PMFC NEWS

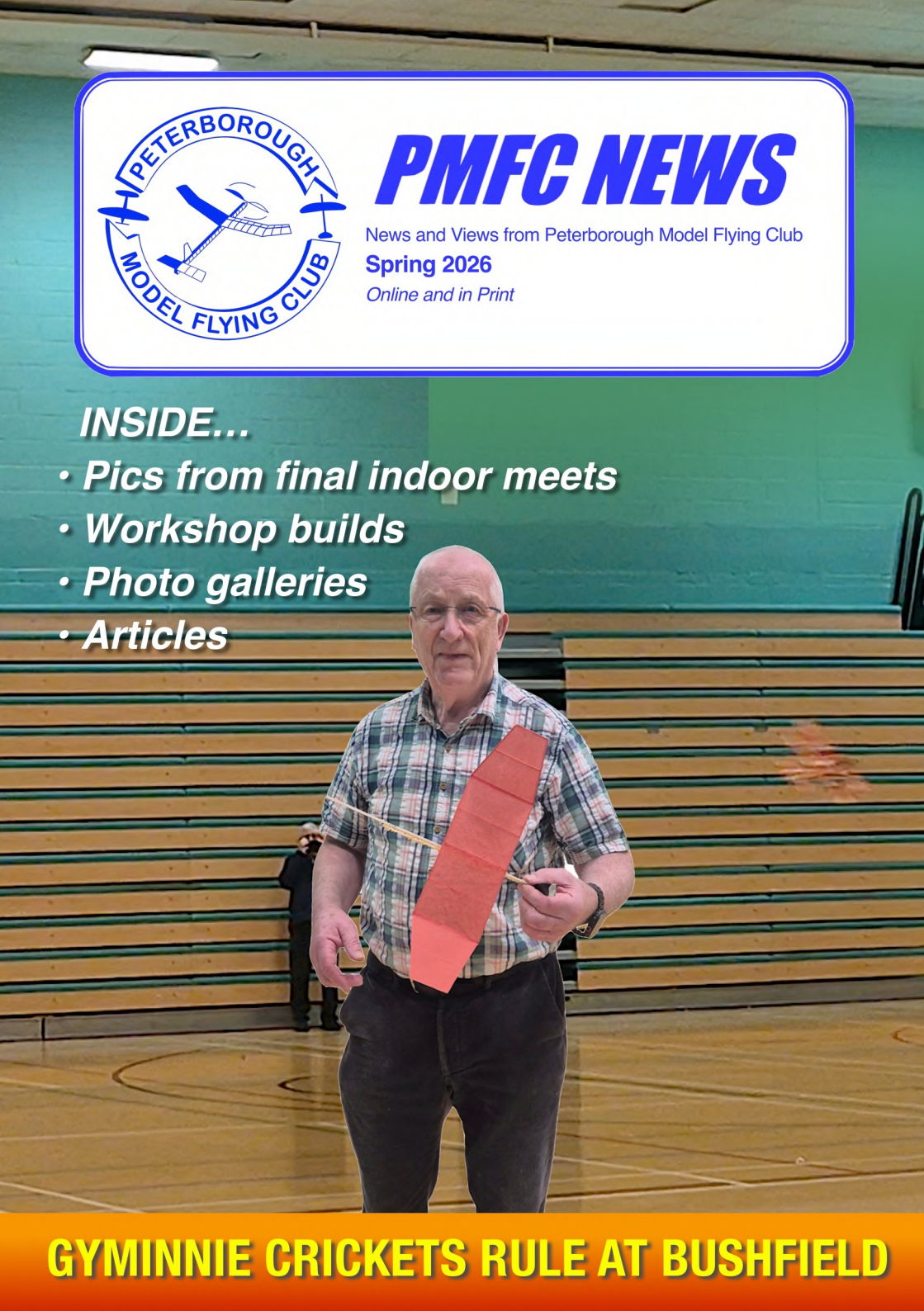
News and Views from Peterborough Model Flying Club

Spring 2026

Online and in Print

INSIDE...

- ***Pics from final indoor meets***
- ***Workshop builds***
- ***Photo galleries***
- ***Articles***



GYMINNIE CRICKETS RULE AT BUSHFIELD

Cover photo: Andy Sephton with his winning Gyminnie Cricket 01.03.26. Photo: T Goymour.

Editorial

Light evenings are here at last. I don't know about you, but flying or not, lighter evenings are always welcome in my book.

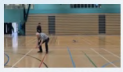
I didn't manage to get down for the first Friday comp at Ferry, but those who did seem to have made some decent flights in not the best conditions. But it least wasn't blowing a gale or raining.

This spring issue began as a quick 'updater' that was intended to be much smaller and get to you at least a couple of weeks earlier than you actually receive it, but as is often the case, some last minute expansion has taken place. The positive is that it becomes a bigger issue with lengthier articles.

Keep the content coming, if you have something you feel might be of interest – even if only slightly so, send it in. I will always trya and accomodate it somehow.

Do take a look at the one video I have added to this issue. It's a memorable flight and relates directly to one of the articles within. Scan the code with your phone from a printed copy or click if viewing the digital version.

page 13 or



SCAN. *CLICK*

And before I forget – I'm writing this at the end of proceedings and I ran out of space... so here is a tip sent in from Bryan Lea. These 100/180 grit emery board packs are available from this link:

https://www.amazon.co.uk/dp/B077PMWLBM?ref=ppx_pop_dt_b_product_details&th=1

Thanks for the tip Bryan.

Tom

From The Workshop of Bryan Lea

PZL S-4 Kania 2

I am calling this one finished. Covering material is Polyspan followed by a sprayed coat of rattle can white primer and hand painted Tamiya blue.
The dummy radial engine is made up from Williams Bros cylinders and aluminium tubing. It is not an accurate representation of the Russian Shvetsov M-11 but my friend Huw Langford has recently bought a 3D printer and as part of the learning process printed me a set of accurate cylinders. If I get the model to fly well I will use these in a competition nose block. When I did a trial assembly and CG check I was concerned that the model was very tail heavy. I have since made a tailplane from Depron which is half the weight of the balsa one.

DHC-2 Beaver

I've now made up the undercarriage for the Beaver. This consists of piano wire running in brass tubing and hinged at the rear, the front is pulled into place by elastic bands. The top and bottom sheeting has been added and a hatch made to allow access to the radio gear. I covered the fuselage in Bucks Composites glass fibre cloth and resin. Trial assembly of the DC Sabre with throttle showed a problem with the venturi hitting the inside of the cowl. If I can't resolve this then I will have to abandon that idea and use my standard venturi Sabre. The full size Beaver that I am modelling flies in New Zealand and Stan Mauger kindly supplied me with a paint sample of the full size authenticated by the chap who painted the aircraft. Looking on the internet I found a place in Milton Keynes called One Stop Aerosols who can provide bespoke customised aerosol spray paint cans. I bought a can of the orange/red and a can of primer for £25. Huw Langford has made some 3D printed wheel hubs that are a better match to the full size Beaver. For this we were greatly helped by the set of photos provided by Stan Mauger and Ricky Bould. So that is where I am at the moment.

The fuselage will need a coat of white primer then the whole model will need a finishing coat of paint and markings. Once it has flown it will be the end of my epic build first started in 2014!

Keep it flying

At the end of March Luke Goymour ventured to Buckminster to fly this splendid beast. Left to him by the late John Ashmole. 1939 Sal Taibi Powerhouse elctric conversion by John A. 84". It flies on a 4s battery.

New Event for you Diary

Impington Village College Model Aeroplane Club
Based near Cambridge we fly Free Flight, Radio Control and Control Line aircraft

Impington Village College MAC are celebrating their 80th anniversary this year and with some funding from the BMFA East Anglia Area Committee are having 2 all day indoor events this spring which are open to PMFC members who wish to come. The events are free of charge.

The first was an all day indoor FF and CL event on Sunday 12th April.

The upcoming Anniversary event is an **RC and Control Line** indoor event on **17th May 9.00am - 5.00pm at the Village College**

https://ivcmac.bmfa.uk/wp-content/uploads/2025/11/All-day-Indoor-RC-and-CL-80th-anniversary-event-details.pdf

If you plan on going please drop an email to Alan Paul at *alanpaul@outlook.com*
to give him an idea on numbers attending.

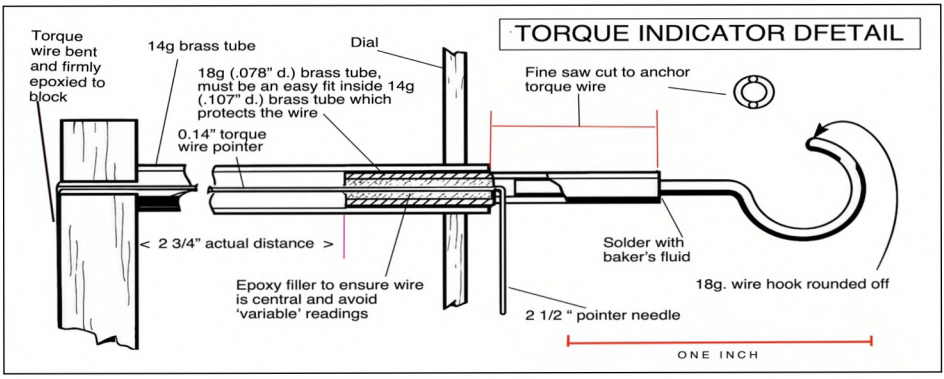
Getting the best out of a Gyminnie Cricket:

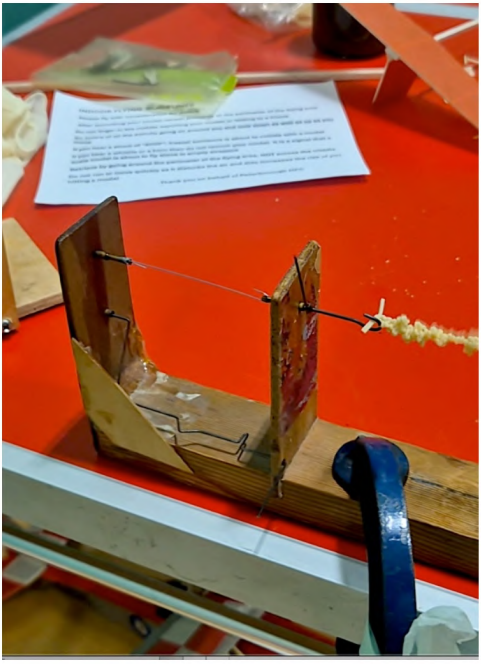
Andy Sephton gives an insight into his success with the model

Just over 40 years ago in 1985 I 'discovered' indoor duration at that year's RAFMAA Championships. I also met several of my aeromodelling heroes in the form of Doug McHard, Doug Sheppard, and Butch Hadland. Butch took me under his wing and over the following few years taught me all I now know about indoor duration flying. I built Laurie Barr's *Easy 'B'* duration model using a kit of parts from SAMS Models and a plan and description from July 1983 AeroModeller. With Butch's help and guidance, I won the *RAFMAA Easy 'B' championships* over the following three years. Applying those skills to the Club's Gyminnie Cricket competition brought a similar success.

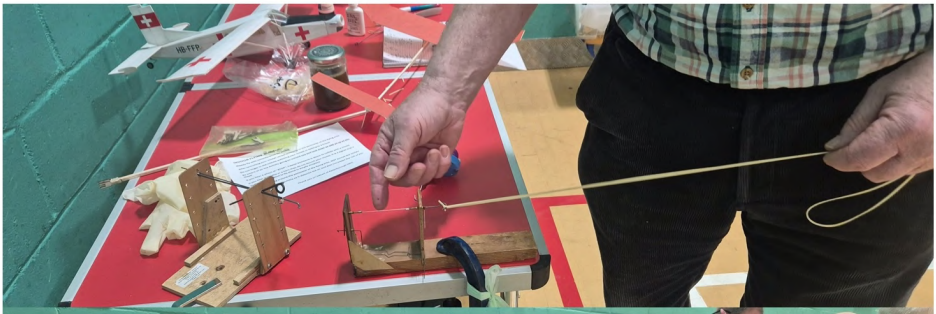
In the run-up to the competition weekend, I tested a few batches of the Tan Super Sport rubber that were in my rubber store. This produced four different hanks of rubber that I used at the competition. I'll say now that none of the rubber in my store is of any great performance, but some batches were better than others. I reckoned that I would be using rubber of about 0.075" width, so I stripped a few lengths of 0.070", 0.075:, and 0.080" for use on the day. 0.075' turned out to be the one to use. I tried several flights with each batch and paradoxically, the rubber that had come fourth in the pre-comp testing was the best on the day. I flew three flights for duration, then made several flights with differing turns and noted the times. This gave me an idea of how many turns to give the rubber for the timed part of the competition. I then made up two motors from the best batch and made one test/running in flight with each of them. I chose the best of the two and finally entered the competition. The six flight times were; 78", 89", 78", then 47" (-0), 27"(-2) and 30"(-9). This gave a final score of 234. The final timed flight was a mistake; I'd written down 30" as the target instead of 39" and thought I'd achieved a perfect score!

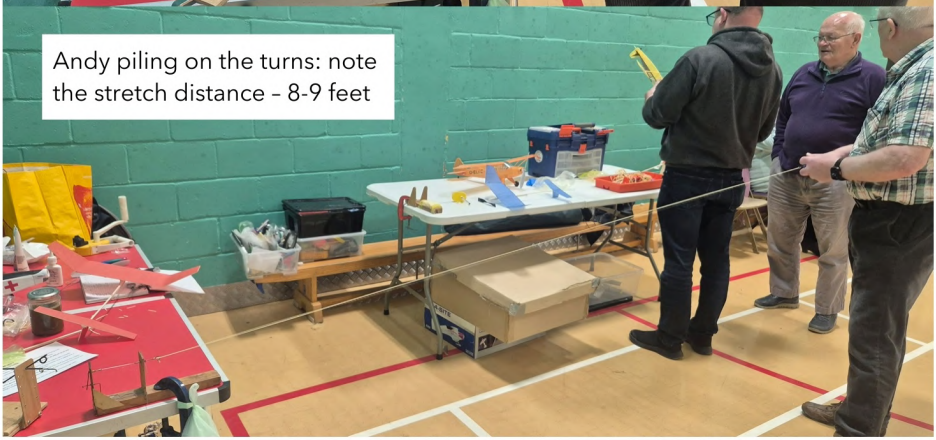
The trimming stage was probably the most useful part of the build up. The trick is to get the model to climb to just below the ceiling, cruise at that height for as long as possible, then make a slow descent, landing ideally with a single row of knots left on the rubber. The height that a model will fly to is dependant on the energy stored in the rubber. It's possible to measure torque while winding the rubber, so this can be used as an indication of how much energy is being stored. Torque is the twisting force that the rubber imparts on the propeller. How do we measure it? In my case I used a torque meter based on that drawn in Laurie Barr's article in 1983. I built mine in 1985 and it's still going strong ... albeit on its third length of 0.015" wire. They last about 15 years each. I don't bother with an absolute calibration, I just wind to a torque then see how high the model flies. After one or two repeats at different torque, I can find the energy I need to get to the ceiling. In my case, the indicator needle went to about the 11.30 position. After that, it was a case of adjusting rubber length and size to get the maximum cruise time with the model at height. Increasing the length of the rubber increases the weight, but allows more turns to be applied. A few flights are needed to get the optimum. On my Gyminnie Cricket it was about 2.25 x the distance between the hooks. Any more than that and the rubber bunched too much and fouled the fuselage. Increasing the thickness of the rubber increases the climb, reducing it reduces the climb. Again, there is a compromise to be made that can only be found by trial, error, and a bit of experience. A trick I learned from Butch was that if the model climbed too high but it was not practical to reduce the rubber thickness, then turns could be backed off. That is, wind on, say, 2000 turns, then back off about 100. This reduces the initial torque burst but should still allow the model to get to the ceiling and have a good cruise time. Again, the best compromise here can only be found by trial and error. I used a 15:1 winder on the day. I was winding to between 150 and 175 turns (x 15) to achieve the torque I needed. For the precision timed part I used: 115, 87, and 95 turns. In the last case, I should have used 105!





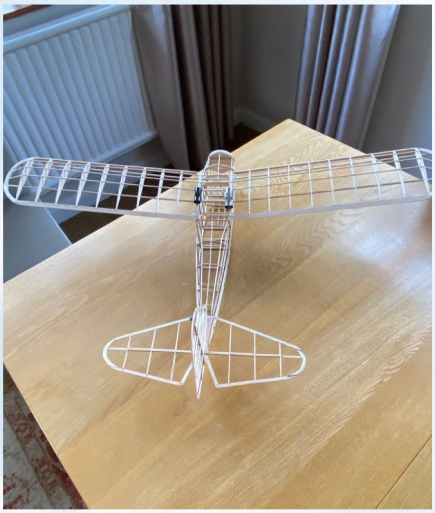
I watched Andy as he wound his model. You can see the pointer arm on the face of the meter; the position of this indicates the torque – no detailed scale needed, precision is gained by knowing the required position the pointer needs to point to for any given situation. *(Editor)*





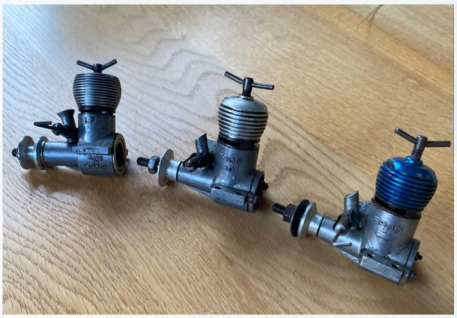
Andy piling on the turns: note the stretch distance – 8-9 feet

BRIAN'S CORNER: Brian Lever often has a lot to show and tell ... *so his new 'corner' feature is on the middle pages in this edition – (this won't always be the case.)*



Left: The Gyminnie Cricket indoor competition at Bushfield proved to be a success. 36 kits were given free, 28 competitors took part and the winner Andy Sephton kindly donated his winnings towards the hall cost.

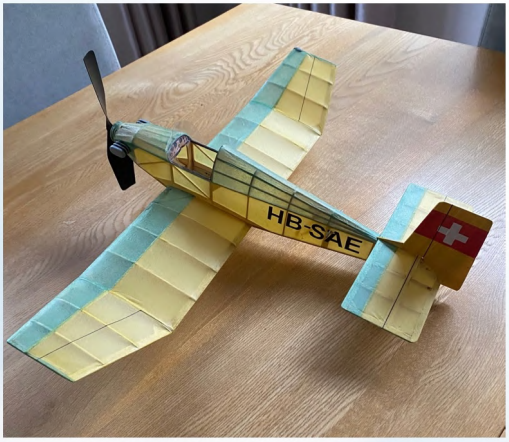
Rigtht: Earl Stahl GRASSHOPPER under construction. Destined to be flown in the Rubber Duration Precision Class.



Three engines from the 50s suitable for the new 1.5cc Stunt Racing Competition. ***Can you guess what they are?***

And ***Can you name the very powerful 1.5cc engine to the right?***

(Answers on page 16)



Top left: The Mk1 Keil Kraft Ranger class "A" early team racer kit from the 50s. *I am running an authenticity event at all the Buckminster meetings this year.* Full rules on the PMFC website.

Top right: My Veron Bebe Jodel. Built from an original old Veron Kit. Weighs just 26.4 grams and winner at two of the Bushfield Scale competitions.

Middle left: Guillows P6 Porter kit. Ideal to fly at this years Flying Aces special scale Guillows competition. If interested can be obtained from Leeds Model Centre.

Middle right: Guillows Lancer sport rubber powered kit. Again suitable for flying at Flying Aces later this year.

Above: My new 1.5cc Stunt Racer with Nylon Covered wing and Eze Tissue for coloured areas. Coverings all applied using EZE Dope 50/50 mix.

Keeps Sheila happy by not smelling the house out!

Free Flight through the decades

The Editor's Reflection

The other evening with my customery glass of red in hand my memory drifted back through the years (as it does … for you sometimes as well I'm sure). It took me back to an endearing moment with a young lad on the edge of some distant flying field one summer's day many years ago. We both gazed up into the blue. The only sounds were of a distant aircraft (a real one, not a model) and pigs chuntering the other side of a hedge from a nearby farm. The model it seemed was lost … but perhaps not gone for good. It was a poignant moment. That small boy was my son Luke, and in recent times, now in his fifth decade he has had the same experience of watching a model disappear and wondering if it will ever be found.

This got me thinking, some moments in our hobby or sport, haven't changed. There's a certain timelessness about free flight. Stand on a flying field today, watch a well-trimmed model climb away and settle into its glide, and you could just as easily be looking at a scene from fifty or sixty years ago. Our hobby is timeless, and yet, underlying the familiar picture of which I speak, a great deal has changed. So, here are a few words on one or two topics that may resonate. Let's start with the basics.

The Building Board

The golden image of aeromodelling for many begins with balsa, tissue, and a flat board covered in pins. That hasn't disappeared – but it has evolved.

Years ago modellers worked with what they had: wood selection by eye and feel, plans interpreted with a degree of instinct, hand carved propellers and the odd cockpit too. Consistency came from experience, not from scientific measurement.

Today, technology offers precision. We were shown carbon fibre then modern adhesives, then came GPS technology. Now we have laser-cutting technology and 3D printers to make our parts. All this has made it possible to build lighter and stronger structures with repeatable accuracy. Where once a spar might have been 'about right,' it can now be engineered to a very specific tolerance for exact purpose.

And yet, many builders still return to traditional methods – not out of necessity, but preference. There's a satisfaction in building something that relies as much on judgement as it does on materials.

Power and Performance

Power systems tell their own story of change.

Rubber power, of course, remains a cornerstone of free flight. The principles are unchanged, but the materials have improved. Modern rubber is more consistent, more efficient, and more predictable than its predecessors, but … like a good wine, it still has its best years.

That familiar sound of internal combustion engines, is now much rarer on our flying fields. They are still out there but are less dominant than they once were. In their place, we have electronic motors, timing and cut-off systems to improve consistency. And in recent years on my return to the fraternity of modellers there is a comforting warm burning smell missing from the flying field that was once ever-present throughout the day of freeflight competition. Years ago many (if not most) models were brought back to earth by burning a fuse to dethermalise.

Even in glider classes, launch and trimming techniques have become more refined. Towlines, dethermalisers and launch techniques have all changed with bungee launches now being a refined skill rather than just a precarious hit-and-miss idea for a bit of fun!

As a result we don't have different disciplines – but more finely tuned versions of the same ones.

Trimming: From Instinct to Understanding

Perhaps the biggest shift isn't in materials or equipment, but in the understanding. Ask an experienced flyer from any era how to trim a model, and you'll often get the same answer: carefully, patiently, and with respect for the air. That surely hasn't changed?

What has changed is how we share what we've learned. Trimming was once purely trial and error; now our clubs, magazines, and competitions pass decades of accumulated wisdom forward. But a model still tells you what it wants to do. The flyer's job is still to listen and learn.

If there's one thread that runs through every decade of free flight, it's continuity. The tools may have changed, the materials may be lighter, stronger, and more consistent, but the craft – the balance between design, build, and the air it has to fly in remains exactly as it was.

A free flight model still depends on the same three things it always has: good design, careful building, and thoughtful trimming. Everything else is just refinement.

Flying free flight is still about the quiet moment before release. It's still about watching a model climb, circle, and drift. And it's still about the small adjustments that make the difference between a short hop and a perfect flight.

And perhaps most importantly, it's still about the people. The shared knowledge, the conversations on the field, and the understanding that no matter how long you've been flying, there's always something more to learn. Technology has refined the hobby, but it hasn't replaced its character.

Our challenge today is to pass all this on to the future generations, but that's a greater topic for discussion another time.

But I'll leave you with this ... the image in my mind's eye that triggered me to write this piece:

A generation from now, will free flight aeromodelling still be about standing on the edge of some distant flying field on a warm summer day, gazing up hopefully as a model disappears up into the blue ?

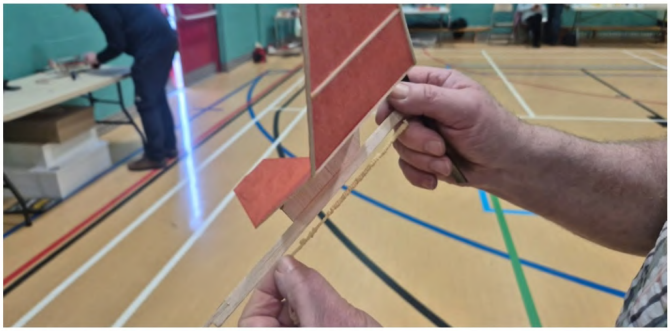
Indoors at Bushfields

Gyminnie Cricket Comp a Great Success

The competitions and the flying in general was well organised as ever. Thanks to all who were involved.

Top left: Andy Sephton receives his prize as overall winner of the Gyminnie Cricket competition

Captions?



Left and below, a closer look at Andy's winning Gyminnie model and a recording of one of his final flights. Andy was regularly getting times of well over 70 seconds on duration flights

SCAN TO WATCH

Keil Kraft. Southerner Mite:

Andy Sephton talks us through his build

For a long time now I've had the will to build a Keil Kraft Southerner Mite, so when one came up at a recent BMFA Buckminster Auction it was just too good to miss. However, on getting the kit home and looking at the contents I felt that the wood was just too heavy for comfort. On the other hand, it was a complete kit, so I was able to copy the print wood, plan and windscreen pattern.

About a year later, I invested in a small laser cutter and as an exercise, decided to produce my own laser cut parts for the Southerner Mite. I experimented with a few analog to digital conversion programs, none of which were accurate enough to produce a print wood file for a model. In the end, I imported a scan of the print wood into a CAD programme and traced it. The result was sent to the Laser Cutting software and a set of laser cut parts produced.

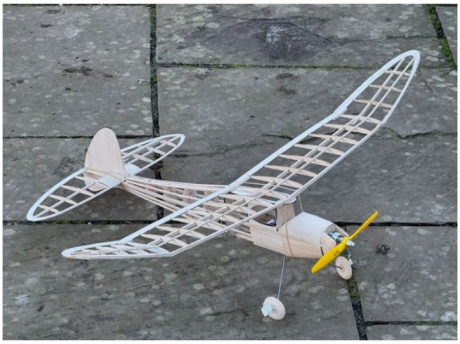
Every year I start a new model on Christmas morning, the criteria being that it must be an emotional build rather than a build for a competitions or demonstration. This year, Christmas 2025, I chose the Southerner Mite. I decided on electric power and rudder/elevator control in order to be able to fly the model from small fields. I deleted the engine bearers, added about 2 inches to the nose, made up a motor mount bulkhead, increased the fin thickness to 3/32" from 1/16", and added a rudder and elevators. The wheels are a ply/balsa sandwich sanded to streamlined section. The model was covered in the lightest Doculam I could find (supplied by VMC) with Eze Tissue on top applied with Eze Dope. The model's finished flying weight was 163gm.

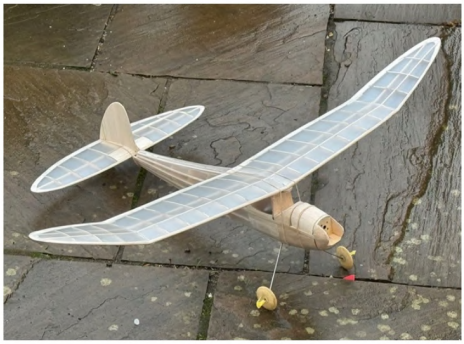
After posting the result on the Club's Facebook Group, Luke Goymour expressed a desire to build one too ... a second set of parts was quickly laser cut and couriered to Luke via his father Tom. I'm sure we'll soon hear about that model too.

Finally, there is a belief that the wing and tailplane of the Slicker and Southerner family are interchangeable. I hate to be the bearer of bad timings, but although the wing and tailplane are of similar shape, only the wing can be interchanged. The fins on the two models are integral with the tailplane and are significantly different.

Left: Christmas morning Start. The fuselage, crutch and mainspar have been laid down ... note breakfast ready and waiting on the table in the background.

Below: Build complete, ready for sanding and the model, doculam covered





Above: The completed Southerner Mite ready for test flights.

Above right: The KK Sister ship in the form of a Slicker Mite. The model is covered in 4-Max film and with a similar power train to the Southerner Mite, weighs 5 grams heavier ready to fly.
Note the similarity in wing plan form.

Right: Fin comparison of the two.

Result Roundup

FIRST ROUND:
CLUB COMP AT FERRY. 17.04.26

Rubber Precision: 1 James Watters, 2 Brian Lever, 3 Mick Page, 4 Bert Whitehead, 5 Brian Waterland, 6 Andy Green. *6 entries.*

P20: 1 Mick Page, 2 Colin Watters, 3 James Watters. *3 entries.*

Cat/Hlg: 1 Pete Gibbons, 2 Bert Whitehead, 3 Brian Lever. *3 entries.*

36" High Start Glider. 1 Brian Lever. 1 entry.

Cloud Tramp: 1 Bert Whitehead, 2 Mick Page, 3 Andy Green, 4 Brian Lever *4 entries.*

SWALLOW GLIDER

Bert Whitehead

Following on from his article in the last newsletter (Winter 2026), Bert has now finished his Swallow Glider

Remaining club competitions at Ferry Meadows are on the following dates:

17th April, 8th May, 5th June and 11th September.
E20, P20, RUBBER PRECISION, 36" HI-START GLIDER, 36" HI-START SCALE GLIDER, CAT/ HLG and CLOUD TRAMP will be run from 2 until 6 o'clock.
We will also be running the BNT Precision rubber competition on or near 22nd May depending on the weather forecast.

Answers to Brian's engine Quetions (page 8)

The 3 Engine are: Left to right. Elfin 1.49, Frog 150 and Frog 150 R.
The very powerful 1.5cc engine is the PAW 1.49 Tuned Single Ball Race Mini Goodyear engine.