, and thus a loss of control due to the lack of airflow over the control surfaces. You should, of course, test this at a higher altitude before attempting a landing.

As a rule, lightweight models require the throttle to remain above idle nearly all the way to the ground while using the elevator to control the descent rate. Just remember that this technique is specific to landing very light airplanes (and 200mph Starfighters) and you'll have to literally switch approaches when transitioning to more conventional airplanes. Happy landings!**LOWER APPROACH** A lower downwind leg and throttle reduction prior to the final turn sets up a lower approach. A lower approach takes the guesswork out of judging when to idle the motor since the touchdown will obviously occur not long after cutting the power.



A. Establish a lower downwind leg.
B. Reduce power to affect a gradual descent.
C. Adjust the elevator to maintain a gradual approximately 3-degree descent angle throughout the setup to landing, but not so steep that excess speed builds up.
D. Idle the motor when confident the airplane will touch down near the front end of the runway.

Proper landing techniques
Fine-tune the elevator to maintain a gradual descent to the runway.
If the plane drops below the glide slope needed to touch down near the front of the runway, adjust the elevator to shallow the approach angle. If it appears that the plane still won't reach the runway, add more power versus continuing to pull more and more elevator.
If the descent is projected to be too far down the runway, rather than pushing the nose down and building up excess airspeed, reduce power to steepen the descent. If that doesn't work, it will be necessary to fly an even lower downwind leg.



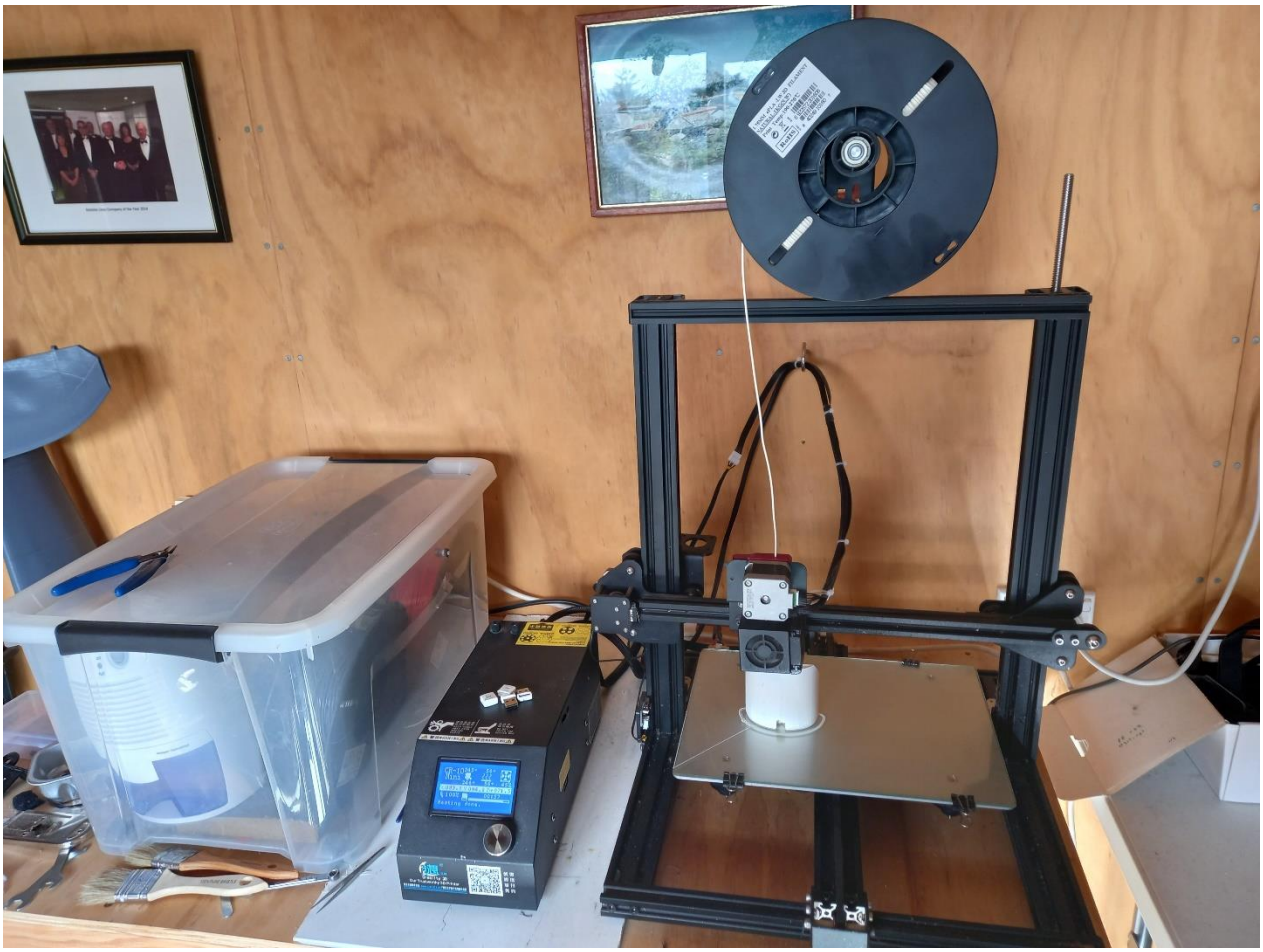
TEXT & ILLUSTRATIONS BY David Scott (rcflightschool.com) Photo by David Hart (capturedfromthehart.com)

3D Printing of Model Aircraft

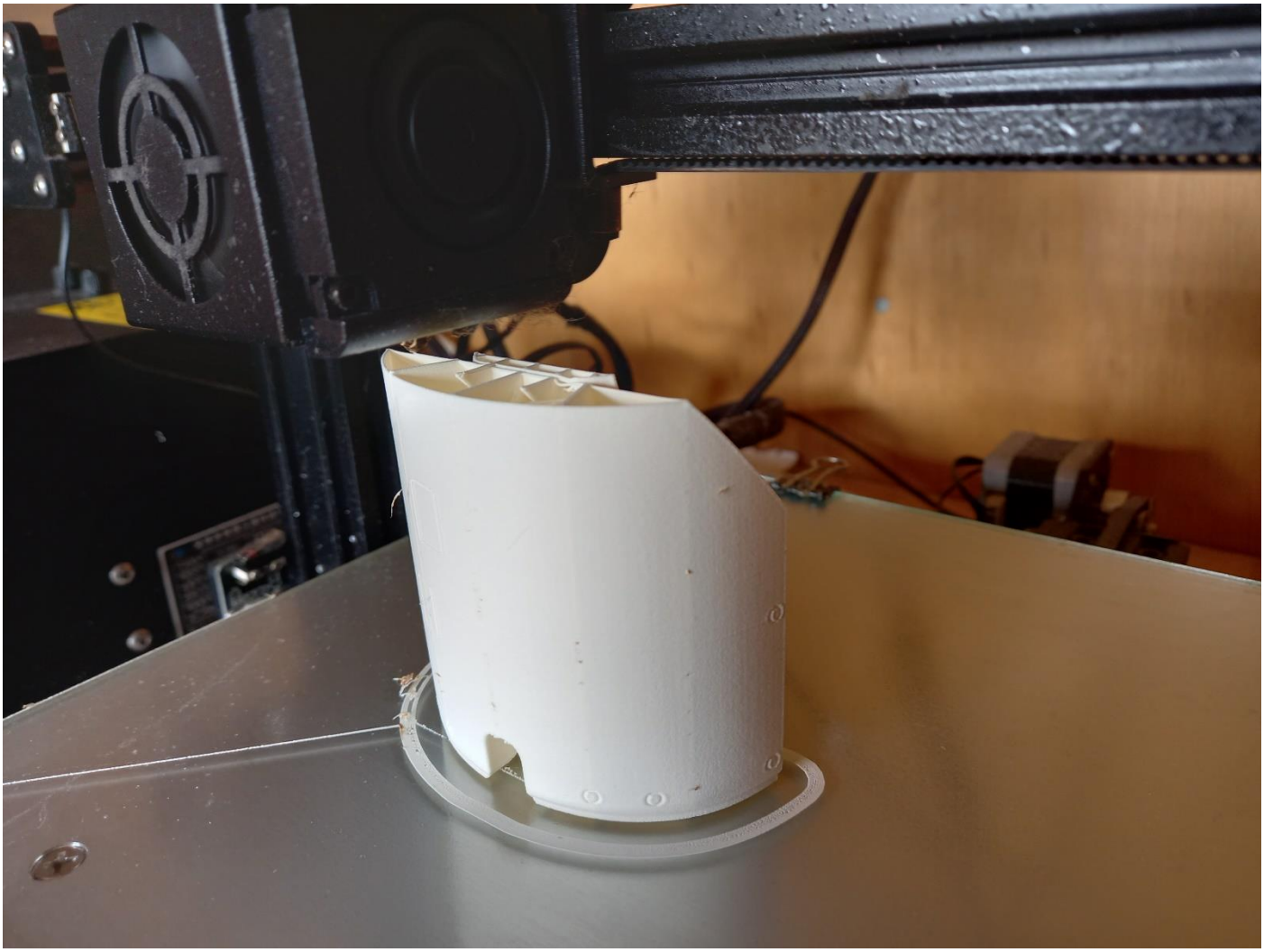
*A couple of weeks back I met **Graham Dawson**, a relatively new member, flying at Roy's Hill Reserve. He was flying a very nice model TA 152 Focke Wulf which amazingly he had 3D printed. Must say I was blown away at the finish and the way it flew and needless to say I asked a lot of questions of Graham and of course saw the possibility of an article. He promised, and true to his word, here it is;* ***Graham writes ……***

3D printing article.

I have been building and flying model aircraft and quadcopters for about 10 years.
Prior to that flew full size aircraft for 30 years owning my own planes and held a Commercial Pilots License.
I am quite technical, so after reading an article about 3D printing of model aircraft I brought a Creality CR10 mini printer from Banggood for about $460 and Simplify 3D software for "slicing" for $200.
I learnt all about 3D printing from watching You Tube videos and reading articles off the internet.
3DLabprint a Czech company was the pioneer of printing model aircraft and although there are many other designers now out there they really are still the leaders. Have a look at https://3dlabprint.com and you will get a good idea of what it is all about.



The designs and filaments have improved considerably from those early days.
The early days used standard PLA and then as it became available PLA + which is considerably stronger. I am now starting to use the new LW PLA which is considerably lighter but not as strong.

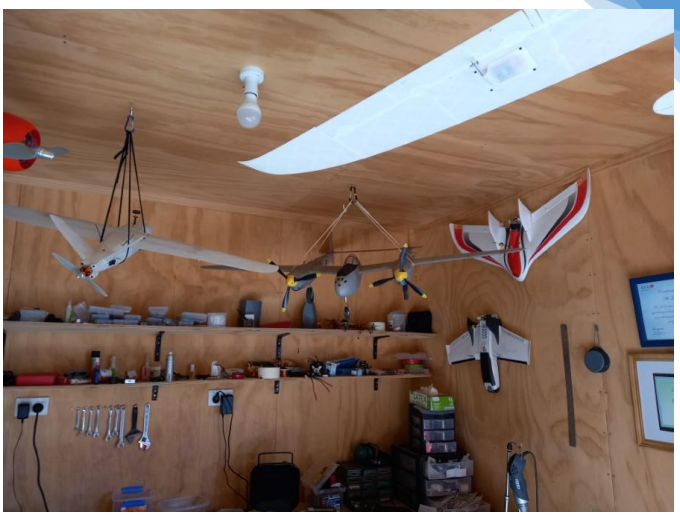


Above; Printing the cowling of a Hawker Hunter.

Below; A Piper Cub, still to be test flown.

The aircraft generally fly extremely well as the build is very accurate.
They are a bit more fragile than balsa models and will warp if subject to temperatures exceeding 60deg C, but are still capable of pretty robust flying and aerobatics etc.

The build material cost is low typically around the $30. for a 1100mm model and just around the $100 for the larger more complex 1600 mm size models.
Build time is fast taking approximately a week for the small models and up to a month for the larger ones. It is important that you get the print quality right with no voids otherwise there is a good chance that the model will undergo rapid disassembly mid-air.



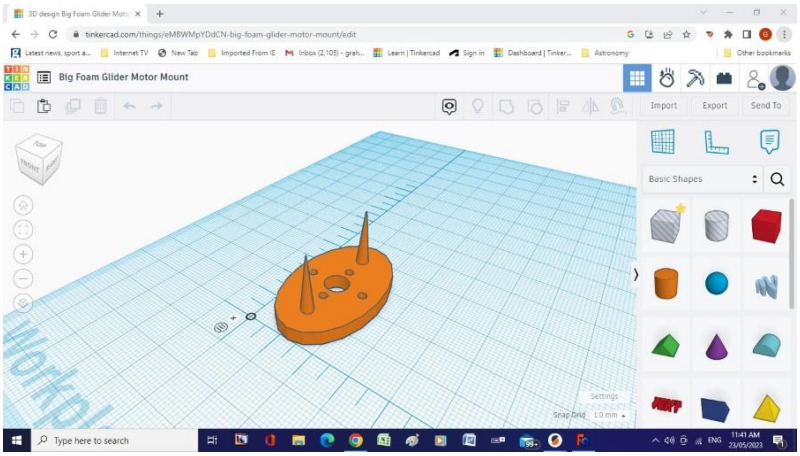
Above, A collection of printed models in the workshop.

I have modified my printer considerably to improve print quality and handle the new lightweight filaments coming out. These new filaments allow you to build models at similar weights to the foam equivalent.

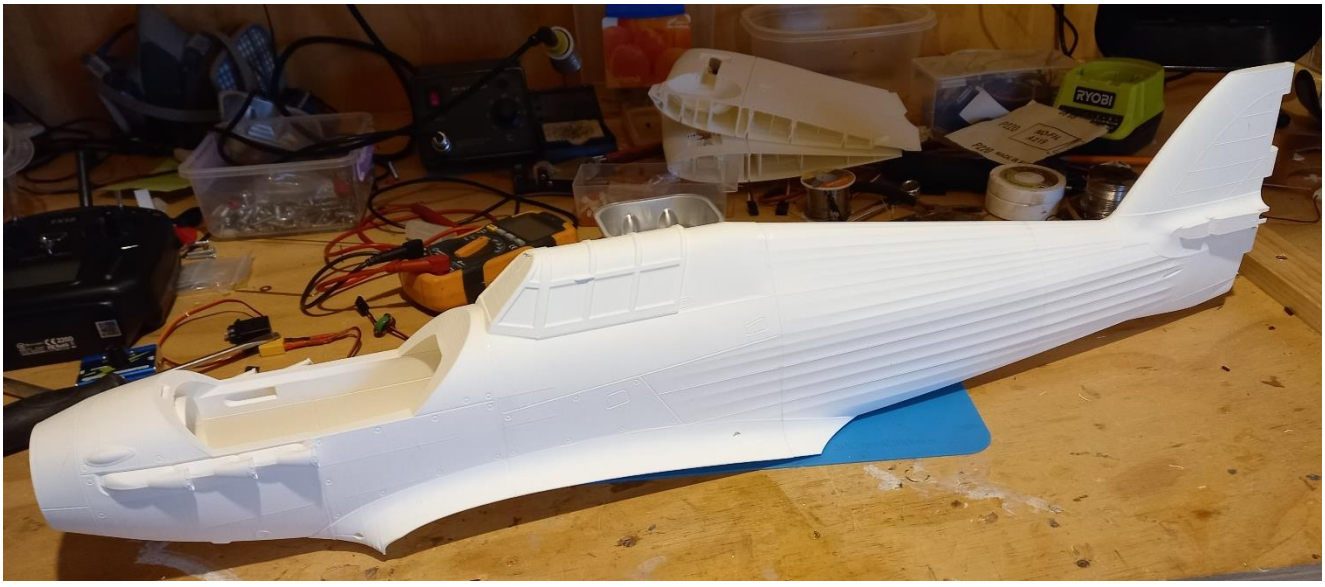
Focke-Wulf Ta 152 ***This model is fully 3D printed and flies beautifully***.

I have probably built a dozen aircraft and 2 fishing drones using the methodology.
It's not for every one but it is another aspect of this wonderful hobby that we all enjoy. 3D printers can be very useful for creating various accessories to

use with your models. I use a free easy to use CAD program, Tinkercad to create the small bits that I sometimes need for my models. A good example of this is the motor mount that I designed for the Kmart Big Foam Glider. The design shown on Tinkercad was exported as a STL file to my slicing software where I then created a gcode file that I used in my printer to create the mount.



Graham then sent me these further pictures of some of his 3D constructions , quite amazing……



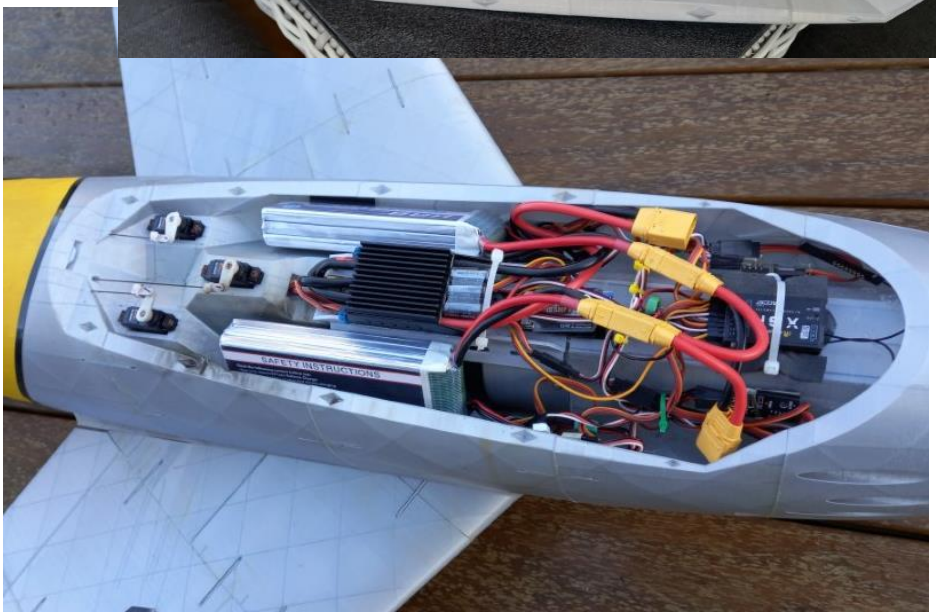
Above; is the fuselage of the Hawker Hurricane II that I am currently printing. It will have a 1100mm wingspan and retracts. Fuselage took just over a day to print.

To the Right; is the Spitfire that I am rebuilding. It has a 1.7M wingspan.

It was my best flying aircraft and I crashed it after takeoff about 6 weeks ago. Wings are fine, just redoing the fuselage. Bit rusty after not flying for close to 3 years !!

These are photos of my F86 Sabre. It was 3D printed about 4 years ago. Span is just under 1.5m. Has an FMS 90mm EDF. Flies well and uses 13 channels including fully functioning speed breaks. It is quite robust. On the maiden flight the ESC blew up and caught fire spreading solder and soot everywhere. Lost total power and control but the plane

glided down smoke pouring out of into long grass with just very minor damage to the underneath the nose, and solder splatter and heat damage inside. You can see the remains of the damage inside the removable canopy.



It will fly it here once Awatoto gets back into operation.

Graham Dawson. May 2023.

Thank You Graham,

That's a mouth watering article, much appreciated. I wouldn't be surprised if you haven't created up a storm ! Be prepared to answer a lot of questions and give advice.

Members, whilst talking to Graham, I touched on the subject of him giving a talk and demo on a future clubnite. He is amenable to the idea, so watch this space. Ed.

CLIVE'S CORNER. #10 May 2023

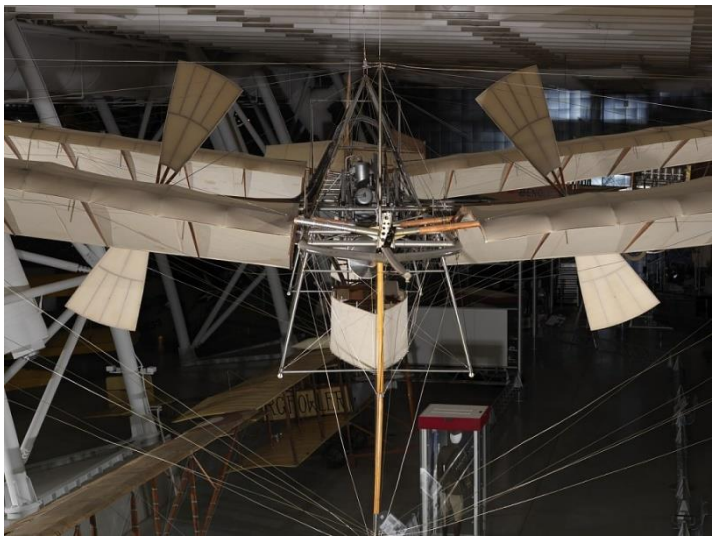
Another month goes by and Clive continues his series of aircraft full sized and those modelled by club members;

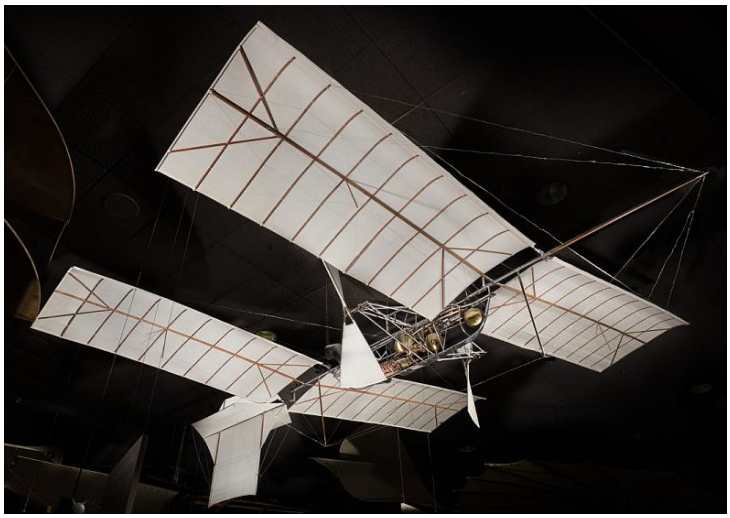
Glenn H. Curtiss An early flyer and Wright pusher

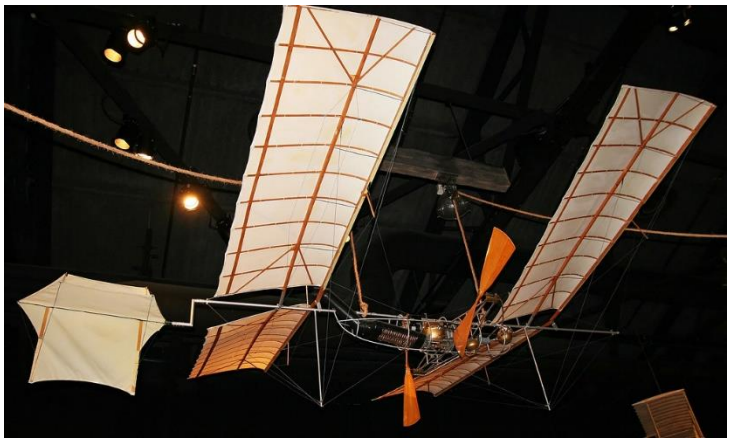
This piece starts before there were any aeroplanes. James Smithson, an English engineer and chemist had just died in 1829. He magnanimously gifted to America just over US $508,000 to be used "for the increase and diffusion of knowledge by all men (*his words not mine*) in America and elsewhere." Why not Britain, Tate is quicker to write than Smithsonian

Today there are Smithsonian Museums all over the place and including one which deals with the development of aviation and space exploration. In the early 1890s the Secretary of the Smithsonian Institute, Simon Langley, was bored and he decided to take an interest in aviation. He called aeroplanes aerodromes. Apart from not being aware of the problems this would cause he got his priorities right and began developing free flight models. The first were rubber powered, and then he explored the possibility of using pressurised carbon dioxide, then came steam, and gasoline.

Langley Aerodrome Number 5 | National Air and Space Museum
https://images.app.goo.gl/75qKcYNE2KhV6oKe8







Just like we did before the radio came along and ruined it all.

To make Langley's task a little easier he had the entire resources, technical and financial, of the Smithsonian Institute available to him.

His planes were based on having a two pair of wings, mounted in tandem, the front pair slightly larger than the rear. This made them stable in pitch, dihedral for roll and an under-fin. He overcame the problem of taking off using a cradle on a catapult, and as this was mounted on a houseboat moored on the Potomac river it avoided the need for an undercarriage.

I have a Japanese kite that is hexagonal in shape, has no tail and is kept stable by bending the rear cross pieces more tightly than the leading ones

The first trial was a success on Nov 28 1896 and a flight of 1005 metres was achieved with a plane of 16 foot span. A second trial with a similar plane was also successful and amongst the spectators was Theodore Roosevelt. He was the Secretary of State for the navy at that time. To carry on with the trials the future President presented Langley with a further $50,000. (For flying a model!)

For Langley the next step seemed easy. Full Size. Just build a bigger plane with a wing span three times that of the successful trial model. He seemed to be unaware of the mathematical necessity of cubing the original dimensions for the integrity of the bigger structure. A moveable cruciform tail was added for control.

He did realise that the engine would need to be more powerful and he approached a migrant engineer named Balzer who had built an automobile powered with a rotary engine. There were development problems from the outset which were only solved by Smithson's engineers who converted the rotary engine to radial.

The new plane was not finished until October 1903. The chief engineer on the project, Charles Manly, was selected as pilot and was given instruction on how to fly, "Just do the best you can!"

Using the launching system on the house boat they had used before, the first attempt was made on December 7. Whether the structure began to break up under the stress induced by the catapult or the tail of the plane hitting the boat house has been argued but it flopped into the river. This was mid-winter in Washington but Manly was able to swim back to the boat house. One plane length away.

Which was the end of Langley's attempt to be the first in the world to fly. He and the Smithsonian never did realise that there had been a definition of flying written probably in the UK or on the Continent. By the turn of the century any number of people could claim to have flown by jumping off an artificial hill or like Maxim Gorky who's plane operated controlled by wheels running in a cage with absolutely no independent control

This definition stated that to fly the aircraft in question must take off under its own power from a level unprepared runway, and the flight must be under control. Langley's plane failed all four conditions.

So did the Wright Brothers whose plane could not take off under its own power and used a carriage on a monorail to aid the take-off. What they did was to get a whole lot of members of their church along to witness the event.

People have asked me if I want to attack the Wright Brothers claim to be first. No I don't. Probably Donald Trump will be president again and is unlikely to deal with the issue as a gentleman.

However the Smithsonian Institute thought lheir man Langley deserved more recognition and began plotting

Chapter 2. During Langleys attempts at flying Glenn Curtiss was chasing his first hobby; speed on two wheels. Having built bicycles he added engines. In 1907 he developed a V8 engine which produced 130 hp to add to one of his bikes. Riding this he became known as the fastest man on earth. Having to be light enough to be installed on a push-bike frame his engines were ideal for the aviation world. Curtiss was encouraged to offer an engine at no cost to the Wright brothers. They rejected him.

Below; 714 Glenn H. Curtiss in flight over Forest Park flying field. St. Louis Centennial aero meet. 8 October 1909

Curtiss began working with Aerial Experiment Association, a group that was funded largely by the Scotsman Alexander Graham Bell the inventor of the telephone. Based in a lake district Glenn Curtiss built his first plane in 1908 and introduced several new features like the aileron, the tricycle under-carriage, and the liquid cooled engine.

The Wrights held a patent for controlling an aircraft latterly by warping the wings and decided that Curtiss had breached the terms of this patent. They started a long bitter legal battle that went on until 1930. Orville Wright later admitted that this had delayed his development work.

Then in 1914 the Smithsonian Institute had a rush of blood to the head. Langley's aerodrome was nearly successful. If he had someone like Curtiss he would have been the first to fly. That would be good for the museum business. They approached Curtiss and asked him if he would make the any necessary improvements to Langley's plane to make it flyable. The soggy remnants were available and attempt to make it fly. Seeing it as a way of getting back at the Wright's and their lawyers, Curtiss agreed. I also thought it was a hiding to nothing.

From the outset Curtiss had been interested in sea planes. His very first plane had been mounted on two canoes. It was not successful until the lake froze over. But Curtiss wanted to off the houseboat and as a result one of his first decisions was to convert Langley's plane to floats. He made a further 60 odd modifications. A series of test flights were made which were just successful and photos of the aerodrome existed with clear air between the lake and the floats.

The Smithsonian decided Curtiss had proved their case.

For the Wrights the 60 modifications Curtis had made was one or two too many and Curtiss was cheating.

A legal case followed (surprise) that went on to 1943 when it was finally agreed that the Wrights were first to fly. Now if you go to the aeronautic museum of the Smithsonian Institute in Washington you will see the first aeroplane to fly was American all along. But the Langley plan hangs in the gallery with the implication that it was second.

Epilogue.

In 1951 after spending the night on the train from Auckland my family disembarked at the Paekakariki railway station and caught a taxi to Paraparaumu Airport. We were going to fly to Blenheim on what should have been a Bristol Type 170 Mark 31E Freighter. But delivery was not on schedule and Sid Holland was hell bent on breaking the Water-sider's Union. He had taken steps to start carrying rail freight across Cook Strait by-passing Picton and Wellington as soon as possible.

So he had found a small airline based in Formosa, now Taiwan, who could provide suitable aircraft to operate the service until the Bristols turned up. Civil Air Transport operated Curtis C46 Commandos, a sort of DC3 on steroids, powered by Curtis Wright twin row radials. Enormously powerful engines so that they could fly from India to China with essential freight climbing up from sea level over the Himalayas.

I was standing by one of these looking at the slick lines of the double bubble fuselage designed to be pressurised over the Himalayas with an enormous tail fin and rudder to keep control of the huge engines,

“Hey dummy don’t stand under that engine if you don’t want to get oil all over you.” (polite version)

The C46 had a bad reputation, another aeroplane to be called the widow maker, but they were poorly served by their pilots most of whom were low time and didn’t want to be flying in foul weather between India and China anyway. Just as well nobody told my mother.

For the Cook Straight crossing freight was loaded manually onto the C46 and strapped down under huge nets, all five ton of it. Being equipped with a tail wheel the cockpit was high off the ground and the only access was to clamber over the net. My father and I followed and took our seats on a little bench amongst the freight. For the Himalayan flight a crew of five were required, radio operator, flight engineer and navigator. My mother, and little brother got on before loading started. They got the radio operator’s seat.

Take off was to the north and we did what was I thought was an unnecessarily tight turn to head to Blenheim. It could have been to impress my mother, who after all, was still in her twenties. But for me looking straight up at five ton of freight was frightening. The only other thing I can remember about the flight, which was in good weather, was the rambunctious Texan laughing his fool head off at the sight of Blenheim Town Square which is actually a triangle. Apparently he did it every flight. I didn’t think it was funny either.

Next day I started school. I was the son of a strike breaker, at a time when it was illegal to give food and comfort to the families of water-siders, who had flown into Blenheim on an American made plane, operated by the CIA.. **Clive Baker.** 12 May 2023

Curtiss C46 Commando

Length	76ft 4in	23.27m
Wing span	108ft	32.92m
Gross weight	45,000lb	20,412kg
Power plant (2)	P&W 2800	Twin Row Wasp 18 Cyl.
Power output	2,000 hp	1,600 kw
Cruise speed	173mph	278kmph
Range	3,150 ml	5,070 km
Ceiling	24,500 ft	7,500 m
Capacity	40 passengers	
Freight	15,000lb	6800 kg

Douglas C47 Skytrain

Length	64ft 8in	19.7m
Wing span	95ft 2in	29.0m
Gross weight	25,000lb	11,430kg
Power plant (2)	P&W 1830	Twin Row Wasp 18 Cyl.
Power output	1,200 hp	890kw
Cruise speed	207 mph	353 kmph
Range	1,580ml	2540 km
Ceiling	23,200ft	7100m
Passenger capacity	21 passengers	
Freight	8,835lb	3781kg

Futaba Conversion to 2.4GHz using a Lemon

A voice from the past, expat member Bernard Scott, now with the Hamilton MAC writes;

Barry Lennox's article on revitalising very old transmitters with an injection of 2.4 was intriguing. While handling a soldering iron presents no problem, I am an electronics tyro compared to those who have the skills and confidence to attempt such conversion projects. I am usually happy and secure with real, steam-powered 72MHz but it has to be admitted that for very small models with limited internal space a 2.4 receiver is easier to fit and not having an aerial dangling out the back does improve appearance. To that end there has been some dabbling with a Taranis and a TX9, but neither had the reassuring "feel" of a real transmitter. Their use also seemed rather flashy with all those unnecessary channels and exotic functions when my models would fly just as well on a simpler set of gear. Since even basic transmitters from the last twenty years have sufficient bells and whistles for my purposes it was decided to convert a Futaba 9C to 2.4GHz.

Inserting a 2.4 module obtained from Hobby King many years ago was a quick and easy solution however the module failed after just a few flying sessions and could not be replaced as it was no longer in HK's inventory. Futaba's modules were ruled out as they would make obsolete my existing receivers, so it was to be a DIY kit by the US based *Lemon RC*. One explanation of the firm's name is that it was originally *Orange RC* but when similarly-named receivers turned up on the asian market it was changed in jest.

LMT0002

DSMP DIY module for legacy transmitter (DSMX/DSM2 compatible)

US$28.30

LMT0001

DSMP Plug and Go module for JR bay compatible transmitter (DSMX/DSM2 compatible)

US$28.30

If you have a MHz JR transmitter with a plug in frequency module, then Lemon have a 2.4GHz replacement to suit. For Futaba there is a kit containing just four parts. At US$28.30 the module kit was a bargain and

assembly was simple enough to be within my comfort zone: four cable runs, eight solder joints, fitting an external bind/test button, and changing the beloved long wire aerial to a stubby one. In addition to instructions from Lemon there was the insertion of a 10k resistor into one circuit, as recommended on rcgroups.

Initial tests showed a reversed channel and an incorrect assumption about channel output sequence, both errors that should have been found in the workroom. When corrected, further tests gave precise control with dot-in-the-distance range. I am pleased with this result for small designs although important models will remain on the trusted 72MHz.

Lemon RC

https://lemon-rx.com/index.php?route=common/home

Lemon Modules

https://lemon-rx.com/index.php?route=product/category&path=84

Manual

https://drive.google.com/file/d/1voYsft4tZqdp8TIlsLDkGQVxpPWp3ySo/view

Discussion group https://www.rcgroups.com/forums/showthread.php?3843777-The-Official-Lemon-DSMP-Transmitter-Module-Thread-%C2%96-NEW-USERS-READ-FIRST-4-POSTS&perpage=25#post46670225

Thank you Bernard, another interesting and down to earth approach to the mysteries of Radio Control, especially to an earth bound user such as myself. Like so much of what is offered in the commercial world these days appears mainly designed to line the pockets of the suppliers rather than gratify the needs of the users. My sceptical mind suspects that less than the top 5% use all the bells and whistles offered by the latest and greatest Tx's and Rx's.

Judging by the calls for help a surprising percentage don't even read the instructions or ever learn to apply the basics.

Differential, exponential, mixing what's all that about ? How many modellers spend the first thirty plus flights setting up a model to fly to it's optimum ? But being human, the latest transmitter with all those lovely switches and channels is so tempting. Wouldn't we all love to own a Ferrari ? Mmmmm

Ed.

Graeme Rose reports on the last Glider Tow meeting at Aorangi Road, HB; …..

The April's 21st-24th tow meeting in HB was not looking good early in the week, but as we got closer the weather was starting to look a bit better. The week before the meeting we had 13 people coming as it was going to be over ANZC weekend, we had Friday to Monday booked. Coming closer to the weekend the weather was looking like it may be good so I decided to go for it as and as I did that I had people dropping like flies due to the weather, they all look at the weather on their phones. and if you have ever looked at them they all tell you a different story. You should go by the people that live in the area, and as it was we a great weekend. The weather was magic very faint breeze all weekend fine and sunny.

Everyone had gone by Monday. That was good as the wind had come up by that day. It would have still been OK for general flying, but not that good for gliders.

As for my tow plane the starter on the motor spat the dummy, the one way bearing jammed itself. After pulling it apart all the needle rollers fell out. I think prior to the meeting I had the motor bend the mounting bracket. I think that damaged the roller bearing. I've got a new bearing and got a new bracket made out of hardened steel not aluminium. Wayne did the towing with his Piper until he had an oops just on take-off, about 10 foot off the ground the motor cut. It had a hard landing that ended in ripping out half the undercarriage that was later Sunday.

The following is a pictorial coverage of the meeting and pilots and their machines.

Right; Colin from Kapiti with his glider Gordon doing the towing

Right; Bruce Clarke from Tauranga with his Topaz, Wayne towing

Left; Gordon from Wellington with his Blanik

Right; Vic from Napier down flying

Below; Pits scene at Aorangi Road site.

Right; Wayne from Feilding, landing (note the tow line just above the trees, yes you have to be at a good height to clear the fence. Yes they do get hooked sometimes)

Above; Myself and Bruce seeing why his verio is not working ??

Above Right; Wayne and Gordon on tow.

Gordon landing above and **Vic** with his electrified Leprechaun.

Colin's half scale Elfe. Full size was only 10m, and most of us would not fit in the cockpit of the full sized one. The ailerons are the same as the German Stuka, hanging down below the wings, and the tips droop down to stop the ailerons from being damaged on landing. This was Brother Ken's glider that he had started before he passed away.

Graeme Rose. MFHB. May 2023.

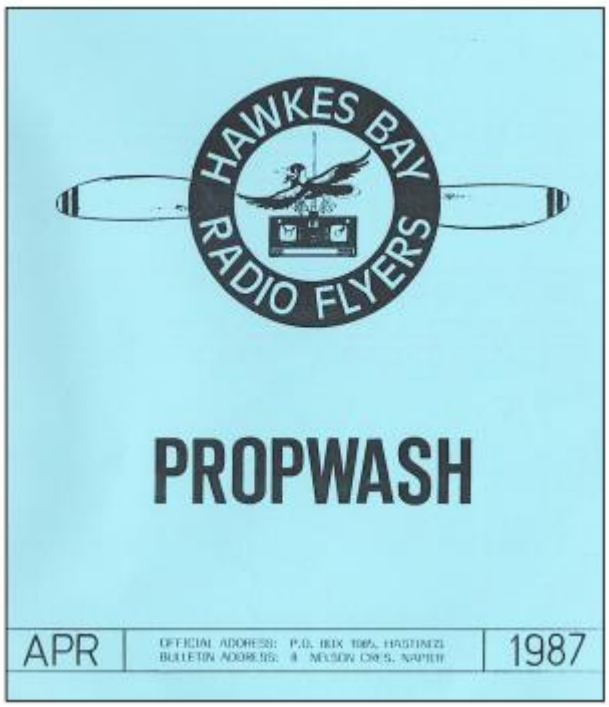
From the OLD PROPWASH ARCHIVES.

*This is the first in a series of a history of the club back in the eighties drawn from old Propwash Bulletins when **Bernard Scott** was both Secretary and Bulletin Editor. I'm most grateful to Bernard for making the past available and keeping it alive. **Ed.***

A Wee Bit of Club History by a past member of HBRF

Before the MFHB Propwash bulletin, the Hawkes Bay Radio Flyers, as the club was then named, had a regular broadsheet of notices. This served its purpose but something a bit more substantial was called for in 1987 when Peter Sharpe announced he was standing for Club President. Before the AGM Peter asked me to stand for the position of Editor and to develop an improved means of communication. As there was little competition for the position of Editor, I ended up with that job and entered the dizzying world of the Club Committee for the first time. In what was thought to be a stroke of creative genius, a name for the new bulletin was decided. It was months before someone pointed out that another club had already named its bulletin Propwash. A rummage through my aeromodelling library unearthed copies of the issues for which I was responsible. Their simplicity and naivety are a bit embarrassing today and they might not be seen as much of an improvement on anything, but it was what the technology of the time allowed. Individual pages were constructed by cutting-and pasting typed text, drawings, and the occasional photograph - the word digital back then meant relating to a finger or fingers. Assembled pages were then photocopied, sorted, stapled, folded, addressed, stamped, and posted in an actual post-box. One 1987 issue carries a membership list. It is sad to see how many fliers are no more, but hopefully those on the list who are still building and flying will have memories stirred by these old bulletins again. Those who were not members back then will be able to judge for yourselves whether the simpler times of the good old days were in fact better than the Club's situation in the 21st century. Starting with the first Propwash, I will comment on what the content reports about the Club back then. My comments are based on memories of thirty-five years ago, and my personal take on the happenings, so it will be no surprise if you don't always remember them exactly the same. ***Bernard Scott.***

The link to the relevant Propwash (of old) is contained in our MFHB website, Click **Old Propwash Archive**



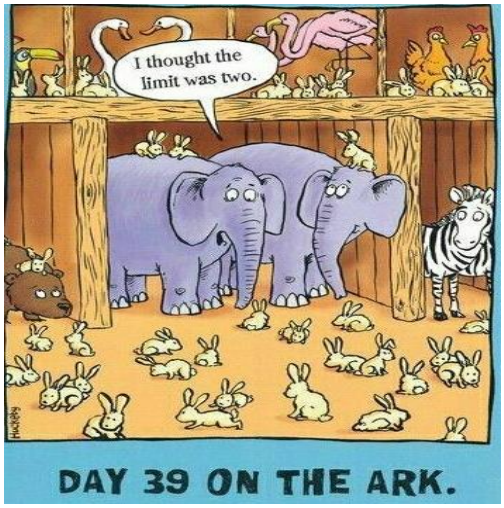
PROPWASH No.1 April 1987; Peter Sharpe won the position of Club President and immediately called a special committee meeting where intended changes were presented. These included a membership pack, new methods of club levy payment, encouragement of newcomers, better communication between Club officials and members, revised bulletin format, and (crikey) the building of a clubhouse at the recently returned-to Highway 50 site - all this before year's end. Peter was highly motivated and demanded full commitment from the Committee. As might be expected, a few hackles were raised but most were enthusiastic about his radical thinking and dynamic approach to improving the club's situation. This was a time when there had been a falling off of club activities and enthusiasm, a consequence of losing the old

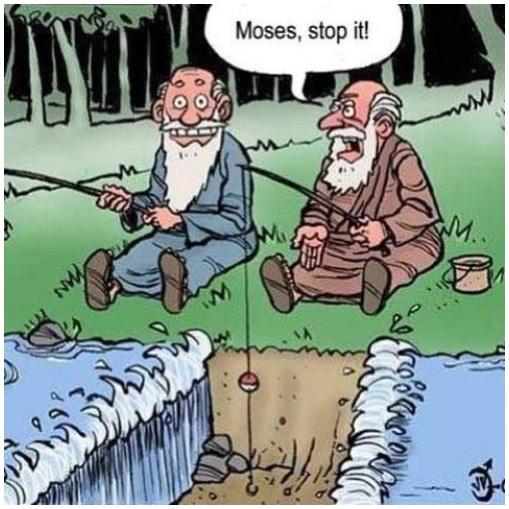
Highway 50 site. I don't recall the reason for the loss of this great field ever being made public. There followed a couple of temporary flying areas including the sharing of a clay pigeon shooting club's range and an empty strip within an orchard. By 1987 we were back at Highway 50, but this time the field was one in from the highway, safer than flying next to the road. The President's Prez Sez column urged members to take part in the developments while taking a stab at the nay-sayers to progress. Keeping everyone informed and involved was to be an on-going theme under Peter.

> The committee must be guided by its members' needs. If these are not communicated to the committee, we can implement policy from our viewpoint only. This is why, as requested by Club members at the AGM, there has been instigated a better line of communication between committee and members. This will continue so that the committee can get feed-back from members. If you have any constructive ideas, don't stand in the half-light dreaming up negative scenarios: step into the limelight and take the credit for a good idea.

The Club was well ahead of the NZMAA with its Wings Badge scheme. It was early days for the two level award system with only a small part of the membership yet qualified. Harvey reported on the Palmerston North Scale Classic where he flew his Aeronca Champion, having Barrie Roberts and Peter Sharpe as observers. Forty-five aircraft on the second day but the highlight was the catapult launch of a ducted fan F-16 built from a Byron kit. Turbine power was still in the future. The 1986-1987 Club Champ of Champs table featured Harvey again with 97 points, ahead of Graham Madder on 87 and Graham Main on 73. Twenty-seven members, five of them juniors, took part in the year's contests. Events were wide-ranging: two slope events - pylon and distance, the club's home-brew ½-hour pylon (what a hoot that was, 30 minutes of racing with two compulsory pit-stops), aerobatics, scale, and thermal A. Free flight was there too with glider, rubber and HLG. There was a call for suggestions for a Club motto. Not many were received and none appears to have been adopted. Of special mention in a later Propwash was the suggestion from Malcolm Small: "Per Adura ad 400ft" (Through adversity to 400 feet), a take on the Royal Airforce motto.

Bernard Scott. Ex Hawkes Bay Radio Flyers (Sec & Bulletin Ed), now AVANZ editor & Hamilton MAC.





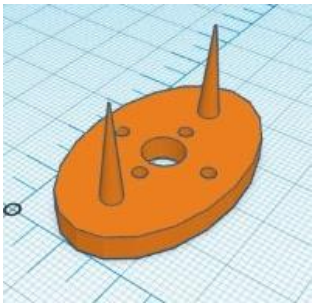
Lidl and Little Aeroplanes

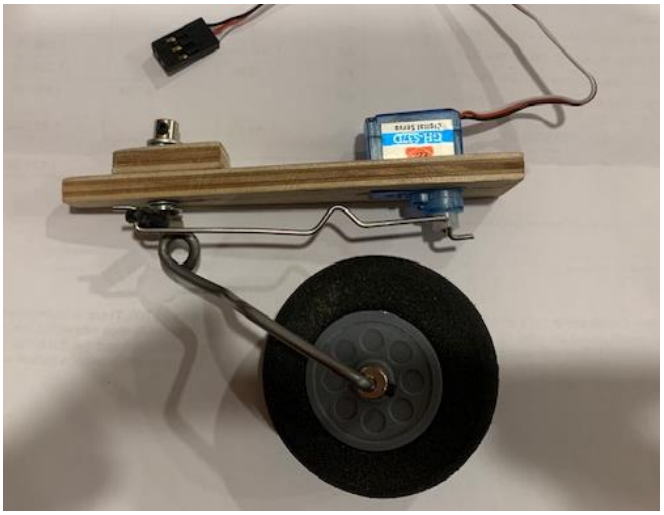
Powered Lidl (Anko) gliders continue to be seen flying at most venues and meetings, quite a collecting of these great little flyers. At Roy's Hill Reserve a couple of weekends back, I met **Graham Dawson**, a newish member from Waipawa who we have not seen a lot of recently, and he was flying a very nice version of his own modification which flew extremely well. It was interesting to note that it had both 3-D printed firewall nose plate and ailerons.

Graham is computer knowledgeable and experienced in 3-D printing so has no difficulty in making parts as he requires. Little does he know I already have a job for him ! He has promised me an article on his 3-D printing, so watch this space.

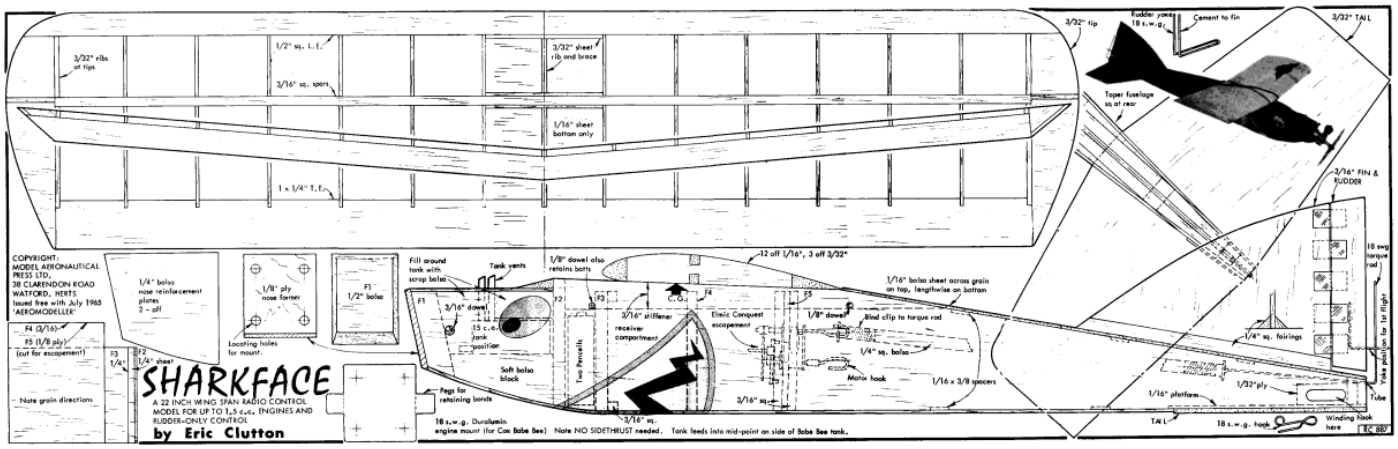
The New Zealand Lidl page on Facebook … Lidl + Other Small Foam Gliders NZ [(20+) Lidl + Other Small Foam Gliders NZ | Facebook] is worth an occasional visit to pick up ideas or contribute.

Also landed in my inbox is this neat little steerable nose wheel prototype from **Mike Anderson**, made for one of his **Twin Lidls.** He is wondering if the ply mounting plate could be replicated in a 3-D print. Needless to say, **Graham** has offered to construct some. That and nose mounting firewalls could be in demand !

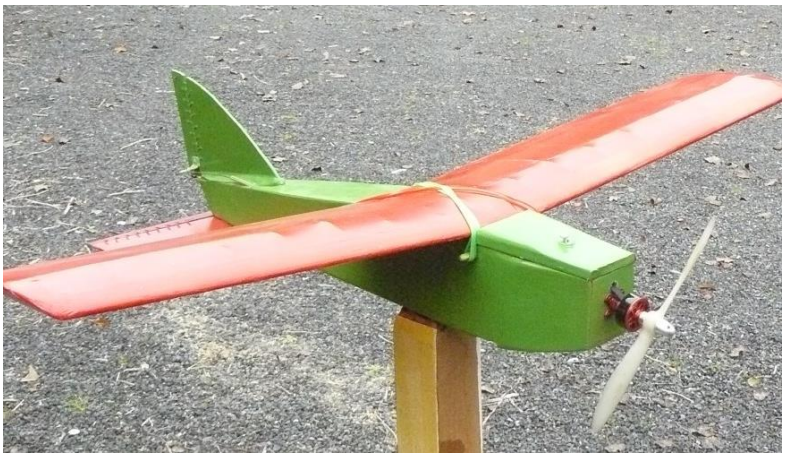




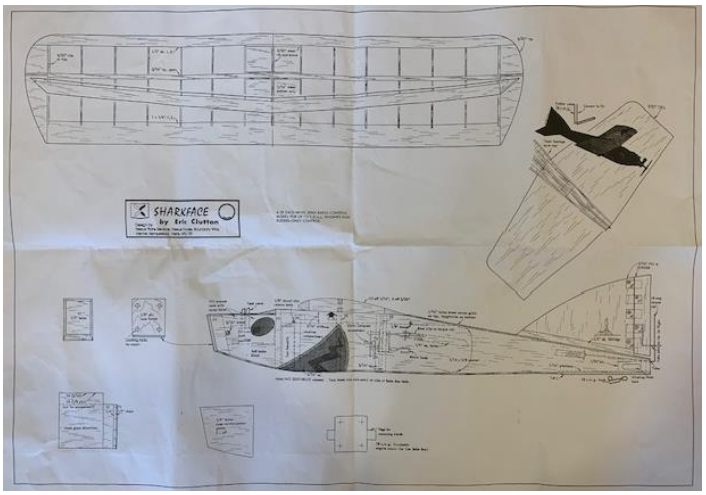
Barry Lennox contributed this little morsel…… A couple of years ago, our Ed, Nick; was extolling the virtues of Eric Cluttons “Sharkface”, first published in Aeromodeller back in July 1965 as a free plan, which then developed a bit of a cult following. The plan and info can be downloaded from Outerzone **** SHARKFACE HERE ****

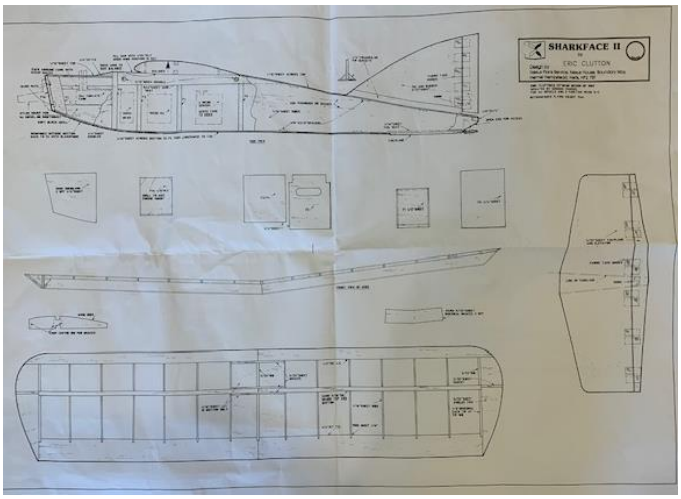


I recently finished one and it’s a great little model, (26" span) very light, fast-ish with 2 LiPo cells and manoeuvrable with no vices. It’s covered in Ulltralite laminating film and brown paper, with a lick of paint. Powered by 2 Cell LiPo/800mAH , a 10Amp ESC, with a Turnigy 22-2300 and a 6 x 3 prop. The AUW ready to fly is 9.6oz with a wing loading of 10.6 oz per ft Sq. A recommended build for something small and light to throw in the car.



I have a couple of plans of both Sharkface and Sharkface ll donated by Mike Anderson, if anyone is interested in doing a build , give me a call and you can have a copy. Ed.





VINTAGE REPORT May 2023

At last some activity, with a superb weather forecast and an email out to the local Vintagers, **Wednesday 17th May** six of us spent a very pleasant day at the Black Bridge site flying NDC and having fun. The conditions were as good as I've ever experienced, no wind, just the odd thermal and quite buoyant air. We flew both Vintage and Classical Precision events. With only Brett, Stan and my scores counting Nationally, but Mark joined in flying Stan's Stardust and Rod with his Glider for a very pleasant morning's fun.

Results;

VINTAGE E- PRECISION

				ROUND																		
				1				2				3				FLYOFF 1				GRAND
NAME	MODEL	YEAR	BONUS	FLIGHT	LAND	BONUS	TOTAL	FLIGHT	LAND	BONUS	TOTAL	FLIGHT	LAND	BONUS	TOTAL	FLIGHT	LAND	TOTAL		TOTAL
BARRIE RUSSELL	STARDUST	1940	10	176	20	10	200	173	20	10	200	180	20	10	200	179	20	199		799
STAN NICHOLAS	STARDUST	1940	10	179	20	10	200	178	20	10	200	168	20	10	198					598
MARK LARSEN	STARDUST (Stans)	1940	10	171	20	10	200	168	20	10	198	180	20	10	200					598
BRETT ROBINSON	LANZO BOMBER	1938	12	165	20	12	197	173	20	12	200	174	20	12	200					597
ROD HUGHES	GLIDER		0	180	20		200	180	0		180									380

CLASSICAL VINTAGE E- PRECISION

		ROUND									
		1			2			3			GRAND
NAME	MODEL	FLIGHT	LAND	TOTAL	FLIGHT	LAND	TOTAL	FLIGHT	LAND	TOTAL	TOTAL
BARRIE RUSSELL	NIGHT TRAIN	180	20	200	176	20	196	179	20	199	595
BRETT ROBINSON	NIGHT TRAIN	174	20	194	180	20	200	179	20	199	593
STAN NICHOLAS	NIGHT TRAIN	174	20	194	173	20	193	179	20	199	586

Pits scene, Self, Brett, Mark, Stan and Rodney, and Barry K turned up later to do some timing and shoot the breeze, not that there was much breeze to shoot !

This was the elderly gentlemen's section, relaxing after a hard morning's work ! Mark and Stanley enjoying a well earned rest.

That's the beauty of Vintage competition, no pressure and you can fly what you want when you want, just need to find someone

to hold the stopwatch and check your landing position. The fact that we could fly two NDC competitions before lunch during the week was testament to the worthwhile NDC Rule changes.

Afterwards I had a second test flight of my newest edition "HI Fli" built for the Classical Texaco comp and was pleased with the result. I added another couple of ounces of nose weight as it was stalling out on the first flight and in the calm conditions managed a 23 minute 8 second flight with the 2S 850 Lipo battery. ***Below; Flight just about over with Hi Fli just inches from touch down. Note the up elevator in to hold the nose up for landing !***

Jo Connolly was talking about his next build (when he's finished the other one or two he has had under way), a model by Lou Garami who also designed the Strato Streak, another popular free flight model.

The Bob Burling Memorial Vintage Meeting was held at Levin MAC on Saturday 13th May.

Great conditions and **Ross Gray** provided excellent photographic coverage of the event which can be accessed :

Here ; [Bob Burling 2023 | Flickr]

FOR SALE May '23

******The Sale of the century **** Russ is moving house and storage is at a premium. He's facing the ultimatum …. It Must go !!!! Make him an offer he can't refuse.**

FOR SALE; *1/3 scale STEARMAN kit by BalsaUSA*

Wing Span: 116 inches (2.95 metres)
Wing Loading: 26-32 oz/ft2
Fuselage Length: 92 inches (2.33 metres)
Flying Weight: 40-50 lbs (18 – 22.5 Kgs)
Engine: 70-120 cc Gas / 215cc 4 Str radial

Kit originally imported some years ago from BalsaUSA by a member of my old club up North. I have added Sierra Giant undercarriage legs which are recommended for the bigger engines being fitted in the Stearman recently. (Several in USA with 250 Valach or Moki radials) Also added numerous fibreglass fairings from Fibreglass Specialties to replace the ABS parts.
Kit has all the hardware required, wheels, cowls, tanks, 8 sheets of drawings, instruction manual for the build. All you need to complete a great classic aeroplane would be an engine, 25 metres of covering, servos and a fair sized shed.

This kit sells for US$2295 on BalsaUSA's web site these days plus a 3rd mortgage to freight it.
Looking for offers around **NZ$1500** and if it sells as a result of this advertisement, I will donate 10% to the MFHB Awatoto Recovery Fund.

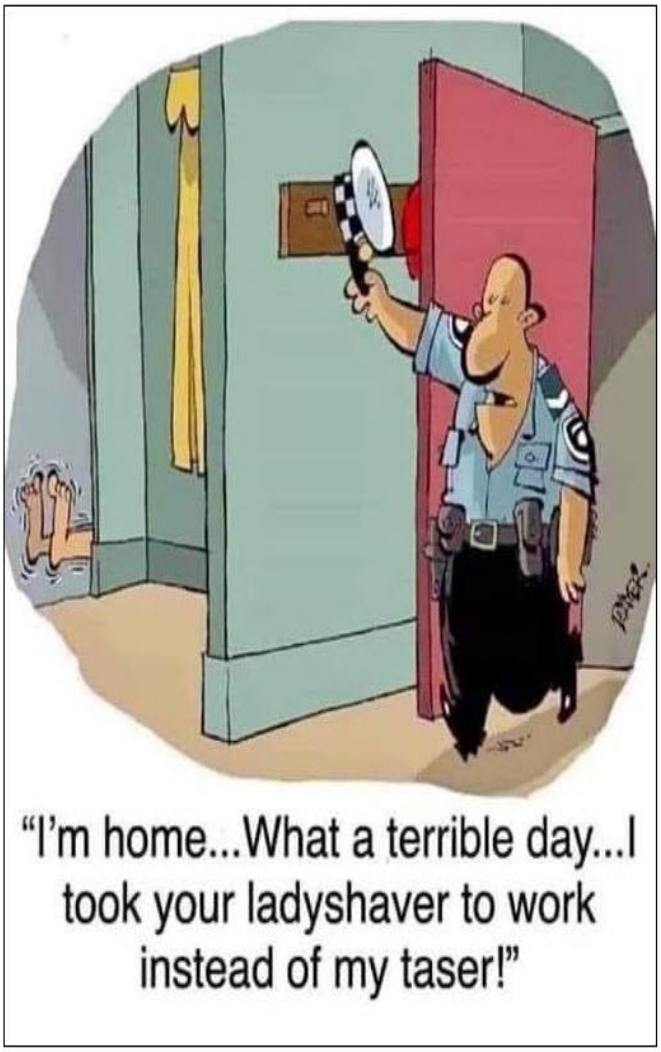
Give me a call on 022 3155 905 and come over and have a look at what you get for your money.
Great Winter project for a keen builder.

Russ Nimmo,
Poukawa.

Ps. If I don't answer the phone, drop me a text and I'll get back to you. **RN.**

Scottish Air Force

A CLOSING SMILE. May '23



Scary aye ?

Thanks to all for this month's contributions, long may the trend continue.

Here's hoping we see you at Awatoto field next month.

Keep safe and fly well,

Barrie the editor mfhb may 2023.