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

Christmas 2022

Snapshots at Scalefest 2022 that encapsulate the atmosphere of an enjoyable, thoroughly laid-back summer's afternoon, with the boys enjoying their toys! On the left we have a be-shorted Simon Rogers, holding forth in the midst of his mini-fleet. On the right is another shorts-wearing member, Gary Dickens, itinerant narrow-boat captain travelling the waterways of England, together with his applause-hating Jack Russell, Bobby-Joe. (pictures and text by David Lovegrove)

In This Issue

Editorial – Andy Blackburn

I'm not *quite* sure how I've managed to be sitting in the Newsletter Editor's chair, but as you'll know if you went to the AGM, David Lovegrove (the erstwhile editor of this splendid publication) has stepped into the role of Club Chairman. Since it was clear that David would have been extremely hard-pressed to do the newsletter as well, there had to be a change. I'll try and do a decent job.

This edition of the newsletter has been published a little earlier and is a little bigger than usual in order to communicate what's happening next year, and also to give people something to read over the festive season and – hopefully – provide some modelling inspiration over the Christmas holiday.

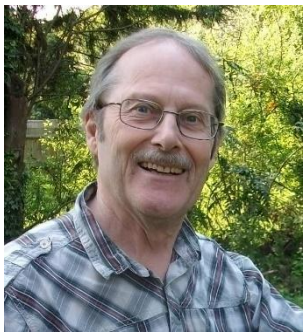
I'd like to thank David Lovegrove, David Thurling, Simon Burch, Dave King, Andrew Longhurst, Gary Law, Bill Dennis, Simon Milan and Mike Stuart for taking the trouble to put pen to paper and/or supply photographs.

Finally, I'd like to wish everyone a Merry Christmas and a Happy New Year!

Contributors to This Issue of The Meadow Flyer

I thought it might be nice for contributors to write a few words about themselves and provide a mugshot, if only so that they can be recognised on the meadow, so here are as many photos and mini-bios as I could get:

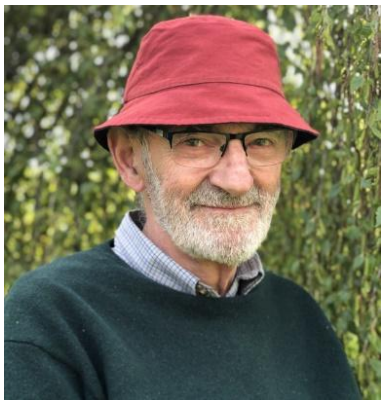
Andy Blackburn - Newsletter Editor. Likes rubber FF and Scale, dabbles in RC Warbirds, Slope/PSS & indoors (peanuts & kit scale, mainly). Started Free-Flight in the late 1960s with a Keil Kraft Hurricane (I claim 15 seconds with the silly plastic prop). Flew R/C from the late 1980s, initially power and then mainly slope soarers at Ivinghoe Beacon (with a few years off to do Full-size Gliding and then Road Saloon Racing). Went back to power models in the mid-2000s when we had a nearly windless year. It's been mainly Free Flight since about 2018, though. Other interests include motorcycling, motorsport, computer games, programming, wargames, military history, reading, photography, astronomy, amateur baking and very, very badly-played chess.



Andrew Longhurst My dad was a modeller of steam engines and boats but in 1956 he helped me build a KK Cadet glider when aged 9. God, it was a wonderful creation! So I got Bill's Eagle Book of Balsa Models and was able to build real planes myself and get great flights. One Saturday we called in at Poultons model shop and there was a notice in the window announcing the formation of a new club. A few weeks later I was thirteen and a proud member of Feltham and District MAC. I loved Free Flight but the club was mainly control line, so I spent the next two decades doing C/L combat, Rat Race and Team Racing. In the 90's I came back to Aeromodelling having done a lot of car racing with Mini Coopers and dived into Vintage rubber, power and glider becoming completely obsessed again. Thirty years later I am still doing that and writing about it for SAM 35 and Free Flight Quarterly.

Dave King. Main interest FF, outdoor and indoor. Flew RC for 40 years but reaction time unfortunately now really limits me to electric gliders.

David Lovegrove – Features Editor. Since early childhood, I've been a lover of all things aeromodelling, including free flight and R/C.



Simon Milan. Committed free-flight (mostly rubber and glider + occasional excursions into scale) dabbler/bodger - both indoor (in Shropshire) and outdoor (on the Meadow). Cut FF teeth on the Meadow in the late 1950s and it has been great fun ever since! Other interests include watercolour painting, singing tenor in our local aptly-named Riff-Raff Singers and playing bad acoustic guitar - oh, and the spoons!

Mike Stuart. Loves free flight scale, both indoors and outdoors. Has been building both plastic and flying models since the late 1960's and just never stopped, even during those difficult teenage years. Has a particular interest in airliners and ran the airliner special interest group for the International Plastic Modellers Society in the 1990's. Attended first indoor scale model flying contest in 1999 and got hooked, since when plastic modelling has very much taken a back seat. Other interests include membership of our local church (St.Mary's Shaw-cum-Donnington) where I look after the AV system, playing the Ukulele with the Newbury Ukulele Town Strummers (NUTS!), gardening and going for country walks.

Bill Dennis. I've been flying FF scale and duration for over sixty years and write occasional scale articles in Aeromodeller. That's a hot air balloon coming out of my ear.

Simon Burch spent the earlier part of his life as a Navy and RAF helicopter pilot, where postings to wild and windy coastal bases were ideal for slope soaring. This became his principal modelling interest, but he also built and flew electric powered models and flat-field soaring gliders. He's often to be found out on Port Meadow, mentoring our newer recruits. Career-wise, after leaving the RAF in 2010 and moving to Oxford, he works as a helicopter flight simulator instructor at RAF Benson.
Thanks to OMFC, Simon has re-discovered the joys of building traditional rubber powered models, but his primary interest remains RC sport flying.

Gary Law I am a lifetime aeroplane fan but joined the Merchant Navy as an engineer when I left school. After six years of chugging around a series of very similar oil terminals on BP tankers, I used those (barely) transferable engineering skills as a trauma and orthopaedic theatre nurse helping to put metal into people, until my recent retirement. I bought my first radio set in 1982 and learnt to fly with my then local radio club in Nuneaton before the days of A and B certificates. Free flight is my thing. I was hijacked into SAM 35 competition flying by one John Ashmole in 2017. I don't think that my models nor my flying had improved in over 40 years. I am not competitive at all but entering a few SAM competitions each year since then has focused my efforts with consequent improvements in my flying and building. Apologies for the mugshot that accompanies this, but Andy B says it's necessary.

Chairman's Chat – David Lovegrove

The Club's AGM in November was well-attended and saw a change of Chairman. A year ago, in the absence of anyone else being prepared to take the reins, David Thurling was rather reluctantly installed in that post. Reluctantly, because on stepping down the year before from his twenty-year stint as Newsletter Editor, he had made it abundantly clear he'd had enough of Committee involvement to last a lifetime!

Thankfully, his sense of duty got the better of him and he gave in to our trembling-lipped pleas to rescue the Club from the unknown perils of being rudderless.

Putting that slightly over-heated metaphor to one side, let's just say that as of Wednesday the 16th of November, yours truly stepped into the breach. Together with the support of my colleagues on the Committee, I hope we can continue to develop the Club's successful programme of events and competitions.

I must mention one or two other important matters. Junior Member, Lewis Ellis, having recently passed his BMFA "A" Certificate test, was presented with the 'Most Improved Member' award whilst Andy Crisp, in recognition of his outstanding contribution to the Club over many years, was given Honorary Life Membership of the Club. Well deserved, both of them, Lewis is at the start of his aeromodelling career and Andy, er, at the other end! But still going strong . . .

Now for two "In Conclusions":

In conclusion No.1 we have a digest of David Thurling's Chairman's Report at the AGM. He was insistent that it should appear in this issue of the Newsletter, as he was keen for his acknowledgments of various individuals' efforts to reach the wider membership. Aye to that. And I'd add that the Club owes him a huge debt of gratitude for the vast amount of work he's put in on our behalf over many years. Thank you, David, from all of us.

In conclusion No. 2 It's almost upon us – from the Committee and me, here's wishing you all a very happy Christmas and a peaceful New Year. May Santa and the weather be kind to us.

Chairman’s Annual Report to the AGM (A Digest) – David Thurling

This year has seen a welcome opportunity to focus more on normal club activities and has meant that we have been able to resume our club meetings both here at Begbroke and on the Meadow. All this has taken place in the context of a steady increase in membership numbers, including some very welcome juniors.

Our Begbroke meetings have included electric control line instruction, a static display competition for Kit Scale models, a large display of models built from Bill Dean designs held to commemorate the 100th anniversary of his birth, a hilarious Foamie Flyers event and talks by members on different model covering techniques.

Good use has been made of the Meadow, greatly helped by Gary Law's much-appreciated mowing and dung removal(!). Organised flying events have included our contributions to the BMFA's successful Centenary World Record Attempt and the international Cloud Tramp Mass Launch, plus free flight competitions for scale and duration models.

A new event this year was an Under 25" Vintage Cabin Postal Competition. The ideas, energy and enthusiasm of Andy Blackburn, ably assisted by Gary Law, Bob Lee, Alan Trinder and others, have been instrumental in making possible the numerous free flight activities, both at Begbroke and on the Meadow. Also assisting with RC flying instruction and subsequent testing, Simon Burch and Andy Stephenson have both done sterling work, for which we thank them.

I would like to offer my personal thanks to my fellow committee members for all their hard work and support. In particular, Bob Lee for his efficient secretarial work; Simon Burch for providing new members with a warm welcome and introduction to the Club; Andy Lauder for keeping our finances in good order and Chris Brainwood for modernising and updating our excellent website.

In conclusion, may I suggest you resolve to try something new in 2023? And if you know a member who hasn't yet got involved, do please encourage them to do so. Let's make 2023 an even more successful year than 2022.

What’s the Best RC Model to Fly at Port Meadow? - Simon Burch

Port Meadow at its Best!

This is a challenging, if not quite impossible, question to answer because every RC flyer has their own particular interest; if you want to fly a fast aerobat, you probably won't have much time for a thermal glider or a vintage cabin monoplane.

So, while I'm going to make some specific recommendations, my intention isn't to say 'you should go out and buy this model'; rather, it's to highlight criteria that you might consider when making your own choice, and perhaps to promote some discussion.

Of course, the views expressed here are mine; ask another flyer for advice and you'll probably hear a very different opinion. Indeed, I'd encourage those with different views to express them in another Meadow Flyer article; diversity of thought and opinion is welcomed and I'm sure that the editor would appreciate it.

This article is aimed mainly at the beginner or the improver working towards a BMFA Achievement Scheme ‘A’ Certificate, but I hope that others, including free-flight enthusiasts, may find some of it useful. Note that I’m confining my discussion to fixed-wing aeroplanes only; I’ll leave it to our helicopter and multi-rotor enthusiasts to contribute another article in due course.

Port Meadow – OMFC’s Flying Site

Port Meadow is a wide-open space and, as such, it's excellent for RC model flying. However, it's not perfect. For those who are newcomers to OMFC and/or Port Meadow, it's certainly helpful to know the Meadow's advantages and disadvantages when it comes to choosing your model and its associated RC equipment. Here are my thoughts:

Port Meadow - The Pros

a. **Size**. Port Meadow is a large site situated on broadly flat ground. Apart from a plainly obvious concrete bomb shelter, there are hardly any obstructions to worry about. In particular, there are no overhead wires and no masts. No public roads cross the site. Indeed, it's a former airfield and, as such, it's almost ideal for RC model flying.

b. **Surroundings**. Port Meadow is mostly surrounded by trees, but the size of the site means that they aren't usually a hazard to an RC model unless the flyer experiences difficulty in controlling their model. Certainly, beginners should take care; trees have been known to ensnare models which have been allowed to stray too far downwind.

In windy conditions, the trees can generate some turbulence, but it's usually mild; in fact, such conditions sometimes produce updraughts which may be useful for thermal gliding. The river to the west, and railway line to the east, are clearly places to avoid; again, neither should present a particular problem unless the flyer encounters trouble.

c. **Airspace**. Port Meadow is clear of regulated airspace and flight restriction zones. It's located close to Oxford City so low-flying military aircraft, which almost always avoid built-up areas and towns, are unlikely to be encountered - although a good lookout and listen-out should be always maintained especially for air ambulance and police helicopters which might cross the Meadow at low-level.

d. **Supportive Local Council**. OMFC has maintained an excellent working relationship with the local Council, and its staff have consistently supported our activities. Please do all you can to help preserve this relationship, since our continued use of the site depends upon it.

e. **Mown Patch**. OMFC has been granted permission to maintain a small mown grass patch on the Meadow. Imaginatively known as 'The Patch', it's about 30m x 30m. It's suitable for Rise-Off-Ground (ROG) take-offs and landings although, being grass of variable length, it's not suitable for models with small wheels.

Port Meadow - The Cons

a. **Size**. The size of Port Meadow is a feature that makes it ideal for model flying; however, while the RC flying area is only some 200m from the car park, the Patch is over 700m away. This is a considerable walk if you're carrying a model and associated paraphernalia.

This distance means that, if you are unfortunate enough to sustain an injury, you're likely to be some distance from immediate help. If you are flying a model that might hurt you, I strongly recommend that you (1) don't fly alone and (2) carry a mobile phone and small first aid kit.

b. **Surface**. Largely, Port Meadow's surface comprises rough, undulating pasture and coarse vegetation. In winter, large areas are sometimes flooded. Most of the flooding is gone by summer, but some of the ground remains soft and boggy throughout the year. Consequently, ROG take-offs are, for the most part, difficult if not impossible away from

the Patch, and trip-slip-and-fall accidents are always a possibility. Landings away from the mown patch, even good ones, carry a risk of damage to undercarriage, airframe undersides and propellers. Tailwheel models are likely to nose-over.

A DB Aerobat encounters one of the livestock-related hazards at the Patch

c. **Animals**. Port Meadow is grazed by cattle and horses, which can render the Patch unusable by occupying it. They also deposit manure and cowpats which affect take-off, landing and shoe cleanliness.

Loose dogs sometimes chase models and occasionally damage them. There are sometimes large flocks of geese, ducks and other birds; fortunately, they normally stay close to the river and don't usually bother us. Soaring birds of prey, especially the ubiquitous red kites, and seabirds may be used to indicate thermals and they'll sometimes join you in them if you find some rising air. I've never known birds to attack a model in the air at the Meadow, but I've heard of it happening elsewhere. Also, it's important to remember that, in accordance with Article 16 5.2, we must avoid endangering animals. Of course, animals abide by no such rules and there is always the chance that they might attack you.

d. **People.** Port Meadow is open to the public, and it's used extensively by walkers, dog walkers, joggers and picknickers. Two footpaths pass close to the Patch, which means that it's sometimes difficult to take off, approach or land without infringing the separation rules for uninvolved people.

The overwhelming majority of people are friendly and sociable; many enjoy watching the flying and will sometimes engage in conversation. If yours is a fast model that requires constant attention in the air, or if you are a beginner, beware of this potential source of distraction. Unfortunately, a tiny minority of people are quick to complain about our activity even when we are sticking to the rules.

Finally, in accordance with Article 16 5.2, we must avoid endangering people; however, there is always the chance, albeit remote, that a wayward model might harm an uninvolved person. Have a plan for this eventuality and familiarise yourself with BMFA Handbook Para 16.4.

e. **SSSI/SAC/Scheduled Ancient Monument Status**. Although the Meadow's conservation status doesn't directly affect our operations, there is a chance that it might be invoked in any effort to curtail or prevent model flying from taking place there - this happened at other sites.

So… What *is* the Most Suitable RC Model for Port Meadow?

It's difficult to define the precise characteristics of the ideal Port Meadow RC model, let alone recommend a particular model; nonetheless, there are some features which, experience has shown, make some models more suitable than others.

And although I'm going to make suggestions regarding these desirable characteristics, and specify some model types, it's important to understand that I'm not precluding other options; rather, my aim is to promote thought and discussion. I've split models into 4 broad categories: 'Prohibited'; 'Inadvisable'; 'Compromised' and 'Suitable' as follows:

a. **'Prohibited' Models**. There are some model types which fall into the 'prohibited' category for Port Meadow. Large models weighing over 7.5 kg are not permitted unless you hold an appropriate B Certificate and have Committee approval, and gas turbine models are not permitted at all due to the fire risk. Those models that exceed the noise limits specified in the rules are also 'Prohibited'.

b. **'Inadvisable' Models**. There are other model types that, while permitted, fall into what might best be described as the 'inadvisable' category. In this I'd place large, detailed scale models (particularly those with delicate retractable undercarriage); any model that is both large and fast; models that don't exceed the limits but have obtrusive noise characteristics (eg powerful 2-stroke glow motors); and pylon racers. Note that model aircraft racing of any kind is not permitted at the Meadow.

Clearly, a degree of judgement and common sense is necessary regarding these 'inadvisable' model types; indeed, some larger scale models could be well suited to the Meadow, especially STOL types like a Fieseler Storch or DHC Beaver, while small, fast models with longer take-off and landing runs might be more challenging to operate safely.

c. **'Compromised' Models**. The 'compromised' category comprises models which are in most ways suitable to operate at the Meadow, but special considerations are necessary. Examples of 'compromised' models are: bungee-launched pure gliders; towline-launched pure gliders; rocket-propelled models and First-person View (FPV) models.

DLGs – ideal for the Meadow, but the required launch style is...energetic

Pure gliders per se are excellent models for flying at Port Meadow; however, in accordance with the rules, bungee-launched gliders require two people to be present and a set of 5 flags placed to mark the area where the bungee is likely to fall after launch. Care must still be taken to ensure that walkers and livestock do not become entangled; neither is likely to understand the significance of the flags! Similar considerations apply to towline-launched gliders.

Fortunately, no flags are required for a towline launch; however, a particular hazard with towline launches is that the person towing the glider risks sustaining a trip and fall injury due to the uneven surface of the Meadow (this has happened). Rocket-

propelled and other reaction propelled models carry an additional fire risk especially in dry conditions, so extra care is required when operating them.

FPV models fall into the 'compromised' category because a competent observer, or a buddy-lead and additional suitably qualified remote pilot, is always required, and FPV models weighing less than 250g require CAA Registration because they carry a camera.

One model type that I struggle to categorise is the Hand Launch Glider (HLG) – in particular the Discus-Launch HLG (DLG). With no requirement for bungees or towlines, these are probably the best type of pure glider to fly at the Meadow; however, I must place them in the 'compromised' category because of their hand launch style is so energetic. For many of our members, this would rule out DLGs; for others, DLGs would be firmly in the 'suitable' category; indeed, if you are insistent upon flying alone, a DLG might be your best choice – there's no propeller to injure you.

d. **'Suitable' Models**. Apart from those listed in 'Prohibited' or 'Compromised' above, it's fair to say that the majority of commonly-flown RC models are, in most ways, suitable for operating at Port Meadow.

It's a Wide Choice, and It's Your Choice!

As a general rule, any model you choose to fly at Port Meadow should not be too large, heavy, noisy, fast or intimidating to the public. Regarding to this last point, it's a good idea to ask yourself 'how would an uninformed, and perhaps hostile, member of the public react to this model?' This is, of course, subjective and there are other factors which might influence your decision; for example, a model might be considered too large and intimidating to fly when the Meadow is crowded, for example on a summer Bank Holiday afternoon, whereas it might be perfectly acceptable on a dull November morning. Consequently, rather than listing the most suitable models by name or type, it's perhaps useful to look first at generic characteristics as follows:

a. **Construction**. Any method of construction may be used to produce a model that is suitable to fly at Port Meadow; however, the inescapable fact is that the majority of RC models that I see there are Almost Ready-to- Fly (ARTF) types built largely from foam (i.e., 'foamies'). With their more-or-less guaranteed good flying qualities, even those of us with lacklustre or non-existent building skills can possess a properly constructed, straight model that flies well.

Most foamies have damage-resistant structure, are easy to repair and fuss-free to operate. These characteristics make them ideal for those who are keener on flying than building, or those who want to go flying as quickly as possible. Even those who enjoy building find that foamies make ideal 'hacks' because they almost always fly nicely and, unlike a lovingly-built balsa and ply model, they will have had little or no emotional investment. This is important at the Meadow, because the rough surface, vegetation and contact with other hazards such as animal droppings mean that damage to a model's finish is common occurrence. With a foamie model, cosmetic damage matters little. A plastic moulded fuselage is recommended over all-foam because, although it's slightly heavier than foam, it's more resistant to surface damage and its extra stiffness usually improves the model's flying qualities.

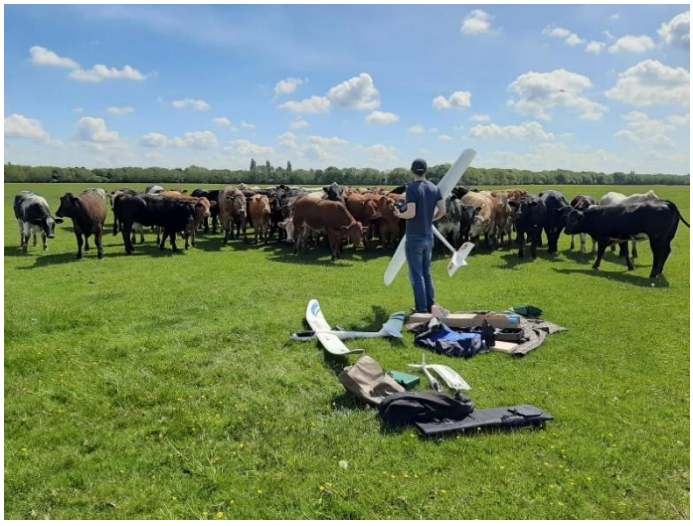
Consequently, with specific reference to construction, I think that foamie models are most suited to the Meadow. Please understand that I'm an old-school builder and I fully appreciate the advantages of constructing the model yourself; indeed, until quite recently, I'd never have

looked at a foamie model. Now, having flown a number of them, I can see their advantages especially for beginners and improvers. If you're a beginner, I'd recommend using one - from your first steps all the way through to your BMFA 'A' Certificate. It's a well-trodden path at OMFC. While you're learning, start building the model(s) that you really want to fly.

Before you rush out and buy a foamie, a note of caution about ARTF or Ready-to-Fly (RTF) models in general. If you're a beginner, don't be fooled by the manufacturer's marketing blurb along the lines of 'ready to fly', 'easy to fly', 'perfect for beginners', 'flies straight out of the box' etc. They are not always as well set-up as they should be, and even those models with the best flying qualities are still vulnerable to the classic beginner errors such as disorientation and allowing it to fly too far away downwind. I also strongly recommend that ARTF or RTF models are checked over and test flown by an experienced RC flyer. That way, you'll know that they are properly set up and thus avoid early disappointment.

b. **Size and Weight**. For model flying, and especially for beginners, a generally accepted rule is 'bigger is better'. This is because large models are easier to see at a distance and, being heavier, they have more inertia and are less susceptible to turbulence than smaller and/or lighter ones, and you'll be less restricted by weather conditions. However, at Port Meadow, the 'bigger is better' rule comes with a caveat. Remember that you'll need to carry your model and its associated paraphernalia some considerable distance from the car park so, in terms of weight and size, it's a good idea to ensure that it's easily portable. From the portability point of view, small one-piece models are desirable; however, it shouldn't be too small. Sadly, many one-piece models are too small for most beginners and improvers. Ideally, your model should be substantial enough to be fly acceptably well in a wide variety of weather conditions, large enough to be easily seen at a distance, but small enough to be easily transported to and from the Patch.

Personally, I think a good compromise is a model weighing around 1 to 2kg with a wingspan of around 1.5 to 2m. I also recommend a 2-piece wing, which allows the model to be transported across the Meadow in a more compact form. I usually carry my models across the Meadow dismantled in home-made boxes and bicycle panniers; others use a trolley bag or other type of wheeled cart. Many people use custom-made boxes.



Sometimes, not being confined to operating from the Patch is useful

c. **Undercarriage**. In my experience of flying at the Meadow, damage to a model's undercarriage is probably the most common reason for an early end to a flying session. For this reason, I believe that the best type of undercarriage is: none.

Instead, I recommend a hand-launchable model/belly-landing type. This type of model isn't tied to operating at the Patch; indeed, you can fly more-or-less anywhere within the RC flying zone. Not only might this mean a shorter walk, but you'll also be able to fly at times when the Patch isn't useable: for example, when it's occupied by livestock or picknickers, it's flooded, or the grass is too long.

An unusual problem occurred in 2020-21 when, during the Covid 19 pandemic, there were restrictions placed upon the number of people permitted to stand together at outdoor gatherings. The ability to operate away from the Patch meant that we could gather in small, well separated groups which enabled far more people to fly at the Meadow at the same time. Clearly, whilst we hope that nothing like this ever happens again, it can't be guaranteed.

Before buying a model with no undercarriage, it's important to note that, for the BMFA Fixed-wing Power 'A' Test, your model must be capable of carrying out a rolling take-off. This means that you are stuck with wheels – or perhaps a dolly arrangement. In this case, you should look for a model with reasonably large wheels (at least 2.5-inch diameter) with soft tyres and undercarriage legs.

Lightweight carbon-fibre legs are, in my experience, too brittle; look for thick piano wire or alloy. Banded-on legs are certainly worth considering, although these are usually found only on older model types. A tailwheel configuration is preferred because it's simpler and more suited to rough-surface operation.

d. **Power**. I understand the appeal of I/C power; however, for flying at Port Meadow Electric Power has too many advantages to ignore. It's quiet, relatively unobtrusive, flying times are unrestricted and far less paraphernalia is required. This final point is important because, as I've already mentioned, every item of equipment has to be carried some distance to and from the operating area.

For gliders, I'd also recommend EP with a folding propeller as a launch method over bungees or towlines for the reasons that I mentioned previously. Finally, if you're determined to fly alone, consider a model with a low-powered motor so that the propeller is less likely to cause a serious injury.

e. **RC Systems**. For most sport flying, the greater level of control offered by a 4-channel (aileron, elevator, throttle, rudder) model is preferred by most RC flyers. There are exceptions; indeed, some people recommend 3-channel (rudder, elevator and throttle; sometimes aileron, elevator and throttle) models for beginners, and thermal gliders are often flown without aileron control in order to save the weight of servos, cables and linkages. Finally, many vintage models use only 3 channels.

Of course, the choice between a 3 or 4 channel RC system doesn't affect a model's suitability for operating at the Meadow; however, the Patch is quite small about (20m x 30m) and, especially in the presence of people and livestock. Perhaps looking beyond the beginner stage, the ability to safely reduce speed, steepen your landing approach and shorten your landing run can be advantageous, and extra channels will enable you to do this.

Gliders in particular (and some other model types) have shallow glide angles; others have comparatively high approach speeds. To allow time and space for such models to descend on a more-or-less straight glidepath, a landing approach might need to be commenced at some considerable distance away from the landing point. For the flyer, increased distance can make orientation difficult, especially if the model is small, and he or she may be forced to over-fly less-than-ideal areas, people or livestock at low-level.

Landing approach aids such as flaps or other aerodynamic approach aids (eg spoilers, airbrakes, crow-brakes - see the Footnotes on the next page for an explanation of these terms), can ameliorate or resolve this problem. Of course, an additional channel, or better still 2

channels, would normally be required to operate them. While not strictly necessary for most RC training models, I would recommend that, if you can, choose an RC system with at least 6 channels and some computing power from the outset.

A couple of cautionary notes.

Firstly, despite their advantages, I recommend that beginners should avoid using aerodynamic landing approach aids described above; they are a complication that you don't need during the early stages of learning to fly. Only start to use them once you are fully confident with flying and landing your model in its standard configuration.

Secondly, assuming you opt for a model that's equipped with landing approach aids, or you program your 'standard' controls to perform this function, seek the advice of an experienced flyer. There are several pitfalls and setting them up properly can be surprisingly difficult; for example, you might find that you need an elevator mix to compensate for the trim change on flap activation (hence the recommendation to choose an RC system with computing power).

Note that aileron control features such as flaperons, spoilerons, and crow-braking will normally require two dedicated channels for roll control (See Footnote[1] for an explanation of terms).

Recommendations

A Phoenix 2000 V2. IMHO this is, for now, the single most suitable model for RC flying at the Meadow. Your opinion might be different of course!

Most types of model may be flown at Port Meadow; by type, I'm referring to the categories of RC model e.g. sport; aerobat; scale; etc. Almost any type of propeller-driven or unpowered RC model may be flown – taking into account the characteristics and considerations that I've mentioned. However, in my experience, the single most suitable type of model to fly at Port Meadow is an electric-powered foamie glider, with a blow-moulded plastic fuselage, 2m (or less) span, weighing around 1.5kg, with a 2-piece demountable wing. It should be

[1] **Flaps and Spoilers**.
Flaps are control surfaces that extend downwards at or beneath the trailing section of both wings, which increase both lift and drag. They reduce the model's stalling speed, allowing it to fly a slower approach with reduced landing speed and roll. They may also be used to provide more lift on take-off, thus reducing the length of the take-off run. Spoilers are control surfaces which rise upwards on top of the wing. They reduce lift, increase drag and allow the model to make a steeper approach without increasing speed.

For beginner/intermediate type models that are so fitted, fixed-wing power aeroplanes tend to be fitted with flaps while gliders tend to be fitted with spoilers and/or flaps, or perhaps 'crow brakes' (ie control surfaces that extend both up and down). Deploying flaps usually causes the model to pitch nose-up, whereas deploying spoilers causes the model to pitch nose-down, effects which may be counteracted by using an appropriate elevator mix. To save weight and complexity, many computerised RC sets permit ailerons to be used as either flaps or spoilers ('flaperons' or 'spoilerons'). Use this feature with care; in particular, 'flaperons' should only be used if the ailerons occupy the full length of the trailing edge.

hand-launchable with no wheeled undercarriage, and have at least 5 channels operating aileron, elevator, rudder, throttle and flaps (or other aerodynamic approach aid), and capable of basic aerobatic manoeuvres. A good example is the Club's Volantex Phoenix 2000 V2 - which, I think, is an ideal RC model for operating at Port Meadow. There are many other similar types; another good choice is the Park Zone Radian, but this isn't made anymore.

Semi-scale Foamie E-Glider (ASK28). Note the flaps on the trailing edge inboard section of the wings.

Certainly, this type of model won't suit everyone but, if you're starting out and gaining experience, an EP glider has some advantages. Flying mostly in silence, a glider's environmental disturbance is minimal - an important consideration for the Meadow. For the inexperienced flyer, a glider's ability to deliver extended flight times is a significant advantage; even when there is little thermal activity, a glider's shallow glide angle allows it to fly for considerable periods with the throttle completely closed. A 6-minute motor run can easily provide 20-30 minutes in the air, and if thermal activity is present flying times can be much longer. Four fully-charged batteries are normally enough for a whole afternoon's flying – indeed a whole day if there are thermals about. For the most part, the slower flying speed and more forgiving control response characteristics of most gliders makes them easier to fly than a standard sport model, although it must be mentioned that gliders have challenges of their own especially when flying under power. Most gliders are hand-launchable and have no undercarriage, so operations aren't confined to the Patch, and their folding propellers (fitted to most electric gliders) mean that they are less vulnerable to damage on contact with the ground.

I/C Powered Chris Foss 'Uno Wot' Trainer. These days, I/C is rarity at the Meadow – but the Uno Wot is a great choice

The drawback with an EP glider is that it can't be used to take a BMFA 'A' (Fixed-wing Power) Test – although it may be used to take an 'A' (Silent Flight Electric) Test which is sufficient to permit 'solo' flying at Port Meadow.

The Fixed-wing Power Test stipulates that the model must weigh at least 1kg and it must be capable of conducting a rolling take-off. Again, taking into account the considerations and characteristics mentioned above, there are a plethora of suitable 1.5m (or thereabouts)

span foamie trainers available.

One of our club trainers is a Max Thrust Riot V2, a type which has proved popular at OMFC – although its undercarriage is vulnerable to minor damage. Other popular models are the Ripmax Wot 4 foamie and E-Flite Apprentice.

If you are determined to fly an I/C model, and/or perhaps you have environmental objections to buying an EP foam model, it's worth noting that people have had success with traditionally-built balsa and ply models such as the Chris Foss Uno Wot, Chris Foss Wot 4, DB Tyro Major and Dancing Wings T40.

A vintage KK Scorpion on the Patch. Note how deeply the wheels sink into the grass [photo R Cowan]

Of course, many of the classic and vintage models such as KK Super 60, Junior 60 et al are eminently well suited to flying at the Meadow. While I believe that foamies have certain advantages, I have no wish to dissuade you from investing in a traditionally-build model.

If your heart is set on a scale model, then the STOL types that I mentioned earlier would be good choices; however, there's little doubt that almost everybody wants to fly a Spitfire, Bf109, Mustang or similar.

I can't recommend any of these types for beginners; however, for intermediate-level flyers there are some good options. Personally, I fly an old Balsacraft Spitfire MkIX (48 inch span; detachable wing) which has no undercarriage; instead, the radiators and oil cooler are reinforced for belly landings. I have flown it off-Patch with no problems although it's wise to remove scale features, such as wing-mounted cannons, that might snag on the grass. More modern examples are VMC 'Balsa Basics' series, and the excellent Cambrian Fun Fighters are also still available.

There are some superb scale ARTF foamie models available now; however, most of them appear to have delicate retractable undercarriages which would be vulnerable to damage at the Meadow. Of course, it would be possible to reinforce the structure for belly-landings, but this would add weight and spoil the model's appearance.

A left-field choice that you might consider is a flying boat. These may be hand-launched and belly-landed on grass but, when the Meadow is flooded, they may be flown from the standing water. If you do try this, please make sure that your model is electric powered so that you can't be accused of polluting the water and, in particular, avoid disturbing

waterfowl.

'Pond Baby' on Meadow floodwater. Fun, but challenging to fly

Indeed, if you see anyone who looks like a birder (long camera lens, spotter telescope, binoculars etc) then find another stretch of water. I've tried flying a tiny (100g) Dave Robelen 'Pond Baby' from floodwater but this proved very difficult to fly; instead, I'd recommend an electric-powered 'Das Ghosten Flugboot' which looks great, is considerably larger and is designed to land on water or grass.

Tailpiece

Please understand that what I've presented here is a very personal view, and my recommendations are somewhat at odds with my own preference for traditionally built models.

Nonetheless, I have to admit that electric-powered foamies are excellent models for beginners and I often wish they'd been around when I was learning. I'm sure I'd have spent far more time flying rather than building and repairing. Then again, I also realise that I would have missed out on the much more immersive model flying experience that comes with scratch-building, kit-building, flying and repairing. As with so many things in life, the choice belongs with each individual.

Keil Kraft Gypsy Half Size Wakefield – Dave King

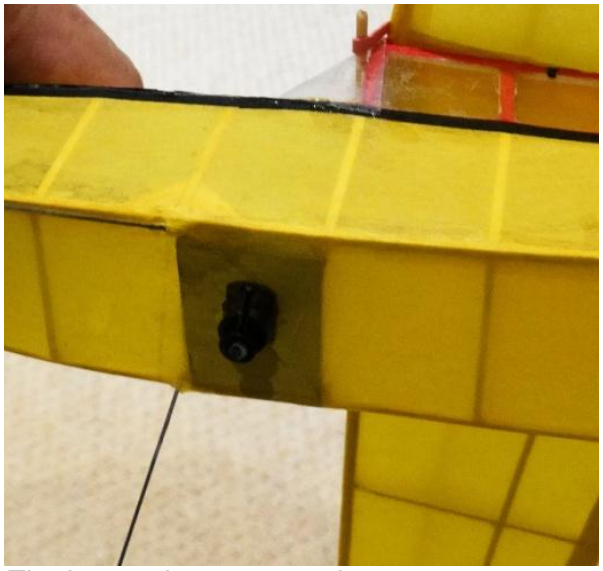
Whilst Andy Blackburn and I were talking at an indoor flying event the subject of a 50% Wakefield competition came up. This is a standard event at the FAC events in the USA and we thought it would be a fun event to hold at the Meadow.

Fired with enthusiasm I downloaded a plan and started work. I didn't know I was going to be asked to write about the build *[Oh, please! - Ed]* and so I didn't take any photos on the way through. When I finished building, I sent Andy a photo and he said, "why not write an article about ½ Wakes". Well, considering this is the only one I have built I anticipate there are several members who are far more qualified to do this. Unfortunately, Mr. Blackburn was unimpressed by this argument!

I chose the 50% KK Gypsy because (a) there was a plan for a 50% sized KK Gypsy on Outerzone (b) I had the full size some 65 years ago and (c) it was a simple and quick build.

Andy mentioned that he had been told that the airfoil section of some Wakes didn't work very well at half size. Looking at the times at the US FAC Nats, their times didn't seem so far removed from those of our recent "25 ins or less" vintage postal competition. In the FAC Nats, of the 10 fliers who completed 3 flights, 6 of them achieved over 60 secs on each flight with the single flight times going from 1 min 16 secs to 1 min 57 secs, which isn't bad for airfoil sections that don't work.

Tail locating pieces to keep fin in position



The button timer mounted on a 1/64" ply + 1/16 balsa plate

There is little point in discussing the build, it's a normal slab side fuselage with which everyone is familiar. I chose to use a putty button timer from Mike Woodhouse – small, light and simple (very much like myself – I thought I'd save you the trouble Andy!).

The streamlined wheels are 1 layer of 1/64" ply between layers of 1/16" balsa with an aluminium hub. The Plan shows an 8" prop which was lucky as I happened to have a nice white plastic 8" prop.

To give a bit of puncture resistance to the covering I opted for tissue over Mylar, the wet tissue being laid on non-shrinking clear dope.

The balance point shown on the plan is 1.25” from the l.e. and at this point my model is very slightly nose heavy, hopefully, when the motor is added the balance won’t be so very far out. Final weight without rubber is 30.83 gms, probably about 5 gms more than I would have liked for a 20” model.

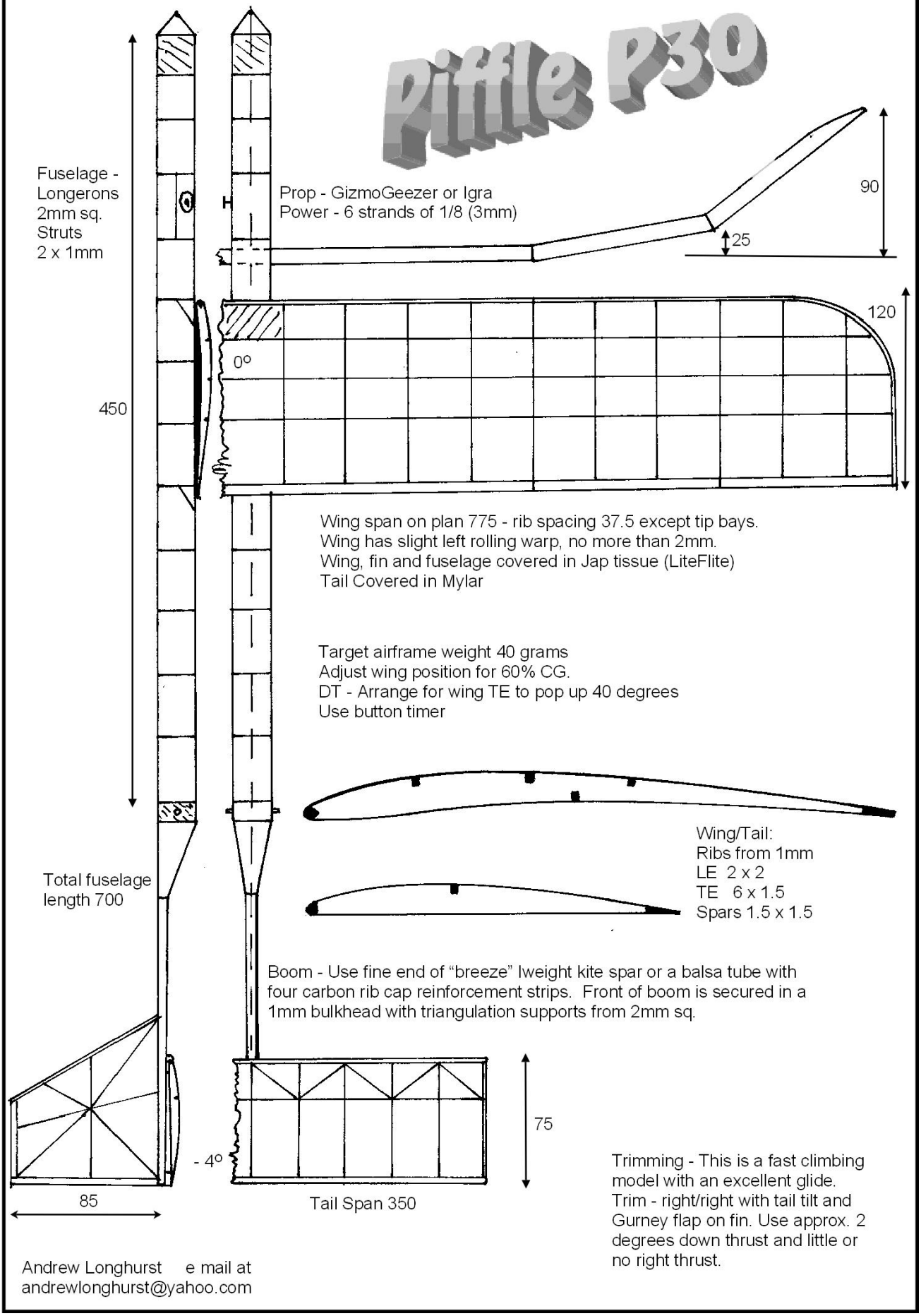
The Piffle P30 – Andrew Longhurst

Building and flying P30s has given me enormous pleasure since I built my first one in 1988. In those days we used the old black rubber and with a model weighing in at 60grams I was well pleased to do more than a minute. In fact, I can vividly remember the flight when I first did it. Tan rubber and lighter models got the duration creeping up and by the end of the century I was up to 1.40. I had the view then that P30s were easy to fly but very difficult to fly well. I loved building them, so I tried many different concepts. I was puzzled that my P30s did not climb better than my 24-inch Achilles which was powered by the same 10g motor. Believe it or not, I even considered building a larger and slimmer fuselage Achilles for P30 competitions. Must have been bonkers!

Then came a seminal moment, John Poole, a top flyer from Yorkshire advised me to build a John Godden designed JGP30 which had been published in Northern Area News and was all the rage up there. I took the advice and suddenly the trimming problems evaporated, and 2 minutes became routine. Its dynamics were just in another class to everything I had tried before. It’s no accident that the Piffle planform is much the same as the JGP30.

An excruciatingly painful sinus operation coincided with an edition of Free Flight Quarterly which was all about P30 design and this proved an absolute inspiration. In the two weeks I spent convalescing, I went into a frenzied build and fly mode which resulted in developing the JGP into the Piffle. This activity proved to be an incredibly efficient analgesic far better than the opiates the hospital provided!

Piffle P30



Andrew Longhurst e mail at
andrewlonghurst@yahoo.com

The rules require a model that will fit into a 30 x 30ins box with a plastic prop up to 9.5ins diameter, and we are not allowed to use variable incidence. So, we know the span, the length of the fuselage and the size of the prop. What else is there? Well, there is the chord which dictates the wing area and then there is the size and aspect ratio of the tailplane. That's about it but there is another factor affecting design, which is weight.

Lightness in P30s is hyper-critical. We have a minimum airframe weight of 40g (45g in the US). Every gram over 40g costs you 5 seconds in duration. Thoughts that a pylon on a tube fuselage yields competition credibility are off the mark if they cost extra weight. If they don't then it's fine…but they do. Actually, you can do without them. Where do you put the timer, you ask? In the breeze is the answer. I cut a section out of the top left longeron and glue in a Tomy with Bostic Clear All Purpose adhesive to replace the missing balsa, so it's half in and half out. But you can just stick it on top if you like.

Choose your wood carefully. Don't use any 3/32 strip that weighs over 1g for a 36ins length and .5g for 1/16. Use the lightest DT system that is reliable, 3 grams max. Make tailplanes really flimsy and cover with film. If the wing structure is balsa, you will probably need to use tissue covering to stiffen it, but development of strong plastic film continues apace.
Target weights are fuselage 14g, wing 14g, tail 3g Prop 9g – Total 40g.

With P30s, it seems to me that design choices in the end boil down to two alternatives. Firstly, you can use 100 to 105mm chord wing and cruise about on a low pitch Peck prop powered by 6 strands of 3/32" (1200 turns). Secondly, you can go for a 120 to 125mm chord and use a higher pitch Gizmo Geezer prop powered by the same motor, or 6 strands of 1/8" instead (950 turns). Which motor will depend on ambient temperature which has a surprisingly great effect on safe maximum turns and energy return. The two props mentioned are the lightest you can get but others work well enough. The built-in ramp freewheel is fine, but you will need a band to hold the nose-block in.

The Piffle is in the larger wing category and on a cold day the thinner motor may not lift it high enough to catch any lift going owing to the drag of the bigger wing. The fatter motor gets you out of the ground turbulence fast, often critical in cold breezy conditions. On the other hand, the motor run is relatively short. At an October 2007 competition held in very high barometric pressure and no wind, the Piffle managed to exceed three minutes in two successive evening flyoffs. I was flabbergasted but BMFA champ Chris Strachan, who won that day, said no, that's what they can do in perfect conditions.

If you don't use a pylon the incidence needs to go on the stab rather than the wing. This changes the flight attitude of the fuselage lowering the tail relative to the wing. The stab can also be mounted lower than the wing to take it below the wing wash. Anselmo Zeri said, "Never economise on tail area if you don't need to." So have a big stab but watch the weight.

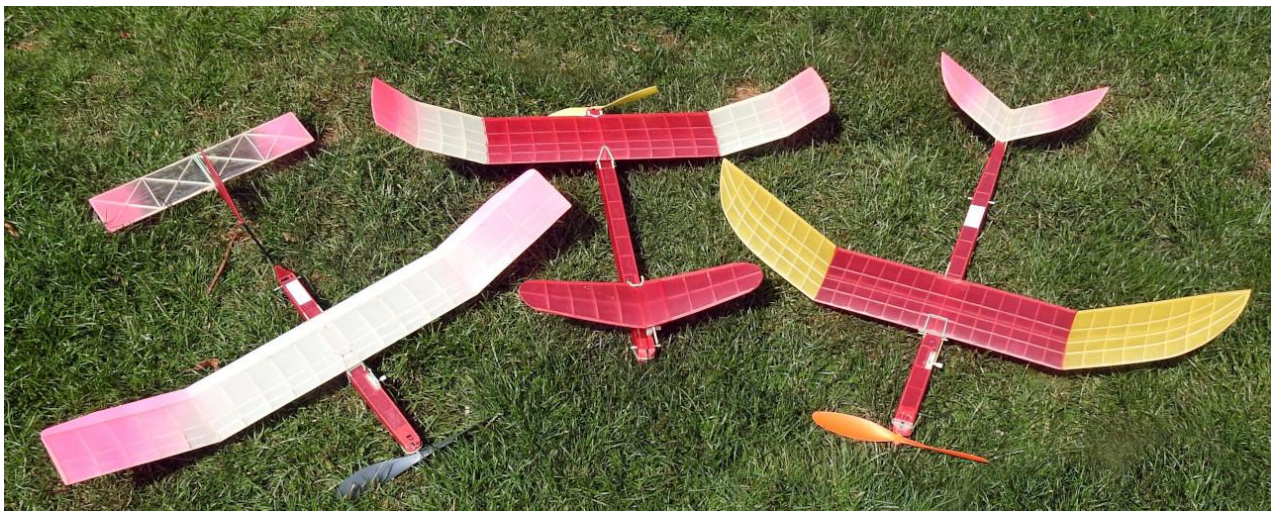
The photo on the left shows an alternative stick and tissue rear end with the stab

inserted through a slot.
The underfin shown on the plan is not essential, it just gets it out of the way of the tailplane mounting, especially if you want to use a pop-up tail DT. However, since the early days I have changed to a pop-up wing DT, BUT it's a pop-up TE not the usual LE. Reason is, P30s are so light they won't come down very fast with the usual wing stalled technique. With a wing TE pop-up of about 20 degrees, they came down in an inverted spiral dive. They hit the ground with right old thwack but because they are so light it does them no harm.

Wings will need to have thin slightly undercambered sections with some energising of the boundary layer and the lightest way is to use two or three top spars. The highest of those will take all the compression load so ideally it will need to be a bit deeper than the others. You might as well use plenty of dihedral because the 30ins applies tip to tip so the wing can be 31ins on the plan and then the application of three, four, or five panel dihedral brings it within the limit.

I have seen P30 exponents advocating the use of large angles of downthrust, but I don't know why. I believe the thrust line should pass approximately through the vertical CG position and that is a good guide. It follows that planes with pylon wing mounts will require slightly more downthrust. The only reason for using more than a couple of degrees is a fear of the model spiralling under full turns when trimmed in the usual right/right pattern. What you need is a bit of left rolling wing warp, about 1/8ins differential. Another trick is left up tail tilt which can be used if the correct thrust and rudder settings for the climb cause the glide circle to be too tight. The tail tilt has no effect on the climb but does steer on the glide and opens up the circle.

I hope I haven't given the impression that all P30s will be much the same. Below are some different styles I have tried. Left to right, a Benedek bird section wing, a canard and a V tail job. They all fly, and Canards have won the US Nats. So have Tailless models…twice!



Andrew Longhurst (2009 revised 2022).

OMFC Free Flight Duration Club Competitions For 2023- Gary Law

Sweet P30 built from a Spencer Willis kit [Photo A Blackburn]

Introduction
I think it's probably true to say that most model flying clubs hold competitions of one sort or another for their members. However, until last years 'postal' comp. for 25" rubber models, we did not.

OMFC is well known nationally, even internationally, for the 'Dreaming Spires Gala' and 'Scalefest' free flight competitions, run by Andy Crisp and Charlie Newman (assisted by Laurence Marks) held each year on Port Meadow. Both these events had run for many years prior to the Covid pandemic and were very well attended, and a number of our own club members would always enter. I hope that these events can be successfully resurrected in the near future.

[Bill Dennis will be running a Scale event in 2023, see Bill's piece later on, and the club events calendar at the end of the newsletter - Ed]

My focus, however, is on the provision of a short series of simple, free flight duration competitions for club members and perhaps a flying friend from outside the club, if you would like to bring one along (BMFA / BDFA membership essential, of course).

Although the idea is for a fun, social sort of gathering, as (a very inexperienced) Contest Director (CD), I want to keep the competition element alive. To this end, established sets of rules from the BMFA, SAM 35 and Peterborough MFC will be used so that the experience is one of a (gentle) competition, run on similar lines to SAM 35 events and where models would be transferrable to competitions held elsewhere. We will time-keep for one another to keep things simple.

Don’t switch off if you fly radio (ho ho) - modern ‘foamies’ and drones are a great way to get into the air quickly and with almost certain success. However, to build a model from a few sticks of balsa, a bit of wire and tissue paper is satisfying in itself, but then to trim it to fly successfully, the satisfaction is so much greater and so much cheaper!

Andy Crisp's classic "May Morning" design, seen at Old Warden [photo G law]

The advantage of belonging to a club like ours is the vast amount of help and experience available, so use that expertise, even if you normally fly radio; have a go at building a simple free flight model over the winter and enter one or more of our club competitions in 2023.

If anyone would like to build a traditional model, I am more than willing to help out with short lengths of wire, rubber, plans (downloading and copying), balsa, 1/32 and 1/64” ply, Eze Dope, cellulose dope, tissue (white only), mylar, polyester tissue, PVA glue (Evostik), smallish blue foam building boards (dented in places!) etc, in one model quantities. And if anyone would like a complete kit for Andy Crisp’s 12” wingspan, Oxcat catapult glider (including rubber and catapult handle); I can make one up at cost (two or three pounds).

Certificates will be presented for first and second places at the end of the competitions and myself and Andy Blackburn plan to bake cakes to share with competitors and spectators for ‘elevenses’!

The dates, times and formats of the competitions have been formulated with Andy Blackburn, David Lovegrove, Bob Lee and Chris Brainwood. Although the meadow can be busy on a Saturday, the relatively early start should ensure that parking is not a problem. We hope the range of comps. will encourage club members to enter at least one class. I will endeavour to enter all seven classes so just need one other person to enter each of the classes to make it a competition!

It is unfortunate that HM King Charles later announced his coronation would be on the same day as our spring comp. But with his positive connections to flight and flying, we hope that he will forgive us.

The Competitions

The original plan called for two dates, with three classes on each date. Andy B later came up with the idea of a scale duration class, which as the name implies combines both scale and duration. This is an interesting idea as scale competitions tend to focus on the scale aspect, Andy wanted to make the duration of the scale model more of a feature. So ‘scale duration’ has been added to the autumn competitions.

Andy has formulated some rules and I should really improve my scruffy build quality and produce a first (modest) scale model – although there’s no static marking, so it doesn’t really matter if it’s a bit scruffy.

Spring Competition: Saturday May 6th 2023
Briefing at 09:45, 10:00 start. 13:00 finish. Fly-off at 13:10 if necessary.

Class	Flight Time	Flights	Notes
P30 rubber	2 minute max	3	BMFA rules
36" Hi start glider	1 minute max	3	SAM 35 rules
Catapult glider	1 minute max	7	BMFA rules

Unlimited 10-second attempts are allowed with all three classes. (This is a 'tweak' of some rule sets for the sake of simplification). Competition flights must be 'announced' to your timekeeper before competition flight takes place.

Rules in Brief

P30 rubber
Max. projected span and total length including prop and DT system etc: 30"
Min. weight of model, less motor: 40g. Max. weight of motor, including lubricant: 10g, to be enclosed within the fuselage.
Any commercial plastic prop. 91/2" in diameter, freewheel may be modified and One blade can be lightened for prop. balance. No folding props.

36" Hi start glider
Wing span max of 36", measured tip to tip, not flat span.
Any glider: modern, scale, vintage, classic, scaled up or down, or own design.
Hi-start consists of 7.5m of 1/8" rubber plus 22.5m of line with pennant and tow ring, Hi-start fixed firmly into the ground. (Hi start is a low powered, mini bungee!)
Hi-start supplied by CD.

Catapult glider
Max. weight of rubber: 2g. Max length of handle: 6".
Any size of glider.
All competitors launch from the same, CD defined, 25m square 'box'.
Scores must be recorded at control after every three flights.

Autumn Competition: Saturday 9th September 2023
Briefing at 0945, 10:00 start. 13:00 finish. Fly off at 13:10 if necessary.

Class	Flight Time	Flights	Notes
Coupe d'Hiver	2 minute max	3	BMFA rules
Frog Senior	45 second max	3	Peterboro' rules
Rocket Plane Duration	1 minute max	3	Part Peterboro' rules
Kit Scale Duration	1 minute max	3	OMFC rules

Unlimited 10-second attempts in all classes (again, a little tweaking of the rules for simplicity).

If there is a *large* clamour of dissent in favour of 5 flights in Coupe (as permitted in The BMFA rules) then this *could* be changed.

Competition flights must be 'announced' to your timekeeper before the start of a competition flight.

Rules in Brief
Coupe d'Hiver
Min. weight of model less rubber: 70g. Max weight of lubricated motor:10g
Models of any design date will be flown against each other with no preferential points for older designs.

Frog Senior
A range of six 18" wingspan, rubber powered, semiscale models from the 50s and 60s.
They were kitted by the Frog model company and if built light, fly well. Flights of over one minute are achievable. See Mike Stuart's brilliant House of Frog web site for plans and details.
There is a 40% time bonus for the three more difficult models: Heron, Raven and Tomtit.

Rocket Plane Duration
Any size model, any size Rapier, Tendera or even Jetex motor.
Hand launch only. No catapults.
Motor must be held securely in place with wire clip or similar.
This is a 'test the water' competition!

Kit Scale Duration
Any scale model ever sold as a kit. Enlargements are OK, as is almost any reasonable structural or outline improvement. Colour scheme can be tissued but must be "in keeping" with the full size.
No static judging, just simple "Pass/Fail" judgement by the CD; workmanship doesn't matter, it can be as scruffy as you like.
The total score is the total of the three flights + up to 15 bonus points.
OMFC Website has a "How To Do It" article as well as the rules.

Summary

Chris Brainwood's Etienvre Coupe from a Hummingbird Model Products kit [photo C Brainwood]

Well, there it is! I hope these low-key comps fill a small gap in club activities and are of enough interest to tempt some of you onto the meadow to compete! Your building and flying will almost certainly improve as a result.

The selection of classes, from the simple catapult glider to the more complex Coupe d'hiver and everything in between, should provide something for everyone.

So for me: Plan A: Oxcat catapult glider, May Morning (36" Glider by Andy Crisp), Sweet P30 or Teachers Pet P30, Etienvre or Garter Knight coupe, Linnet or Redwing Frog Senior, Pelican rocket plane, Possibly 21" Keil Kraft Piper Cruiser for KSD. *[Wow! Kudos. – Ed]*

Oxford Scale 2023 - Bill Dennis

Next year the club will be running a FF scale event at Port Meadow. It will be open to those from outside the club but it would be nice to drum up support from within, other than the usual scale aficionados.

I know there are quite a few members who fly sport and vintage models so this short article is to show how the less-committed modeller can join in without the effort becoming onerous.

A Guillows Pfalz for rubber and a Veron Fury being converted to Telco CO2 [photo B Dennis]

The West Wings Puss Moth converted to small electric power [photo B Dennis]

The event will be essentially ‘flying only’ with a very small element of static judging based on realism. No documentation will be needed so you can concentrate on flying performance, but Tomboys with roundels will not be allowed! How can we achieve this without committing to more effort than we really want to?

You will probably already be aware of the Outerzone website which has a vast assortment of plans free to download. Another good site is hippocketaeronautics which has a plans gallery that is easier to navigate. Between them you will almost certainly be able to find something that suits and will not tie you down to weeks of building.

Once you have found something likely, you may well want to re-size it. If so, I can recommend a printers in Stroud called James and Owen. The first time I used them I could not believe how cheap the job was. Email them the file with instructions on the percentage size you want and you will get the prints in short order. Then phone them and pay. Postage is cheaper if the plan is folded and not rolled.

If you are a rubber flyer then a very quick and easy route is to pick one of the Keil Kraft or Veron kits, preferably a high wing design, and enlarge it 150%. Keep the weight down with a tissue finish and you will do very well. The KK Auster Arrow flies nicely, as do the Pipers. Another good route is with the many designs of Earl Stahl; they all fly well.

This is a KK Lysander blown up 200% (36”) for a small diesel. Don’t go bigger or you will need more ribs and formers. [photo B Dennis]

All Earl Stahl designs go well and can be built quickly. This is the Stinson L-1 Vigilant [photo B Dennis]

Power flyers could do worse than the KK Piper Super Cruiser which is a fine flyer, albeit with a lot of parts. Diesel models in particular often benefit from enlarging a bit because many of them are overpowered as designed.

But for the fastest build I have ever come across, nothing beats the Aeromodeller Fokker EIV which I managed to produce in five days! Unfortunately this is one plan not on the websites given above, but I can supply a copy if required.

The KK Piper Super Cruiser is a light, slow flyer for a small diesel [photo B Dennis]

Andrew Hewitt with a Fokker EIII. This one took more than my five days! [photo B Dennis]

There you go. You should be able to be competitive in a couple of weeks, so why not join in?

Hi-Start Gliders (and What Could be Simpler?) - Simon Milan

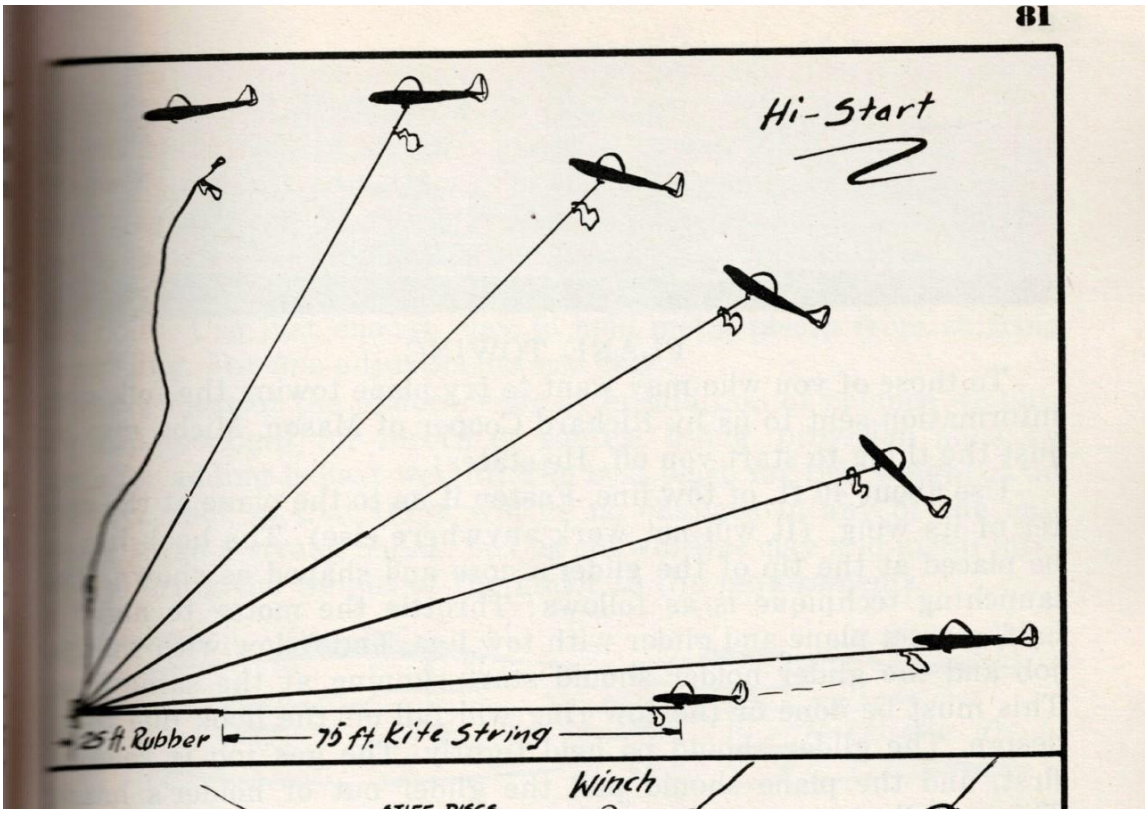
Herewith my intro to the simplicities and joys of “Hi-Start” gliders. My bona fides for doing this are that I designed and built my first Hi-Start after reading Peter Michel’s excellent article in the July/August 2013 issue of the Aeromodeller. With this model I managed to place 1st and 3rd respectively in the 2017 and 2019 Dreaming Spires Hi-Start contests – though I don’t recall there being vast numbers of entries!

My Hi-Start circa 2013 (it’s since been both OOS and in the Canal) [photo S Milan]

However, because such bona fides are really pretty limited, I have borrowed much of what I write from Peter Michel’s article (reproduced with Andrew Boddington’s kind permission), and from Andy Crisp’s January 2022 Free Flight News article on his Windrush Mk 2 Jedelsky-winged Hi-Start model.

Accordingly, at this juncture I would make the point that if you have access to these two articles you need read no further, as they will tell you all you need to know! For those who don’t, please read on.

First a bit of history…. According to Frank Zaic’s 1941 classic “Model Glider Design” Hi-Start launching (i.e. a fixed towline consisting of 25 ft of rubber and 75 feet of “string”) was simply one of a number of alternative ways of launching any towline glider, rather than being a “class” in itself.



How it works from Frank Zaic

Hi-Start was seemingly imported into the US from Germany and Frank Z claimed that *"By using light rubber, the tow is fairly slow and glider has no trouble in reaching altitudes equal to length of string*(sic)". Furthermore*…."Hi Start is especially fun in calm weather. By progressive adjustments you can make the glider circle back to you at the starting line. It is thrilling to watch your ship climb up and automatically take care of itself, especially if you are reluctant to run".* Hands up all those past their first flushes of youth!

So, to bring matters up to date, it was, I believe, Peterborough MFC who laid down the contest rules for Hi-Start launched gliders in the UK about a decade or so ago. They're not (yet?) a BMFA-recognised class, but this matters little…

The rules are very simple: A "Hi-Start" glider is <u>any</u> glider of maximum 36" projected (tip-to-tip) span launched by a towline consisting of 7.5 metres of 1/8" rubber and 22.5 metres of line. For the sake of thoroughness, I should, perhaps, point out that the SAM 35 and SAM 1066 contest rules <u>only</u> permit models from the Vintage (pre-1951) and/or Classic (1951-1960) eras to be flown in their Hi-Start contests, but this need not bother us for OMFC events.

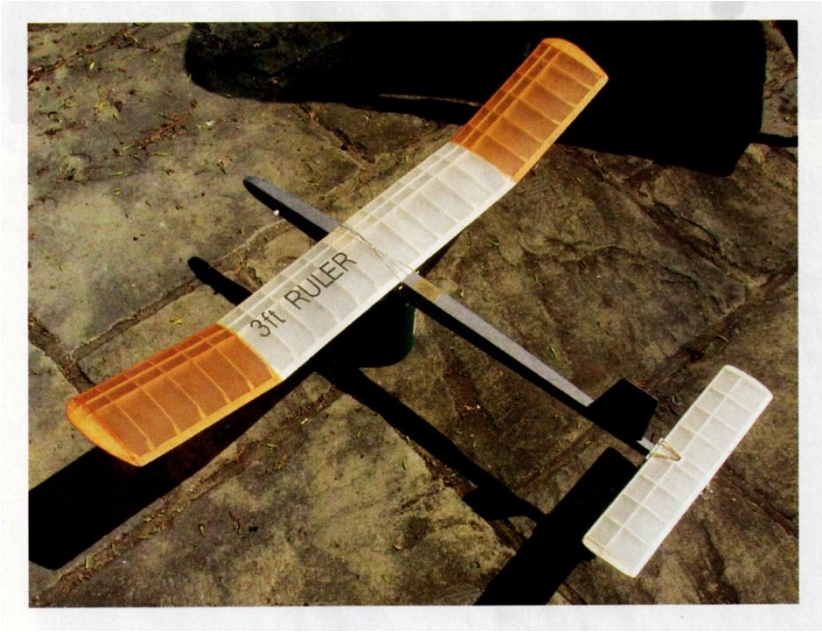
To continue…. The glider is hooked on to the line (string!) end of the towline, the other rubber end usually being fixed to a stake in the ground – or in Andy Crisp's case to the handle bars of his bike! As Andy says:

"Operation is delightfully simple. You hook the model to the tow ring, walk backwards stretching the rubber as far as you dare, aim into the wind and release. If all goes well, the model will rise to the top of the line, perhaps hunt a bit, then release itself, as if by magic, to fly free". Of course, the stretch required depends upon the wind strength. Dead calm is a no-no

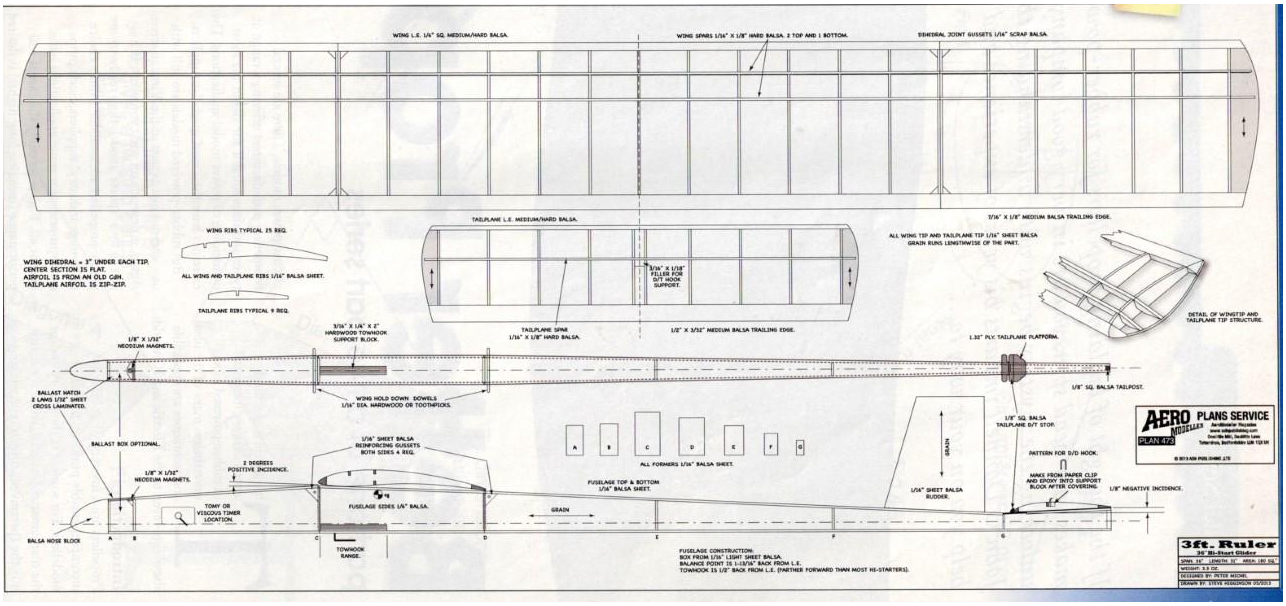
[sorry, Frank Z, he's right!]. *The model will just flop off the line a few feet up. The ideal is about 5 mph, whatever that is in m/sec!"*

More of this launching business later….

So… suitable models? The possibilities are endless. They can be vintage, modern, scale, kit, o/d or an existing design scaled up or down. I loosely based my Hi Start on Peter Michel's "3ft Ruler" which featured in his Aeromodeller article, as although I like designing my own stuff I needed a reliable starting point.



Peter Michel's 3ft Ruler [photo S Milan]



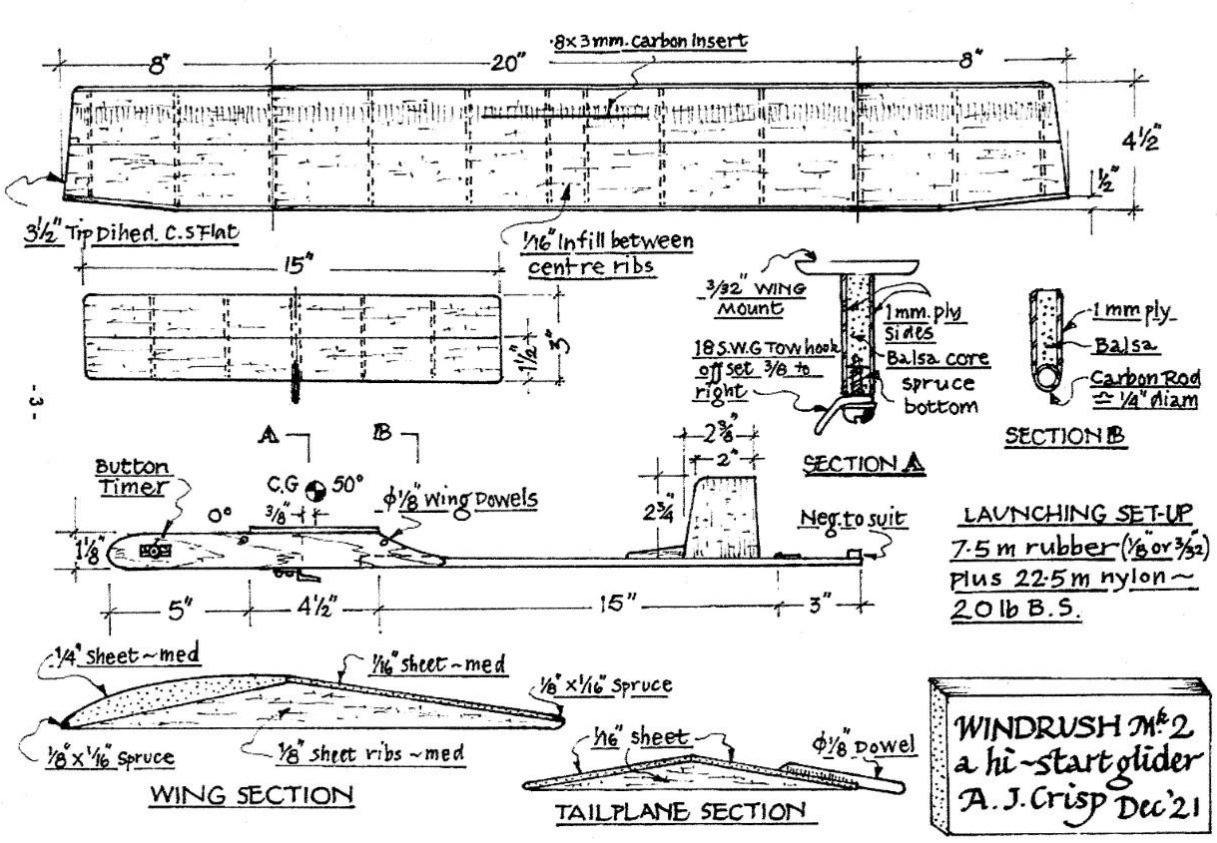
3ft Ruler Plan

I used a carbon tail boom instead of his sheet balsa fuselage only because a friend had offered me a load of his old fishing rods. I copied my wing section from one of the F1As flown in the 1993 World Champs - just because I liked its shape!

Here are Peter Michel's suggestions of suitable models from his article. They all happen to be from the Vintage era – no doubt in cognisance of the SAMs rules – but no less suitable for that and are all available on the Outerzone plans website. The Vintage Model Company and Belair Kits are also well worth checking for suitable designs.

Ato 36	Frog Petrel	Sinbad Junior
Baby Gull	Jersey Skeeter	Thermic 36
BH 5	Jetco Trooper	Thermic C
KK Conquest	KK Cadet	Towline Terror
Crowfly	KK Dolphin	Trooper
Doofa	KK Soarer Baby	Veron Classic
Elite No1(Warring)	Lulu Baby	Veron Wagtail
Frog Diana	Meteorite	Vespa

Obviously, there are many other possibilities, too numerous to mention (so go for it all you "own design" specialists!), but Andy Crisp's "Windrush Mk 2" is certainly worth pursuing:



Andy Crisp's Windrush Mk 2

And then there are scale models…. With a 36" span limit, moderate aspect ratio (certainly no more than more than 8:1?) would seem wise to keep the wing loading within reasonable limits - and this would also seem to be a useful yardstick when scaling down larger non-scale designs.

I am waiting to test-fly my scale model of the ULF-1, a German high-wing, single-seat, foot-launched(!), microlight glider, from the BMJR Models kit (www.bmjrmodels.com). At 125g, 150sq in of wing area, and a very bulky fuselage with scale-like structure, this will never compete on equal terms with dedicated "contest-type" gliders, but with a bit of luck and some good air, you never know….

My BMJR Models ULF-1 awaiting test flying [photo S Milan]

A few other tips and observations….

My first Hi-Start has an auto-rudder. It proved to be a pain to start with as its loop at the tow hook end kept failing to come off when the tow hook released. I tried the pull-out pin system, but the model hung up on more than one occasion. I cured matters in the end by gluing a fillet to the front of the tow hook to help the auto rudder loop to slide off, but this experience has convinced me that Andy's "no-auto-rudder/ off-set tow hook" method is a better way to go. As he explains:

"However you try to make the [auto-rudder] *systems fool-proof in the workshop, something often sticks in actuality, so I sought to devise a method without pull-out pins, etc, which would give a glide circle and a timer start. Enter the offset tow hook. As this is quite a small model, the offset of the hook from the centre line of the fuselage needs only to be about 10mm (3/8"). There is no auto-rudder. A Gurney flap drag strip on the right side of the fin sets the turn. Tail tilt does the rest. Both are easily adjustable, as required".*

I followed this advice on my latest Hi-Start a Jedelsky-winged model inspired by Windrush Mk 2 – however, poor wood selection for the wing – and a short nose - resulted in a dreadfully overweight model so at the time of writing, I'm building replacement "stick and tissue" wings and tail for it. Initial test flying on the Meadow in September did, however, show that Andy's system worked fine.

My Jedelsky-winged Hi-Start. Currently awaiting new wings and tail… [photo S Milan]

OK a bit more about the launch phase… So far as the model releasing itself, "as if by magic, to fly free" is concerned…. sometimes it doesn't! This has happened to my glider on more than one occasion. It has also sometimes gently veered to one side and dived into the ground still attached to the towline, luckily with little damage. To quote from Peter Michel's article:

"The object, of course, is to achieve a cast-off right over the anchor point, or nearly so, which is not as difficult as it might sound. The old glider-tower's mantra holds good for Hi-Start. If the model veers to one side and stays there, move the hook forward. If it "hunts" from side to side on the way up, move it back. Here's a good tip acquired from a fellow bungee flyer: bend the tow hook down about 10 degrees from the horizontal which will assist the mysterious process of casting-off."

Anything else to say? Apart from ALWAYS fit a DT (I have Leo Bodnar or BMK RDTs on mine) the only other thing is an issue if you're flying a Hi-Start on your own on the Meadow. When you're off retrieving your model after a successful launch, your towline will be left on the ground where it landed after the model released itself. There is therefore a risk of 3rd parties

(whether human or 4-legged) getting tangled up in your towline while you're off collecting your model. So I guess the message must be: only launch when the coast is sufficiently clear and carefully pin-point where your model has landed before leaving the launch area to retrieve it. Using short – preferably via RDT- Dethermalizer settings will no doubt help this process.

This will enable you to recover your towline and leave it in a "safe" condition in accordance with Club Rule FF7 before heading off to retrieve your model… The best way to do this would be to rewind your towline on to its winch but gathering it carefully in and leaving it close to its fixing post could also work. Either way, dayglo pennants on your towline and its fixing post will help visibility.

As an aside, the SAMs and Peterborough contest rules require the towline to be held by an assistant rather than attached to a post in the ground - or to your handlebars - and to be winched in immediately following release, but obviously problematic if you're on your own! Life's difficult enough as it is without trying to be in two places at once….

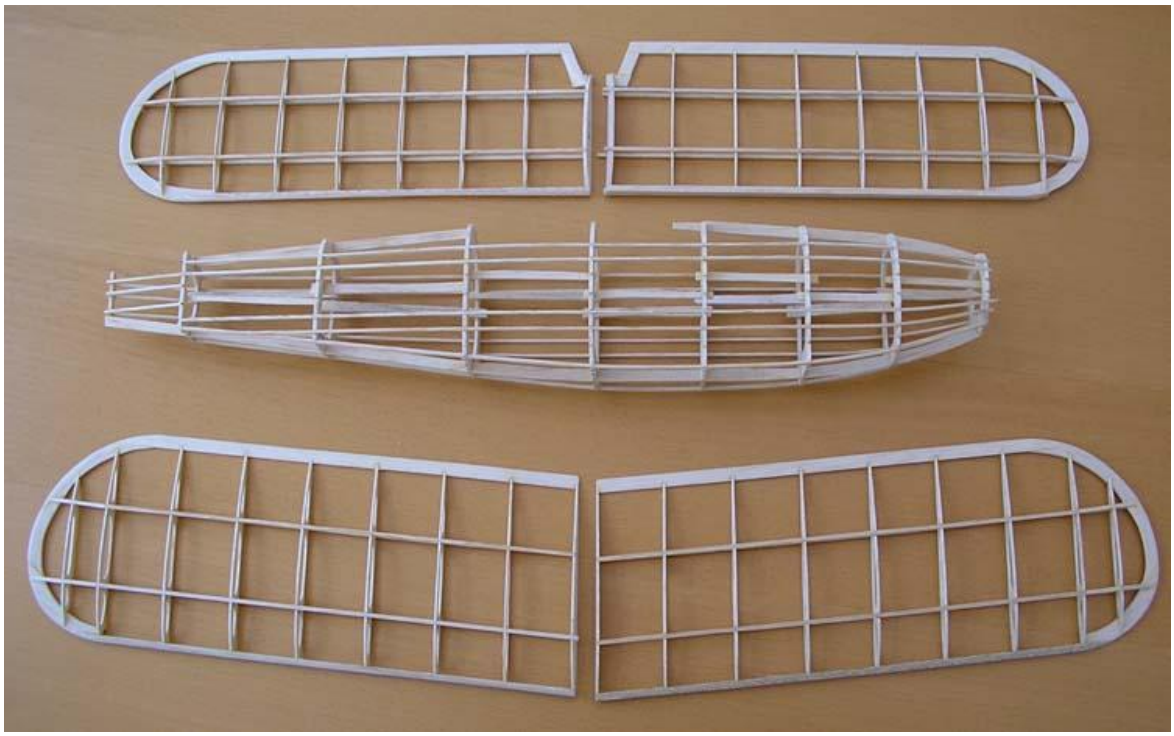
Have fun!

PS Andrew Boddington has asked me to point out that the Aeromodeller is still alive and kicking!

A Very Long-term Project - Mike Stuart

I'm sure I'm not the only one who has a collection of half-built models hidden away in their cupboards and drawers – the lure of cutting fresh balsa is so appealing, especially if your current project has got to a tricky stage, or you have just got bored with it.

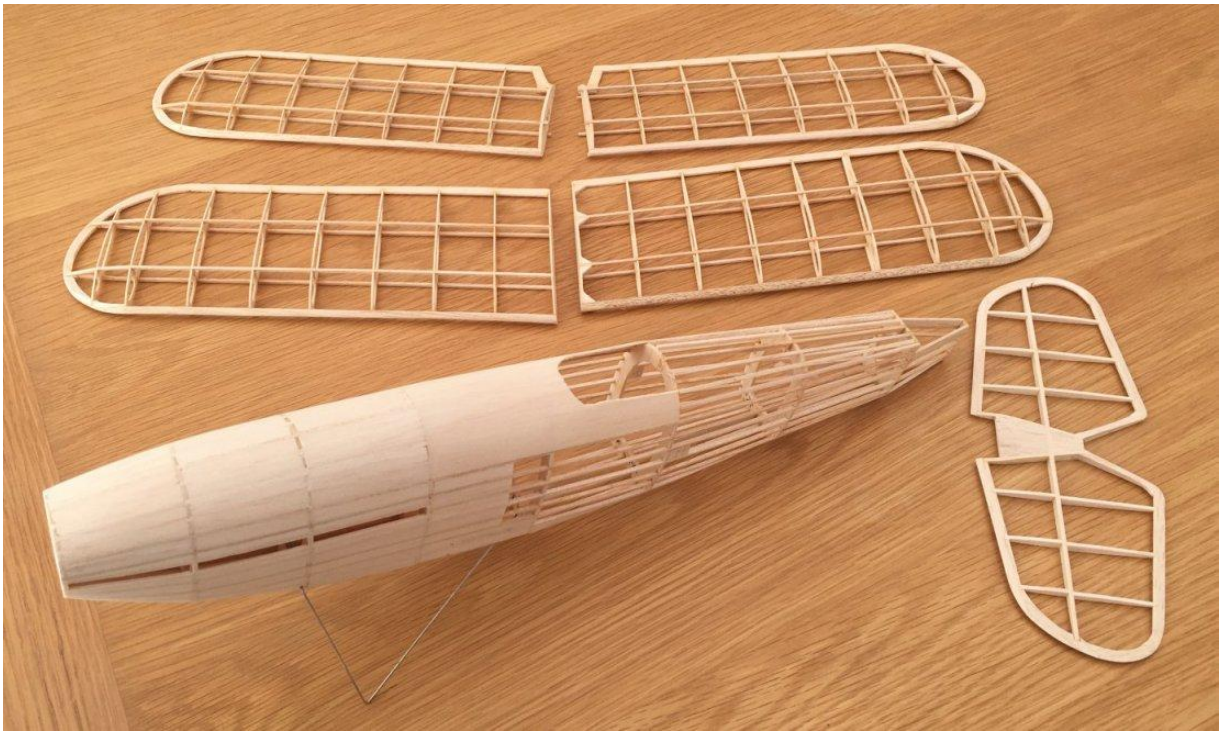
Well, I am here to encourage you not to give up – such models can eventually get finished, even if they have spent many years shut away and forgotten.



Case in point – my West Wings Hawker Hart kit, which I won in a raffle at a Peterborough Flying Aces meeting around 2008.

A year later I took the kit with me on one of our trips up north visiting family, together with tools and a building board, and by the time we came home, construction had reached the stage shown above.
This kit does not feature side keels, so in order to keep the fuselage straight when removing from the board, scraps of balsa sheet were glued between the formers on the inside. The same was done for the other side before adding the stringers in pairs.

On the wings, the wood supplied for the ribs was rather hard and heavy, so I cut lightening holes in all of them.



The kit box and parts were then put away in a cupboard where they stayed for the next twelve years until April 2021 when we made another trip up north. Not sure why I chose the Hart to take with me, but I'm glad I did. After a week of evenings, the model has reached the state shown here.

All that in-filling at the front was very satisfying – it's mostly soft 1/16" sheet, but some 3/32" for the curvier bits. There is no weight penalty for doing this as the model turned out to need nose weight anyway, and it looks so much better for the metal sheeted areas of the aircraft.

At this point, enthusiasm for the model was definitely reignited and I managed to keep it moving until finally finished in October this year.

The model is covered in Martin Dilly's Japanese tissue apart from the sheeted areas, which were in Esaki as I needed the wet strength. The sheeted area (metal on the full size) was airbrushed with Tamiya chrome silver, then masked and the rest of the airframe sprayed with Xtracolor RAF High Speed Silver enamel. Rigging is fishing nylon painted metallic dark grey after installation and tightened using a hair dryer set to maximum.

I found a nice colourful scheme for the model – a couple of RAF auxiliary fighter squadrons flew Harts while they were waiting for their Demons to arrive and painted them in the full fighter scheme. 601 (County of London) Sqn. Used red and black triangles.

Markings are all cut from painted decal sheet and applied in layers. So, for the wing roundels, a full white disc was applied first, then the blue outer ring followed by the centre red disc. For the fuselage and wing panels, solid red bands were applied first and the black triangles put over the top. I prefer this approach to masking and spraying, mainly because I hate masking, but also due to the fact you get very crisp edges (guaranteed no overspray) and you can slide the decals around until you have them positioned perfectly.

The model has not yet been trimmed apart from a few tentative powered glides – with some necessary nose weight on board plus rubber, it weighs a rather substantial 88 grams. I now need a calm day and some nice long grass!

RC Spot Landing Competition – David Lovegrove

For some considerable time, bongling around at the back of my brain cell, there's been this gnawing awareness that as a club we do very little (bordering on b*gg*r-all) for our long-suffering and statistically-more-numerous RC contingent. My Friends, this must stop!

So, if you own a radio-controlled model of any description, even if you aren't yet BMFA-Certified, we're proposing to hold a little light-hearted, fun competition for you on the Meadow. Rest assured, no aerobatics will be required, in fact nothing hard at all, just a simple exercise in controlling your model.

What Will You Have To Do?

The objective will be to see who can climb their model at full throttle for one minute, stop the engine/motor (IC or electric – we won't discriminate) and glide back to earth to see who can land their model with its nose nearest to the designated "spot".

Even something as simple as this hand-launch two-channel sport model would be very suitable for a Spot Landing competition - what matters is where the model stops, not how it gets there. [photo A. Boddington]

Sounds too easy? Don't you believe it! This innocent bit of tomfoolery has seen the humiliating come-uppance of many a BMFA "B" Certified pilot. Some have been reduced to tears by their inability to win a meaningless trophy (not that you'd get one from us, although a handsome, super-calligraphic, Andy Crisp – designed Certificate and a *Snickers* could be yours!).

Roll Up!
Fancy your chances, do you? We'd really like to get this off the ground (ouch!) and we need YOU to let us know that you'd like to compete for the numerous, utterly valueless prizes on the morning of Saturday, 13th May, on the Meadow. The Contest Director will probably have a few surprises up his sleeve to help ensure an even playing field…

While we're at it, we'll make it a general Fly-In for all OMFC members and guests, so drag your chums along as well to enjoy a few hours of fun.

Email me at david.lovegrove11@btinternet.com, send a postcard or carrier pigeon, communicate via ESP or any other valid means of communication to confirm you'd like to take part.

A bit of Mid-Summer madness on the Meadow – what's not to like? But first, clubmates, we need to hear from you.

BMFA AGM Report – David Lovegrove

Just before the BMFA/SAME AGM on the 19th of November I volunteered to represent Oxford MFC as our Club Representative. For me, this was a Zoom meeting.

What follows is a report on the principal matters discussed that may have a bearing on us, individually, at club level.

- Dave Phipps (BMFA CEO) mentioned the likelihood that "Electronic Conspicuity" for models/drones was likely to soon become mandatory. To paraphrase that clunky techno-speak, the powers that be think they need to know what (permitted) model activity is happening at our local patches. It's not likely to be onerous; just a simple, inexpensive bit of electronic kit that will enable anyone interested to identify our models.

The sub-text to this is that a) it's estimated there will be some 900,000 commercial drones in operation by 2030. Thus, the UK's airspace will become increasingly crowded. And b) illegal drone operations are expected to become more of a problem, so we'll need to be differentiated from the baddies.

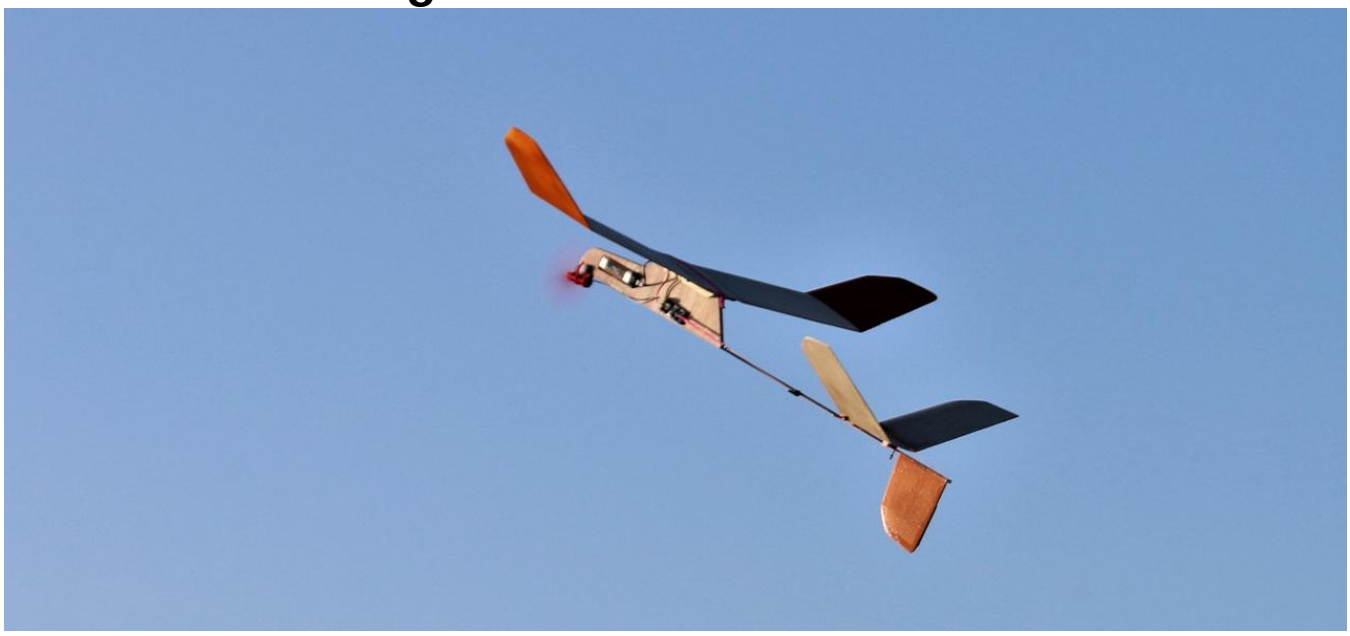
- The CAA Registration Fee will rise to £12 in April, 2023.

- If you were thinking of travelling to the EU for a model flying event or holiday, obtain an EU Exemption Carnet before you go. UK Flyers attending an event in Spain this year were charged Import Duty amounting to several thousand pounds, all perfectly legal and correctly enforced. They got their money back eventually, thanks to the BMFA's intervention.

- The meeting voted to accept the proposed increased BMFA Membership charges as follows: Adults £42; Juniors £20; Family Partners £29; Family Juniors £16. For the majority of us, that's modest – an increase of just £2.

- Due to the need to rein-in rapidly escalating costs, ***BMFA News*** issues are to be reduced to four (currently six) annually.

E.20 – David Lovegrove



The writer's Carbonara E.20 (Photo by Andy Blackburn)

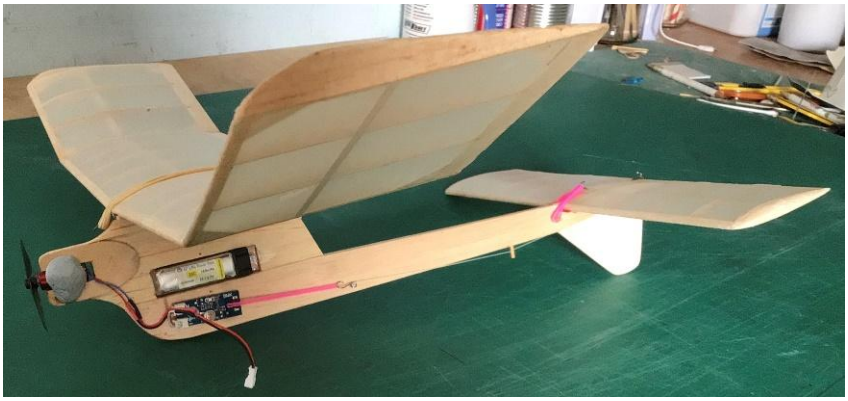
Back in November, Fr. Luke Guymour gave an excellent presentation on the BMFA's *'In The Air Tonight'* online webcast. He spoke about a class of model – E.20 – that's been growing in popularity in the UK. The rules are deliberately simple and designed to encourage participation and experimentation. The Concept? A small, free flight model with a) a maximum projected wingspan of twenty inches and b) an overall maximum length, also of twenty inches.

Contests for E.20 models are so far governed by the USA's NFFS rules. So far, there's no formal FAI Class for it, which explains why there is no maximum or minimum weight stipulated. The only other requirements are a) a motor run of less than eight seconds and b) the fitting of a D/T. That's practically all there is. If you want the rest of the sparse details, have a look at the Peterborough Club E20 Rules

At the risk of repeating myself the reason that E.20 is gaining traction is because of this very simplicity. The models are small, quick and, above all, reasonably cheap to build. They offer a decent performance and, importantly, use easily obtained components. At the time of writing, a complete 'kit' of parts, including a motor, prop, battery, charger and electronic timer will set you back just thirty quid from BMK's Free Flight Store; that lot will get you started on an equal footing to everyone else.

What Models are Available?

How much would you would you like to spend?



At the bottom end, choose something like the *Mini-Starduster (right),* a pint-sized version of a classic US "Gas" duration model from the 1940s that can be built cheaply from a plan.

In fact, there are loads of suitable designs of that vintage ilk that will make great subjects for the E.20 class. Build them yourself from sticks and tissue.

Alternatively, have a look at J&H Aerospace, the domain of Joshua Finn, a well-known and prolific YouTuber on all things free flight. His range of kits starts at $35 (approx.. £30) and includes the *Mini-Starduster*. It's also rumoured that the Vintage Model Company (VMC) are also looking at producing a home-grown E.20 sometime soon. Look out for that.

Yet another alternative is to have a look at the Paul and Ralph Bradley's website. Here you'll find a couple of plans for potent E.20 designs by Ralph Bradley. Download the plans and build – easy as that. That's what I did. I'd built a couple of others before this; the *Mini-Starduster* from a plan and a *Ferry 500* from the plan published in the *AeroModeller a* while ago. The latter is a different approach. Heavier, and with a lower performance to suit the rather restricted Peterborough MFC's Ferry Meadows flying site.

Enter the 'Carbonara'

The model that took my fancy was Ralph Bradley's *'Cliché'* design, a balsa-and-carbon confection that has the look of a long, spindly chuck glider, but allegedly possessed of a 70-80-seconds duration. I always like to incorporate some of my own favourite, occasionally somewhat quirky, details into the models I build, and that meant moving away from the *Cliché's* straightforward cruciform tail to what, for want of a better description, I call a 'butterfly' tail - a kind of a V-Tail' with an underslung fin.

It looks nice to me and works well, giving solid directional stability. The design utilised a 2mm square carbon tube and that's *okay* but, at an overall length of 50.5cms/20", I discovered it's easily twisted. I doubt this is a desirable feature in a model aeroplane! If I built another, I'd opt for something more substantial; perhaps 3mm square.

The wing is very 'chuck glider-ish" and consists of soft 3/16" balsa beefed up with a hard balsa leading edge. Carving such a wing to a consistent section is always tricky: you need to be patient and check the shape and thicknesses frequently. Again, I think I'd opt for a conventional, fully built-up wing and tail next time.

All said, these are minor criticisms. It's someone else's design and it worked well for him, apparently amassing an impressive tally of wins at national contests. However, it must be borne in mind that the USA's continental climate means the wind strength in the summers are significantly more benign than ours! A lighter structure is always going to do well, whereas in breezy old Britain, perhaps we need to build a tad heavier?

How Does It Fly?

It flies very well! The first flight showed a strong left turn that mucked up the climb, so before the next flight I tacked 30mm of 1/16" sq. Gurney flap to the right side of the fin. That immediately straightened the turn, and the climb was pretty good, achieving about a hundred feet in the short motor run. The transition was good, and the glide wasn't bad, but it quickly

degraded into a stall. As the breeze had built up a bit, I decided to leave it there and get on with further trimming next time out.

Further Development

The screw adjustment to the tailplane wasn't entirely satisfactory. That's because the D/T hold-down thread turns back on itself at the extreme end of the fuselage, going on to engage with a little horn on the tailplane. The geometry of this arrangement was allowing the t/p to sit at a slight negative angle, i.e., giving a slight "Up" elevator effect, probably causing the stall.
I decided to raise the t/p up a bit on a 10mm-high platform. This allowed the D/T cord to pull the t/p down more positively.

Conclusion

Even as it is, with its chuck-glider style wing and arguably being a bit on the porky side, I think the *Carbonara/Cliché* would be a serious contender for honours in any E.20 event. And with built-up flying surfaces substituted, I'm sure it would be a match for anything. After all, the "Max." time for E.20 rounds is a mere 60 seconds – easy-peasy!

My hope is that this piece might inspire some of my OMFC clubmates to have a crack at this interesting new class. There's no reason why we couldn't have an E.20 Postal and/or a little contest or two on the Meadow, when the warmer months return.
Let us know what you think, please!

Contributions to the Newsletter

The OMFC Newsletter should reflect the interests of OMFC members and the editorial team will try and ensure that this is the case. However, the content of the newsletter really relies on the goodwill and involvement of everyone in the club.

Please consider writing a little something for one of the 2023 newsletters; almost anything aviation-related will be welcome, but we'd all particularly like to know what you've building or flying over the winter.

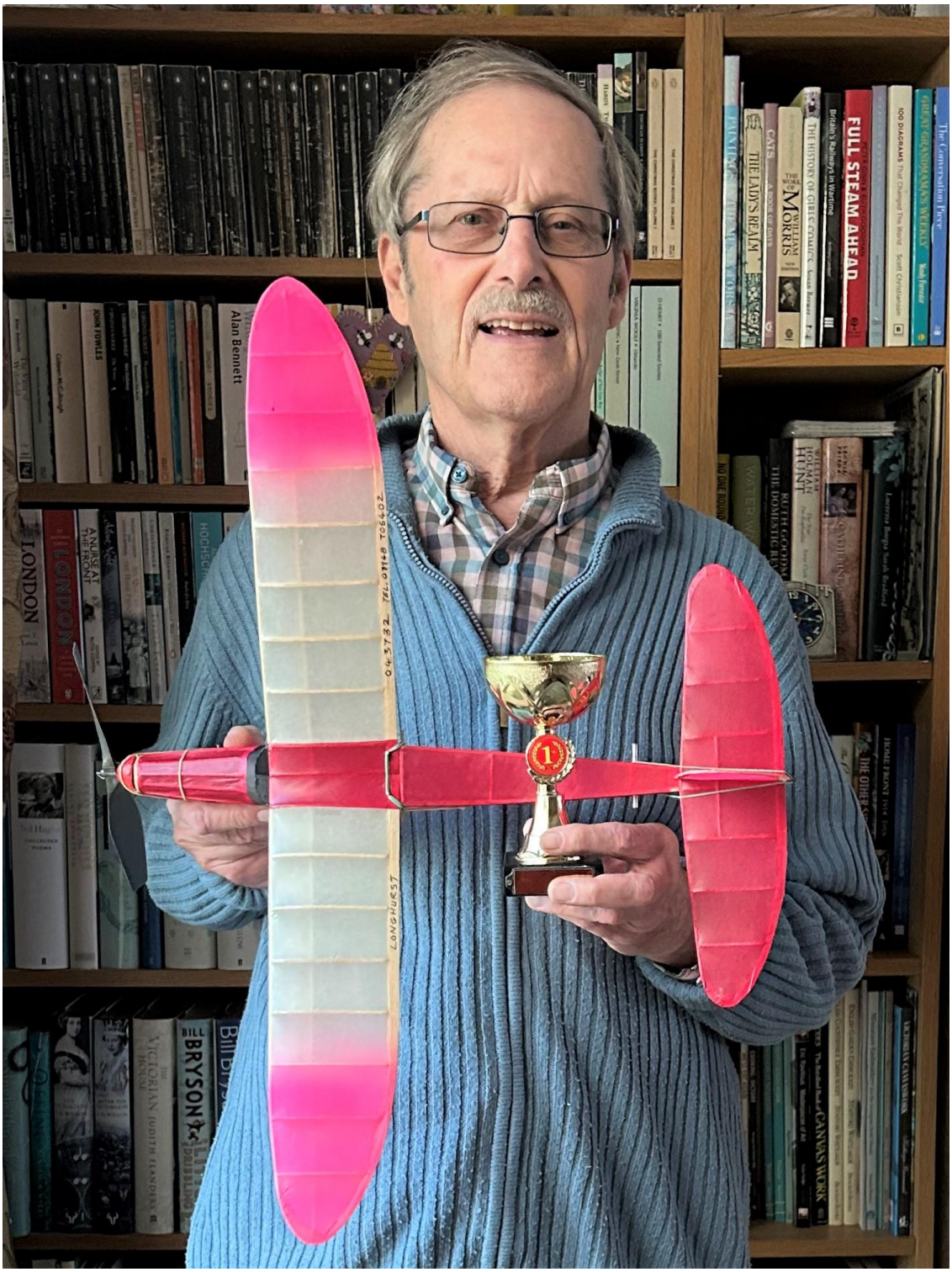
Please let me have your contributions for inclusion in the Spring 2023 Newsletter by 17th March. Send them to: Andy Blackburn at **newsletter@oxfordmfc.bmfa.uk**

As far as format is concerned, M$ Word is useable but can be a bit of a nightmare as it occasionally over-writes local text styles with imported ones and can start to treat imported picture captions differently to local ones. I therefore have to save each contribution as plain text before using it.

Pictures do not *need* to be ultra-high resolution as they will eventually be compressed by the PDF export process anyway. The thing to be careful of when producing jpeg images, though, is the amount of compression – please don't compress any photos because the artefacts generated by the compression process can sometimes be problematic, especially if compressed multiple times, because then it starts to look a bit rough.

Ideally, it's better to send the text and suggested image captions in a plain text file along with images as separate attachments. These days you can usually rely on being able to email up to about 20 MB of attachments, if it gets bigger than that then www.wetransfer.com is usually the best way of transferring lots of images.

2022 Postal Competition



As many members will be aware, Andrew Longhurst was the eventual victor in the 2022 Under 25" Vintage Rubber Postal Competition, and is seen here holding the nearly priceless (that might not be a *totally* correct description) annual award. Some of us will be trying very hard to wrest the trophy from Andrew's grip in next year's competition, which starts in April 2023 – please consider having a go, it's good fun. And I still owe Andrew and Jim (Ist and 3rd places) a packet of Tunnock's Teacakes each…

Meadow Flyer Christmas 2022

The Full 2022 Results for the Under 25” Vintage Rubber Postal are:

Position	Name	Model	Score
1	Andrew Longhurst	Flying Cloud Jr/KK Eaglet	518
2	Andy Blackburn	KK Achilles	397
3	Jim Paton	KK Achilles/FROG Goblin	360
4	Chris Brainwood	JA Skokie	240
5	Gary Dickens	FA Moth	182
6	Simon Milan	Black Bullet	174
7	Gary Law	FA Moth	116
8	David Lovegrove	KK Eaglet	83.1
9	Dave King	BA Cabin	75

Postal Events for 2023

The **Under 25” Vintage Cabin Postal Competition** will be run in two Rounds. Round 1 (Spring) runs from 1st April to 31st May, Round 2 (Summer) runs from 1st June to 31st July inclusive. For full details see the Club website https://oxfordmfc.bmfa.uk/2022-under-25-vintage-rubber-postal/. In case of questions/issues, the Virtual CD is Andy Blackburn.

The **Combined P30 and Coupe D'Hiver Postal Competition** will consist of one round which will be run between 1st September and 31st October inclusive. For full details see the club

website https://oxfordmfc.bmfa.uk/p30-and-coupe-dhiver-postal/. In case of questions/issues, the Virtual CD is Andy Blackburn.

Club And Other Local events, 2023

Jan 18 **Informal meeting**. Bring a model to show and/or to fly in the Hall.

Feb 15 **'Foamie Design Challenge' Flying**
Collect a basic 'kit' of materials at the chip supper (21 Dec 2022) and design and build a wallpaper foam model to fly at the Feb meet. More details later but the kit will include a prop which is the most difficult bit and an article on building with wallpaper foam. A chance to unleash your creative skills !

March 15 **The Picasim Simulator**
Talk by Danny Chapman, the originator of the Picasim, free, flight simulator

April 19 **Club Night, flying on the Begbroke Field and Free Flight Scale judging**
Bring along any FF scale model to be judged to a variety of criteria, to be decided on the night. There will be prizes!

May 6 **Spring Duration Competitions on the Meadow for members and guests**
CD is Gary Law. P30, 36" Hi-Start Glider (Peterborough rules), Catapult-launched glider. Arrive in the car park at 9:00, event runs from 10:00-13:00 or until the scores are in. Possibly have lunch & pint in the pub afterwards.

May 17 **Club Night, Electric Control-line Tuition + General Flying at Begbroke**
Have a go at electric control-line, models and tuition provided. Also general flying.

June 3 **Summer Scale Competitions on the Meadow for OMFC & BMFA Members**
CD is Bill Dennis. BMFA Flying Only + small static realism score, Kit Scale / Precision Rubber to BMFA rules, Kit Scale Duration. Arrive in the car park at 9:00, event runs from 10:00-13:00 or until the scores are in. Fly for fun afterwards, or quick pint in the pub.

June 21 **Club Night, flying on the Begbroke Field**

July 8 **Backup date for Summer Scale Competitions on the Meadow (see above)**

July 19 **Club Night, flying on the Begbroke Field**

Aug 16 **Club Night, flying on the Begbroke Field**

Sept 9 **Autumn Duration Competitions on the Meadow for members and guests**
CD is Gary Law. Coupe d'Hiver, FROG Senior (Peterborough rules), Rocket Duration, Kit Scale Duration. Arrive in the car park at 9:00, event runs from 10:00-13:00 or until the scores are in. Possibly have lunch & pint in the pub afterwards.

Sept 20 **Designing a flying wing. A talk by club member Alan Smith (provisional).**

Oct 18 **Club Night, TBC**

Nov 15 **AGM**

Dec 20 **Club Night, TBC**