

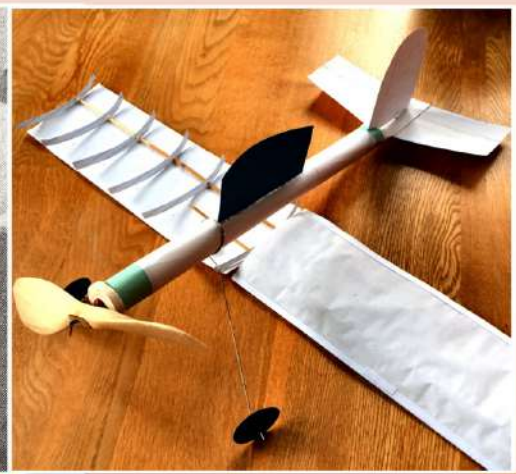
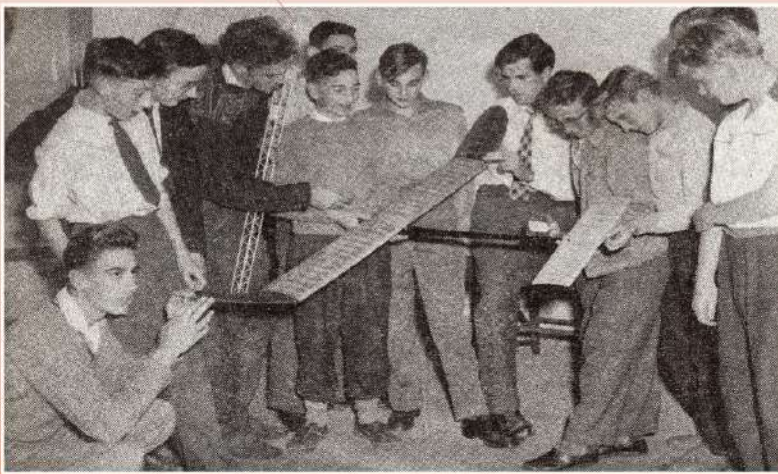


PMFC NEWS

News and Views from Peterborough Model Flying Club

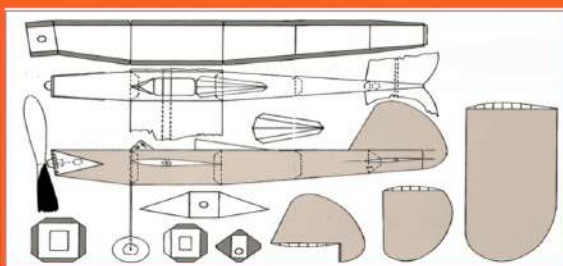
January 2025

Online and in Print



INSIDE...

- ***Memories from yesteryear***
- ***Paper Planes past and present***
- ***Workshop projects***
- ***Results***
- ***Forthcoming events***



Getting ready for the first PRPPP



Editorial

As we begin 2025 I celebrate my first 'year in the job' as your editor and producer of this newsletter. I am thoroughly enjoying the opportunity. The process does take time but it is made easy for me by the great contributions I receive – and always in an orderly fashion. So I thank all who have helped in that respect. Please do keep the content coming.

On a personal note, things have got physically easier for me since the last hip operation, but I still haven't managed to commandeer enough time and workspace to actually build anything (hence a little contribution from me in this issue from years past that I hope will in some way make up!) What is evident though is the amount of building that does go on within the club. It is a credit to us all.

The forthcoming Paperplane event (PRPPN) offers a great innovative building opportunity, and whatever your plans may be for that I think you will find the article covered over no fewer than 6 pages in this issue, very engaging. We have one more indoor event before the final big day at the beginning of March. Let's get as many as we can to support the event even if you're not able to fly yourself.

I mentioned my own health improvement but it's not lost on me that 2024 and now 2025 have been and still are very difficult times health-wise for some club members. In wishing you all the best with whatever you are going through, I hope this somewhat 'bumper issue' can at least provide something to pique your interest.

If you can't get to the flying field ... fly high in spirits whenever you can.

Tom



PMFC Committee

President: Brian Waterland

Chairman: Andy Green

Vice Chairman: John Ashmole

Secretary/PRO: Andy Green

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Treasurer/Mem Sec: Richard Arnold

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C/L Sec: Roger Silcock

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Safety/Ferry Liaison: Dave Rumball

Webmaster: Paul Townsin



On the cover: some examples of paper plane builds (see pages 10-15) and a photo from 1958 – see what it celebrates on page 4

From The Chair ...

New Chairman Andy Green has been away for much of the early part of the year but has sent this brief account of his exploits.



Your Chairman has flown with some success at the New Zealand NATs again this year where the PMFC shirt is becoming a regular sight. Currently in the mountains of Tasmania but will return for the paper plane Nats at Bushfield.

Andy's Exploits...

As he was over there flying in their Nationals, Andy got dragooned into judging the FF Scale event. It's a pity they are half a world away, because Andy says that with fantastic examples like Antony Koerbin's BE2e (below) judging was a joy!



Their National Championships was held across the New Year holiday and Andy had a very successful NATs with 2nd in Vintage Precision (hand launched Bowden), 6th in Aggy (power scramble mayhem) and, once again, a Merit Award for being the token Pom!



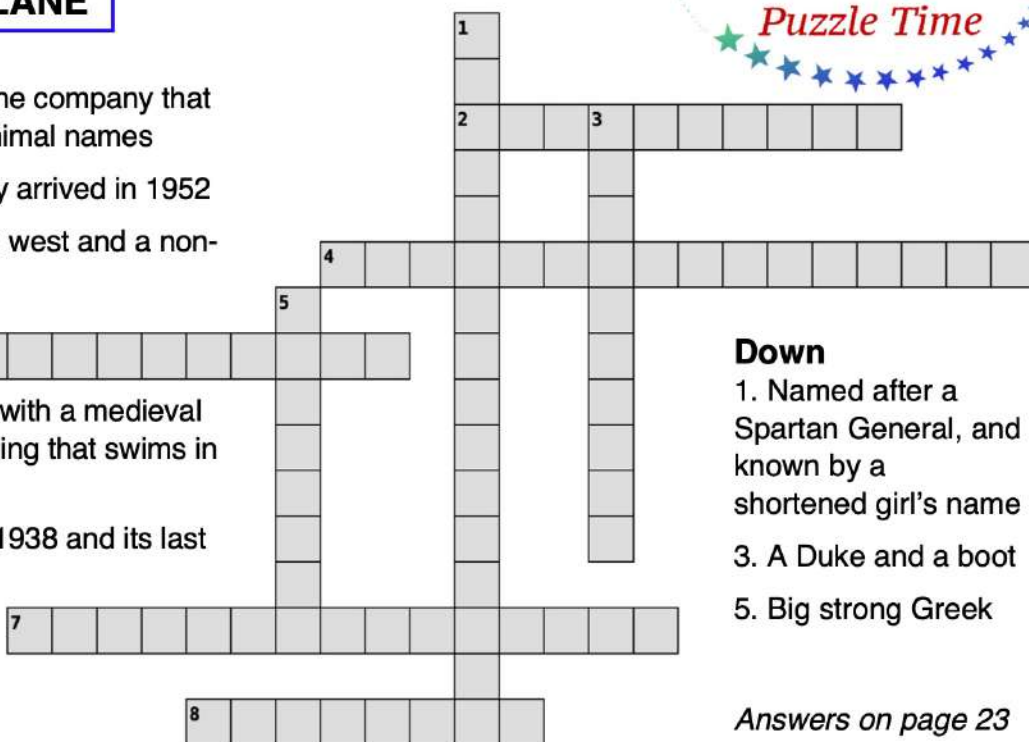
NAME THE PLANE

Across

2. Canine pet from the company that gave their aircraft animal names
4. This celestial body arrived in 1952
6. A city in the South west and a non-royal palace
7. Mythical creature with a medieval weapon and something that swims in the sea
8. The first came in 1938 and its last was made in 1948

Down

1. Named after a Spartan General, and known by a shortened girl's name
3. A Duke and a boot
5. Big strong Greek



Answers on page 23



We are indebted to Jim White from the Ivinghoe club for sending these reflections from the past. Jim is the guy who restarted PMFC after the war.



Back Row: Ted Fairchild (PMFC Sec) is 2nd left, Mike Fountain (frizzy hair - known as 'Pen') next to him
Front Row: Jim White on the left in white shirt, V Hutchcraft (centre) and to the right Alan Lane

The photo is of the Mercury Gnome 'one model' competition organised by Jim on 4th October 1959 at the old Westfield airfield. Jim takes up the story ...

We had 12 entries in the comp but only 6 returned a score and they are in the photo. According to my notes at the times, the winner was V. Hutchcraft (in the middle kneeling I think). I was second. Alan Lane was third, and I seem to remember that for a while he ran a small model shop on the north side of Peterborough. Maybe some of your members may know more.

The Gnome contest was for 3 flights with a 1 min max and we used a 100foot tow line. I noted the weather was 'very windy' and several models were broken and therefore didn't record scores.

So, even back in 1959 the Peterborough club was running 'small field comps' for small FF gliders. Happy days.

I also have a note that we had an 11-seater mini bus to go to the South Midland Area Gala at Cranfield on 23rd August 1959 and the cost was 8/6d each (42.5p ...wow!)

Also, 16 PMFC members went by bus to the Nats in 1960 that was held at RAF Scampton near Lincoln. The cost was £1.00 each return. We camped in a bell tent borrowed from the Scouts.



Finally, the Peterborough Advertiser were at our first 'restart' meeting late 1958/early 1959. I am holding my Shorty A-2 glider, my favourite model to fly at the time. My mother was most displeased with the photo because I had my trousers tucked in my socks having ridden my bike to the Youth Centre and carried my model. Mick Fountain is on my left and Phil Lydiard on my right.

Phil was at school with me may still be a member of the Ramsey Club. To the right of Phil is Ted Fairchild who was our club Sec. and a local builder.

From The Workshop of Bryan Lea

PZL S4 Kania

This has now been covered with Polyspan and received a thin sprayed coat of white primer. Colour photos of the full size seem to show it as being off-white so I think I will go with that once the weather warms up and I can spray it outside. Tamiya Racing White TS-7 seems to be a good match.

DHC-2 Beaver

I originally designed and built this model in 2012 and in that year's BMFA Nats at Barkston it came 4th and the following year it came 2nd.

Flying performance was a bit erratic, sometimes it flew well and at other times it would spiral in to the left. At some point I must have decided to bin the original model. Moving forward to October 2015 and I decided to make another one using saved parts of the first namely the glass



The orange fin in the photo lost marks for the very rounded leading edge and on the full size it is sharp so I made a new fin with a 0.5mm ply core and blue foam either side. I think the rudder must have been slightly the wrong shape so that was new. I made a new fuselage then progress stalled. Thanks to our New Zealand friends Stan Mauger and Ricky Bould I have a CD of photos of the full size so no excuses there.

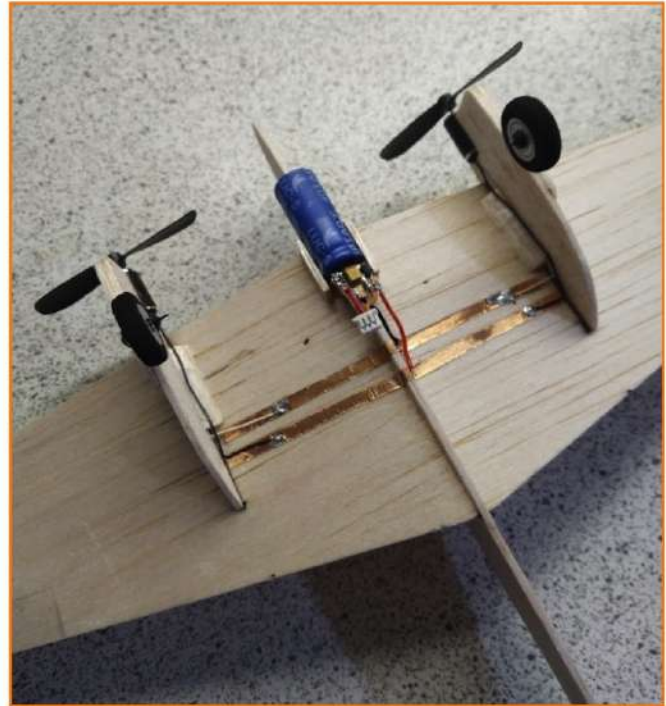


Now we are in December 2024 and I've decided to try and finally finish this off. I intend to fly this version with 2 channel R/C assist on rudder and elevator. New wings will need to be cut from white foam and luckily I saved the templates. A new undercarriage will need making up as well, hopefully before I lose interest again!

Supercapacitor FET Interrupter Switch and Delay for ROG

Jonathan Whitmore

Mucking about with electrics has a long tradition in the PMFC and the Peterborough FET Timer is a great example of a simple circuit that arose to fill a need, namely timing a motor run to prevent the full discharge of a LiPo cell. It might be overstating it to describe such tinkering as 'necessity mothering invention' but being obsessed with achieving a particular function certainly helps push developments along. For a long time, I've been keen to find a simple way to add a delayed start timer function so that I can place a tiny model on the ground, walk away and then watch it Rise Off Ground.



Installation on the Desford Twin

Recently I have been experimenting with 3 Volt Supercapacitors as a power source. The following circuit came about due to my dissatisfaction with the bulky switches needed to keep the motor from running while charging up the capacitor. I then realised that it would be possible to add a delay to the switch which might be a way of getting a small model to ROG. It hasn't quite worked out that way ... at least not yet.

The standard approach with a supercapacitor circuit is to use a slide switch to isolate the motor which stops it running whilst charging the capacitor (Fig 1.) This switch should really be rated for the current drawn by the motor, meaning it must be fairly bulky. On some models, such as the BMFA Rookie, a jack switch is used to interrupt the motor circuit while charging and the motor starts running on removal of the jack plug. A simple MOSFET circuit can give the same function with much less weight.

How It Works

A MOSFET can be thought of as a voltage-controlled switch: when a particular voltage is applied to the gate pin of the FET, the other two pins will conduct. In the Peterborough Timer this is used to turn the motor on, but we can also configure the circuit to keep the motor off while the voltage of the supercap charger is present.

The circuit shown in Fig. 2 uses a three-pin servo-type plug for charging with two of the pins connected to negative. When the charging plug is applied, the second negative pin grounds the resistor and pulls the FET gate voltage to zero, switching 'off' the FET and preventing the motor from running. On removal of the charging plug, the FET gate is pulled high to the supercapacitor voltage and the motor will run.

A three-pin servo plug will be given an Ampere rating and this should determine the maximum charging current which can be limited by a high-power resistor on the charger side. The plug should ideally be of a keying type that does not allow reverse polarity. If not, you can ensure the correct polarity by putting the single positive on the central pin and negatives on the outer pin (Fig 6.). The circuit can be configured to work with a standard two pin charging plug, but this requires a diode in the charging circuit as per Fig 3. This diode must also be rated for the charging current and so would have to be a larger component. It also slightly drops the voltage supplied to the supercapacitor.

Fig.1: Standard Supercapacitor Circuit

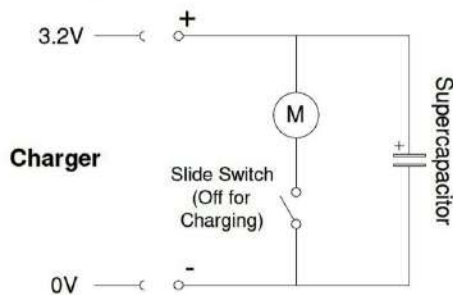


Fig. 4: FET Interrupter Switch with Delayed Start

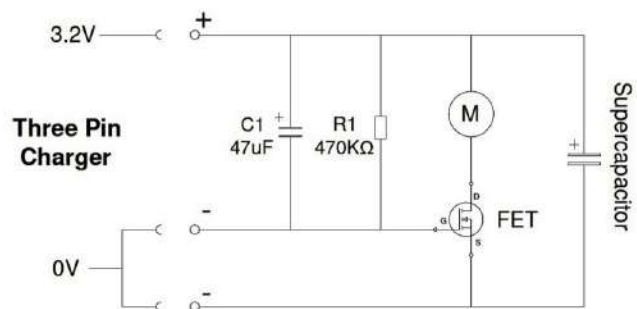


Fig 2: FET Interrupter Switch

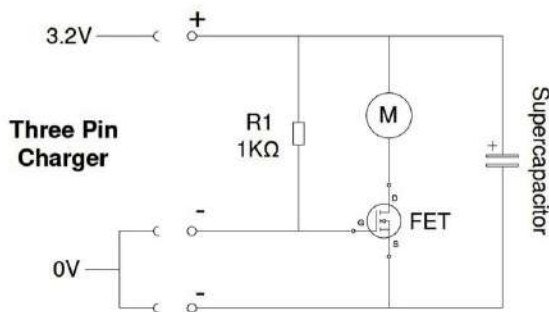


Fig. 5: Delay Power Profile

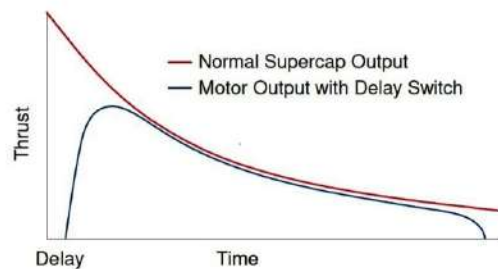


Fig 3: Two Pin FET Interrupter Switch with Diode

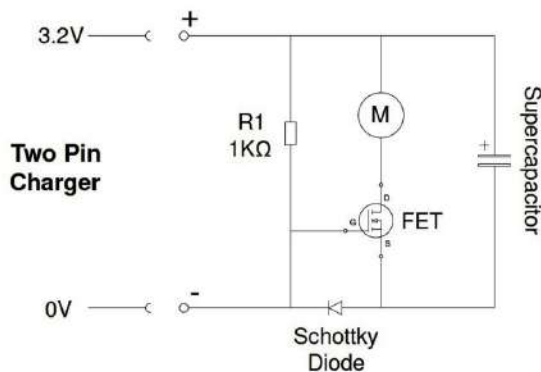
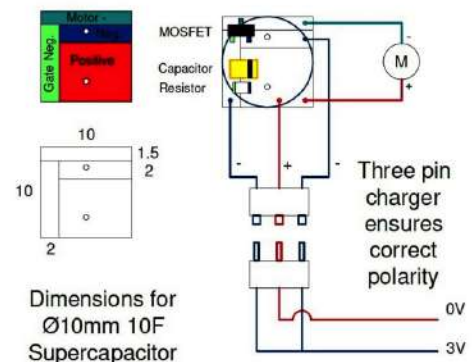


Fig 6: Scratched Circuit Board



The advantage of a circuit over a switch is that it can be made very light – approximately 0.3g for the design in Fig. 6 - whereas a jack socket is probably more like 1.2 grams. The downside is that there will be a very slight loss of power due to the resistance of the FET and the motor will stop a little sooner (when the supercap voltage drops below the FET gate threshold voltage.) This is not a problem since a capacitor model is likely to have landed by this point anyway. Using a FET with a low gate threshold and low resistance will help.

Adding A Delay for Rise Off Ground

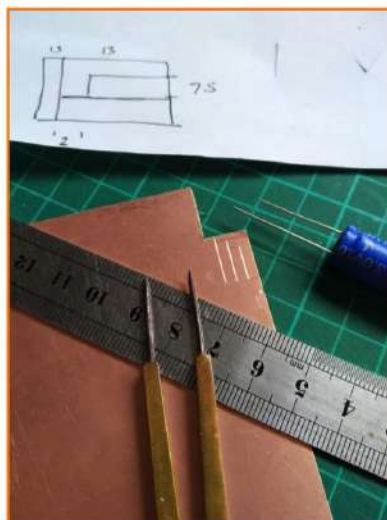
Adding a capacitor to the circuit allows us to hold the gate voltage low for some time after the charging plug is removed. (Fig 4.) This provides a delayed start and slow motor run-up for ROG. The result is a power profile like that shown in Fig 5., but - and it's a significant but - the highest voltage part of the supercapacitor run is lost to resistance as the FET turns on slowly. This means that the peak thrust that capacitor models rely on to get a good climb is reduced and this loss gets worse with a longer delay. My 11.5" Desford Twin testbed model was too heavy to take off with thrust reduced by a 20 second delay and but did achieve a lovely fast taxi (!) A 47uF capacitor and 470K resistor will give a delay of about five seconds, with the motor ramping up over a further five seconds. Peak thrust is reduced by about 20-30%. Models using this circuit must therefore be very light for the idea to work.

Building the Circuit

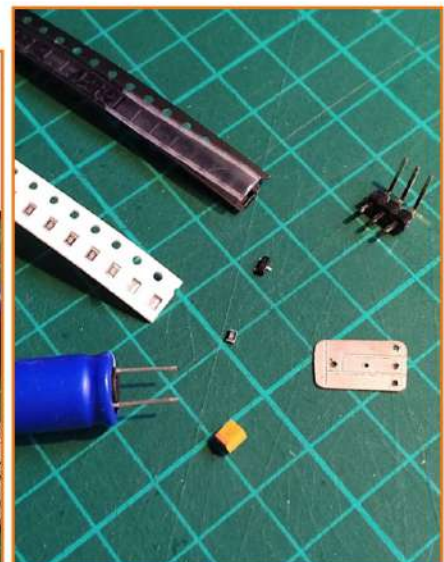
It is possible to build the circuit 'in the air' in the manor of the standard Peterborough Timer (Photo 1) but is much better to create a small circuit board and use smaller surface mount 'SMD' components. Complex circuit boards designs can be etched on copper-clad glassfibre sheet, but this circuit is simple enough to allow one to scratch away the copper to create divisions as per Photo 2 and 3. The supercapacitor can be soldered directly through drilled holes in the board or made removable by using sockets broken out of 2.54mm SIL Header connectors (Photo 4 and 5) The latter gives more flexibility to the board layout. The SMD FET, capacitor, resistor and charge plug are then soldered to the board as per Fig 6. A scratched board permits the use of very small components: a SOT-23 MOSFET, an A or B-Case capacitor and 0805 SMD resistor. The A03404 MOSFET is cheap and widely available and can handle up to 4 amps but there are plenty of other options.



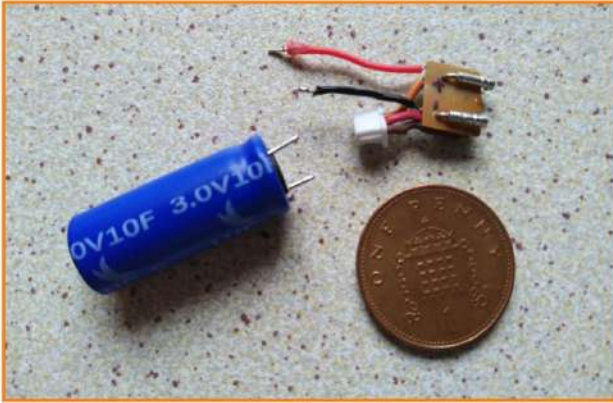
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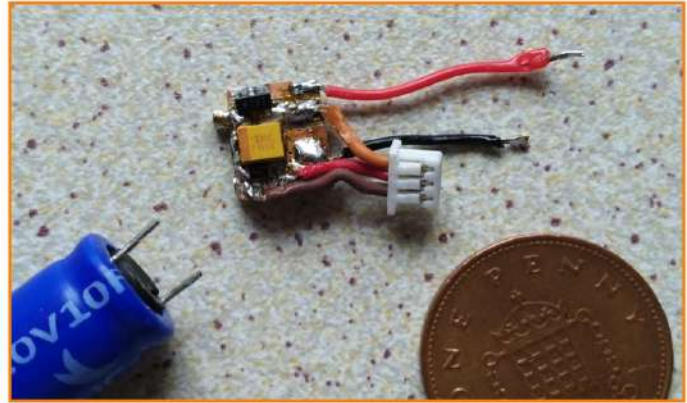
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8



3



4



5

Conclusions

As a lighter replacement for the Rookie style charging jack, the switching circuit can be considered a success. However, a simple slide switch does allow you to hold the charge back until you are ready to run the motor. As a means of providing a 'hands off' delay for indoor ROG, the reduction in thrust on top of the already modest power available from a supercapacitor imposes a significant weight limit on what you can build. Subsequent tests with geared 6mm motors indicate better efficiency than the direct drive motors used on the Desford, so the next step will be to try one of these in a lighter model. However, I'm also working on adding a delay function to a timer for LiPo with much more power available. The search for tiny electric ROG continues...

Note: Some of the pictures show a slightly different version of the circuit. Thanks go to 'RaggedFlyer' for his feedback on the development of this circuit.

A Brief History of Buckminster

by Bryan Lea

Buckminster in the First World War

There was a Royal Flying Corps airfield at Buckminster. Buckminster itself is situated in Leicestershire but the airfield is in Lincolnshire. Ordnance Survey sheet 130 National Grid Reference 893235 is the location. The following information is taken from the books Bomber County, A History of the Royal Air Force in Lincolnshire and Bomber County 2 by T N Hancock. Three Home Defence Squadrons had bases in Lincolnshire. In September 1916 38 Squadron moved its HQ to Melton Mowbray. Its three flights of FE2b's were stationed at Stamford (later called Wittering and thus in Northants, Buckminster B flight and Leadenham A flight. The 'Fees' operated until May 1918 without once intercepting a Zeppelin. 38 squadron was replaced at Buckminster and Leadenham by 90 Squadron which reformed in August 1918 with Avro 504 NF and Dolphins. HQ was at Buckminster. The unit disbanded in June 1919. The last Zeppelin raid on Britain was on 5 August 1918.

Zeppelin raids on Britain where aircraft from 38 Squadron at Buckminster took part.

27th November 1916 Zeppelin raid on the Midlands. One BE2e .

24th September 1917 Zeppelin raid on the Midlands. One BE2e and FE2b.

19th October 1917 Zeppelin raid on Northern England. Two FE2b.

5th August 1918 Zeppelin raid on the Midlands. One FE2b

Some Pensées and Ponderings About Paper Planes

Roger Simmonds with Brian Lever

rsimmo@globalnet.co.uk

Those of you who have read my review of 'Wallis Rigby, Paper Model Monarch' in January's *SAM (35) Speaks* will know of my interest in the still popular genre of paper models, and will understand my excitement when I heard about Peterborough Model Flying Club's 'Sensational New Competition for Paper Rubber Powered indoor Free Flight Model Aircraft' (see: <https://peterboroughmfc.org/feature/paperfreeflight>) which I hoped would result in many vintage models being rediscovered and new ones designed. And of course flown. In a nutshell (a building material probably not allowed) the rules are as follows: the model must primarily be made of 'paper' (60-200 gsm paper or stiff card is suggested); there must be a proper fuselage (no skeletal sticks or 'nocal') with a mainplane and tailplane (or foreplane). Wing spars can be of thin bamboo or similar, but paper (or plastic) drinking straws are allowed. Carbon fibre is *Verboten*; indeed, plastic is eschewed completely, except for propellers (and their bearings) and the afore mentioned drinking straws. The only wire allowed is for the prop shaft and (mandatory) undercarriage. In order to score, the minimum flight time is 12 seconds in scale and 20 seconds in duration.



Fig 1: Brian's 'Mk II' contender Peterborough Rubber Powered Paper Plane Nationals (PRPPN). It has a wingspan of 18" with a 3" cord, its length is 14" and it weighs a smidgeon under 29 grams. It is powered by a single 20" loop off 1/8 rubber. Its best duration (with a limited number of turns) was a short, but promising, 12 sec. When putting this montage together I couldn't help noticing the model bears more than a little resemblance to the 'Sky Ranger' that came free with two packets of 'Wheaties' (bottom right). The advert is from, I would guess, the early 1950s.

A lot of thought has gone into the rules, which (as it should be) allow more than a little leeway in their interpretation and will hopefully encourage a variety of design approaches. However, a description of Brian Lever's 'proof of concept' (POC) duration models will illustrate one way they can be applied to produce a practicable and (hopefully) competitive duration model. Brian is, after all, the progenitor of the competition, so, after careful consideration of his methodologies, the reader is well advised to 'go and do likewise!' Or perhaps not: modellers are by nature an idiosyncratic and contrary lot and will, I'm sure, have their own ideas!

Brian's model is as yet unnamed. Given where the PRPPN is being held, perhaps it should be called the 'Bush Ranger'! Brian writes: "The wing is 60 gsm paper with a bamboo spar on the underside [see fig 1, bottom left] and 220 gsm record card ribs. It is supported by bamboo wing struts and a thin card pylon. The wing tips, leading and trailing edges were not reinforced and both are warped. In contrast, the tailplane, constructed (if that is the right word) of 100 gsm paper with reinforced tips and leading and trailing edge, stayed perfectly flat. The 8" propeller is light balsa, as is the nose block. The fuselage is made of two windings of 60 gsm paper around my wife Sheila's mop handle. The U/C and prop shaft are thin wire, and the wheels are thin card. After a few successful [if short] flights I increased the number of turns on the motor and the rear fuselage buckled under the increased tension. This rather spoiled its performance!". Brian, encouraged by the model's potential and mindful of the lessons it taught him, has now made (but not yet flown) a 'MK III'.

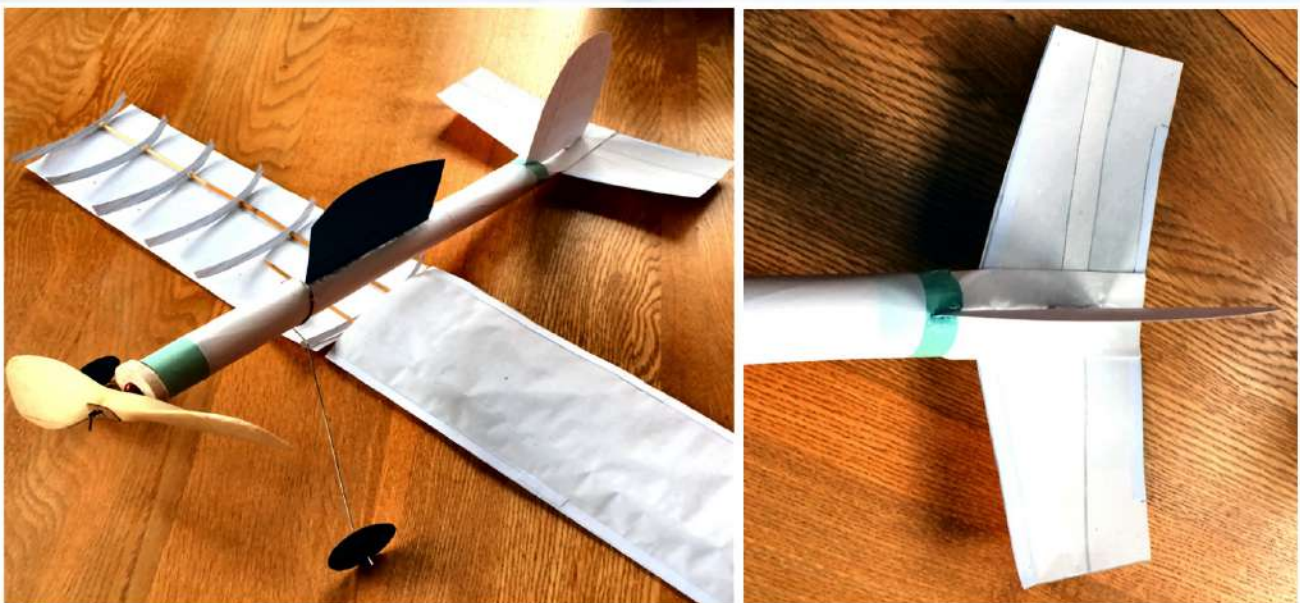


Fig 2: Brian's 'MK III' incorporates a number of improvements over the Mk II. It is a little larger to compensate for the more substantial fuselage, which is made of 3 layers of 100 gsm 'Conqueror' ribbed paper and weighs about 8g. The Wing ribs and spars etc. are as Mk II but the span is now 24" with a 4" cord, an increase in area of 64%) and Brian has added thin 'record card' reinforcing strips to the leading and trailing edges. The 100 gsm tailplane is also larger and has been given a slight dihedral. It is firmly mounted on the flattened rear fuselage. The shapelier fin, also of record card, is 15% larger and the pylon has been raised by 0.25" to ameliorate the Mk II's tendency to 'Dutch Roll'. The dihedral, 5 cm under each tip will be, like the Mk II, supported with paper struts attached to each wing 5 bays out.

I have discussed Brian's modern duration models at some length because I myself (confession time!) know so little about such things. If you need some vintage inspiration, have a look at the plan of John Lueken's 1973 'Flypaper', serendipitously republished in *Aeromodeller* this year (May), and discussed in Robert Haug's, 'Paper Planes History' (September).

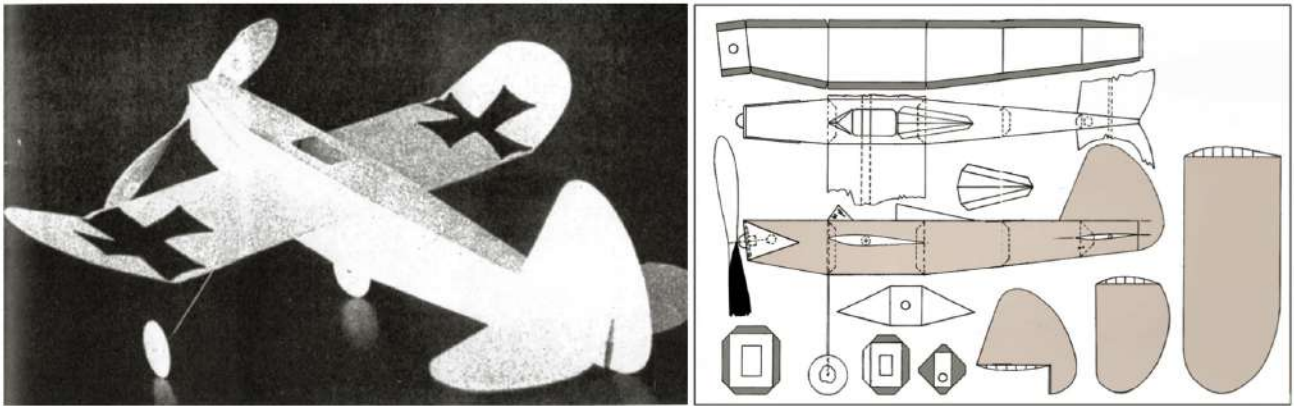


Fig 3: John Lueken's seminal 'Flypaper' was designed some fifty years ago. Despite being 'all paper' (apart from the undercarriage and the 6" plastic propeller) it was of quite robust construction as it was flown outdoors, not indoors.

That Brian's 'Bush Ranger' is more than a little reminiscent of the 'Sky Ranger', which was flown in its thousands more than 70 years ago, is reassuring and an indication that there could well be some other vintage models out there in the archives that might do well in our PRPPN. This indeed proved to be the case, and perusal of my own collection of paper plane plans and templates (ignoring all the darts, flying wings and scale jets (which are definitely not PRPPN eligible) yielded two rather tasty examples from those doyens of paper models, F D Myers (who designed not only the Sky Ranger but also a vast range of 'Jack Armstrong' Wheaties) and (of course) Wallis Rigby.

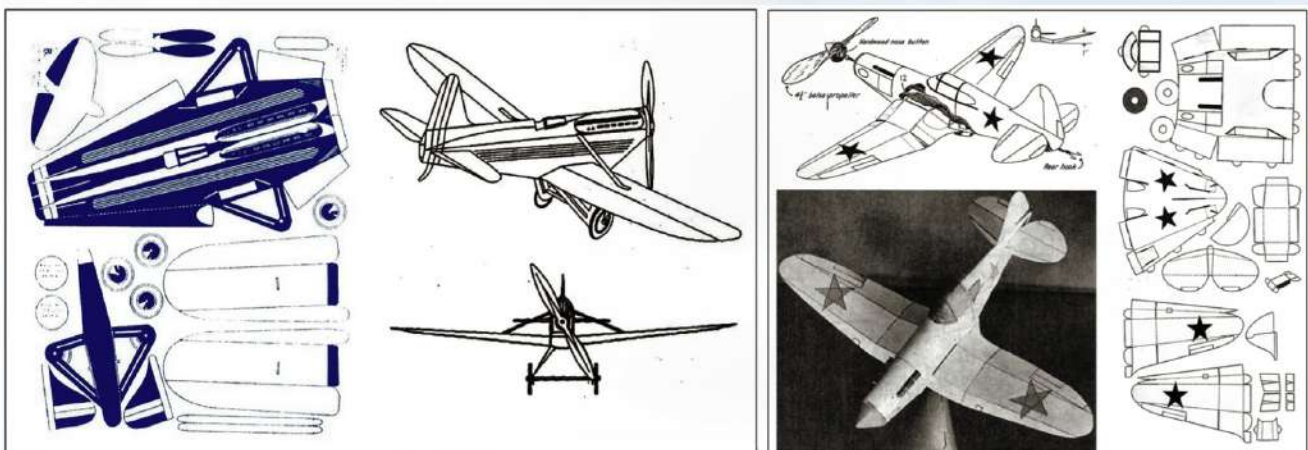


Fig 4: Two Wallis Rigby paper aeroplanes specifically designed for rubber power. The archetypal (1932) Swallow (left) was built in its thousands and makes up into a very appealing flying model. I hope its Supermarine S6B-like looks are enough to make it 'sports scale' eligible. Perhaps the judges can make it a 'special case'? Rigby's later 'I-18' (right) is, however, PRPPPN perfect.

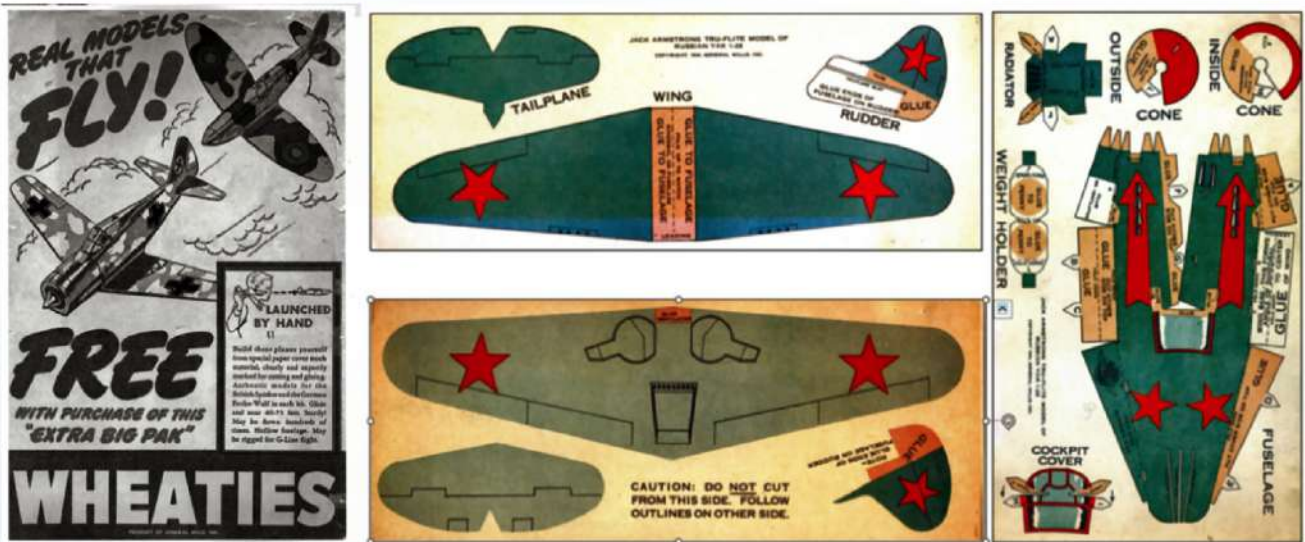


Fig 5: Wheaties were made in their thousands but few examples have survived, and this is the best example of a 'Jack Armstrong' card kit in my archives. PDFs (or jpegs) of my hi-res scans are available on request.



Fig 6: these recreations of Wallis Rigby scale models (left) and 'Wheaties' (right) were built from photocopies of original templates. The 'Wheaties' and Rigby's Zero look to be rather more practicable propositions for the would be PRPPN scale competitor.

Templates for more modern, but similar, models can be found in 'Famous Fighters to Color, Cut Out and Fly' (Bellerophon Books, 1990) copies of which are available from the usual suspects, but, you are warned, at an eye-watering cost. A download from <http://www.fiddlersgreen.net/> and other websites is a far cheaper option, and <https://modelingmadness.com/others/features/paper/pm.htm> is always good for inspiration. As to the conversion of these designs, originally for catapult or hand launch, to rubber power, at the very least the fuselages will need strengthening as paper is weak in compression, and extra layers, even of Brian's favoured record card, might not be adequate. Hmmm ... is there another option?

Many, many years ago I was given a simple, but very attractive FROG RTF rubber powered. Having survived my first clumsy attempts at trimming, it flew very well. Too well; as, one summer's day, I incautiously piled on the turns and it flew away. Brian, too, attests the performance and resilience of these models, reminiscing: "Ah, the FROG Raider! ... I purchased one from a general wares shop with much saved up 3/3d when on holiday in North Wales in 1952. I flew it on a narrow strip of grass between the caravans and a railway line. The wings and tailplane were silver balsa, and the fuselage (which was also silver and incorporated the fin) was card. It gave this 10 year old much excitement even if the nose became rather creased after successive comings together with caravans!" The point of these prelapsarian stories is that, as Brian has alluded to, the fuselages of these models were made of what appeared to be thin card.



Fig 7: I was as thrilled with my FROG 'Fury' (top left) as Brian was with his larger and more sophisticated 'Raider'. The wings and tail of both models were thin balsa, but the preformed fuselages were made of card or paper, heat pressed in a hydraulic mould. These were light and, as they had to be in the hands of us young fledgling fliers, tough.

Not having a FROG Raider or Fury to hand that I could modify with paper (or card) wings and tail to make it PRPPN eligible, I wondered if an analogous fuselage could be fabricated from suitably moulded laminated paper strips. It was worth a try. My first task was to find a suitable mandrel or male mould.

Disappointingly, a surreptitious rummage of the broom cupboard revealed no mop, washing-up brush or distaff of the right shape and size. I then had a happy thought: what about the mould I made for a Fairey Delta 2 be suitable? At ~13" long, 1½" diameter It's about the right size, and it is, of course, nicely streamlined. It was time to put on my daughter's old 'Blue Peter' badge and get messy!



Fig 8:1, the FD 2 mould was mounted and covered in cling film. The diluted PVA glue and 1" wide strips of paper ready for pasting can be seen at the back. 2, three layers were applied diagonally, first one way and then the other. The nose received an extra layer. 3, whilst still wet and looking like the proverbial 'dog's dinner', it was covered with lightweight tissue and dried overnight before taking off the mould and trimming to shape. 4, I made three half fuselage shells, one of 45 gsm paper (front), 60 gsm paper (middle), and, after some cogitation, one of four layers of heavyweight Modelspan tissue (back).

The results were, as they say, 'interesting'. A monocoque fuselage comparable to Brian's Bushranger would, if made of three layers of 60 gsm paper, be immensely resilient, but weigh a whopping 21g; if made of 45 gsm paper it would weigh a more reasonable, but still too heavy, 12g; if made of heavyweight Modelspan it would tip the scales at an acceptable 8g. This was more promising, but whilst adequately strong in compression, the shell was woefully weak in torsion. Laminated tissue may be a viable option for a small scale model, but not for a moulded 'Bush Ranger'! I need to discuss all this with Brian and, if he is agreed, carry out more experiments with a slimmer mandrel and paper of different weights and absorbency. Any suggestions? Only polite ones, please!

One of benefits of this PRPPN initiative is that ruminating about the design challenges it presents has helped an old and inveterate balsa basher like me to 'think out of the box' and keep my encroaching senescence at bay. It can do the same for you! Paper planes have a lot going for them: they can be made quickly and – a consideration in these straightened times – at little expense. They are also a lot of fun. I hope this article has encouraged you to at least contemplate taking part in this new, and as far as I know, unique competition, stimulated your own creative juices and inspired you to put knife to balsa ... er ... scissors to paper!

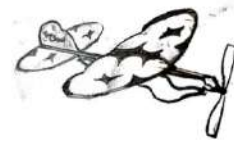
From The (Armchair) Workshop of Tom Goymour

I could have placed this short piece under the 'Down Memory Lane' heading but as I have filled that spot with another article and this issue already has more than one piece about the past, I thought I would get your attention by using the word 'Armchair' in the title. Alas, this is therefore another delve into the past without evidence of any current building exploits – or indeed any pictures of these described projects built many years ago. Currently no models of these exist.

What I am providing you with though are a couple of plans, and they at full size.

Those of you that have been in or around the club for thirty years or more may remember some of my mid-nineties experiments. I didn't compete much (my boys took up that space!) but I did design a few small models, mainly HLG and Rubber. Some were more successful than others.

The two designs I am putting out here are chalk and cheese as regards to the way they look and fly:



The Cloud (July 1994), was made from polystyrene insulating foam over a very light balsa frame and in good conditions I regularly got over a minute out of this - even lost one once!



Vroom (August 1995), was designed in a moment of inspiration because I wanted to get something that would corkscrew it's way up fast and that any youngster could launch. It's all about power – 'let's see how high we can get it!' – 100 foot was the norm as I remember. Built from Depron with a hardish balsa leading edge, I will confess the inspiration for this came from Mick Page who had designed a *Step 1* HLG and a *Step 2* rubber powered stick body model which did much the same thing as this design. *Vroom* is very much adapted from *Step 2* and I am indebted to MP for the idea. Thank you Mick.



Frostbite 28th December

Ferry Meadows was a chilly place to be on December 28th, but a few did brave the elements. Luke Goymour launches a catapult glider whilst Brian Waterland toys with the idea of getting something in the air

Member's Success 2024

John Kay receiving his "Unorthodox" trophy at the 2024 AGM. (John flew a "plank" in 36 inch Hi Start at the 2024 Flying Aces)



The season Free-flight Trophy for 2024 went to Peter Gibbons. Peter had a very successful year having had health problems to overcome throughout the year.

Well done Pete!

The image shows his successes!

Club Trophy Winners 2024

The Winners of the Club competitions held at Ferry this year were:

36" Hi Start Glider, Open Rocket and Victor Ludorum – **Andy Sephton**

Cloud Tramp, P20 and BNT – **Mick Page**

HLG/CAT Glider – **Pete Gibbons**

E20 – **Luke Goymour**

Table Top Precision – **Brian Lever**

R/C Spot Landing – **Paul Townsin**

Those awarded the PMFC Trophies were:

Control Line Trophy – **Brian Waterland**

Unorthodox Trophy – **John Kay**

Free Flight Trophy – **Pete Gibbons**

Eric Young Trophy – **Andy Green**

For a brand new competition, Stunt Racing can be declared an unequivocal success. Flown over three SAM 35 meetings and the BMFA Nationals at Buckminster plus the two Modelair meetings at Old Warden competitors, helpers and spectators have turned up in abundance. Flights have been close throughout the season with the fastest time being achieved on the last weekend of the competition. For the first time in many years we have a competition which can be flown by many, is so exciting to watch there are many spectators and is easy to run. Of note is the rich variety of models flown all adding to the excitement and interest. The event will be run throughout the 2025 season so keep an eye out for those Buckminster and Old Warden dates.

Times for 50 forward laps + 3 loops, 3 laps inverted, 3 bunts

1st Neil Tricker	3.02	6th Russell Baker	3.34
2nd Roger Silcock	3.13	7th Colin Hutchinson	3.53
3rd Andrew Robertson	3.18	8th Ian Hewitt	3.55
4th Brian Waterland	3.24	9th Julio Isidro	4.24
5th David Cowburn	3.32	10th Peter Arkley	4.27

Neil was awarded the Sam Skitt Shield for 1 year. The top 3 shared £100 prize money and a certificate each. For those who entered and did not manage a score good luck in 2025. Brian Lever Organiser

BUSHFIELD INDOOR MEET RESULTS

(up to Jan 11th)

19 Oct '24

Hanger Rat

1st Chris Grant	138 sec
2nd Andy Green	92 sec

Rubber Precision

1st Andy Green Unfortunately Andy was the only entrant on that occasion.

Indoor Scale

1st Pete Adams	Cessna 140	18 pts.
2nd John Cooper	Fred	15
3rd = Andy Sephton	Currie Wot	13
3rd = Pete Adams	Bristol Scout	13

9 Nov '24

Hangar Rat

1st Chris Grant	257 sec.
2nd Andy Green	241 sec
3rd Brian Lever	215 sec

Rubber Precision

1st Andy Green	Total difference	66 sec
2nd Chris Grant		71 sec

Indoor Scale

1st Garry Flack	Aeronca Champ	15 pts.
2nd Pete Adams	Cessna 140	4.5
3rd Brian Waterland	Pietenpol Aircamper	10.5

8th Dec '24

Hanger Rat

1st Andy Green	248 sec.
2nd Bert Whitehead	211
3rd Chris Grant	130

Rubber Precision

1st Andy Green	17
2nd Gordon Hannah	40
3rd Brian Lever	56

Unfortunately there were no entries in Scale at this meeting.

11 Jan'25

The very cold weather, -7 when I set off from home, must have put people off as the turnout was poor.

Chris Grant completed 3 flights in Hanger Rat but no other entries were received for any competition.

Several people were developing their paper aeroplanes with different levels of success, but overall it was a very enjoyable session with a great atmosphere.

Flying at Bushfields

some pictures from 11th January



Brian Waterland with his paper plane prototype - they come in all shapes and sizes!

This one is called the
'Tangerine Toblerone Terror!'
(That should tell you something!)



Steve Turner has built a Phoenix
Flying Bird Ornithopter



Mick Mahon with his *Zero Jap* model

Well done to all who made it there on the coldest day of the winter so far... two more meets to go at the time of writing – hope to see as many there as possible with your paper models at the ready ...

The PRPPN Sunday March 2nd 2025



Paul McMahon and Doug Hunt (SAM 35
Chairman) compare models

PETERBOROUGH MODEL FLYING CLUB NEW FOR THE 2025 C/L SEASON ELITE TRIBUTE VOETSAK

BACKGROUND

Over the last 10 seasons there has been (and continues to be) a very successful competition for the smaller sized Tribute Voetsak version of Ron Moulton's famous 1946 design. Using the AM25 motor as originally designated by Julio Isidro and with the redrawn plan for the Tribute sized model commissioned by Steve Betney there are now some 40 models circulating each year and competing over 10 speed laps plus 60 race laps (including one pit stop) flown one up over grass. You only have to examine the monthly result sheets to see how these teams have managed to operate their AM25 motors in most cases with remarkable consistency. During this time there have been calls to examine the existing engine rules to allow more modern motors to be used in the existing Tribute Voetsak airframe.

ELITE TRIBUTE VOETSAK FOR THE 2025 SEASON

Peterborough Model Flying Club have examined the possibility of providing the existing Tribute Voetsak airframe with a revised engine class and come up with Elite Tribute Voetsak (ETV) for the 2025 flying season. Please note this new class is IN ADDITION TO TRIBUTE VOETSAK. IT DOES NOT REPLACE THE AM25 POWERED CLASS

PMFC have used the BMFA existing British Goodyear rules as the basis behind this exciting new racing class to continue and honour Ron Moulton as the founder of Control Line in our country in 1946.

ETV RULES

MODEL. Existing Tribute Voetsak design from plan or VMC kit. Wing to be firmly cemented to fuselage (no bands required) Dummy tank and Ron Moulton bust in cockpit required. Bellcrank to be firmly attached to bearers and heavy weight leadouts used to enable safety pull of 10 x model weight prior to flight. Two wheel U/C and size as per plan firmly cemented to bearers. Cut outs may be fitted but are not mandatory as the model is flown one up and only one pit stop is required. Finish model to taste with racing number on fin and ensure BMFA membership number on outboard wing.

ENGINE

To be of 2.5cc capacity. Oliver Tiger or PAW engines or clones thereof which have enjoyed a sizable production run. Compression ignition, radial porting and iron/ steel piston liner assembly.

PROPELLERS

Any commercially available thermoplastic or glass filled propeller may be used to suit your

engine. Any propellers designed for electric motors are expressly forbidden. No modifications may be made to any propeller. Balancing to one blade only is allowed.

FUEL SYSTEM

On board tank within fuselage body. Squeeze bottle fill. Suction engine feed only. No pressure systems allowed.

LINES

Minimum line dia. 0.38mm (0.015") Stranded Lines.

Pull test before each flight 10 x model weight.

Line distance between centre line of model to centre line of handle must be 15.92m (52ft 3inches) +- 25mm (1 inch)

RACING CIRCLE

Pilot circle radius of 3 metres

Racing Circle radius of 19.6 metres

To be flown from prepared grass circle to above dimensions

PILOT AND PITMAN

Pilot to use well fitting and safe wrist strap

Pitman to use safety helmet with chin strap

Safety first at all times when flying

RACE OF TWO PARTS

PART 1

A 20 LAP SPRINT FROM A STANDING START WITH MOTOR RUNNING. 5-4-3-2-1-GO.

Sprint timed from release and watch stopped at 20 laps.

PART 2

A 60 lap race from a standing start with motor warmed up but stopped and one pit stop.

5-4-3-2-1-GO. Watch starts and pitman commences to start motor.

Model lands to make pit stop within the 60 laps. Pitman refuels and releases model to complete race. Watch stops at 60 laps. If model lands after completing more than 60 laps without a stop it must be refuelled and put back in the air again. Watch stops after model has completed a full additional lap.

SAFETY AND GENERAL RULES

All racing safety measures as per the BMFA rules handbook and in particular the rules for British Goodyear from which the engine, line length and circle rules have been adopted.

ANY QUESTIONS?

Please contact.....blever@btinternet.com

I hope you may join in the fun for 2025. Very Best Wishes, Brian Lever PMFC.

From The Workshop of Andy Sephton

2024 has been a dry year for me in respect of model flying. Work (yes, I'm still working one day a week!), weather and car unserviceability have contrived to limit my flying to just 11 outdoor sessions and one indoors over the past 12 months. However, looking on the bright side, it has left me a lot of time in the workshop!

Projects worked on since the last report have included:

- Decorating the KK Gypsy for Deluxe Materials to illustrate the use of spray cellulose dope on Eze Tissue:
- Finishing off the Radio Queen and getting it ready for a Test Flight early next year:
- Building a test model of a 30" rubber powered FF Lacey for the Vintage Model Co (VMC). I designed the model for SAMS Models back in 2016/17. Sadly, it proved to be too expensive to produce so it was put on hold. VMC showed an interest and believed they could make it financially viable, so a test model was produced. It's successfully flown outdoors at the time of writing, but not Indoors. The kit should be ready for sale in the Spring of 2025.



I won a number of kits at the recent BMFA Auctions. I'm intending to build all of them and have started on the Chief.

The Keelbild is a 16" Miles Magister; the kit includes bottles of Banana Oil and Thinners (long dried up) and a packing slip dated 15 Sep 1938!

The Chief is progressing slowly, the picture shows the fuselage sides on the building board.



The Chief is progressing slowly, the picture shows the fuselage



... and finally... For many years, I've started a model on Christmas morning. I try to make it a model that I'd like to build for no other reason than it peaks my interest. This year it was a 30" rubber free flight model of a Fieseler Fi167, a model that's been on my build list for over three decades. Report on how I got on in the next newsletter.

For help with understanding the layout and colour scheme of the Fi167, I'll be making up a 1/72 plastic model too:

CROSSWORD PUZZLE ANSWERS

Answers to 'Name the Plane' page 3

8. Spitfire
 7. Fairey Swordfish
 6. Bristol Blenheim
 4. De Havilland Comet
 2. Sopwith Pup
- ACROSS
5. Hercules
 3. Wellington
 1. Westland Lyander
- DOWN



"Easy this modelling game isn't it.... but do you really think we need to build any more today?"

FORTHCOMING EVENTS



Have you started preparing for...
**THE SENSATIONAL NEW COMPETITION FOR PAPER RUBBER
POWERED INDOOR FREE FLIGHT MODEL AIRCRAFT ?**

2025 Indoor Flying - remaining sessions

Location: Bushfield Leisure Centre, Peterborough PE2 5RQ
Sunday February 9th 10.00 to 13:00

Sunday March 2nd 10:00 to 14:00 - Includes:

The Peterborough Rubber Powered Paper Plane Nationals event

2 Classes:

If you fancy taking part in a UK history making competition come up with your design (or make a paper version of an existing one) and pop along to the Bushfield Sports Centre for the remaining meeting for trimming flights prior to the day



The **PRPPPN** will take place on



**2nd MARCH: Bushfields Sports Centre
10.00 - 14.00**

How can you possibly resist the hottest new indoor event in town?
**Come along and trim your model at the February 9th meeting
at Bushfields 10.00 -13.00**

DATES FOR YOUR DIARY

22/23 February 2025: N Luffenham 'Coupe de
Birmingham' including Open E20

Sat 6th September: **Flying Aces 2025**
PMFC's Annual Gala