Meadow Flyer
Newsletter of The Oxford M.F.C.

Summer 2025

Andrew Longhurst winds his Link for the Under 25" Vintage Cabin class at the Spring Duration comps [Photo by Chris Brainwood]

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Editorial

I thought I might have a go at a couple of events at the Indoor Scale Nationals next April and in a break with tradition have started planning 10 months in advance, which sounds a lot but might turn out to be just enough time to get a couple of models built and trimmed, plus a spare if I'm lucky.

Haven't quite decided what classes to do yet but maybe two of Peanut, Intermediate Scale and Kit scale. I still have quite a few kits squirreled away, the challenge will be building one without giving in to the temptation to correct the outline – I might allow myself **one** adjustment and just take the hit of a 5 point static mark penalty.

In other news, I've had a think about submissions to the newsletter and on balance the best way of submitting articles is just to send me an email at *newsletter@oxfordmfc.bmfa.uk*, and send any pictures as attachments. You should be Ok up to about 20 MB, anything bigger than that and you can use a website called https://wetransfer.com – it's fairly easy to use, drop me a line if you have problems.

I *can* use submissions written with M$ Word but it's too clever for its own good and there's a significant risk that page formats, styles etc will be unintentionally imported along with the text, which will screw up the document it's copied to. I can work around this but it takes more effort and time to do so.

I'd like to thank Andrew Longhurst, Chris Brainwood, Colin Sharman, Dave King, Ian Melville, The Lurker, Simon Burch and David Lovegrove for providing content and services for the newsletter.

Chairman's Chat – Simon Burch

We've been enjoying some better weather over the past few weeks, and it's pleasing to see so many of our members taking advantage of it. The RC flyers had an excellent start to the season, with four new 'A' Certificate holders - including junior member Ryan Crews - and several people making good progress towards taking their tests. The free-fliers have been very active too; indeed, I've just returned from the Meadow after looking in on our well-attended Spring Duration competition. The weather was fine, and competition was close, although the wind was a little stronger than we would have liked - resulting in long walks to recover models. Our thanks go to Gary Law, Alan Trinder, Chris Brainwood and all those who helped to organise it.

As for my own activity, I completed my Bambina which I flew for the first time a couple of weeks ago. Paul Thomas and I had been looking at the RCME Bambino and Bambina as traditional-build models potentially suitable for RC flying at Begbroke; sadly, the Bambina is too fast for such a small site, certainly with the recommended 4-Max power train. Much better was a superb own-design foamboard delta-wing prototype demonstrated by Lewis Ellis at our May meeting but, for now, the plan only exists in his mind. He's promised to draw it once his A Levels are finished. Otherwise, one could do worse than Alan Trinder's Volantex 400mm foamie FW190, which looked so good in the air but, as an RTF model, you'll appreciate that it rather misses the point.

Finally, as some you already know, OMFC was recently featured in Arabella Warner's 'Oxford Sausage' Blog. Arabella is a former children's presenter/writer/producer, and now a freelance writer, who asked to feature the club and its activities. The club committee very much supported this, seeing it as a valuable contribution to the club's local profile - and aeromodelling in general - reaching beyond our usual circles. She is particularly interested in our free-flight scale activity, which she finds the most fascinating aspect of what we do. Here's a link to her feature, which focuses upon Alan Trinder, and we expect to see her at the FF Scale Competition on 12the July:

On Port Meadow with Alan Trinder and friends | The Oxford Sausage

3 pages on the Three Nite caper...one for each Nite! – Andrew Longhurst

David King recently confounded everyone by flying this flat wing machine in our club P30 comp. The Three Nite title refers to the speed you can build it (in the U.S.A "Nite" is an alternative spelling for Night, so Mrs Google says). Designed by Michael Jester its available as a short kit from Volare Products and a film of it flying is on YouTube at: https://www.youtube.com/watch?v=E0nvnJptVLU

In contrast to the subject model, I use loads of dihedral on my P30s because I think it costs you nothing as the 30 ins span limit is tip to tip on the live model so you might as well have plenty. Anyway, my shed is home to a box of half a dozen P30s. No problem therefore to use the fuselage and tail off one of them to test out the Three Nite wing.

Meanwhile this what the designer (Mike Jester) had to say about his reasoning:

"A free flight model airplane needs some form of dihedral in the wing in order to maintain roll stability. Dihedral prevents a free flight model from spiralling into the ground when upset by turbulence. Tip plates on the ends of the wing effectively provide dihedral and can also reduce drag by minimizing wing tip vortices. Early in my efforts one flier questioned whether tip plates would work on an outdoor model since its wing has a higher Reynolds numbers than the wing of an indoor duration model such as a Penny Plane. The Big Cat Embryo that is sold in kit form by Volare Products has vertical tip plates and is an excellent outdoor flier. My Flat Iron Embryo, which is my own design, also has a flat wing with vertical tip plates and is a very stable outdoor flier. So, I had little doubt that my flat wing P-30 would at least have marginal roll stability.

Many novice model builders have difficulty accurately and securely joining angled wing sections. Therefore, my idea was to have them build a flat wing, i.e. one that is all one horizontal section. The wing tip plates are cut from 1/16-inch sheet balsa wood and are simply glued to the outermost ribs of the single flat wing section. The flat wing of my P-30 measures 29 7/8-inches by 4 1/8-inches which gives it 123 square inches of wing area. This is right in the sweet spot recommended by John Oldenkamp. John was a long-time member of the San Diego Orbiteers and one of the originators of the P-30 event. The wing ribs have a Neelmeyer airfoil with a flat bottom. A thinner wing with undercamber would provide better performance but would be much more difficult for a novice to build and cover.

Many novices also have difficult accurately and securely mounting a single vertical fin to the aft end of a fuselage, or to the centre of a stab. The vertical fins of the stab of my beginner's P-30 can be easily and quickly glued to its outermost ribs. The stab of my beginner's P-30 measures 12 ¾-inches by 3-inches and also uses ribs with the flat bottom Neelmeyer airfoil. The vertical fins are each made of 1/16-inch sheet balsa wood and have a combined area more than double that of a typical single P-30 vertical fin. Therefore, I thought that the twin fins of my P-30 would provide adequate yaw stability".

Meanwhile free flight guru Sergio Montes *[Editor of Free Flight Quarterly - Ed]* had this to say:

"Mike Jester's design has unveiled a number of very interesting questions, which, in truth are not covered by the text of the article. The main one is the spiral stability of the model. It is true that, in, spite of its flat wing it retains a modicum of spiral stability, the question being what advantage does the flat wing confer to the model? Mike's experience is that the model flies successfully in moderate to calm winds but has not been sufficiently tested in harsher conditions.

You may remember Frank Zaic's famous book on "Circular Airflow" where he explored the stability of simple glider models under a varying set of conditions: the models had tip dihedral or flat wings, fins of varying shape, variable location of the CG which could move laterally from the fuselage. He found that stable, smooth flight could only be obtained with adequate dihedral and fins. Models would fly with other configurations, but in most cases could only do so by "skidding", that is model turns at an angle to the direction of motion, until one wing developed greater lift to counteract the stability problem.

Mike is concerned with making the Three Nite model as attractive as possible to newcomers of the hobby, thus the flat wing with no dihedral. True, but it seems to me that he is exaggerating the lack of building expertise in such modellers. Implementing a V-dihedral would take a minor modification to the spars at the centre of the wing, which would require just a cut and regluing at an angle of (say) 5 to 10 degrees or alternatively doing the same with tip-dihedral. No need to modify the wing-tip plates or the stab tip fins. Although the model will lose some of its distinctiveness, it will be far more reliable under realistic wind conditions."

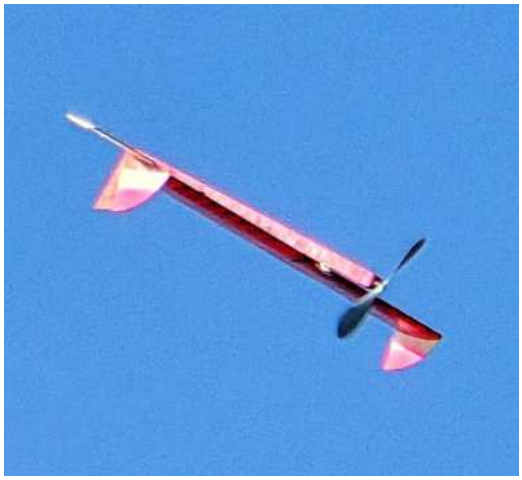
And so to the meadow with 6 strands of 1/8 loaded up in my bitza version of the Three Nite. On the first flight, elevation seemed about right. Gave it 300 turns upon which it circled rather too tightly to the right and ditto on glide. The thrustline was more or less straight, so I put a small length of 1/6sq on the left side of the fin. Same turns and it climbed straight but glided very wide right. Obviously very sensitive to adjustment.

On 600 turns it climbed straight, stalled, recovered, then circled tightly left not climbing owing to the angle of bank. Glide was as before. Tried some right thrust. Again, it stalled and went off left circling. Nevertheless, it climbed high enough for a good flight of about 1.30 with an excellent glide. Next tried adding a little downthrust. 800 turns and it stalled again and went off on a tight left banking circle as before.

I felt the 1/8 motor had more torque than it could handle so replaced it with 6st of 3/32. 1200 turns and it just repeated its left circle trick. Tried again with 500 turns and it went right no problem looking quite steady and smoothly into its wide right glide.

The left power turn on a right trimmed model may be generated by the prop-wash on the upper fin coupled with torque reaction. The original 3 Nite has twin fins so may be better in this respect. An underfin might serve the same purpose. However, standard dihedral P30s are not fazed in this way because they are more resistant to banking in the turn. I have seen this left power effect on a Buckeridge vintage model some years ago. Same size, plenty of dihedral, but three times the torque and a 14ins prop.

On the plus side, upon stalling the Three Nite had a safe exit to the left whereas it might have kept its wings level and dived in causing damage.



And now for the most weird and interesting thing of all. It has a DT operating a wing TE pop up. When this activates the model rotates onto its back and continues gliding as if nothing had happened! Never seen this before but here's a photo to prove it. The upside-down glide slope was of course quite steep but fairly slow, so might it not be enough to escape a "trash shifter", as the Americans quaintly put it.

The next time out on a sunny spring day at 18C with a 6mph breeze, I had the Three Nite wing now mounted on an underfin fuselage. Trimming it out we found it still ultra-sensitive to right thrust. This demonstrates the importance of the original twin fin stab for this layout. Nevertheless, we got a nice flight out of it lasting 90 seconds. Climb was not great owing to a rather over-tight right climb, but the glide was excellent.

What I couldn't understand is how these tip fins aid roll stability because the corrective force of a vertical tip surface must pass near the CG of the model and therefore have very little if any moment about the CG i.e. leverage. It follows that if this be true it cannot help right the model if it rolls into a spiral.

To prove this theory the 1/16th wing fins had to be removed. A pair of scissors performed the fin-ectomy to the accompaniment of derisive remarks from Jim. He nevertheless refused to take on my bet that it would still fly.

The result was that it managed a bit of a flight on low turns but next flight on five hundred, an initial climb to 20 feet was followed by it gently rolling in to the right. We tried a bit of left thrust but to no avail and it just rolled in again. It is therefore established that upright tip fins do indeed help to stabilise the model and I would have lost my bet. I just don't understand how and why tip fins work. Can anyone explain it?

Safety Thoughts – Simon Burch

Today at the Meadow, I witnessed an RC glider crash. Crashes are of course unwelcome but are accepted as part of model flying; however, this one was notable because it occurred less than 5m from the Patch pits area, and within 10m of club members and visitors. Fortunately, there was no harm done. But this was more down to luck than anything else.

I have no desire to point the finger at any one individual; it is all too easy to blame the person flying the model and to leave it at that. However, a closer analysis would probably show that this incident was part of a chain of events that could have been broken.

In such an analysis, it is important to look at all of the links; all those involved in an incident, either directly or on the periphery, need to take an honest look at what they did or did not do to help prevent it. In the light of this, we'll be looking at the club rules to see what we can do, in administrative terms, to make things safer. I've asked the flyer of the glider in question to provide us with his account of what happened to be included in the next issue of MF - with the aim of helping us all to learn the lessons, and I'll be taking a closer look at the chain of events that led to the incident.

In the meantime, if you see something happening that you consider to be actually, or potentially, unsafe, don't hesitate to speak up. Even if this only results in a discussion, your point will have been highlighted and everyone will be more aware.

If you have any suggestions regarding changes in rules or procedures that might help, please let me know; I'm particularly interested in hearing from those of you with experience at other clubs. If you have any safety-related stories or confessions that you think we could learn from, please consider writing an article about it for MF.

More Regulatory Changes Afoot!

Most OMFC members will, I'm sure, will be aware of impending changes to Civil Aviation Authority (CAA) regulations regarding model aircraft. 'Here we go again' I hear many of you say - with some justification; however, the impact of these changes will, for the most part, be minimal. My aim here is to set out the likely effect upon OMFC members operating their models under the BMFA Article 16 Authorisation. For those who might elect to operate their models under the CAA Open Category, rather than Article 16, the implications will differ. Perhaps surprisingly, there are some circumstances where this might be advantageous - but that's a subject for another time.

Returning to the main point regarding the CAA's latest proposals, the 'headline' impacts upon us are as follows:

1. If you fly models weighing 100g or more, you will need to hold a Civil Aviation Authority (CAA) Flyer ID.

2. From 1st January 2028, model aircraft weighing 100g or more will need to be equipped with a compliant Direct Remote ID (RID) module unless an exemption applies. As BMFA members operating under Article 16, you'll be pleased to know that we are likely to qualify for exemptions when operating at our flying sites.

For now, that's all you need to know. If you'd like to dig deeper, please read on.....

Background

The CAA's proposals are set out in its Consultation Reply Document, which is Civil Air Publication (CAP) 3105, published 2025. CAP 3105 covers many proposed regulatory changes, which are intended to: simplify the existing Unmanned Aircraft Systems (UAS) regulations in CAP 722; improve user education; enhance safety; and facilitate the development of the commercial Unmanned Aircraft System (UAS) sector.

The majority of these proposals are of little interest to us; however, the new Flyer ID and RID requirements certainly are. They have yet to be approved by the Department for Transport (DfT), but my guess is that they will be: after all, the non-specialist DfT is unlikely to oppose the CAA's recommendations. Nonetheless, it is important to understand that many of the details of these changes are still in development.

Flyer ID

Presently, you must hold a CAA Flyer ID to operate any model that weighs 250g or more. Under the new regulations this weight will be reduced to 100g or more, which means that those of you who fly only lightweight models will almost certainly need to obtain a CAA Flyer ID. Note that there are no longer any exemptions for BMFA Achievement Scheme Certificate holders. Those 'grandfather rights' have gone!

The process for obtaining a Flyer ID is not onerous and it's free. It involves an online test, it takes about one hour to complete and you can use reference material throughout; and the qualification is valid for five years.

There are two tests available: the CAA Flyer ID Test and the BMFA Registration Competency Certificate (RCC) Test. Both are legally valid, but I strongly recommend taking the BMFA RCC Test, because it is based upon the BMFA's Article 16 Authorisation - ie the rules that almost always apply to us. If you are unsure about how to obtain a CAA Flyer ID, please don't hesitate to contact me directly.

Remote ID (RID) Module

For those who are unfamiliar with RID, it is a method of transmitting the identification details, location, height, heading and speed of your model to other agencies and/or aircraft.

Presently, there are two types: Direct (or Broadcast) RID and Network RID. Direct RID is a short-range system that broadcasts the information directly from an on-board module, while a Network RID module is similar, but connected to a cellular network (eg phone network) which means that the information may be read by any agency using that network.

For now, the CAA is looking to mandate only Direct RID; however, longer term, the CAA will be looking to develop a hybrid system - ie a combination of Direct and Network RID. This is likely to be some years away so, for the foreseeable future, Direct RID is the way forward. It will soon become mandatory to fit a Direct RID module to any model weighing 100g.

RID Exemptions

You will be pleased to know that model flyers will be exempt from the requirement to fit a RID module to their model - provided all three of the following criteria are met:

a. The flyer is a member of an Article 16 Authorised model flying club (eg a BMFA-affiliated club like OMFC);

b. The model meets defined low-risk criteria - ie non-commercial, not a 'highly sophisticated' aircraft. (For now, we do not know what the 'defined low-risk' criteria are, nor what 'highly sophisticated' means).

c. The flight takes place within the bounds of a declared club model flying site.

The arrangements for identifying and registering club flying sites have yet to be decided. At OMFC, we would look to register Port Meadow, Begbroke Playing Field, Pinkneys Green and Wittenham Clumps. Those of us who enjoy slope soaring, or other impromptu flying, at unrecognised non-club sites, will need to fit a Direct RID module to our models if they weigh 100g or more. The impact of this will be felt mainly in the wallet but, for lighter models with no built-in electrical power supply, it will pose more of a problem.

Direct RID Module

Direct RID (or 'Broadcast RID) modules are already mandated in the US, EU and some other European countries. The US and EU have exemptions for model flyers that are similar to those proposed for the UK. A typical RID module weighs around 10-15g. Here's a link to the Spektrum site which gives details of its Sky Remote ID module, which has various connection options and requires a minimum of 3.3 volts to operate. It costs around $90

https://www.spektrumrc.com/product/sky-remote-id-module/SPMA9500.html

In theory, you only need one module, because it can be swapped between models. Some RID modules have built-in power supplies; clearly, these are larger, heavier and more expensive. As with most electronic devices, smaller and cheaper versions will no doubt come onto the market soon; indeed, Amazon is advertising a US-compliant module for $29 (not on sale in UK), and at least one 'bare bones' module weighing under 2g is being marketed. Certainly, my advice would be not purchase an RID module until the CAA has finalised its requirements, and manufacturers begin offering UK-compliant versions.

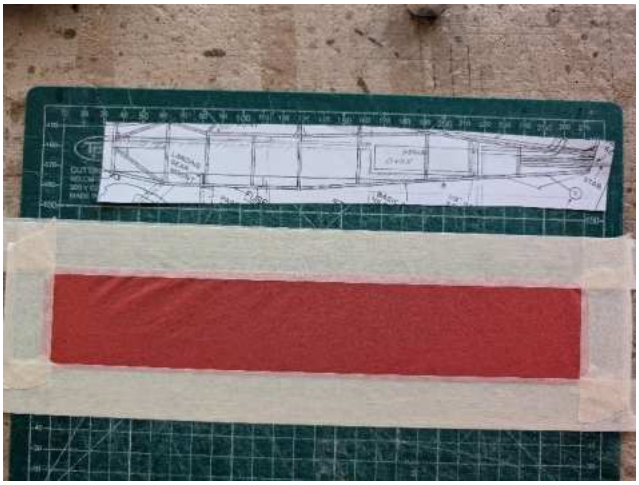
RID is yet another imposition upon our hobby and sad to say, it will be another cost and regulatory barrier for those starting - especially for younger people. Nonetheless, I remain hopeful that its impact upon our normal club activities will be limited. If, by any chance, you'd like to read CAP 3105 for yourself, here's a link:

https://www.caa.co.uk/publication/download/25025

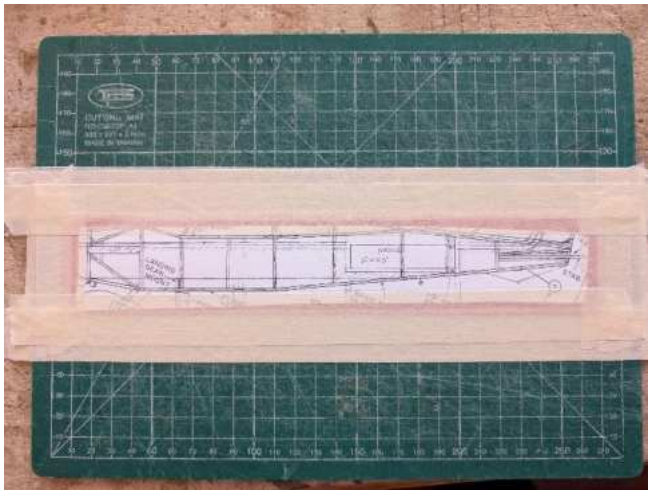
Decoration with Tissue – Andy Blackburn

I was recently asked by someone who didn't know the trick how to cut and accurately stick tissue to a model, so this is a quick briefing on how to do it. I'm using a peanut scale Bede BD4, partly because that's what I was doing at the time, and partly because it's quite a convincing demonstration of how small the lettering/decoration can be. I first learned of this from an article by the late Bill Hannan in a book called "Flying Scale Models of WW2" in the mid-1970s.

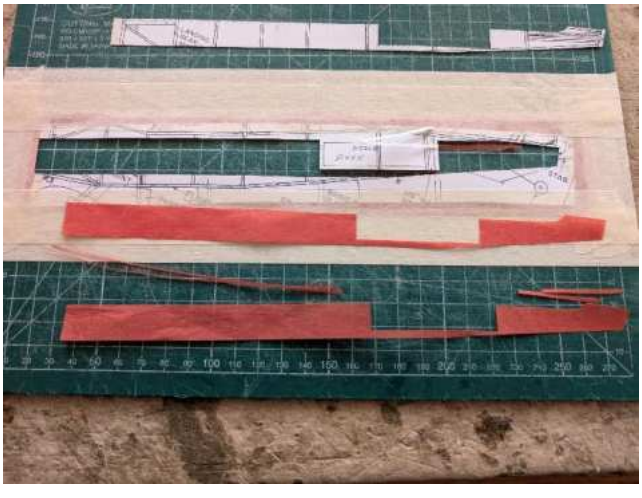
*The very **first** thing you'll need is a new blade in your scalpel. Don't muck about, just change it, even if it's "nearly new" because it'll make your life easier.*



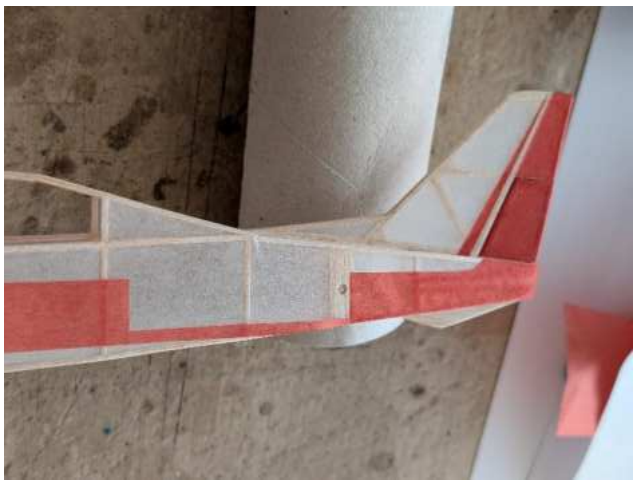
We're starting with the fuselage side trim. Draw the shape of the trim on a copy of the plan and tape down two layers of undoped tissue (one for each side). Some authorities suggest giving the tissue a coat of dope first, but I've found that this tends to get in the way of the application process. It might work for you though, so by all means give it a try.



Tape the pattern over the top of the tissue. This is why we needed a new blade; it has to cut cleanly through one layer of paper and two layers of tissue.

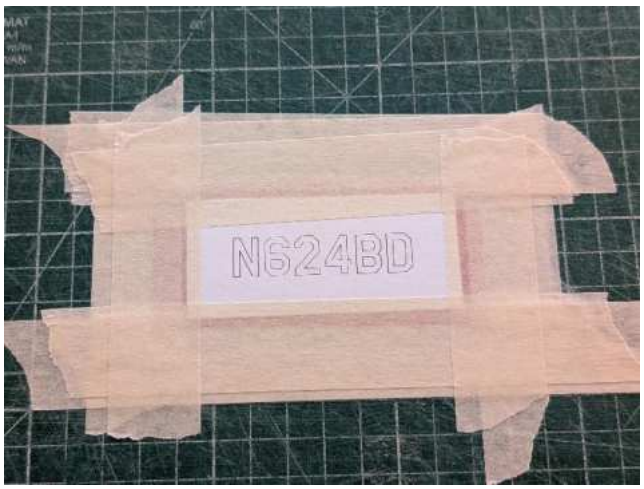


Cut the pieces out carefully with a steel straightedge, going past the corners where you can. This should be similar to what you end up with.



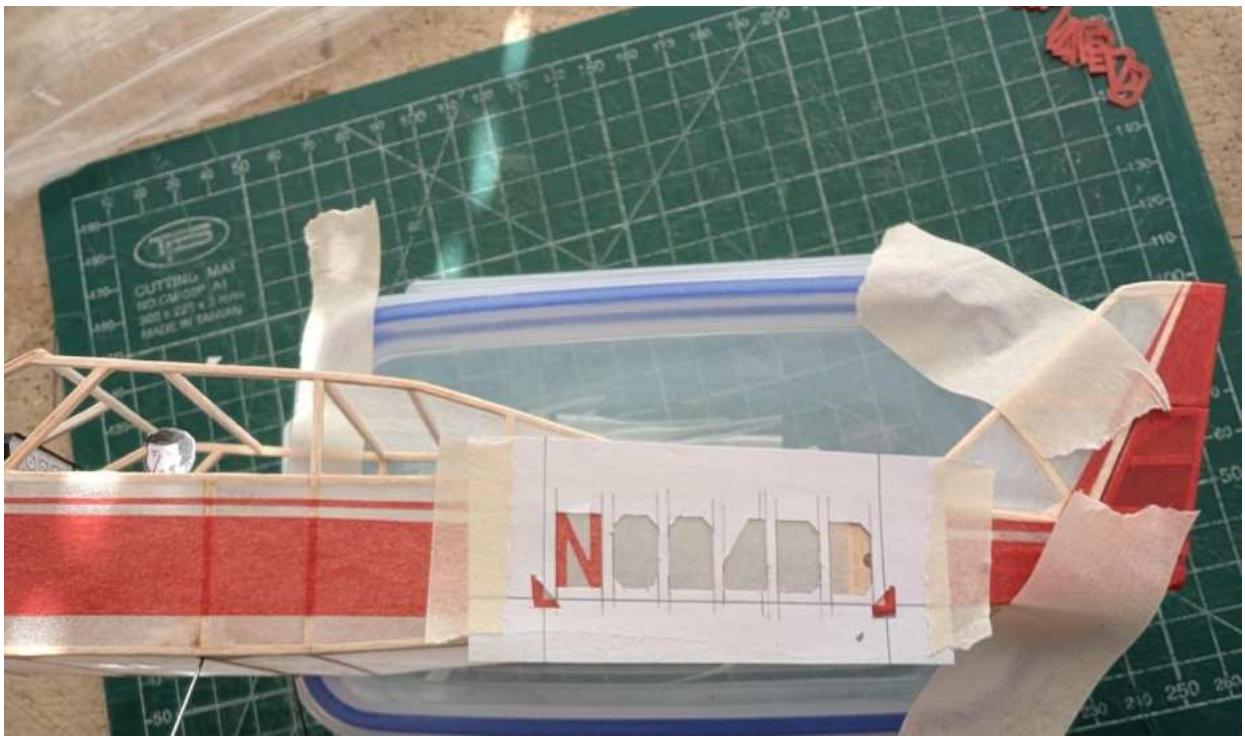
Support the fuselage on something suitable (tape it in place if you have to) and then carefully lay the tissue in place using a pair of tweezers. Use tiny bits of de-stickified masking tape to hold the tissue pattern in the right place, and then carefully touch a small brush loaded with thinners to one end.

When the thinners has evaporated (a minute or so) the tissue pattern will be stuck down and can be gently pulled flat whilst more thinners is applied. If a mistake is made, add more thinners, pull up the tissue and have another go. This is what the fuselage looked like at this stage.



On to the lettering. I use a CAD system but just drawing onto the paper with pencil is nearly as good. This is the two layers of tissue, and the pattern taped down.

The letters are cut out in exactly the same way as the less-complex patterns, but I've found that it's best to cut the middle out of the letters first, then do the 45 degree angles, then the vertical and finally the horizontal cuts. What you should end up with is a pile of tissue letters – be careful how heavily you breathe if they're just stacked on the bench!



The paper pattern that was used to cut out the letters is now used as a positioning guide (note how the corners have been cut off so that it can be positioned correctly). Position each letter with tweezers in your right hand (assuming that you're right-handed) and use a small brush of thinners to tack the letter in place; there's a second or two to adjust if required but if it turns out that the letter isn't in the right place, apply more thinners to lift it and have another go.

It doesn't take that long to stick everything down, the lettering will benefit from a coat of very thin dope (~25-35%) to seal it, and then you're done.

OMFC Spring Competitions – Chris Brainwood

The last week of May had seen some rather blustery weather so it was very lucky that the Spring Competitions on Port Meadow seemed to coincide with a brief pause in the strong winds. A calm start was forecast with wind increasing during the day and that is pretty much what happened with those able to fly early on in the day doing the best particularly with some of the classes with smaller models.

Peter Brown with diesel-powered vintage sportster.

Numbers were slightly less than expected, no doubt partly due to the increasing wind forecast but it was great to see some FF fun flyers with Paul Notley's towline gliders and Peter Brown filling the air with the wonderful smell of vintage diesel engines. Gary Law was CD for the 6 classes and did a great job keeping everyone in check and providing timers with the help of Alan Trinder. Most of the competitors arrived early so competition was started slightly early at 9:15am to take advantage of the lighter winds

Andy Blackburn launching his "Stickky" P30

The P30 class attracted 4 entries, all own design models, with all flyers doing times over 1 min in the first round with only Richard Fryer scoring a Max. Round 2 saw Andy Blackburn retire his model due to the increasing wind but both Richard and Andrew Longhurst scored maxes. Round 3 saw Jim Paton max with his OD model along with Andrew and Richard with a flight of just over 1 minute. In the end the scores were very close with Jim Paton coming third and Richard beating Andrew to first place by just 1 second

Meadow Flyer Summer 2025

Name	Model	1	2	3	Total	Pos
Richard Fryer	O/D	max	max	65	245	1
Andrew Longhurst	O/D	64	max	max	244	2
James Paton	O/D	61	65	max	216	3
Andy Blackburn	O/D	68	-	-	68	4

Max = 90s, Attempts 10s (unlimited)

Alan Trinder sorts out his E20

Simon Milan waiting for his E20 motor to start

E20 was by far the most popular class with 6 entries but the increasing wind speed and the inevitable long retrieves for other models saw only 3 manage to score times in all three rounds.

Gary Law, David King and Andrew Longhurst all managed one flight with David and Andrew both scoring maxes with their Dixielanders. Simon Milan put in three strong flights for third place with his own design E20 while Nick Peppiatt from the Crookham Club managed a max in round 2 to give him second place with his Ferry 500. Out in front though was Alan Trinder with two maxes with his SAM35 E20 and very deserved win

Name	club	Model	1	2	3	Total	Pos
Alan Trinder	OMFC	SAM 35	max	44	max	164	1
Nick Peppiatt	Crookham	Ferry 500	42	max	57	159	2
Simon Milan	OMFC	O/D	37	45	46	128	3
Andrew Longhurst	OMFC	Dixielander	max	-	-	60	= 4
David King	OMFC	Dixielander	max	-	-	60	= 4
Gary Law	OMFC		31			31	6

Max = 60s with 20 sec motor run, Attempts 10s (unlimited)

Paddy McMahon's Under 25” Vintage Cabin Flying Aces Moth

The Under 25” Vintage Cabin class saw 5 entries though my own Skokie didn’t even make it to the score sheet. Andy Blackburn unfortunately broke his Achilles bringing the flying scores down to 3 competitors. Alan Trinder did get 3 flights with his Achillies despite the wind and managed a very creditable 3rd place. At the top Paddy McMahon from the Peterborough Club with his FA Moth and Andrew Longhurst with his Link were inseparable both scoring 3 maxes. All the long retrievals had taken their toll and neither had the energy for a flyoff so they were awarded equal first place.

Name	club	Model	1	2	3	Total	Pos
Andrew Longhurst	OMFC	Link	max	max	max	180	= 1
Paddy McMahon	PMFC	FA Moth	max	max	max	180	= 1
Alan Trinder	OMFC	Achilles	43	25	15	83	3
Andy Blackburn	OMFC	Achilles	-	-	-	-	-

Max = 90s Attempts 10s (unlimited)

Paddy McMahon with Baby Lulu

Simon Milan launches his hi-start glider

36” Hi Start Glider was won by Paddy McMahon by just 3 seconds with his Baby Lulu from Simon Milan’s own design glider despite Simon scoring a max in round 2. Consistency was difficult in the conditions but Paddy showed it could be done. Gary Law managed a single flight with his 110% Gnome

Name	club	Model	1	2	3	Total	Pos
Paddy McMahon	PMFC	Baby Lulu	48	32	40	120	1
Simon Milan	OMFC	O/D	38	max	17	115	2
Gary Law	OMFC	110% Gnome	37	-	-	-	3

Max = 60s Attempts 10s (unlimited)

Catapult Glider had 3 entries. This is a class very new to me and the trimming is much more tricky than it first appears, well that’s my excuse anyway. I managed one decent flight in round 4 but I need to work on the transition from the climb. Alan Trinder did much better with his Oxcat scoring 4 flights of over 20 secs and one of almost 40 to give him 2nd place. Out in front though was Richard Fryer with a well sorted model that managed a max in the final round to give him first place

Name	Model	1	2	3	4	5	Total	Pos
Richard Fryer	O/D	35	19	20	20	max	154	1
Alan Trinder	Oxcat	25	28	27	26	38	144	2
Chris Brainwood	Oxcat	15	15	14	22	13	79	3

Max = 60s Attempt 10s (unlimited)

Dave King launches his Dime Scale BAT Monoplane built from a Volare kit, didn't enter the competition because of the increasing wind strength.

Classic Kit Scale was the class most affected by the increasingly windy conditions. There were 4 potential entries but David King's BAT monoplane didn't make it to the score sheet and after too many long retrievals Andrew Longhurst decided not fly his Auster AOP9. I tried several times with my KK Piper Super Cruiser and after a bit of bouncing around managed 12 seconds to get on the score sheet. the next flight ended in a re-kitting of the model leaving Andy Blackburn the clear winner with his peanut Whitman Tailwind. Andy put in just one 49 second flight early on before the wind really got going which proved that that was all that was needed

Name	Model	Bonus	1	2	3	Total	Pos
Andy Blackburn	Whitman Tailwind	30	49	-	-	79	1
Chris Brainwood	KK Piper Super Cruiser	25	12	-	-	37	2
Andrew Longhurst	Auster AOP9	-	-	-	-	-	

Max = 60s Attempt 10s (unlimited)

By 12:30 the wind had increased to 10-12 mph and it was decided to call end to the competition and a prize giving was held shortly afterwards. Thanks to Gary for a good mornings fun on the Meadow. The next meeting is 12th July for the FF Scale fly-in so stick the date in your diary

Letters

A letter has flooded in from The Lurker who – for those not in the know – is the editor of the Trinity Indoor Flyers newsletter; I have added emphasis to the relevant part.

Gentlemen,

While chewing over yesterday's Frogwell Flyer event with Steve H he said that he wouldn't be surprised if a Frogwell Flyer could break the minute mark. Given that Peter's winning model made a 52s flight I agree. Therefore, in the grand tradition, if not the grand scale, of Aeronautical Challenges & Prizes I am pleased to announce the Frogwell Flyer Challenge.

A prize to the first person to get Frogwell Flyer to, or over, the 60.0s mark, indoors from a hand launch, by the end of the December Trinity meeting. That is, one o'clock in the afternoon of the 13th of December 2025.

The flight must be independently timed and the model built in accordance with the dimensions on the plan and tissue covered, but modifications to reduce weight are permitted. The choice of propeller and motor is left to the challenger.

Reports of flights (any flight of 53s - see below - or greater, location and names of modeller & timekeeper) to be sent to the Challenge Sponsor (that'd be me) at the usual electronic postal address (cigwork@yahoo.co.uk). The winner will be announced as soon as possible after the result is received.

There will be a couple of bottles of beer for the winner and anyone other than the winner getting a time in excess of 59.5 seconds will win some confectionery. Prizes will be awarded at the January 2026 Trinity meeting.

In the event that no-one breaks either the 59.5 mark or 60s mark I'll drink the beer myself. No no no.... the prize will be awarded for first longest flight in excess of 53s.

The challenge is also open to OMFC & OFMAC flyers should they be interested. The Frogwell Flyer plan was published in the July 2024 Aeromodeller.

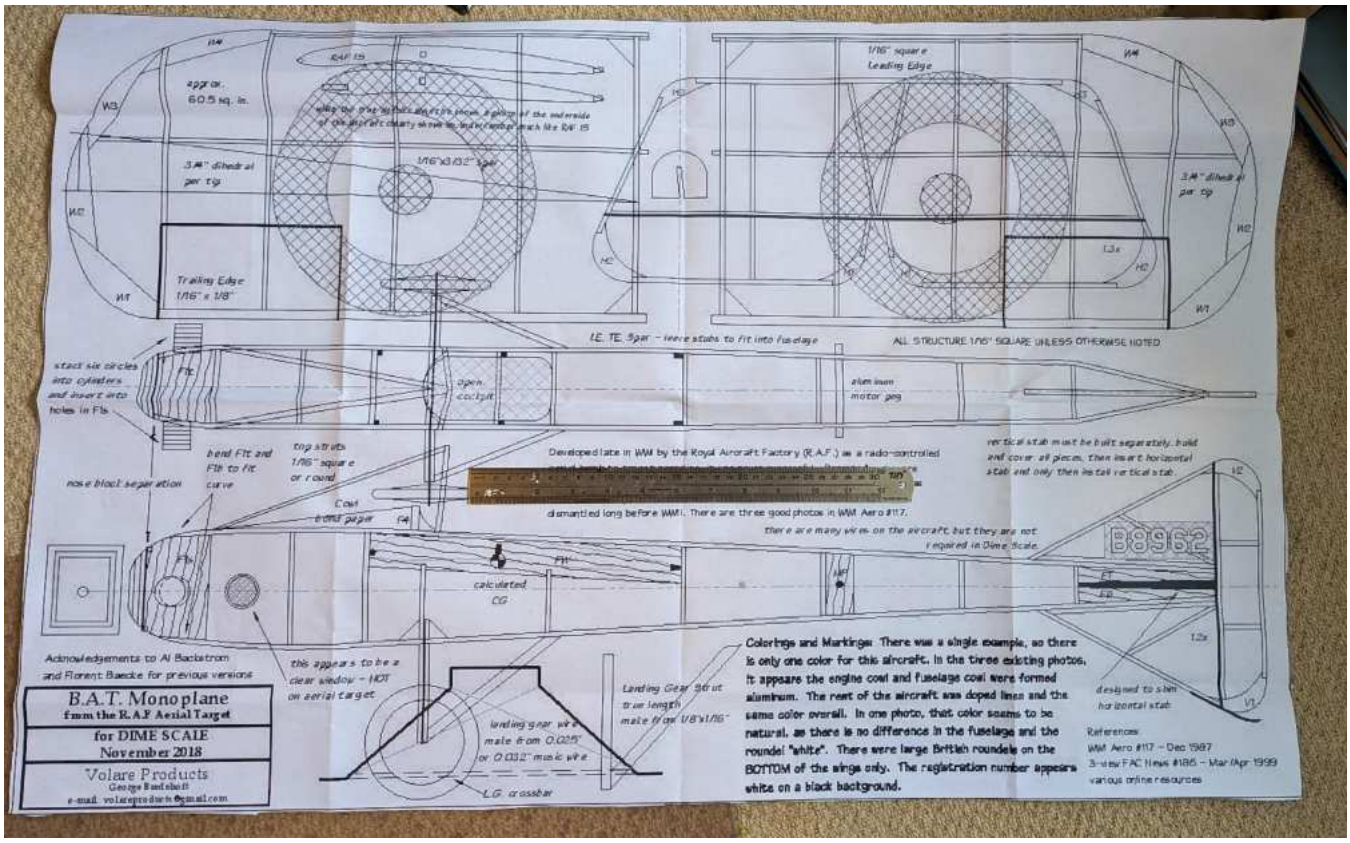
Cheers,

Lurk

B.A.T Monoplane Again – Dave King

Looking for a larger scale model for rubber The BAT seemed a good choice for a scale duration model. It has a large wing area with an aspect ratio of 4:1 and a long fuselage to give a decent motor length even with the rear motor peg moved forward by a bay (2 x hook/peg equalling 34”).

There is detractor for the design but *[Well, it’s really an unmanned aerial torpedo… 😊 Ed]* I decided to go ahead anyway. I had the dime scale plan enlarged by a really helpful copy shop in Abingdon who charged £12 including delivery.



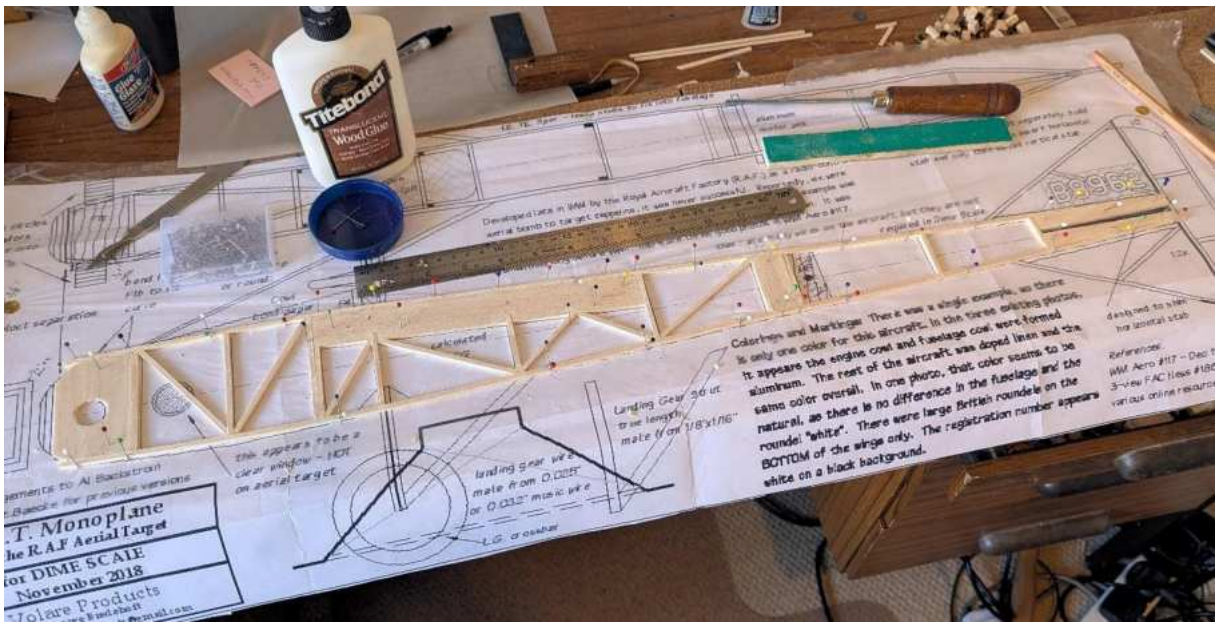
Already having built two dime scale, one peanut and a 28” version for a .5cc diesel I was conversant with the build and the alterations that would be needed for the larger model:-

1. Detachable wings and u/c for ease of transport
2. Laminated wing tips instead of cut sheet
3. D/t in case it flew even better that the dime scale.
4. Laminated wing tips

The dethermalizer required some thought but I decided on a tip up tailplane pivoting on a carbon fibre spar operated by a radio band burner.

Fuselage

The fuselage follows standard construction with sides being built over the plan from 1/8” sq and joined with two alignment formers before adding the cross pieces. Reinforcement was added for aluminium tubes to retain the removable u/c. A small box was built into the lower fuselage next to the u/c to house the D/T LiPo with the Rx/band burner mounted on the outside of the fuselage to the rear of the LiPo box.



Ply reinforcement was glued inside the fuselage to take the 14swg wing mounting wires.

The rear motor peg was positioned so that the indicated cg of the motor would be halfway between prop hook and peg.

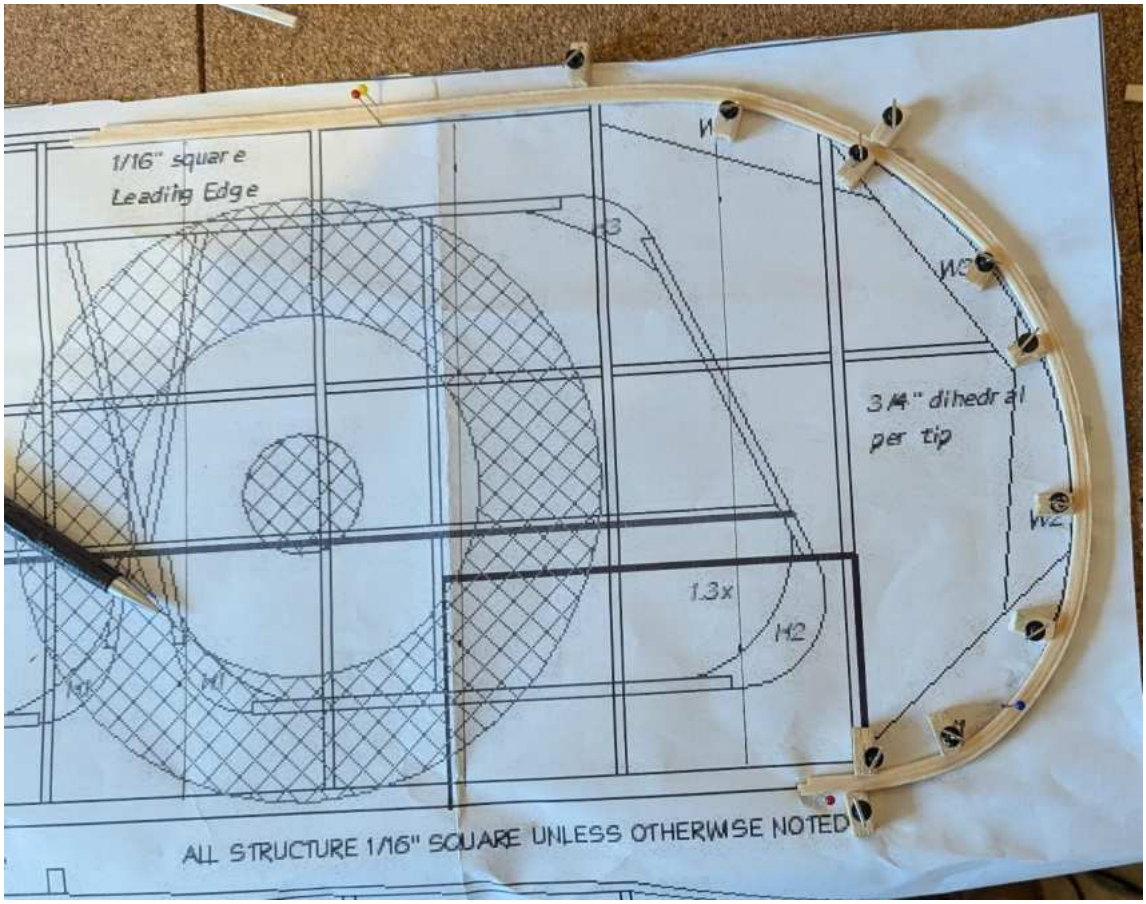
Prop

I had my first attempt at carving a large prop (12”) which, whilst not perfect, seems to look OK. Not being sure just how efficient the prop might be I wanted to make it interchangeable with a 12” plastic prop.

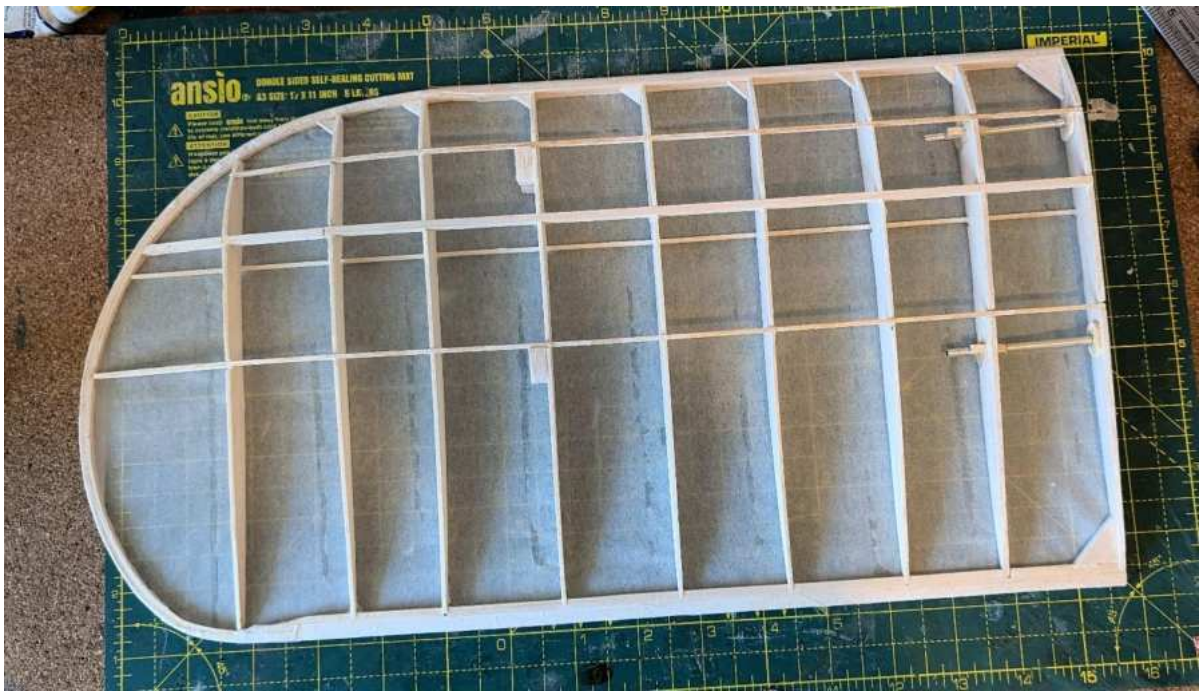
I decided to use the Doug McHard freewheel behind the prop which would allow me to grind a flat on the shaft in front of the prop and use a brass collet as a retainer. To make thrust adjustments I have used a Gizmo Geezer nose button.

Wing

I wanted to use the scale RAF15 section but when I downloaded it, I thought it was a bit thin to take to aluminium tubes especially as the outer end of the tube would need to be lowered by 3/16” to give the necessary dihedral. To that end I thickened the section slightly.



The number of ribs shown on the dime scale plan was doubled but still from 1/16”. Spars are 1/8”sq. The wing tips were laminated from 3 x 1/32 x 3/32



The first 2 ribs in each wing half have 1/32” ply reinforcement where the aluminium wing tubes go through with the holes in the second rib elongated downwards until the correct dihedral was obtained. The small blocks in the wing are for the small wire loops that will be anchor points for the rigging wires.

Tailplane

The tailplane was made in two halves and joined by a 2mm carbon fibre tube, with an aluminium tube in the centre which is epoxied in the fuselage allowing the whole tailplane to tip upwards to act as a D/T. A 1/32ply plate is fitted to the fuselage to hold the tailplane in the correct position for flight.

Fin and Rudder

The fin and rudder were built over the plan in 3 parts and glued to the fuselage once the tailplane assembly is fitted.

Undercarriage

The undercarriage was bent from 1mm wire with 1/16 fairings wrapped with tissue/cement . The wheels have a 1/32 ply core with 3/32 balsa each side and fitted with a brass tube centre.

Covering

Fuselage and wings covered with Asuka tissue and then shrunk and finished with Ezedope. The tailplane was covered, as an experiment, with lightweight Polyspan and also Ezedoped. I was going to cover the wings with Polyspan but decided that it just didn't give the torsional strength of doped tissue.

Assembly

The fuselage, without u/c, was fixed to the bench and blocked up level. A couple of jigs were made to go under each wing tip to give the correct dihedral and the aluminium tube epoxied into the wings.

Rigging

Rigging is black thick thread fixed permanently to the wings and attached to the fuselage with hooks/ rubber bands after wings are slid onto the wires, hopefully the rigging will have enough tension to keep the wings on the wires.

Finals

When rigged the empty weight before rubber is 145 gms (5.17oz) with the cg spot on at 38% chord. The wing area is 2.25 sq ft so the wing loading seems not too bad for a scale model at 0.435 oz sq ft. (unless my maths is wrong, which is not unlikely as I failed maths GCE).

No test glides or flights have yet taken place (as at 14th May). I think the motor will probably be 8 strand of 3/16 twice the hook/peg length.

Mathematics, Reliability and Performance – Andrew LongHurst

There was an interesting aspect of the flying at Port Meadow on Saturday. The under 25in rubber models and the P30s are usually powered by the same 10g motors. The under 25s have a smaller prop and smaller wing area and may be a couple of grams lighter. Consequently they climb faster, fly faster and glide less well. The glide makes a big difference to performance in that the 25inchers limit is about 2 minutes whereas a P30 might do more in neutral conditions.

Nevertheless, at our competition my 24ins Link and Paddy McMahon's 24ins Moth managed 3 maxes of 1.30 whereas my P30 and that of Richerd Fryer managed only two maxes and a one minute flight each. You might think this is serendipity but maybe it's not.

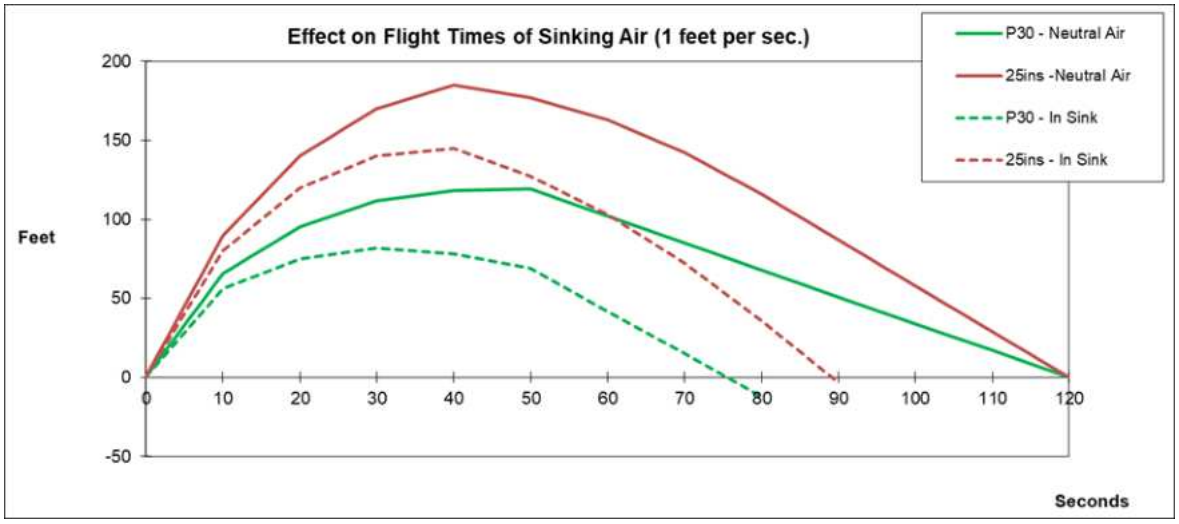
The challenge for both classes is how to lift 50g and keep it up there for as long as possible. We all know and saw it demonstrated that launched in sink *[I know how to do that - Ed]*, the target of 1.30 will not be achieved by a P30. Meanwhile two of my under 25ins flights were DTeed from height but one wasn't and just crept over the max by a few seconds.

Would this have happened had I launched my P30 into the same air? The answer is no, and I can say that with confidence because it's just maths.

In the Excel generated graph below we see the flight paths (solid lines) of a 25incher and a P30 which we are going to assume are both equally capable of doing 2 minutes. It then follows from that assumption that as the P30 will have a better glide it is not climbing so high.

The dotted lines then show what happens if we ask the computer to simulate launching into air sinking at one foot per second. The 25incher makes the 90second max but the P30 does not. It just shows that the more ballistic the trajectory the less it will be affected by downdrafts and therefore will be a more reliable method to achieve a max if that max is lower than the model's still air performance.

The opposite must also be true, rising air at the same rate will result in the P30 flying away but the 25incher will be down all right in a few minutes. It's all about how the gliding sink speed compares to the rising or falling of the air it's in.



Club And Other Local events, 2025

(Note that OFMAC Meetings are now back at **Berinsfield**!)

Club Meetings at Begbroke

Club Nights are held at Begbroke Village Hall, Begbroke Lane, Kidlington, OX5 1RN, 7.30 p.m. - 10p.m. Club business (if any) commences at 8 p.m., unless otherwise stated.

Wednesday 18 June 2025	**Club Night**: Fun flying on the Begbroke Field
Wednesday 16 July 2025	**Club Night**: Fun flying on the Begbroke Field
Wednesday 20 August 2025	**Club Night**: Fun flying on the Begbroke Field
Wednesday 17 September 2025	**Club Night:** TBD

Competitions on Port Meadow for 2025

Definitions:

The "Peterborough" bungee = 7.5m of 1/8" rubber and 22.5m of line.
TOTF = Total of Three Flights + Fly-off if required

Rules for all classes at https://oxfordmfc.bmfa.club/event-rules/

Meadow Flyer Summer 2025

Saturday 12 July 2025 **Summer Scale Competition** -Port Meadow:-

OMFC Scale Rubber Duration - max span 36" monoplanes, 30" multi-wing, no static judging, 90s Max, **best** of three flights + bonuses count. Flyoff if necessary. Rules at https://oxfordmfc.bmfa.club/wp-content/uploads/2024/10/OMFC-Scale-Rubber-Duration-Rules-V1.1.pdf
Flying Only – IC/CO2/Electric/rubber. Traditional rules, no static judging)
Hi-start Scale Glider – Peterborough bungee, Total of three flights, no static judging.
Frog Senior – 60s Max, Total of three flights

Rules for all classes at https://oxfordmfc.bmfa.club/event-rules/

Saturday 2 August 2025 RC Party Games + Fun-Fly + MIMLOCT:-Port Meadow:-

CD is David Lovegrove, competitions are TBD but are expected to include the legendary spot-landing game and may well include events such as RC Rudder-Only, Hi-Start Glider and other similar pastimes. Cloud Tramps may be launched from the FF area as this is MIMLOCT (Memorial International Mass Launch of Cloud Tramps) Day. Fun-flyers are welcome.

Saturday 30 August 2025 Autumn Duration Competition (Includes Southern Coupe League), Port Meadow:-

Vintage/Classic A1 Glider – 90s Max, total of three flights.
Vintage/Classic Glider – 60 inch span limit, 90s Max, total of three flights .
(For both the above, launch using either the supplied bungee (10m of 3/16" rubber and 40m of line) or a 50 metre towline, at the discretion of the entrant)
Coupe d'Hiver – Total of three flights, 90s Max.
Catapult glider – 60s Max, total of 5 flights
OMFC Scale Rubber Duration – max span 36" monoplanes, 30" multi-wing, no static judging, 90s Max, best of three flights + bonuses. Flyoff if necessary.
E20 – Total of three flights, 20s motor run, 60s Max

Rules for all classes at https://oxfordmfc.bmfa.club/event-rules/

Saturday 27 Sept 2025 **BMFA Scale Competition**, Port Meadow:-

BMFA Flying Only (IC/CO2/Electric/rubber) to new BMFA rules – includes some minor static + workmanship marks
OMFC Hi-Start Scale Glider – Peterborough bungee, total of three flights, no static judging.
OMFC Scale Rubber Duration - max span 36" monoplanes, 30" multi-wing, no static judging, 90s Max, best of three flights + bonuses. Flyoff if necessary.

Postal Events

V20 – SAM 35 rules, 2 rounds April 1st – June 30th and July 1st – Sept 30th. For rules see:-
https://sam35.org.uk/wp-content/uploads/Rubber-Vintage-V20-rules.pdf

Coupe/P30 postal – September 1st to October 31st. Total of three flights, 90 second Max, entrants submit three times to Max + unlimited fly-off time, all flights must be on the same day. Send your times to webmaster@oxfordmfc.bmfa.uk . For rules see:- https://oxfordmfc.bmfa.club/wp-content/uploads/2023/12/P30-and-Coupe-Postal-rules-v1.2.pdf

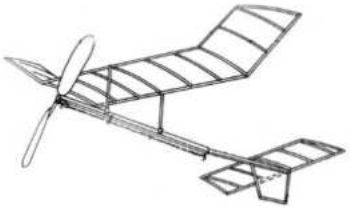
OFMAC

2024-2025 Season Dates

Indoor Model Flying

Funfly for all. Freeflight, rubber, CO2, Electric

Venue:
Abbey Sports Centre
Green Furlong
Berinsfield
Oxfordshire
OX10 7NR



Dates:

Sundays 09:00 to 15:00
6th October 2024
3rd November 2024
1st December 2024
5th January 2025
2nd February 2025
2nd March 2025
6th April 2025
4th May 2025
1st June 2025

Contact:
Ian Melville
07545158177
ofmac@redkite.aero

Contributions to the Newsletter

Please let me have your contributions by the end of August for inclusion in the Autumn 2025 newsletter. Anything aeromodelling-related would be of interest.

Send contributions to: Andy Blackburn at *newsletter@oxfordmfc.bmfa.uk*. As mentioned earlier, an email and some pictures is best; M$ Word documents are more work.

Advertisment