



WHAT? A proper events calendar at last?

HOORAY!



PMFC and SAM 35 Calendar of Free Flight events.

Plus one very important extra!

(Other events may be added later or changed if circumstances alter, so “check before travelling.”)

10th May: SAM 35 Under 25” Vintage Rubber Postal begins.

25th May: Club FF Contest, Round One.

11th June: Club FF Contest, Round Two.

21-22 June: 24 Hour Electric C/L Flight, Peakirk Village Green
(see PMFC website for details)

25th June: SAM 35 Under 25” Vintage Rubber Postal ends.

26th June: Power Precision, Buckminster. (Part of the SAM 35 Retro weekend 25 - 27/6)

16th July: Club FF Contest, Round Three.

25th July: Masfield and Earl Stahl Trophies, Old Warden (part of Scale Weekend.)

23rd August: Ajax and Achilles (plus supporting events) Buckminster

7th September: Club FF Contest, Round Four.

9th September: 2021 BNT window opens.

12th September: PMFC Flying Aces, Nene Park.

19th September: Rubber Bowden, Old Warden. (Festival of Flight weekend, 18 - 19th)

25th September: Indoor at Bushfield, 10.00 to 16.00

4th October: Rubber Aces, Buckminster (Ace, plus supporting events)

17th October: Rubber Ratio (plus supporting events) Buckminster

25th October: Small Models plus 36” Hi-Start Glider, Buckminster/
plus catch up date for missing events.

31st October: Indoor at Bushfield 10.00 to 13.00

TBA: (Probably September) Cloud Tramp Challenge versus Auckland.

PETERBOROUGH MODEL FLYING CLUB



MAGAZINE



May

2021

ACTION, AND ACTION NOW!



Russ Lister’s contest winners, Bernie Nichols Trophy report, and a full size plan for Real Aeromodellers!

*Produced both as a paper copy and as an e-mail attachment for PMFC members, and subsequently on our website
www.peterboroughmfc.org*



NOTHING IS YET CERTAIN, but we can, with care, visit the fields when weather allows, and peruse the calendars for the (intended) coming season.

The back cover of this magazine lists PMFC events, the SAM 35 Free Flight events that I am running, plus a few others. Members will need also to visit the FFTC website for their calendar (with its relocated Nationals events), the scale sites (remember the series of Buckminster Monday meetings), the control line listings and the Buckminster events calendar in order to put together a full picture of what lies ahead.

Mondays are Free Flight days at Bucky, so if you are planning to go, let me know and I will put the message out. Control liners will be looking forward to seeing the new circle which is nearing completion. And you can't be a modelling enthusiast without wanting to see the car race circle in action, too.

Please remember, folks, that by being present you are helping events to survive. Results of contests are interesting to a few, but the numbers attending are critical.

Editor@peterboroughmfc.org

(Then, just as we were about to press "print" along came two sets of photos, almost character sketches in some cases, generously supplied by Mick Page and Martin Skinner.

As a last minute addition, they now form our "BNT Colour Supplement.")

COVER: Windbreak Club stalwart Gerry Williamson's fleet, ready and waiting to escape from lockdown and hit the sky!



Normally, such a grim-looking bunch of cronies as these would not be allowed to taint the pages of our magazine, but since this is the FIRST ACTION PICTURE AFTER LOCKDOWN (if you call this action) taken at the Good Friday meet at Ferry, it deserves a place, albeit near the back. However, if any one of these offers you a second-hand car, have it checked it carefully!

Goodbye Esaki, welcome Asuka!

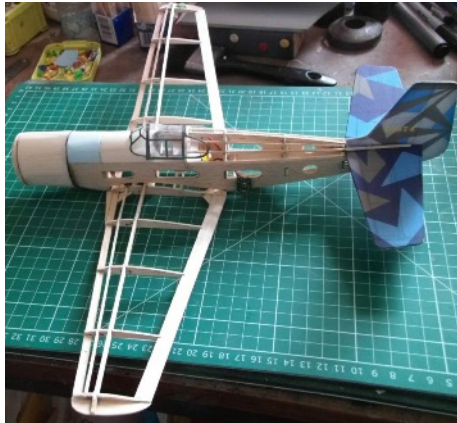
Members will know that Mr. Esaki is no longer handling his popular range of lightweight tissue. Does this mean that my signature red/white colour scheme will have to be abandoned? NO, because Mike Woodhouse has sourced a similar product.

It is a new range, known as "Asuka." Members may also know that I only use tissue to add colour to models already covered in Polyester, but I have just used the new tissue on a wing, and found it no different in strength or handling than its predecessor. In fact I intentionally put a piece on wrongly, with a crease and a slight twist, so that I could see how easily it could be removed and replaced (err, twice, actually.) No problems. My ten sheets cost £25 posted, from FF Supplies. Now to give it a coat of thinned non shrinking dope from another favourite supplier, Sky-tech, who do it in useful 250ml tins, as well as thinners by the half gallon. Contact me if you wish to visit, as they have tended to move, but I know where they are!

COMMITTEE POSTS:

- | | |
|----------------------------------|-----------------|
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| Chairman | Brian Lever |
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| C/L Sec | Roger Silcock |
| Sports/Scale Sec: | Russ Lister |
| Website: | Paul Towsin |

The Rob Smith page (2) ...soon this innovative modeller will have a supplement of his own!



“By the middle of 1942 the US Navy was seriously worried by the superior performance of the Japanese Zero fighter. So they asked North American if they could produce a naval version of their P51 pursuit fighter. However, as they had little experience of inline engines they asked if the aircraft could be powered by a Pratt and Whitney 2000hp double Wasp motor.

At the same time the Navy was experimenting with a version of their measure 22 warship camouflage for use on aircraft. NA built the fighter which was given the title F7F Sea Stallion. With its new paint scheme it proved very successful.

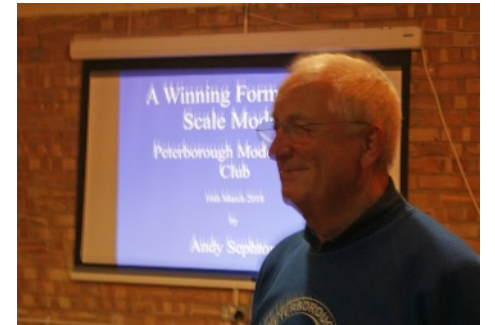


The Mk 2 version had an advanced aerodynamic swept forward wing. It performed beyond expectations and served into the jet age.”

Thus says Rob, & who am I to question his veracity. Apparently, a three view exists. As for the rest...members may like to do their own research.. Personally, I believe every word.....

CORRESPONDENCE

Andy Sephton has a point to make....



Afternoon John,

Congrats on yet another great magazine!

Now, here's some food for thought, I decided to take a sideways look at the new Operator ID ... I'll not be offended if you don't publish it!

"My new CA Operator ID has arrived. Looking at the length of it and given the minimum height of the letters, I reckon the required space to put it on a model would be a lot longer than a number of my models are anyway. I admit that such models are below the weight limit, but I decided to have a 'light hearted' look at the size of the ID - bear that in mind, please, as you read on....

So, with 19 characters total, there are some 98 possible ways that each character can be filled on my keyboard - numbers, letters small and large and symbols. This means that there are a possible 6,000,000,000 (37 noughts in total) number of different combinations. Given that there are only (?) just under 8 billion people in the world, we have an excess of some 1,000,000,000 (28 noughts in total) times the world population in spare ID s. Scientists have estimated that there are 1,000,000,000,000 stars in our galaxy and there are 1,000,000,000,000 galaxies, that makes some 1,000,000,000,000 (24 noughts in total) stars in the universe. Lets assume there are 9,000,000,000 beings on planets orbiting those stars, and each one of those beings is issued with an operator ID, we still have a factor of 1,000 spare. So it would appear that the CAA not only wants to regulate our universe, but they also plan to regulate some 1000 parallel universes as well!

In an effort to reduce the excess, I looked a little closer at the ID. The first 7 characters define the country and the operation. That leaves 12 characters. These appear to be limited to uppercase letters and numbers, so we have just 36 characters available to fill the next 12 slots. This gives us 4,000,000,000 (18 noughts in total), a surplus of some 1,000,000,000 (9 noughts in total) times the worlds population. Again, we have an excess. Scientists believe that there are around 11,000,000,000 earth like worlds in our galaxy orbiting sun-like stars. Assuming these earth-like planets have developed life similar to ours, we now not only have enough operator IDs to cover all the people on earth, but those of every planet in our Galaxy ... which is probably a more realistic goal that the 1000 parallel universes described above.

Looking at it another way, with 60 odd million people in the UK and 36 characters to play with, we only need a 5 digit number to cover the whole of the UK population which would give me an ID that WOULD fit on my smaller models, should they ever require one!

Questions?"

Best Regards,
Andy

THE NEW POWER PRECISION CONTEST



In addition to the Bowden Trophy, which will be run by PMFC at Sculthorpe on Sunday 1st August, we can also enjoy the SAM 35 precision contest at Buckminster a little earlier in the year, on Saturday 26th June.

POWER PRECISION RULES assuming event takes place at Buckminster.

Models: Cabin or cockpit style models powered by diesel or glow motors up to 1.3c.c. No profiles. For this contest, models are divided into two classes; Class A, High Wing/Shoulder Wing Cabin, Class B: Low Wing/Biplane Cabin. A competitor may enter both classes. It is the competitor's responsibility to ensure that their models are safe and legal. Only one model may be used by each competitor in each class.

Entries: Fee £3 per entry, which must be made one hour before the contest is due to begin. Names will be balloted for running order. The contest will begin at a time between 12 noon and 3pm, depending upon the weather conditions. Target time will be announced at least one hour before contest begins. It is likely to be between 30 and 40 seconds according to windspeed.

TEAMS (optional, and subject to a minimum of three teams.) Flyers may form into teams either based on their club membership or ad hoc teams assembled on the day. For the purpose of the team competition, the division of models between Class A and Class B is disregarded. Three flyers per team. Lowest aggregate score wins. Flyers' individual scores are also counted as team scores.

Procedure and scoring: Number of rounds decided on the day, but will be two or three. All flights hand launched. Deviation from target time will be recorded. That will be the only form of scoring. A launching area will be defined by the CD, and will be at a safe distance from the pits. Flyers will be called across when it is their turn. One assistant may accompany flyer. Two minutes will be allowed to start motor and launch. Starting must be by the competitor and by hand only at this point but assistant may if necessary hold the model during starting. If starting/launching takes between two and five minutes, 5 points will be added to the score. Models that fly for less than 10 seconds may be launched, retrieved and launched again within the first five minutes but only one such relaunch is permitted. Failure to launch within 5 minutes: no flight, scored as 30 points.

Any flight over 60 seconds will be scored as a 60 second flight. Any model that lands by dethermaliser within 60 seconds will be scored as a 60 second flight. Radio transmitters (if used) must not be touched by competitor or assistant during the 60 seconds of the flight. Penalty: flight scored as 60 seconds. Lowest aggregate score over both (or all) flights wins.

AWARDS: Engraved trophy for overall winner. Runner Up certificate and Best in Class certificate for winner of alternative class. Certificates to members of winning team.

Category three: Radio Control



PMFC Winter Building Comp. 2021
Radio Control Winner
JOHN ASHMOLE



Category four: Control Line



PMFC Winter Building Comp. 2021
Control Line Winner
BRIAN LEVER



Category five: Best Runner Up



PMFC Winter Building Comp. 2021
Best Runner Up
LUKE GOYMOUR



Many thanks to Russ for running this motivational event, and also for his remarkable generosity with regard to prizes.

RUSS LISTER'S WINTER LOCKDOWN BUILDING CONTEST RESULTS

Russ reports: "A great amount of entries for the competition making it difficult for me to pick the winners!

I have decided to add a couple more categories.

Hopefully I shall be able to hand over the prizes personally as I have a mistrust of the post, and I hope to see you all sometime soon."

Category one: Scale:



PMFC Winter Building Comp. 2021
Scale Winner
MARTIN SKINNER



Category two: Free Flight



PMFC Winter Building Comp. 2021
Free Flight Winner
ANDY SEPHTON



Preparations for the big day... Brian Lever and team have much to do before the 24 Hour record attempt takes place, on 21st and 22nd of June.

Visit our website for further information, and advice on how to make a donation to Brian's fundraising appeal.



BRITISH ELECTRIC CONTROL LINE 24 HOUR RECORD ATTEMPT 21/22 JUNE PEAKIRK VILLAGE GREEN 10.00 START

FLIGHT TESTING

Andy Green and Brian Lever made some important flight testing in late April. In particular Andy, who had a complete flight system outside of a model, had spent time mastering the timer programming sequences. This enabled him to re-programme the timer on each model to give a flight time of five minutes and ten seconds from a single button push prior to launch.

Difficulties had arisen earlier in the month when the original battery supplier, who had confirmed he had stock, all of a sudden was unable to supply.

The situation was saved by Overlander, based in Preston, who were able to supply thirty six 1000mAh batteries suitable for the task in a matter of 48 hours. Not only this the batteries were sold at a very discounted price as their contribution to support our fund raising.

Brian Lever tested the new four output balanced chargers on a number of the Overlander batteries and all worked perfectly.

Out on the Village Green five models were flight tested. Some slight adjustment to the CG position was made to ensure a "grooving" stable flight pattern, and with all systems working well we retired for a well earned lunch.

All members are cordially invited to visit Peakirk Village Green on the 21/22 June to spur on the pilots, helpers and hopefully achieve a British National Record for PMFC.

THE ROB SMITH PAGE (1)



Hi, John:

Here's my version of the KK Sportster.

I thought the wing shape was very much like the Dewoitine 510, so I did it in Vichy French colours!

East to spot in the long grass.

It has depron wings and tail surfaces.



The motor, prop and gearbox are drone spares available from Amazon. The cells and control board are from the small models Phil Worth and myself are experimenting with.

The setup gives a lot of thrust, I think the prop must be very efficient. I'm going to try one out on a KK Flying Scale kit.

....Rob Smith,

After three rounds Luke Goymour was beginning a strong recovery from an initial "13," while Messrs Whitmore and Watson were contending for third place behind Peter and Brian. Big changes were to follow in the final two rounds, as Brian lost fourteen in round four to put himself out of contention, while John Watson, working hard to get his turns just right on a Frog Goblin, came strongly into the picture with a one and a two. Earlier, Mick Page, three times a holder of the "BNT," had blown his chances at first flight with a fourteen plus some damage. A zero later showed what could have been. Andy Green seemed to be having difficulties with his Eaglet which had performed better in trimming, but don't they all? Martin Skinner recovered very well from two disappointing flights scoring a five and a three at one stage, while Dave Rumball just got better and better to rise into fourth place.

And my second Red Admiral trimmed down to a "one" just as the contest ended.

At the prizegiving, we made Mick relinquish the trophy to a very pleased Peter, and all went away looking forward to doing this all again...quite soon as it happens, as the 2021 version is scheduled for later in the summer.

Every competitor will have had adventures to recall, and all (bar one) will be hoping to do better. Now the attention will turn to the regular series of club competitions.



Left: Champion in trouble, a rare sight.

Right: "Ut victor spolia."



2020 BNT Results:

1	PeterAdams	Lacy	0	2	4	5	1	=	12
2	John Watson	Frog Goblin	3	5	6	1	2	=	17
3	Luke Goymour	Ace	13	2	5	0	2	=	22
4	Dave Rumball	Sirocco	9	7	5	1	1	=	23
5	Brian Lever	Robin/Ace	3	3	1	14	4	=	25
6=	Jon Whitmore	Skiptown Cadet	5	7	2	5	9	=	28
6=	Mick Page	Link	14	4	0	4	6	=	28
8	John Ashmole	Red Admirals	14	7	4	3	1	=	29
9	Martin Skinner	Robin	17	15	5	3	10	=	50
10	Bert Whitehead	Ace	11	0	14	9	18	=	52
11	Andy Green	Eaglet/Elf	14	13	8	15	6	=	56
12	Chris Grant	Ajax					w/d.		

A WALK IN THE PARK FOR PETER

.....the 2020 Bernie Nichols Trophy



We had been waiting a long time for this. Finally, nine months after its due date, the 2020 Bernie Nichols Trophy took place. A dozen competitors were greeted by a flat calm overcast at Ferry Meadows: conditions which enabled the event to run its full course of five rounds...around 60 competition flights were about to take place. The ballot for flying order was drawn just after 4pm, the CD called a briefing explaining how he intended to try to keep everyone under control, a vain hope, and the sound of rubber winders was heard again in the land.

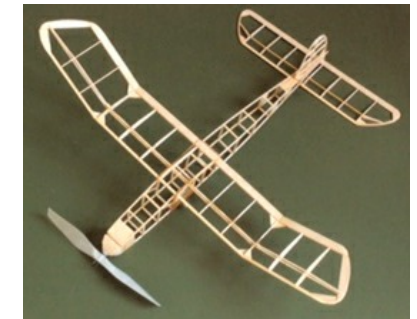
Chris Grant, drawn first, began the proceedings and probably wished he hadn't. His normally compliant Ajax executed a series of violent stalls striking the ground inside the 10 second attempt allowance. A second launch, later on, produced a similar result and he retired from the event with work to do. Generously he then assisted greatly in timing and scoring, along with Dave Leeding who, having arrived to spectate, found his experience with precision contests called upon, and provided valuable assistance. This was needed because the CD, (that's me) had such an embarrassing first flight that I was preoccupied with trying to force a face saving score out of a pair of Red Admirals for the remainder of the contest. Consequently this report will be rather sketchy, and may contain inaccuracies.

Peter Adams laid down his marker in the first round; his scale Lacy performing perfectly, with a zero loss hitting the target time of 35 seconds. (Andy Sephton will love reading this!) There is a trend beginning here: as in 2019 "he who cleans the first round wins the trophy." John Watson and Brian Lever ran him close, but there were too many big losses in this opening round, which rather "shot the fox" for several potential challengers. Brian Lever who, like us all, prefers to do things a little differently, was winding by finger throughout. His digital torque meter was the best assessment of power, he claimed. Since after three rounds he was only one point away from Peter's Lacy we could hardly object, although after broken motor a change of model was subsequently forced upon him. Jon Whitmore felt he was "bringing a knife to a gunfight" with his very attractive little Skiptown Cadet, but the knife was well whetted, providing a string of single-figure scores. One of the few zero scores was provided by Bert's black Ace (of spades?) But he, one of the heroes of last year's "Rubber Bowden" would have been disappointed by inconsistency after a commendable zero in Round Two.

New members!

(Both of whom were to shine in the BNT...see p. 14).

No, not that old chap on the left who we've seen too many times before, but Luke Goymour, not entirely new, as some of you may remember him from a youthful past. Clearly an ACE builder.



...and a warm welcome to John Watson, with a superb line in hats, and his Elf.
"Can you see what is is yet?" He asks, revealing the uncovered framework. It's a 20" Senator, for use in club P20 contests.

Scene at Ferry and Bucky, April. Photos by Martin Skinner.



Peter Adams shows his Frog Tomtit, useful for SAM "Small Models" contest, now moved to Bucky later in the year. Dave Rumball holds his Swallow: is it a 20 incher?



To misquote Arnold Palmer, the more I trim, the more confused I get. There goes the Setter, making up its own mind.



The uncovered frame of Brian Lever's Lola, from an Old School Model Aircraft Factory kit (no longer available) but he can supply the Vic Smeed plan. Below To complete the FLUSH of ACES in this edition here is Stuart Marsden's Ace. AS the BNT demonstrated, they are very elegant in the air.



Below: Dave Clark sends this reminder of 2009, at Ferry. Can you tell all the names?

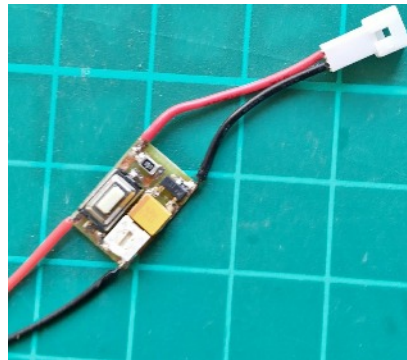
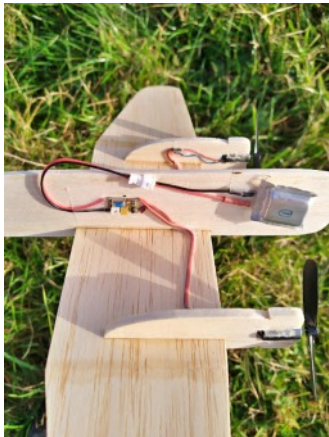


This current timer iteration is 8 x 12 mm, weighs in at 0.3g and is capable of 5 amps. This is enough to run four 6mm drone motors. The time can be set up to about 70 seconds and motor run has a short decay period which helps transition to the glide. There are some areas I can shave weight so should be possible to go even lighter than this. I will also make some available if there is any interest.

The Test Bed Model

The proof of the pudding is in the flying, as they say, so a test bed model was needed. The Douglas DC-5 has a good layout for free flight being a high-wing twin with dihedral and a decent tail volume. A simple profile scale model of 13" span was built and equipped with 6 x 12mm coreless motors (from Ebay complete with 47mm props) and a 1S 100mAh lipo (Cheerson via Banggood). The total weight came to 18g of which the airframe was 10g along with 8g of electric bits. A smaller Lipo could be used but this size is the smallest that most basic chargers can handle.

Construction is extremely simple and should be obvious from notes on the plan. In spite of the fact that the wing template is split up to fit on a sheet of A4, the wing is actually made from a single piece of wood with the dihedral joints cracked and glued. Lateral balance could be improved by inseting the Lipo



into a cut out in the nose. The original was just taped on one side, which necessitated the aileron trim tab, or a blob of Blu-tak on the opposite wing.

Flying the model is great fun – just turn up and press the button. This is very much an outdoor model as there is plenty of power on this set up. On one very calm afternoon I set the timer to the full minute or so and let rip. The model headed off in a steady climbing circuit and kept going until it was a mere speck. Fortunately, there isn't much of a glide and it landed just inside the field!

Flying videos can be seen on my Youtube channel via these links or search 'Slowmatch DC-5'
<https://www.youtube.com/watch?v=YYVJlxg85vk>
https://www.youtube.com/channel/UCQAYWl3uyx0UMGDx_nJf5Dw

The profile model has proven that a with a lightweight timer, small coreless motors can fly a Peanut sized twin very well indeed. A stick and tissue DC-5 is now under consideration, or perhaps a profile Constellation?



JON WHITMORE'S DOUGLAS DC 5 ELECTRIC TWIN



Consterneezer?
Constellneezer?
DeeCeeNeezer?

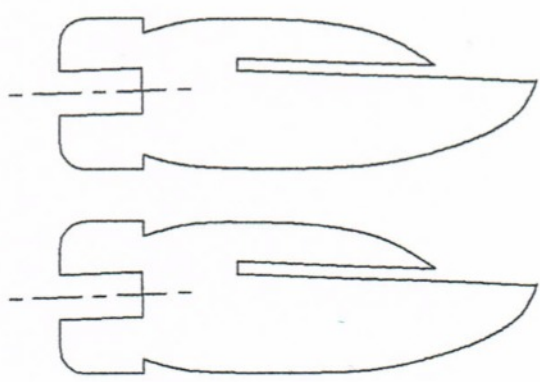
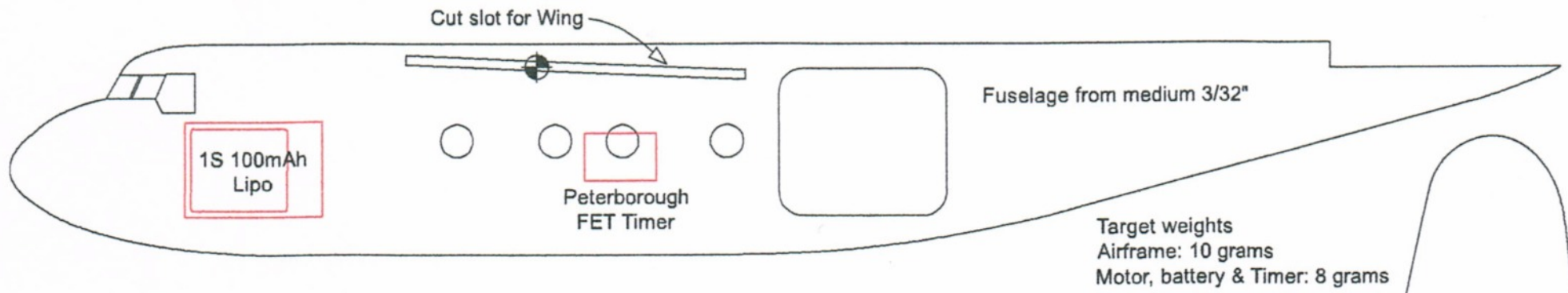
For some years now, I have nursed the dream of a micro-sized multi-engine scale model for electric. Over the last decade technology has advanced quickly and now there are a tantalising array of cheap tiny drone motors and small lipos available. The missing link has been a **really** light timer.

There are some off the shelf units ranging from the sophisticated Atomic Workshop Zombie controller (1.25g) to the simple but heavy Strix (6g!) Then, of course there is the beloved Peterborough FET Timer in it's many guises. The simplest iteration of the Peterborough timer is quite light (around a gram) but operating it has it's quirks and usually requires some faffing about with a zapper.

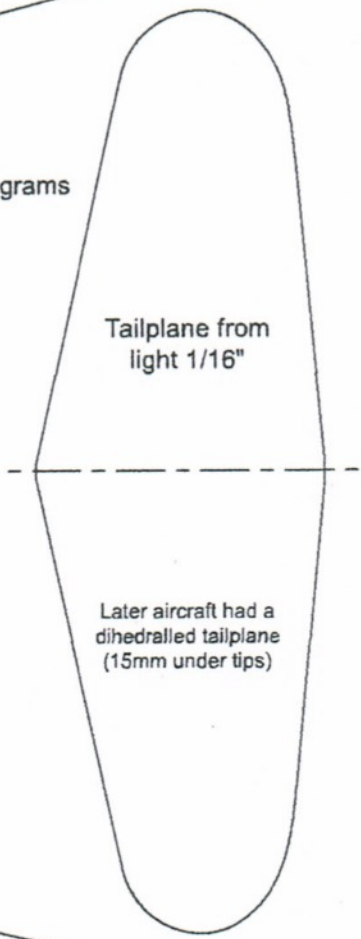
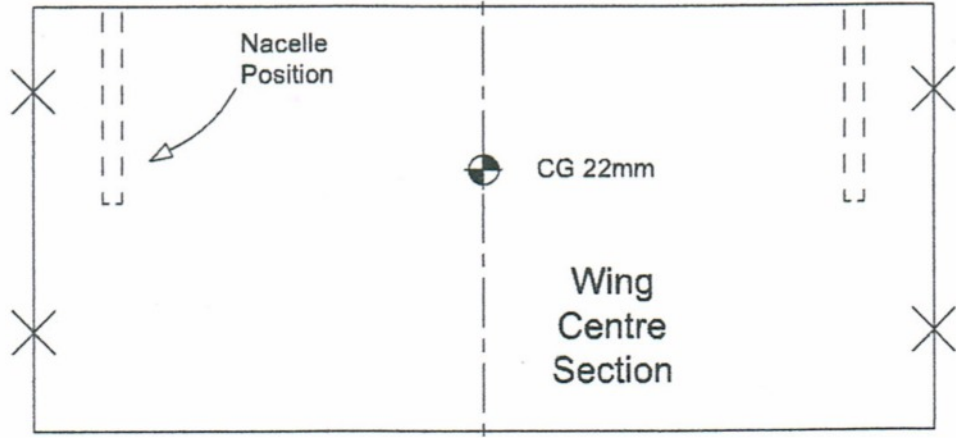
When it comes to flying my models, I've realised I can be quite lazy. Some days I just want to pop out with a model and a couple of batteries and fly with minimal fuss. Would it be possible to create a really light timer that gives a 'plug and play' solution - filling the gap between those tiny motors and batteries?

My early experiments with micro versions of the P'boro Timer showed that soldering the smallest components together 'in the air' as per the original design was extremely fiddly. Some kind of circuit board would be needed. I did my research, bought some materials and started out printing and etching some small circuit boards. The method is simple: copper clad glassfibre sheet is overlaid with a printed transfer mask. Ferric Chloride is used to etch off the exposed copper, leaving a neat layout of copper traces. Now I was able to use the smallest surface mount (SMD) components and lay out a proper circuit.

With easy field operation being the goal, I wanted a push button start and onboard motor run time adjustment. The circuit for this version of the timer has long been available on our PMFC website. The timer is started with charge from the flight battery by means of a momentary switch instead of a zapper and the motor run time is adjusted with a 3mm trimpot. Consequently the only field equipment required is a small screwdriver to adjust the run time.

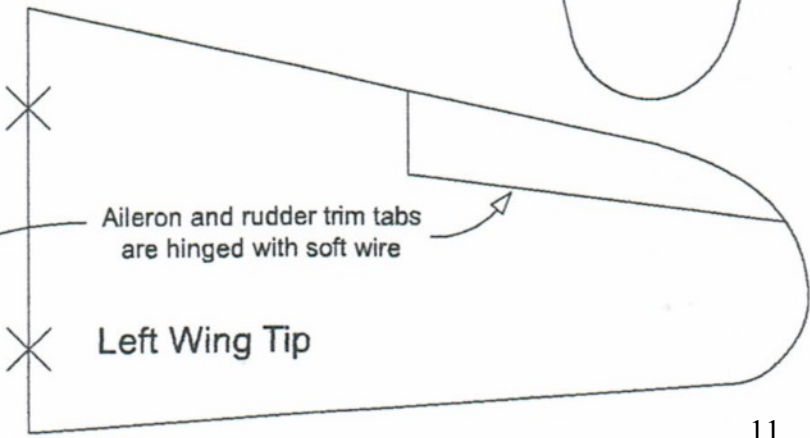
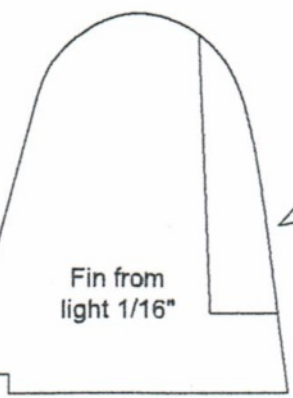
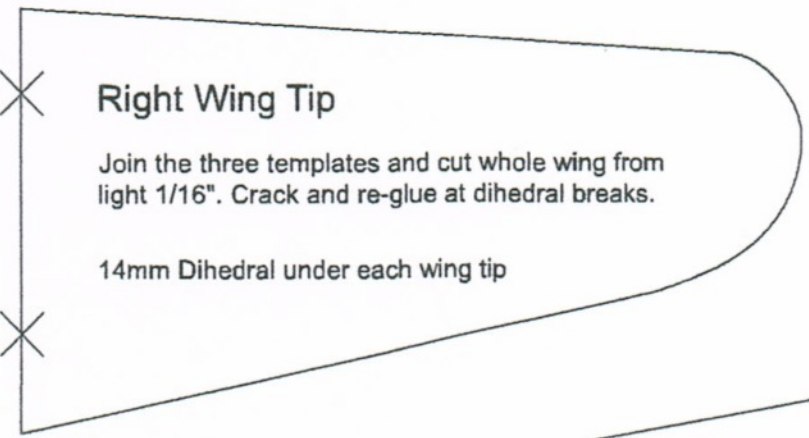


Nacelles from medium 1/8" sheet
610 or 612 Coreless motors are hot glued into slots



DOUGLAS DC-5

13" Profile Scale Electric Twin





PMFC Colour Supplement to celebrate...

“ BACK TO THE FIELDS AGAIN” *

Images from the Bernie Nichols Trophy, by Martin Skinner and Mick Page.



Applying the turns:
Above: John Watson with Martin assist. Don't tread on the prop, lads!
Left: Dave Rumball uses full kit. (Note Brian Lever, studiously counting and pretending that his finger does not ache!)



Jon, with small but perfectly formed Skiptown Cadet. Andy also had this remarkably neat Eaglet.

* If that isn't a quote from something, it should be. Any ideas, anyone?



Launching styles: (Clockwise from above.) Your editor looks anxious about what the next few seconds will bring...using Red Admiral No. two. Luke serenely dismisses his Ace. An elegant shape. Peter adopts the Mike Sanderson dropped shoulder style. (Good trimmers don't need dihedral.)

Andrew Green tries to be very precise: they're all watching, Andrew!



B



C