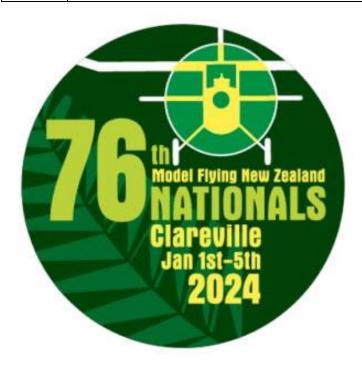


Newsletter # **154** November 2023

Dec '23	Club Activity Calendar
Sun 3	Club Sunday
Sun 10	Club Sunday Awatoto Field * WORKING
	BEE* Rebuilding the field seating . Flying after
Sun 10	**CHRISTMAS PARTY ** From 4.00pm at
	The Filter Room, Meeanee. Please phone
	Mike Shears 027 420 5480
Sun17	Club Sunday " Marty's Barbecue"
Sun 24	Christmas Eve. Club flying if you can!!
Mon 25	Christmas Day Prezzie time
Sun 31	Last club day for 2023 !!
Mon 1 –	7CTH NIATIONIAIC AT CARTERTON
MIOH I —	I 76''' NATIONALS AT CARTERTON
Fri 5 Jan	76 TH NATIONALS AT CARTERTON

In this Issue	Pages
Opening / Calendar / Contents etc	1.
Editorials Notices Comment.	2 - 3
Club Activity.	4 - 9
Around the Building Boards	10 -13
Info & Things	14 -15
Mart'y's Member Workshop #13	16 -18
Clive's Corner	19 -23
Soar Champs 2023	24 -27
Back to the Future	28 -32
Vintage Report	33
A Pilots Paint Job	34 -35
Closing News & a Smile	35 -36



Contributors to this Issue; Brett Robinson / Barrie Russell / Marty Hughes / Kevin Botherway / Barry Lennox / Clive Baker / Anthony Hales / Bernard Scott / Ash / Phil Sharp / Rob Lockyer / E & OE



From the Editor's Desk;

Greetings All,

Sorry about the late publishing time of this issue but after avoiding the damned Covid thing for the past three years it finally caught up, not to be recommended as many will be aware. Not a lot of content this month, I've not been up to chasing it and seemingly much of the membership has minimal interest in support so we survive on the few stalwarts who help keep these pages alive. I guess those few words sum up my state of mind at present as I ponder the future.

On a more positive note, I must express my gratitude to Brett R, Phil S, Marty H, Barry L, Bernard S and Clive B in particular and the few others who show support on a regular basis, without them we wouldn't survive. Congratulations to those involved on an excellent "Massive Sale" result with the total raised creeping up towards \$7,000 with a bit more to come. There was a huge selection on offer with some excellent bargains but as they say, it is only worth what someone will pay for it, so another good result for the club and the buyers all round.

That's it for this year, from the Editorial Staff, may we wish you a very Merry Christmas and a Strong, Safe, Happy and Healthy New Year.

Barrie the editor mfhb.

Prez Sez;

Hi All. You haven't seen me at the field on Sundays for a couple of months now as I've been busy putting dreams in drive ways but things are about to change and my Sundays are free to put Burgers into members belly's.

Firstly.... The monster plane auction we had at the National Service club.... WOW!!!! What a huge success. With the joint efforts of many and the donations from you guys and the buyers bidding on all 42 lots up for sale..... not to mention the sales table that opened after the auction, we raised a little over \$6000 for the club. A massive reward for a huge effort. Thankyou all. These funds are much needed for the ongoing rebuild from the effects of cyclone Gabriel.

And on the rebuild.. We have another working Bee planned for Sunday the 10th of December. We changed it from Saturday as with past working bees because very few turned up on Saturday for the working Bee and yet the very next day on Sunday..... Lots turned up to fly??? I'm sure it's just a coincidence and more people seem to be available on Sundays. The purpose of this working bee is to run the seating line for the new seating, dig the holes with a post hole borer, Ram the posts in, cut to hight and move the existing seat tops over and re nail down. We are looking into a Dingo hire with a borer for the holes, The posts will be delivered but what we need are post hole packers, chain saws, hammers and a lot of smiley faces ready to supervise.. haha. Bring your model's as working bee is from 8amm to 11am Then we fly.

Some other great news is the annual MFHB Christmas Party. Same day as the working Bee (Sunday 10Dec) at 4pm at the Filter Room Meanee. Please RSVP to Magic Mike Sheers for numbers on 0274205480. Please make an effort to attend as it a great chance to all catch up, have a beer and talk some crap. Stan Nichols might even be there to entertain us with tales of his travels abroad. As this is the last Prop Wash before Christmas, I would just like to thank each and every one of you on behalf of myself and the committee for your support over what has been a very challenging year for MFHB. Remember this is your club. We only get out of it what we put in. I'm really happy with the direction of the club and I'm looking forward to the future.

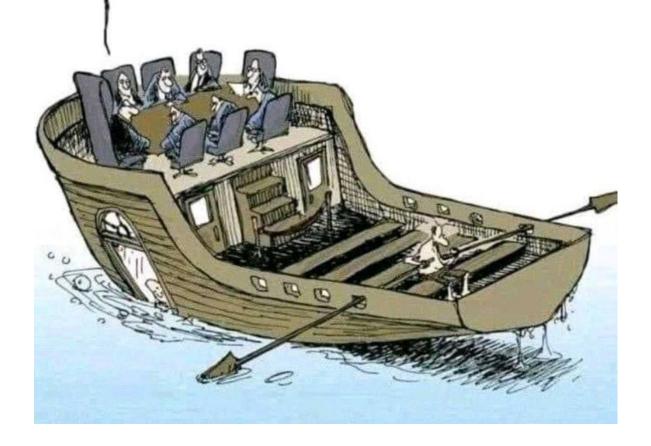
So signing off for the year and wishing you and your families a wonderful Christmas I'm sure we will catch up soon at the field

Marty Hughes President MFHB



"Marty, you can't go to the field today, just sit there till I find my glasses."

I don't understand, after so many budget cuts, why don't we move faster?



CLUB ACTIVITY November '23





Sunday 5th November, No fireworks at the club this morning, a meagre turnout with minimal flightline activity. The morning was very flyable with a light sea breeze settling in around mid morning. **Stu Sturge** was going great guns with his new Pilot electric aerobatic ship carving holes in the sky, it looks and even sounds great. **Phil Sharp** put in some good flights with his Storch once he got the muck cleaned out of the carburettor filter! Maybe a good ceramic filter on the pickup line in the fuel can might help? **Young Danny** is really coming to terms with his new electric pattern ship, enjoying the pleasures of a well built and well trimmed model. F3A and IMAC here we come!

This morning we were graced with a visit from a group of "Young Eagles" from the Hawkes Bay and East Coast Aero Club at Bridge Pa. This group of young aviation enthusiasts came to have a look at our hobby under the guidance and watchful eye of their mentor **Peter Steers.** I had occasion to meet **Peter** at Bridge Pa aerodrome a few years back when **Jacob Wardley** then a High School student was involved in their program of the building of a full sized RV12 aircraft under sponsorship largely due to **Peter's** efforts.

WHAT IS YOUNG FAGIFS

The Young Eagles program was designed to encourage young people to experience flying for themselves. Young Eagles start with your local Aero Club. It provides the opportunity for young people to consider flying for sport and recreation or a career as a Commercial Pilot. An added bonus is it enables them to have some fun while learning about aviation. The scheme originated with the Experimental Aircraft Association (EAA) in the USA. The Royal New Zealand Aero Club (Flying NZ) adapted the EAA program to suit the New Zealand environment and the existing Aero Club structure. The recommended age for participating is 14 – 18 years however some programs do take on younger than 14. In April 2020 there were a total of 17 Aero Clubs with Young Eagles programs and total enrolments exceeded 350.



Seen above, **Danny** explaining the intricacies and virtues of electric flight. There were some very interested members amongst the group, so much so that hopefully we might see them again at Awatoto Field and maybe give them the opportunity of some Buddy flying. Interesting, that amongst their group of mentors was **Ian Sowman** who I also met at Awatoto a few years ago when he landed his full sized home built aircraft safely on our field after suffering engine failure in the area.

Clive was back with his camera and grabbed some shots of our morning activities;

ship / Phil's Storch overhead / Time for a flight of my newest creation, an electric Senior Tomboy / On Finals coming home / Danny on fly past / Rod Hughes having a ball with his Carbon Cub.

Clockwise from top right; Stu's aerobatic

Mid morning, The local council wild life officer arrived with this rather bedraggled "Bird" he found hiding over the river last week. I think more than a little TLC will be needed to breath life back into it. Mark laid claim to it but didn't offer any explanation as to it's presence in the wild life reserve?



Sunday 12th November;

Another Sunday in the life of Awatoto Field., the grass surface is looking great thanks **to Big Red and Lance's** caring touch. It should be even better soon with the imminent arrival of our new and bigger mower. Word has it that the shed repairs are going to be completed in the next week or so, then "Shed Tuesdays" and any other shed days will be back on the agenda.

A moderate turnout of pilots, most of whom seemed to spend more time sitting and chatting than out at the flightline. Whatever, they seemed to be enjoying themselves and less chance of damage to their aircraft that way ?? As usual, Clive was busy recording the morning's activity for posterity in these pages;



Tuesday 14th,

Marty called to say they were test flying Rod's Moraine Saunier.

Had to see this and needless to say with a DLE55 hauling it around Rod test flew the model a real treat. They handled the cross wind no trouble and the model flew with great authority, Warbirds here we come.

Marty had his new Trojan T-28 airborne, that model has great presence in the air and Marty is presenting it so well.





with the new (Old) single channel push button OS FT-3A Transmitter. Not a good decision considering

the northerly cross wind. The model got away and was gaining altitude and heading towards Clive and Havelock. North when we lost sight of it. Bugger!! Nothing wrong with the radio gear, the model needed more down trim and hence just wanted to climb but couldn't make headway into the wind. Let's hope some kind person finds it, I hope!! Not a lot flying wise, but **Wednesday 22nd Club Night's Massive Sale** proved to be an outstanding success. I counted 55 in attendance with at least 10 of those being visitors and some joined in the bidding.



Marty did a great job as Auctioneer with lots of encouragement and good humour and very few lots were passed in or did not reach their reserve. The quality of the offerings was exceptional thanks to the estates of the late Ken Duffle and Kevin Morrison and the generosity of a few of our members. A few items that did not make the auction will be offered for sale in a subsequent newsletter with the proceeds to club funds.

At the conclusion of the Auction, the Sales table was well picked over with members negotiating for the goodies on offer. What remained will be added to the "Shed's" inventory, so it's win win all round.



The "Boss" even got to take home this rather magnificent slopey after some interference and spirited building from certain opposition! More scenes from the Auction Night below;......





The evening concluded with supper to finish off what proved to be the most successful Auction we've held yet.

The club will benefit from a result in excess of \$6,700 with a few more sales to come. Well done all those involved, the donors, the organisers and the bidders. **Ed.**

AROUND the BUILDING BOARDS nov'23





Dave Cantell continues with work on his Cessna nearing completion. He writes;

Hi Barrie progress is going well now still have to install the fin and stabiliser which are finished and painted. Wings are also finished with only the paint trim along the leading edge to complete when it stops raining. Cheers Dave

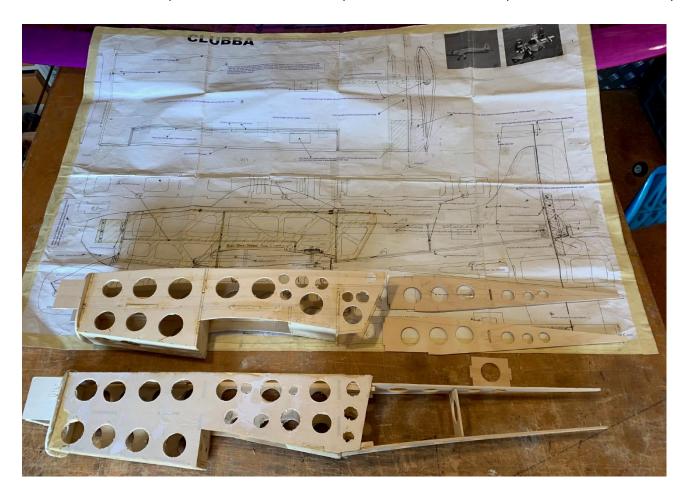


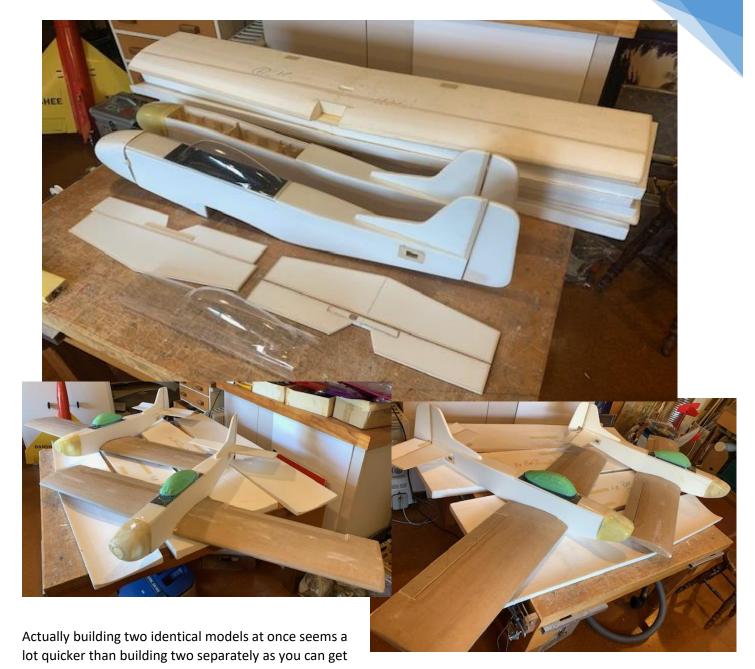


Amongst the donated Auction goods was this rather sad Foamboard Clubba which had all the paper covering lifting off. I decided to pull it out and re-furbish it as an original Clubba and then re- offer it for sale on behalf.



I also wanted another Clubba as a workhorse for an experimental old radio system. The Foamboard one was unrecoverable so stripped it all back to the liteply box and replaced all the fuselage foam with 5mm Depron for a much stronger and cleaner finish, attaching it with Gorilla polyurethane glue. Decided to rebuild the wing "Clubba Style" with a foam core, liteply and balsa inserts and Pva'd brown paper covering. Dug out the old canopy mould and vacuumed some new canopies from 1.00mm PET, laid up a new front cowl and the production line is under way.





duplicate jobs done together and when you get bored with one you can shift to the other. Seen above are the results of my labours all ready for painting and having the gear all fitted. I will use a one step type filler primer sprayed on the wings, cowl, U/C & canopy and then apart from the cowl and canopy and U/C which I'll finish with a spray can enamel, the aircraft will be painted using Resene test pots watered down by about 30 to 40% Bars Bugs which helps flow the acrylic paint on easily for a reasonable brush finish.

The gear used is as previously, All new 4x MG 2kg Digital servos, 45AMP ESC and a 3542 1000kv brushless motor

One of these will be for sale when finished and tested, an excellent trainer come fun aircraft to fly and fully aerobatic depending on set up. The proceeds going to the club's rebuilding fund. If anyone is interested give me a call, first in first served for a great ready to fly aircraft. Will just need a 6 channel Receiver of choice and a 3C 2200 or slightly larger lipo battery and be ready to fly away. Watch this space!



Info and Things October 2023



A few months back **Anthony Hales** reported on the Rat Attack on his stored glider. He mentioned that he was going to use some expanding polyurethane foam in the repair schedule. Subsequently he reports;

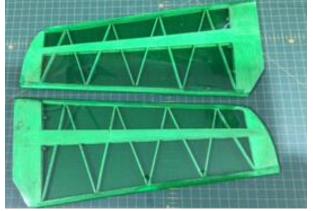


Hello Barrie. You asked for it. Following the rat attack on my gliders in July I've now finished the repairs. The problem for me was trying to do the repairs without fully taking the wings apart. I had to replace parts of the balsa wing leading edge sheet covering in patches, where a full piece of sheet was replaced was no bother but inserting small squares to repair a hole was not so easy due to the curve. I decided to glue together two layers of 1/32 sheet over a good original area with a barrier between, this gave me a nice pre curved sheet from which I could cut the patches needed. Replacement ribs had to be cut in between the leading and trailing edges and the spar, then caps were added.



Where the leading edge and wing tip blocks had been chewed I used expanding spray foam cut and sanded to shape to replace the missing bits. Only a very small area of leading edge required an insert spliced in for strength. I chose to replace the black wing and tailplane covering in a lighter weight green covering but replaced the yellow and white back to original.







painstaking job and a great effort, congratulations **Anthony.** Thanks for the heads up on the foam reconstruction, sounds like a neat system. **Ed.**

Joe Wurts informal clinic at Blue Skies 2023

Joe Wurts gives an informal discussion on "reading air" along with strategic tips on DLG tasks. Thanks to Charles Martin, Ed LaCroix, and John Armstrong for hosting; Southwest Soaring Society for a beautiful field, and Joe Wurts for taking time to teach us all his though process.

<u>Joe Wurts informal clinic at Blue Skies</u> 2023 - YouTube

What a



EMMERSON'S VIEW







Registrations from 8:30am Sat 10th Feb at the Rally. \$20 landing fee for the weekend. Food, Ice cream & Coffee cart on site.

Marty's "Members' Workshops"#14 Oct



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

Welcome to Mike's Model Shop.

This month with 6 minutes notice, I arrived up the drive way of our long time senior member **Mike Harris** .

Marty: Mikey I'm 6 minutes away and guess what... You're my next victim for Marty's Members Workshops.

Mike: NO ... The workshops a mess and there's dust on my models.



Marty: I don't care Mike, your pretty face will over shadow any dust on any model and I'm 4 minutes away.

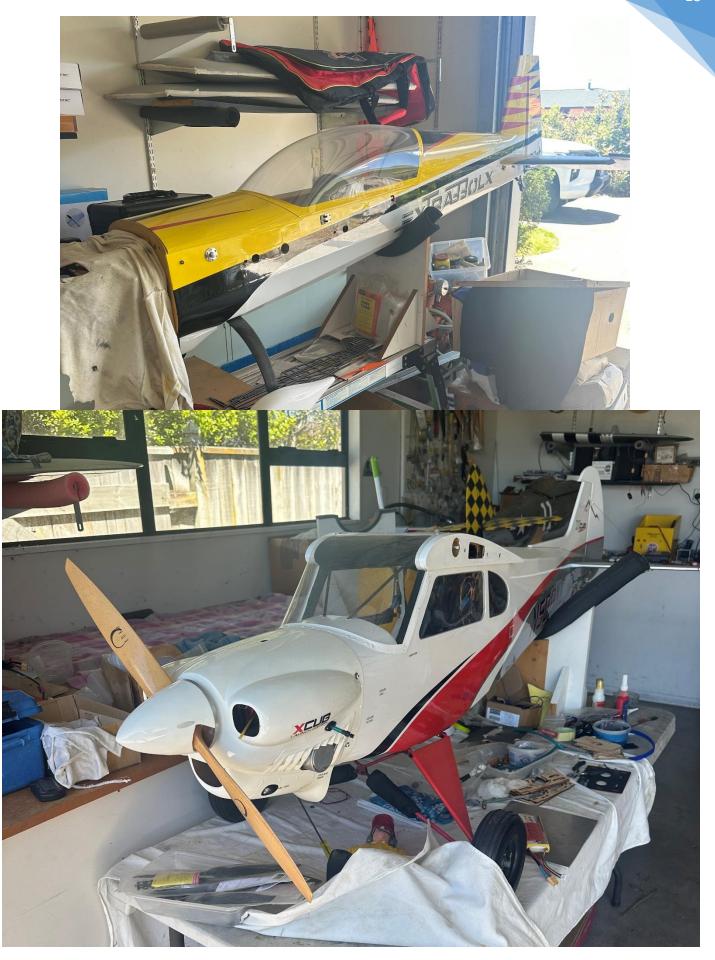
Nek Minit.....

Marty: This is like a model shop Mike, This is your new Pilot RC weapon with the 140 Twin? Looks awesome. Need to see this in the air this summer Mike. It's been a couple of years since you're regular in the air at Awatoto.

Mike: Yip, I've had my break and back into it this year, all the models are ready to go. I've put on board starters in the Super Cub and the Edge and they work well so I will have them at the field soon.







Marty. I will hold you to that Mike. Thanks for letting me in (Like you had a choice haha) See you at the field.

CLIVE'S CORNER #13 October'23





Another month goes by and Clive continues his interesting series of aircraft, both full sized and some modelled by club members.

The Schneider Trophy.

One of the few things I do well is to digress! So today I am going to start with a Frenchman called Schneider. M'sieur Schneider had looked at his surroundings and saw a lot of water. It was at the seaside and in the rivers and in the Lakes. Most of it was flat and free of permanent buildings. M'sieur Schneider thought that these places away from the land would be great places to operate planes but few people were using it in the early days of aviation. To interest more people in building sea planes he offered a trophy to be competed for annually.

It was to be the Schneider Trophy. The limits on the design were to be few. The big test was on the finished aircraft. M'sieur Schneider realised that the sea had a habit of sinking things. So the first test was to tether the plane for 6 hours at an open mooring. Sinking meant disqualification.

The second test was that the take-off run was to no less than 550 metres. There is a great piece of film of one of the English entrants taxiing at high speed over what looks like a fairly, rough sea before turning round into the wind and taking off. If the plane had taken on any water during tests 1 and 2 that could not be removed before the race proper. The course was triangular for 280km This was later lengthened to 350km. Pilots were required to land at intervals to make sure that they were still water tight.

The first race was in held 1913 and the last in 1931. It was a time of rapid development, the winner of the first race completed the course at an average speed of 73.6 mph. The speed of the winner in 1931 was 347.30 mph. Some of this may be attributed to the impetus of the Schneider Trophy but to be honest WW1 played a major part.

The first race was convincingly won by France, who provided the only entrants but next year Britain had an entrant. The Sopwith Tabloid had only flown for the first time in 1913 and was designed as a two-seater for the rich golfer. The pilot was reduced to the role of chauffeur to take his lord to the first tee. The name was weird. It possibly came from "tabloid" newspapers which were smaller than average but it wasn't. It also could have come from an American first aid kit called the Tabloid and was marketed in UK but in the coming war there would be aircraft called the One and Half Strutter

The Tabloid was a land plane but it could be easily modified with four floats and shipped to Monaco for the 1914 race. In the race proper the English pilot had spotted a loop hole in the intermediate landing rule and bounced the Tabloid at speed. This avoided the time penalty incurred in a full landing and the Tabloid won the race at a speed of 86 mph. There was a tenuous link to the MFHB. Allan Rowson flew a land version of the Tabloid at the 2019 Warbirds.

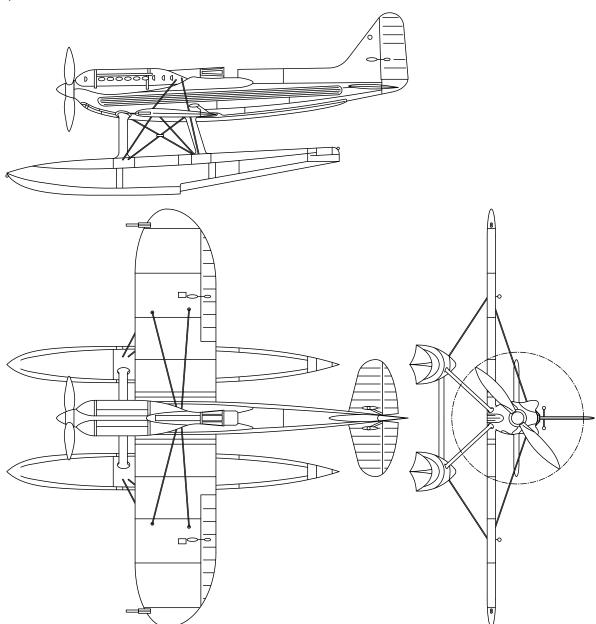
No races for the Trophy took place during WW1. After the war Switzerland, United States, and Italy joined France and Britain the Trophy races. In 1923 USA won the trophy. A clause had been added to the Trophy rules which stated if a country had won the race two years in a row it was theirs outright. When no opposition turned up all the Americans had to do was to fly round the course and it was theirs. No, they said we are having too much fun we will not fly the course. What nice guys. Which left the Italians and the British competing with each other.

The Italian entries were interesting. During the 1920s Italy built a series of speed-boats for use on their lakes. They obviously knew how to get the best out of their hulls for speeds of around 160kmph. One of the Italian entrants in 1929 featured a single hull housing a separate engine driving a water-based propeller but it withdrew before the race. Another Italian entry in 1929 was equipped with twin engines one driving the propeller through a gear box. They also came with another innovation; a contra-rotating propeller.

But war was coming and Britain was in a hurry. Supermarine Aircraft introduced a new series of aircraft in 1929 which were powered by Rolls Royce engines with a output of 1900 hp. In 1931 the Italians withdrew before the race leaving the British free to fly the course and win the Schneider trophy outright.

The three-dimensional drawing below shows the small frontal area of the what was to become the Merlin engine. Britain had a use for this tiny plane and its big engine. The day after the last Schneider Trophy race it achieved a world record speed of 407.5 mph and that was lugging around two huge floats. Incidentally the stripes down the side of the fuselage were not decoration. They were a radiator for cooling the lubrication system. In my "big boys book of aeroplanes" there was an anecdote from the pilot of the S6B. He leant his knees against the sides of the cockpit in flight and suffered severe burns.

The ancestry of the Supermarine Spitfire is quite clear from the drawing. And the reason for Supermarine's haste quite obvious



One of the persistent Italian companies involved in the Schneider Trophy was Aermacchi. During WW2 Italy was one of the Axis powers. Because Italy was attacked from the Mediterranean sea by the Americans and British they reached an Armistice with the Allies much earlier that Germany. Aermacchi began design and production of small jet aircraft for the Italian Air Force post war and other European nations.

A Short Crusader.

Writing about the Schneider Trophy, the Editor was not satisfied. A whole lot of aeroplanes and you only wrote a page or two. Give it another go! Scots you know (!! ??? Ed)



So I thought I would start with the Short Crusader. It qualifies for this article because it was built for the Schneider Trophy but it never flew in a Trophy race as the result of a very "model aircraft" mistake which if I remember I will come back to.

It also qualifies for Propwash because lots of modellers tried to build a scale model of it

The full-size Short Crusader was built round the Bristol Mercury 9 cylinder air cooled radial engine. Up to this time liquid cooled engines had been preferred but the Mercury put our more power and was lighter. The fuselage with its elongated tear drop shape should have created the minimum of drag, It was only the 9 cylinder heads that worried the designers.

I was a bit doubtful about the engine designers who rated the engine at 960 Hp but limited it to 800 hp in

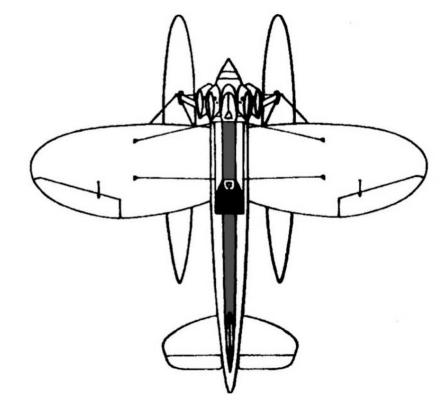
operation? Also the name Mercury is a bit dodgy, Mercury was the messenger of the gods but he carried out lots of underhand tricks on ordinary mortals

And the wings look better suited to a Bumblebee than swift Schneider trophy Racer.

Trials were held of the Crusader against the Supermarine S 5 and Gloster IV. but the Crusader was much slower than the other two. However it was dismantled and packed on board a cruiser, with the other two S5s and a Gloster IV for the trip to Monaco, the site of the 1927 Trophy races.

Because of the proven fragility of this type of plane it was decided to use the Crusader to familiarise the pilots to local conditions.

Piloted by Flying Officer Harry Scholfield it took off flying for some



distance skimming the waves before the pilot initiated a climbing right-hand turn. Unexpectedly It turned to the left and as the pilot attempted to correct it the turn increased and crashed into the sea. The pilot survived and was taken back to the cruiser where he was heard to shout "what silly idiot connected the ailerons up the wrong way round." Or something like that. Ever heard that at a flying field. But sadly it never

flew again. In the actual races the Supermarine S5s were first and second but the Gloster IVB did not finish.

But 1927 marked a new beginning for the English teams. The RAF created a High Speed Flight which would provide experienced pilots for the races and advice to the designers. It seemed that Britain had decided to win the trophy outright. All development was focussed on the Supermarine S6 for the 1929 race which was to be held in Calshot which was designed by Ronald Mitchell and powered by the new Rolls Royce engine, This would be further developed and become the Merlin, the mainstay of the RAF through WW2.



At the 1929 race France and Italy turned up with new aircraft. Britain entered two Supermarine S6s, an S5 and a Gloster 6B. The French entry crashed before the race, the Gloster failed the flotation test, which left the three Supermarine aircraft and the Italian entrant. It was won by a S6, the Italian Macchi was second and the S5 was third. The other S6 was quicker than the other entrants but was disqualified for consistently cutting the left hand turns.

The next race was set down for 1931. Britain put all its faith in the Supermarine S6. But there was to be a twist. Because of the effects of the 1929 financial crash the British Government refused to back their entry. The High Speed flight were forced to look for private funds and found them from Lady Houston.

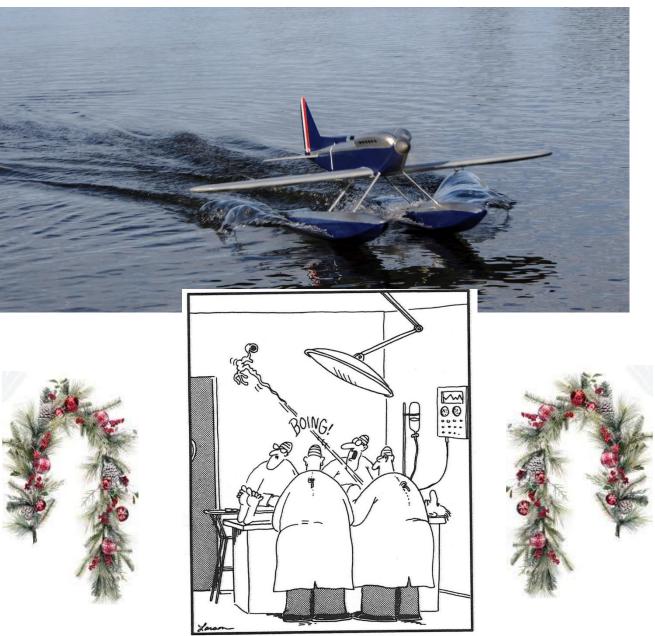
Ronald Mitchell made some improvements to the aircraft which became the S6B and Rolls Royce increased the power output of the engine to 2350 Hp.

Entries came from Italy and France but both crashed before the race leaving the British entry to fly the course alone. As a result they were declared the out-right winner of the Schneider trophy.

The next day they flew the S6B over a measured course and set a new record of 655 Kmph/ 407 mph. Not to be outdone the Italians rebuilt their aircraft and set a new record with it of 709 kmph/ 440 mph.

To me the S6B looks like a Spitfire. It is different but it comes from the same gene pool. The seaplane had a minimal open cockpit and had what looks like a corrugated surface to the wing and fuselage. This was a cooling system which had less drag than a conventional radiator. And it was driven by a great hulking coarse pitch two bladed propeller. Two blades to absorb 2350 HP?





"Whoa! Watch where that thing lands—we'll probably need it."

Soarchamps 2023 2nd - 5th Nov. '23



This was our usual second biggest event for soaring during our year. We had an average amount of entries with 7 Classes on the schedule. This meant we had a good variation in soaring available to over most of the different soaring disciplines. John Shaw was up from the very deep South Island, and we had a few from all around the North Island. Although we had some good rain on the Tuesday before the event the forecast looked great!

F3B (3 Task Winch launch)

This was scheduled for the first day as normal. We had enough people to help run the course and a big thanks to Helen Gray-Williams and Barry Kerr who also helped with the officiating. Twelve entries made it a little easier to run efficiently and with a light wind (in the right direction) made launching nice and easy. It was time for the light winch line although Richard managed to trash four lines in one day, almost a record! We completed two full rounds during a nice relaxing day with most getting there ten minutes in duration. The landing was different, with the models being a bit heavier than our thermal models, they came in fast, and it was harder to manage getting the magic 100-point landing.

Peter Willimas got the perfect landing score 10.00 minutes and 100 landing. Four pilots flew 20 laps in distance and Peter Williams was fastest in the speed task 16.34 seconds.

1st Kevin Botherway. 2nd Peter Williams. 3rd Peter Glassey

F3J (Winch Launch Thermal)

The next day the weather was just as good, and it took a little while to set up with mostly Maxa's to assemble and lots of little screws to lose. The winch lines for this event are 150m long but we space the winches in lanes to give a little launch separation as the pilot group all start launching at the same time. In the very first round we had a little crossed over on the lines and Peter Glassey lost his elevator on launch. Luckly there was little damage, and it was repaired and ready to fly again with the group re-flown later. Again, we had the wind direction perfect for launching and most of the day there was little thermal activity but mostly a lot of wave lift which means lots of patience and just hanging there waiting for time to tick by. The best score was 9.52.9 and 98 landing by Kevin Botherway and lots achieved times close to Kevins flight time. We completed 9 rounds of 3 groups during the day which was heaps of flying for all. We flew the last group with light rain starting and unfortunately ended up packing up in the rain! Yep, everything and everyone got well washed and cleaned.

1st John Shaw. 2nd Kevin Botherway. 3rd Peter Glassey.

Kevin Botherway targeting 100 points landing.

F5J (Electric Launch Thermal) This was our first electric model competition for the weekend and again the weather was great! This is a reasonably technical event with three recordings to be done, launch height, flight



time and landing and most pilots have got all of this sorted now. We set up and worked towards a cut off for the event so we could fit the other day's events in. The best flight was 9.56 time, 50 landing and 91 meters launch height by Kevin Botherway. It was not a day for the low launch and at time flights were hard work with very little thermal activity. It was a case of launching well upwind and then be in search mode. We managed 4 complete rounds of three groups in each round.

1st Kevin Botherway. 2nd Peter Glassey. 3rd Richard Thompson.



Kevin Campbell with his Plus F5J

Tony Christianson with Rob Morgan timing. (right)

ALES Radian (Electric chilly bins)

We decided to do this Class next as the wind was getting a little stronger and the radians had a little better penetration than the eRES models. We flew 3 rounds of 30 minutes time slots and had 10 pilots in the competition. The first early starters seemed to get the worst times and the air just got better and better towards the end of the competition. Quite a few did some full on thermaling with a few getting to the height where your model disappeared! It was fun watching landing styles with no brakes. John Shaw had the three top flights in Radian with his best a max of 7.00 minutes and a 50 landing.

1st John Shaw. 2ndAndrew Hiscock. 3rd Peter Glassey. eRES 2M (Electric Launch 2m rudder, elevator, and spoiler) It was the first time this competition had been run by the Soaring SIG as a new Soarchamps discipline. It's getting popular with many around the country building kits or



buying the ARF. We had 9 entries in this one and it was time to pop a little ballast in them which worked a treat. The air from Radian had gone and it was just a clean breeze with little lift with under half of all the flights under 5 minutes. Kevin's and Dave's planes crashed on launch during the competition which put

them out. It was a great competition and believe we have the recipe about right for rules. We all found 100m is not very high at all. The best flight was Richard Thompson 4.57 flight and 50 landing. 1st Stewart Cox. 2nd Andrew Hiscock. 3rd Rob Morgan.



RES 2M model lineup.

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

The last day

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

This was another stunning day in the Bay. We set up and prepped all our models in some nice air with thermal activity and a light breeze. The tasks were scheduled in alphabetical order. We planned to run a complete round of F3K then a round of F5K which had two groups in each round. This meant lots of swapping around model's transmitter's charging batteries it was a busy time. There was some good lift

required towards the end of our flying. F3K - 1st Peter Williams. 2nd Miles Moloney. 3rd Peter Glassey F5K - 1st Kevin Botherway. 2nd Peter Glassey. 3rd

with a little ballast

Right; Timing group for F3K – all up last down.

Steve Warner

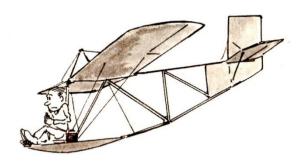


Overall if you flew every event and got all your time you did 257 minutes or about 4.2 hours of flying in competition mode! That's without warmups and practice and calling others - WOW no wonder we deserve a beer... A super big thanks to John Shaw who came for the weekend and helped Kevin sort stuff and haul the gear around. To Kevin for organizing everything and directing all the contests. To everyone for making it a seamless relaxed competition. Lastly the weather was unreal. It's the first time in a long time we have managed to fly all the events in a big competition like this.



Soaring Champion – Kevin Botherway (left)

See y'all at Nats! Just remember **SOARING ROCKS!!!!!**



Back to the Future or A journey into the past.





We read a lot these days about converting our old "long wire" sets to 2.4ghz and also about the clever fellows who are upgrading and/or simulating the original radio control sets, Single Channel, Galloping Ghost and Reed sets etc to re-create some the early adventures in model flying. As a youth I had no experience of RC, but I still remember awing over the huge ED ground based transmitter box of batteries and valves with a tall aerial etc sitting in Steven's Bike Shop window here in Napier in the early 1950's, and then seeing the late Jack Godfrey flying (and crashing) his "Huge" RC Rudder Bug somewhere at a field in Hastings!

I came back to the hobby in the mid-1980's when a school mate (John Clarke, bless his heart!) invited me out to Highway 50 to a club meeting and I was hooked. By then proportional RC was in and has just got better, culminating in today's digital 2.4ghz systems. We still have a few Rip Van Winkles in the club who can relate back to those early days but they're mostly just memories now and it seems a shame not to experience those early thrills and spills before shaking off this earthly coil. Mind you, one only has to "Blip" Mike S's switch and out pours all this long forgotten info about sets and systems and people from those early days of RC!!

So what to do about it one might ask. Well, fortunately, with the right friends there is a way, and after spending a few nights in Christchurch with Barry and Di Lennox a few of months back the solution became obvious. After delving into Barry's workshop complex and talking and talking and listening and talking more, it became obvious that here was the answer, and with some careful and surreptitious manipulation Barry came up trumps, which of course I never doubted for a minute! I am now in possession (on loan I must stress) of a Futaba FT-3A Transmitter from the early 1960's.

At the same time, Barry was doing a similar conversion on an OS Pixie set from the 1960's for Graeme Rose. (So we can go Vintage Pylon Racing together .. Yeah Right!) Here for your edification and enjoyment is Barry's account of those transmitters' conversions.

New Lamps form old. Special Edition for the Futaba FT-3A and OS Pixies; Barry Lennox.

This was an exercise in converting some very old S/C transmitters from the 1960's into a 2.4GHz spread spectrum version with an electronic encoder. Why? Because you can, and it's great to see 60 year old technology getting a

new lease of life. Anyway, there were two, the very small OS Pixie and the somewhat larger Futaba FT-3A. The Pixie is so small that it can probably only fit a 2S LiPo at 200 mAH. The Futaba can hold an 800 mAH one.

So what's the process? Firstly you clean it up if required, removing any corrosion and dirt, remove everything except the on-off switch and the push-button. Sadly, in the



case of the OS Pixie the pushbutton is almost impossible to remove off the PCB so it has to be replaced with a modern version The Pixie pushbutton does not have a very good feel in any case, but the Futaba has a nice micro switch.

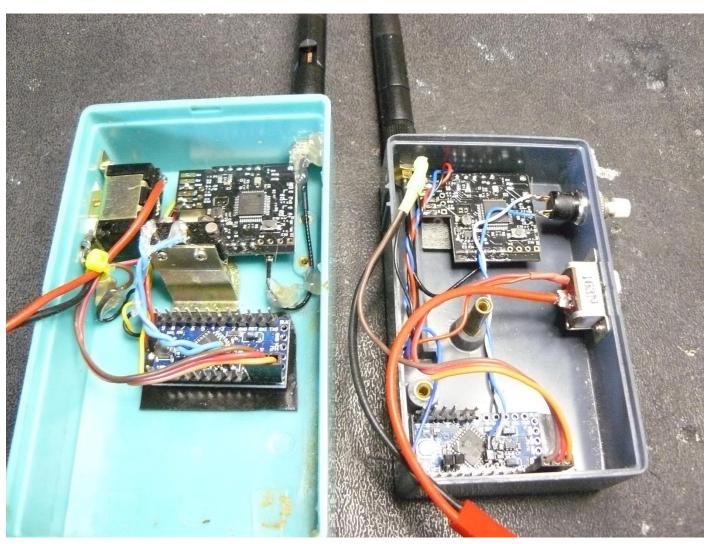
Then the following parts are installed.

An RF transmitter module. I used the Lemon, as they are more readily available and cheaper than FrSky, plus the service and post costs from Lemon are very good. And it comes with a comprehensive manual in fluent English! A big



plus these days. See https://lemon-rx.com/

The transmitter is the DSMP DIY module at USD 28.30. You will also need as many receivers as you wish, the 6 channel one is USD 12.90 and the 7 channel one is USD 15.90.



One thing to note is that Lemon explicitly state you must NOT apply power to the transmitter module with the aerial disconnected, otherwise damage will occur. The 2.4 GHz antenna, take care the coax and connector are small and a bit delicate.

A battery connector for a 2S LiPo battery, the small JST connectors are perfect.

An encoder. There's two options here, the first is a premade one from Phil Green in the UK, it's simple and works, but it is more expensive at around Stg 23 from the UK. The second is more of a DIY version by Mike Kitchen (also in the UK) based on his freely available software code and an Arduino Nano Pro Mini microprocessor board, these can be purchased from Aliexpress for as little as 95 cents, plus post. It's tiny, you can see it beside a postage stamp.

The problem is that you have to program the code into the Arduino. And you require a programmer to do this, plus a bit of patience, sometimes, as Windows does not always co-operate!

I won't repeat how to do this, as it well covered at the Mode-Zero and Single-Channel websites.

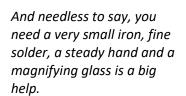
Phil Greens email address is philg@talk21.com The software code, and the 18 page manual for the DIY Arduino

encoder are here; https://mode-zero.uk/viewtopic.php?f=24&t=609

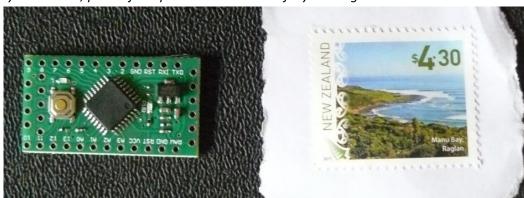
One problem you will soon note is that the 2 modules are so small that there are no mounting holes, so, you must mount the modules on the plastic case using double-sided foam tape. The cheap stationary or hardware store stuff is no good, and will fall off in a few days. The correct tape to us is the incredibly sticky (and quite pricey) VHB black tape by 3M, from Bunnings. The packet holds much more than you need, but it will also be superb for mounting servos reliably.

Mike has written an excellent 18 page manual for the Arduino encoder. And there are many user options for setting it up.

However it can be as simple as you like. But, please just spend some time carefully reading his manual!



And then, with a little bit of care and luck, it will work that's when the fun starts. The encoder does offer left, right, kick-up elevator and



8 11N/PULG x 31N/PULG -2.54 cm x 7.62 m FA

motor speed control, but, timing of button pushes takes some practice, it gets easier after 15 hours mins of practice. It goes like this....

- Push the button and hold gives Right
- Two pushes and hold gives Left
- Three pushes and hold gives kick-up elevator
- Each "quick Blip" by itself cycles the motor speed through this sequence ... fast / med / slow-off, then ... fast / med etc again.

As a safety matter, it's required to hold the push-button down for 5 seconds to initially start the motor (It always starts up at full speed)

I very strongly suggest you start with the basics, say just rudder and motor. There are many programming options, but they take a fair bit of study, and a small board with a couple of switches on it, that is temporarily connected just for the programming.

Needless to say, it's far more complex and featured those SC systems of the 1960's but it can also be used in its most basic configuration. That is just left and right.

Barry Lennox. Nov 2023.

Needless to say, "My Cup Runneth Over" and I am now the proud possessor of a 1960's Futaba FT3A push button single Channel Transmitter. - During the negotiation process, I made up a "Test Box" containing the servos, ESC and Motor and an Elevator and Rudder, and sent this to Barry so he could use it for setup and then I could then use it to start practising my button pushing sequences!



Test Flight Day Tuesday 14th October.

I think I need to rename this article. "BACK TO THE BUILDING BOARD"!! through no fault of the gear, it all worked perfectly, but I made two mistakes. First, flying that day in a moderate northerly cross wind at the field, and Second, not spending a bit more time test gliding the trim.

I'd reset the rudder and elevator settings as close as I thought to the original flying settings. Hand launched and the model flew away well though had quite a bias to the left and climbed markedly under both half and full power and the glide was right on the stall. I had full control, but spent the next quarter of an hour going backwards and climbing and trying to work the model forward into the wind. I got it back overhead a couple of times and spiral dived it down, but as soon as it turned off the wind it was away again and any throttle sent it climbing away. After about fifteen minutes of battling it finally disappeared at altitude heading towards Clive and Havelock North. I was still able to control the turn until it disappeared but I had no idea what the throttle setting was. All a bit sad, but all as the result of a couple of poor decisions. I live in hope that some kind person might find it and get in touch with

the club, NO I hadn't put my name and phone number in it! (Third black mark). I'll give it a while and then not to be deterred it will be back to the building board, the challenge is still alive albeit a bit dented!! Ed.

Post Script.

"Mr Radio Control walking history book" (Aka Mike S) came up with the answer, albeit a bit late! He went delving into his archives, notably some early annual bound copies of (MANS) Model Airplane News, December 1964. There in a column by the late Bill Winter writing about his Single Channel "Swamp Box" model offered the following sage advice.

Flying: It is practical to hand test glide any Rudder job. Make sure the glide is fast, with the landing two-point on the wheels, and not flared out prettily for a three-pointer. This may look good but the ship will power stall all over the sky. With a full load of war paint, our model required one matchpaper shim above the stab trailing edge (a more positive angle of attack) on a fairly windy day. On a calm day with .09 power, it should be right on—perhaps slightly nose heavy.

To insure that there is no turn in the glide, it will be helpful to find a slope down where more hand-glide tests can be made—even the slightest slope will extend the gliding distance long enough to spot turning tendencies.

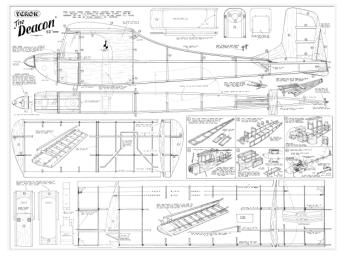
Be sure that you have the right thrust shown before flying with power. If the glide proves satisfactory, but there is a slight stall tendency under power—common to power models, especially on high motor—add downthrust. None may be required on the .09. Time your motor run on the ground and release first power flight

with about 45 to 60 seconds fuel remaining. With the .09, almost full power can be used for test (slightly rich); with a .15, make a noticeable reduction in power. Or run not quite wide open with the prop on backwards.

For anyone who has not flown radio before, the idea is to keep the ship upwind not allowing it to get downwind, at first, or even too far off to either side where a control mistake could result in the craft getting away. If the flight is reasonably straight, let the ship go far enough upwind that the first complete turn will not bring it all the way back to the transmitter. On your first turning attempts, apply the rudder only long enough to start the turn, and reapply it when safe to continue the turn, or to take it out of the turn if it is too steep. If the glide appears slow with the ship seeming to hover and sink, speed it up by placing a matchpaper shim between the fuselage and the stab trailing edge.

Well, as they say, better late than never, we won't make those same mistakes again next time, I hope! And there will be a next time but it might be a few months away unless Mmmmmm maybe I could get Mike S to finish repairing that enlarged Tomboy he scored an own goal with at the Sports Park rugby field goal post several years back and was going to have it repaired the following week? Mmmmm where's my phone? Ha Ha!!

Breaking News, All this discussion of yesteryear gear has lit Stinky's fire and look what he has just purchased on line. And what's even more exciting is that in the "Container of Shame" or maybe under the bed, he has Father Harvey's old Wright Transmitter. He has now downloaded their original model from Outerzone; **The "Deacon"**





Oz : Deacon plan - free download (outerzone.co.uk)

Fun times ahead !! Good luck Andrew!

Vintage Report November 2023





I guess the above morphs into this month's Vintage report where there is little to report for this last session of the year. The weather and the flu beat any of my attempts to get the November NDC flown and enthusiasm to get vintage flying seems to have diminished a bit amongst members with the end of the year approaching. I was looking forward to spending three days at the Nats, but that too is looking a bit tenuous just at the moment.

One thing causing concern at present is the supply of suitable batteries for the vintage electric competition classes. We seem to survive on the coat tails of the other users, and as the other applications change in size and popularity so the manufacturers change batteries in accordance. No problem for sport fliers who can use whatever suits, but a headache for competition where the rules stipulate a specific rating and capacity. The Nano Tech range of batteries which covered this well no longer seem to be available and this has led to the current proposal to allow 2S 200mah

batteries to replace the 180 mah lipos in the E Sport Cabin class.

An interesting solution has been put forward by Peter Townsend of using an Energy Limiting Device ELD.

Screen shot here to the right and the link below......

https://www.starlink-flitetech.com/f1q.php

One wonders if something like this might offer a simple solution where before the flight of a model you just dial in the allowable amount of mah energy allowed and go fly. It would certainly level the playing field and battery capacity would become irrelevant as long as it was big enough! It may require some minor design change as we wouldn't be using a timer and need to be able to control the motor off and on and alter the speed. That surely shouldn't prove a problem for today's techs.

Sidus EL - energy limiter for FAI F1Q class

This device fully complies with the latest F1Q rules and is compatible with all current F1Q e-Timers



Features

- · Equipped with standard 3.5mm bullet connectors for energy metering
- Maximum allowed energy amount is user-programmable without any external devices
- · A built-in 4-digit display directly shows the consumed or programmed energy amount

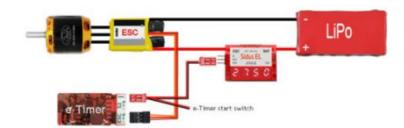
Technical data

Voltage range 7.4 to 25.2Vdc (2s to 6s LiPo)
 Current rangw 3.0 to 65.0 A

• Energy range 100 to 2750J in steps of 1J

Wiring

The limiter is inserted along the positive wire between the battery and the ESC, and is connected to the e-Timer and its start switch. It works with any F1Q e-Timer having separate RDT input and capable to recognize and handle a negative-going 20mS pulse. The connection to the Sidus F1Q e-Timer (that has built-in RDT) is even easier as it uses the same start switch input also for the energy limit signal.



How it works

On battery connection, the limiter performs a quick self calibration and awaits the press/release transition of the start switch (i.e. model release). On such transition the limiter starts calculating the energy delivered by the battery. In the event the programmed limit is exceeded, the limiter issues a 20mS negative pulse informing the e-Timer, that will cut power to the motor and smoothly continue the timing sequence the same way it would in case of expiration of the programmed motor time. All the functions following the motor cut off will be activated according to the programmed sequence, including the DT time. At the end of the flight it will be possible to check the total energy delivered by the battery.

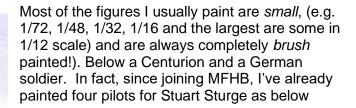
A Pilot's Paint Job. Brett Robinson.





So....I get a phone call the other day from our esteemed President Marty who asks me if I still make plastic models? I reply in the affirmative and he then asks me if there is anyone in our plastic model group that paints figures? My reply to that is simply.... hmmm...that would probably be.... Me. I've been making plastic models myself since I was eight and have painted quite a few figures in that time for sure!







A couple of days later, Marty fronts up with two large 3D printed pilots in white, one for himself and one for John Clarke.

A start was then made by giving both pilots a good sand, a bit of filler here and there and, in a few places, a really good grind with a Dremel just to smooth out some 3D lumps in the various places.

That done, two heavy coats of sprayed matt white went over the figures to fill and smooth them ready for painting. Once that was done, it was onto the actual paint job itself.

Due to the large size of the two figures, most of the base colours could be also airbrushed on.

For the job I used a mix of Acrylic and

Enamel paints, together with some ground pastels to highlight some details and some thinned acrylic to drybrush highlights on the figures.



Anyway, over the course of about four days the painting process was done a bit at a time until the two pilots were all done.

For me it was not only something big to paint (for a change), but also I enjoy figure painting in any case and certainly enjoyed painting the two pilots for Marty and John.



Marty then came over to collect them

both and was more than pleased with the results, as was John C when he received his finished pilot.

Brett Robinson. November 2023.

Closing Late News



Just to hand, Good news from Rob Lockyer. He has the on line web station back up and running, he writes;

Our weather station is back online and partly operational. The Temperature, Wind speed and direction appear reasonably accurate, however I suspect the anemometer is a bit tight and needs a bearing replacement. I also suspect the Humidity sensor is faulty as it is showing 100% continuously.

The rain gauge is not recording. So the main things we require, Temperature, Wind speed and Direction are OK. Don't take too much notice of the other readings. Further work need to be done and hopefully I can get some replacement parts. Here is a link to the main page.

https://www.weatherlink.com/embeddablePage/show/49b7087bb9614d43b676b784f34d9674/summary

The Barometer is also working. I also took the opportunity to tidy up our installation at the pump shed. This is our

terminal providing internet for the weather station and

field camera.





The other Late News;

This morning I received a phone call from a Lady in Taradale to say that she has my Fly-away Senior Tomboy aircraft in her garage in Taradale. Turns our her Husband was on a cycle track somewhere in Clive when the model whizzed past him and landed with nobody in sight! He decided to take it home and his wife put a call out on line through someone in the model boat club. This found it's way via Messenger to President Marty who was able to get us communicating. I'm able to pick it up tomorrow in Taradale.

Joy oh Joy, Thank You!

And here is some "Food for Thought";.....

Maybe time for some New Year Resolutions?

We'll see you in 2024, where did 2023 go?

Best Wishes to you all. Barrie the editor mfhb.



Eating in the 50s

- 1. Pasta was not eaten
- 2. Curry was a surname.
- 3. A takeaway was a mathematical problem.
- 4. A pizza was something to do with a leaning tower.
- 5. Crisps were plain; the only choice we had was whether to put the salt on or not.
- 6. Rice was only eaten as a milk pudding.
- 7. A Big Mac was what we wore when it was raining.
- 8. Brown bread was something only poor people ate.
- Oil was for lubricating, fat was for cooking.
- 10. Tea was made in a teapot using tea leaves and never green.
- 11. Sugar enjoyed a good press in those days, and was regarded as being white gold. Cubed sugar was regarded as posh.
- 12. Fish didn't have fingers.
- 13. Eating raw fish was called poverty, not sushi.
- 14. None of us had ever heard of yoghurt.
- 15. Healthy food consisted of anything edible.
- 16. People who didn't peel potatoes were regarded as lazy.
- 17. Indian restaurants were only found in India.
- 18. Cooking outside was called camping.
- 19. Seaweed was not a recognised food.
- 20. "Kebab" was not even a word, never mind a food.
- 21. Prunes were medicinal.
- 22. Surprisingly, muesli was readily available, it was called cattle feed.
- 23. Water came out of the tap. If someone had suggested bottling it and charging more than petrol for it, they would have become a laughing stock!
- 24. And the things that we never ever had on our table in the 50s and 60s: elbows or phones!