PETERBOROUGH MODEL FLYING CLUB

MAGAZINE

2012

A WINTER'S TALE

A last look at Summer events, then we close down the hatches for some indoor action.....

"An anachronism in the modern world, a mostly non-Radio club encompassing both F/F and C/L that meets weekly!"

CARPE DIEM

Closed season? There is no closed season for PMFC members. Outdoor, Indoor, R/C, C/L, F/F, it's all there. This hobby is relentless.

In my salad days, when I was green in judgment, there was a lot of ,"I'm thinking of building..." or ,"I've just started... or ,"I've just bought the plan of... "There were many starters but few finishers. Now that many of us are entering our slippered years, this is the time to get them completed.

This twenty four page edition of our magazine launches a number of new initiatives in a variety of disciplines involving Free Flight, Indoor and Control Line, and reveals just some of the expertise to be found within the ranks of PMFC.

Let's all get into a new winter project and see it through to the end. A short account, with a picture or two to the Editor, and we can all share with you the process of creation.

j.ashmole@talk21.com

Part of your committee:(From left) Tony Becket, webmaster, trying to look elegant ,Brian Lever,always elegant, (C/L Secrertary), Richard Arnold, looking relaxed ((treasurer) Bernie Nichols pontificating as usual, (chairman) and JMA, the current editor, looking for an angle.

FROM THE AGM:

Membership Renewal:

BMFA Fees.....Seniors £32, Juniors £17
PMFC Fees.....Seniors..£15, Juniors £1

Cheques for the combined amount, payable to "Peterborough MFC" to the Club Treasurer, Richard Arnold, 21, Signal Road Ramsey, PE26 1NG.

You are insured for 2013 from the time that the treasurer receives your BMFA and Club fees.

THIS WILL BE YOUR LAST MAGAZINE IF YOU DO NOT RENEW YOUR MEMBERSHIP PROMPTLY!

NEW "T" and sweat shirts: We do not carry stocks of club shirts, which means new members cannot obtain them. If you want good quality (Fruit of the Loom) Club shirts, please contact Brian Waterland (brianwaterland@hotmail.co.uk) or 01778 343722 stating your size (S, M, L,XL, XXL) He will organise if there are viable numbers. ("T" white with blue logo,at £9 , Sweat Shirt, blue with white logo, £16.)

FRONT COVER As the emphasis now turns towards indoor flight, here is Stan Spencer's beautiful rendition of the Eric Clutton homebuilt "Fred" as an inspiration to us all.

PAGE THREE MODEL

PETER GIBBONS'

"PEETWO" No 4.

This is the fourth in a line of P30's that began with a cut down Coupe d'Hiver (which also uses a 10g. motor.) Spurred on by necessity (ie. being beaten by his protege Martin McHugh) Peter was forced to develop the concept. The first attempt may have been " born out of ignorance,"as he admits, but a careful eye to the control of weights and good use of rubber have produced a very competitive model.

A completed P30 must fit into a 30" by 30" box, and weigh no less than 50g. with motor. The fuselage is a box section, black for visibility in the air, and it has a good deal of downthrust built in, but no sidethrust. (Peter uses the trim tab on the fin to control the power phase. Tail tilt provides glide turn.) Wings weigh 15.3g., with four 1/16" spars, and a quite highly undercambered section. Warps are: left inner flat, right inner 1/8" wash-in, right tip (strangely) flat. It works.

All components from both versions of this design are interchangeable, so tailplane weights must be equal: they are, at 3.5g. (That's 2.4 for wood, the rest is lightweight Esaki plus three coats of 25% dope, 75% thinners. Conveniently, the noseblock is provided by Gismo Geezer (see Mike Woodhouse's website,) at 10g, with propellor.

Peter now uses a new motor for every contest flight, but re-uses them after they have been rested. (Martin tells of stretching new motors overnight, prior to use.) they are made up of 74" of flat 3/16" (weight 9.8oz.) 875 turns seem to be safe, but 910 have been used. Motor run is about 65 seconds.

It's worth mentioning that, at recent inter club contests, when gliders and powered models have been grounded by conditions, these rubber flyers keep going: If you want to be sure of a contest, fly small rubber!

Back-up Equipment: a stooge, welded yoke with guy ropes into the ground. Winder: a hand drill (£3.99) cut and drilled to take a piano wire shaft. Winding tube: a cut-down fishing rod.(That's to protect the fuselage, even a rolled one, in the event of a blown motor.

Future development: Rolled fuselages, parallel or tapered: this is mainly for speed of building. A more effective d/t.(Peter claims to have a simple arrangement for both wing and tail.) His ambitious target is to approach the ten minute fly-off times that are being reported in America .AND MOST OF ALL: NOT TO BE BEATEN BY MARTIN!

FREE FLIGHT SCALE AT THE NATIONALS

PMFC Results :

Free Flight Power:

2nd	Stan Mauger	Auster T7c
3rd	Gareth Tilston	Fokker EIII

CO2/Electric:

4th	Gareth Tilston	DH 60 Moth
6th	Richard Bould	Comper Swift
7th	Bernie Nichols	L4 Grasshopper

Rubber:

8th	Stan Mauger	Fairchild 24

THOUGHTS FROM ABROAD

A New Zealander's thoughts on the UK Nationals experience

Why travel to the other side of the world to compete in the UK Nats? Richard Bould and I have been regular scale flyers at our own Nationals here in New Zealand and in the Trans Tasman contests in Sydney, but we both felt that it would be a great challenge to compete in the BMFA August Nationals at Barkston Heath. For Richard who had already taken part in the UK Nationals some years ago this was a return to familiar ground, although the splitting of the Nationals was an obvious change from those days. To me, it was a step into the unknown.

Both of us started on projects well ahead of the Nationals. Richard was successful in completing and bringing three models in quite a large box. I had a red alert just 48 hours before departure when it was clear that my new and well researched and detailed Auster T7c was not sufficiently trimmed to bring to the event and I had to fall back on my older model built twenty years ago. Having got through the necessary airline clearances we were relieved to find that both model boxes arrived with us in perfect condition.

The impact of seeing the camping area on arrival made for the inevitable comparisons with music festivals and other mass outdoor events, as did the sheer number of people involved in various ways at the Nationals site at Barkston. Even the journey into the airfield to get to the sites of the events reflected the sheer geography of finding one's way.

With scale comes opportunity, and it was great to see the running of a good number of well supported events, that here in NZ sometimes do not get enough entries to be run, especially in control line.

The trading tent area added a real dimension that is not possible in the smaller scale Nationals that I am familiar with. I was warned to be sure to "bring my cheque book" by another Kiwi who had visited the previous year, and I was not disappointed with the modelling stuff on offer. Certain restraint was needed here, though it has been a great pleasure to unload and enjoy my purchases at this end!

I have to say that having come to the Nationals to fly free flight scale classes, I did not digress to view other events, so my comments apply very much to the scale events. Bill Dennis did an excellent job in organising the judging and flying of free flight power scale, rubber scale and the electric/CO2 classes. Static judging was orderly, and being prior to the first evening's flying, got that requirement out of the way so that we could focus on the competitive aspect of flying. The airfield is an amazing venue for a scale contest and the opportunity to use the tarmac for take-offs was worth the 23 hours in a plane to get there, as it is a facility rarely available here. I had never flown in a contest using the rounds system before, but it was not as onerous as I had imagined it might be. What it did do, was to quickly eliminate models that were not properly trimmed or not up to the flying conditions on each of the two evenings. It soon became clear to me that we had to make the most of each flight opportunity but not under estimate the turbulence that was around. I was lucky with my flight opportunities and delighted to make the final group in free flight power scale with a model brought out of retirement! Richard also had a great flight with his Comper Swift and those experiences were very encouraging as the building standards were extremely high and quite inspirational. We fly to FAI F4A rules, but as they have much in common with BMFA rules it was not too much of a jump. One big difference is the CO2/Electric class which differs from ours is that here larger models with greater motive power are deemed to be equivalent to power scale and are outside this class, because of their different flying characteristics.

I valued the opportunity to learn from the many accomplished modellers present. From a New Zealand perspective, we have become familiar with the names of well-known British flyers through Aeromodeller over the years as well as other aeromodelling media, via model designs, articles and reports. One of the slightly "unreal" aspects of these Nationals was the opportunity it presented to meet these modellers, putting a name to a face and to make friendships.

Richard and I were grateful for the readiness of others to guide us through the logistics of finding venues and competing in the scale events. A big thank you to those of the Peterborough Club we were able to meet both on the field and socially! Brian Waterland was particularly helpful in providing the information that we required prior to the event, helping with accommodation ensuring that we had everything that we needed for the contest.

The Peterborough Ferry Meadows Flying Aces day was a very enjoyable add-on to the Nationals and I was impressed with the number of very fine scale modellers outside the Peterborough Club as well as club members themselves who made a point of attending. We are now associate members of the Peterborough Club and look forward to keeping in touch and hopefully flying with you again.

We are both resolved to come to the BMFA Nationals again, albeit a little better prepared!

Stan Mauger, Auckland, New Zealand

NATIONALS CONTROL LINE REPORTS

(From an interview with Steve Turner second in C/L Scale and, still wide-eyed, a week after the event)

Feeling rough after some medical treatment, Steve turned up on the Saturday of the Nats, and being, I suspect, a bit "gung ho" asked at control if he could enter C/L Scale with his Mosquito. Fee duly paid (accepted on the field) he was asked when he wished to make his flights and chose the prevailing conditions of that morning. That meant 10kt. of wind for the first attempt, but the flight was "OK, but not perfect."

There were four available options (flaps, throttle, retract, bomb dropping) but the model was only capable of complying with two, which reduced the available option points by 50%.

"The model did a reasonable take-off, however the inboard motor stopped before the outboard which posed a problem. However, it landed, not quite prettily."

As the day progressed, Steve flew another two flights. A passing Dave Shipton offered to lend a hand and the second flight "...in my opinion, was perfect," says Steve, "I couldn't do any better. It goes like s*** with two Olivers in it, and a lot of line tension . After the 45 degree laps, the level flight, pretty low. Beautiful, a fully held-off landing. Came in like a Team Racer: That's what it is, a multi-engined Team Racer! And they all clapped. "*(Steve's final position was 2nd.)*

Processing passed the Mosquito in every respect, the only cavil being the use of iron-on pinstriping which would have been better if flush with the surface. "But the overall form was absolutely spot-on to the drawings."

Ambition being the monster that it is, Steve is now looking towards a Halifax for next year, having a family connection with that aircraft. Four PAW's in one model? Well worth looking out for.

LETS GO RACING!

Mini Goodyear at the Nats, by Richard Arnold

Last year I discovered that flying round in circles fast is a lot easier than learning the stunt schedule. More time in the air with fewer crashes! Following on from this Bernie Nichols offered to be the "pit man" if I fancied a go as the pilot, so "Team Arnold/Nichols" was formed.

Mini Goodyear is the lowest rung in Team Racing, but a good place to learn racing technique in a slightly less frenetic surrounding, and the team was launched at last year's Nats. The idea is to race two up in heats where you are racing for a top three time (you get two heats for each team) then three up in the final for placings. One hundred laps with two pitstops to refuel in the heats, two hundred laps with five stops in the final.

So to the 2012 Nats; we had only raced twice before, last year, and hadn't put in much practice since then, so on the Saturday morning of the weekend, practice we did! We needed a good combination of one flick starting, race craft in the middle of the circle plus being able to land when called by the pitman, and in the correct pit so that he doesn't have to run around the outside of the circle to refuel and restart. After maybe 10 to 12 flights we had got the knack and we were ready for battle. We decided to wait until Sunday to enter as we expected better weather.

Team Arnold/Nichols. But why does the pitman look more exhausted that the flyer?

Race Day:

It's only Mini Goodyear, but once I stood in the middle of the circle, two up for our first heat, I was nervous/excited/dry mouthed thinking, in a few seconds away we go, will the engine start first flick, will we get a good launch, will we be fast enough, will I remember that I need to get up close to the other racer rather than run round him (it's a contact sport in the middle,) will I hear the pitman call me in?

In the first heat we made a good time: we were faster that the other team but could have done better if I had not run around my opponent (you see, I forgot about this being a contact sport.) The race was over in about five minutes but I was knackered, heart racing and heavy breathing, but with a smile about a mile wide.

In the next heat we were up against Lever/Waterland. We knew that they had a faster plane but we still wanted to do well. We were called into the circle, one minute to warm up the engine: as we had warmed up a minute or two earlier we chose not to do this: a BIG MISTAKE. The race started, Lever/Waterland were immediately away, but Team Arnold/Nichols had a cool engine, so no one-flick start. Eventually we got away, and this time I remembered to stay close to my opponent in the middle. They were fast but we were doing OK. After about 30 laps or so I was called in to refuel: we did this alright but our engine settings were not spot on. The engine started after several flicks and we launched. However, at that moment Lever/Waterland were coming around to overtake, and I ditched our plane into the grass. Bugger, I thought, this is not going well. Bernie raced around the circle as fast as he could but the engine didn't want to start, so we scratched.

So, on to next year, we should have a new plane, we know a bit more about racecraft , we learned some important lessons, so hopefully we should do better. Can't wait!

The final was a fantastic spectacle with three teams racing, the combination of starting, pitting, refuelling and launching makes for exciting racing where all elements need to come together to win.

Richard Arnold

FOURTH INTER CLUB CONTEST 29th Sept

The wind gusted up to 30mph, no gliders flew, the Electric Precision boys postponed until the next event, but Peter Gibbons and the Bus Pass Irregulars were determined to have their day. The P30 contest, even with a max of 90 seconds, constituted a good day's work for the nine entries with maxes going the full length of the field.

Peter Adams' Bert Whitehead designed No Name (but see below)

Getting clear of ground turbulence was a problem

CONVERSATION:Place: beside Ermine Street:
Bert Whitehead (holding rods to De-tree his own P30:) Lost out of sight?
Peter Adams: Yes.
Designer: Did you have a d/t?
Builder: No.
Designer: Why Not?
Builder: It wasn't drawn on the plan.
Designer: Well, why didn't you fit one?
Builder: But there was no drawing.
Designer: Well, you built the model, Why didn't you...
Owner: But there wasn't one on the plan.
Designer: Yes, but...
Et cetera, et cetera, for some considerable time
(At this point your correspondent made his excuses and left.)

After the event, Ken Norton 'phoned to say with great satisfaction that the sum of £360 was collected from the sale of some of Peter Spalding's models and equipment.

CLUB SCORES:

Gr*nth*m	32
Cleemac	22
PMFC	19
Morley	16

RESULTS: P30 3rd Bert Whitehead
4th Peter Gibbons
6th Martin McHugh

UNDER 25" RUBBER:
2nd Peter Adams (lost oos).

End of Season on Barkston: The Gr*nth*m Grand prix And final Inter Club comtest.

Mick Groom had fun with his pretty Envoy, including a successful RoG.

Mark Benns, after waiting 31 minutes for his hlg to come down. Spent most of the time lying in the grass watching for the edt to chime in. On this warm day, the model was "cold" when it landed.

Two very contrasting days. On the 7th October the air was so buoyant that it was unwise to launch anything that did not have a good d/t. It was one of those occasions when the direction of drift was hard to identify and maxes landed easily within the field. By contrast, the final Inter Club Comp, although drawing about twenty cars during the day, kept all grounded, apart once again for the Rubber element. They all deserved praise for launching, walking backwards in some cases, in winds between 20 and 30 mph. The final electric precision event was held over until next year.

Following profuse thanks to Ken Norton for his organisation and running of these comps, and who was hardly responsible for the prevailing weather this year, we dispersed to our cars and our homes, the clocks took a step backwards, and the outdoor season was, in effect, over.

Bert's Linnett showed no fear of the 20 to 30 mph winds of the last event of the season. Bert himself hardly stopped winding, launching & retrieving all day.

K.K."Ace" Whitehead in last-minute Victory launch!

Only one minute to go, find a motor, any motor. No time to set d/t. Launch. " It went up like a bl**dy rocket!" Thus did Bert win the Keil Kraft two wheel (Senators need not apply) rubber event. A suitably dramatic way to end the season.

(Results on page 22)

Chairman Bernie and helpers demonstrate how to build a lightweight Gyminie Cricket....from P. 19

Andy Sephton takes questions at the end of his Indoor Scale presentation,..... from p 11

Wanna be in Our Gang?

Watch out, lads, Bernie's recruiting again!

Insert caption here...I just can't think of one!,

I first attended the Indoor Nationals at Nottingham with Marc Ashby, and we decided to make it an annual event . We had talked about entering a class there for some years. Something simple. The Air race. That always looked like good fun. Peanut looked do-able, the skills required would need honing, but we could try. But somehow, we never did anything.

This year was different. After the August Nats, we were talking on the 'phione and we decided that THIS was the year that we'd do something . Kit Scale: That was the one. We had kits, we had entered FF Scale at the Nats, how hard could it be? Next person we roped in was our fellow scale devotee, Gareth Tilston. And he had a splendid idea: why don't we invite (new member) Andy Sephton to give a talk about it on a club night? Splendid.

So we did, and along the way we managed to rope in a few other club members, KevTatlow, Brian Lever and Dave Shipton. So now we are six. Inviting Andy to give us a talk was an inspired and timely move, turns out he was promoting Indoor Scale and KitSscale in particular. Just the job!

Of course, it turns out that there's a tad more to it than just building a kit model and entering. Well, this isn't quite true, at one level, that is EXACTLY what it is. But in the spirit of the game, it's a contest and therefore competitive. So one needs to be a little more choosy in which model to fly and how well it's built for the task in hand. And the Internet is a wonderful thing! All sorts of stuff out there. Hints and tips. Lots of those. Don't make a Keil Kraft Flying Scale Lysander an your first entry into Kit Scale. (Well, you can, but you're setting up mountains to climb, why not scale [ouch, Ed] a foothill or two first?)

To this end we have gathered together lots of information for anyone wishing to join us. And best of all, we have the required expertise and backup right here in the club. All that is needed is the desire to join in and join us at Nottingham next April. It's Kit Scale, how hard can it be? Really? WANNA BE IN OUR GANG?

Competition Indoor Free Flight Scale Modelling

A clubnight presentation by Andy Sephton.

What follows is necessarily incomplete and fragmented, but it has been vetted by Andy to remove any obvious howlers.

A week after Bernie's Gyminie Cricket Expo, we assembled again at Peakirk for a very professional talk designed to attract spectators and participants to Indoor Scale. Bernie introduced the speaker to the thirty members present by referring to his astonishing CV in the world of full size aviation, contemporary and antique.

Andy began by explaining that he recently replaced Ian Pallister in the role of BMFA Indoor Scale Rep, but which he only intends to maintain for a couple more years. He does not believe that the regulator should also be a participant (for sound reasons) and is keen to take part again soon. (So we'd better get in quick!)

"Indoor flying is a good spectator event"

What to do first? Research the rules! It's all in BMFA Contest Rules Section Six "Scale free Flight."

Available Indoor competitions, Official:		Fun Events:
Open Rubber	CO2/electric	Bostonian
Kit Scale*	Peanut	Mass Launch*
Pistachio		Air Race*

*0ne model could do all these.

Advice: for electric, use KPO1 or KPO2, (Derek Knight) or the Atomic Workshop "Zombie" systems. As models are judged for take off, climb, cruise, descent and landing: the potentiometers of the DK or AW timers can be adjusted accordingly. N.B. (Ian Middlemiss will give better advice for electric fans, admits Andy.)

"If you want to start in Kit Scale, go electric."

*(*Electric is more expensive, and probably heavier, but since the rubber motor is likely to force weight to be carried well aft, necessitating added lead in the nose, there may not be much difference.)

If choosing rubber, remember that the cruise phase requires good rubber, with only a gradual reduction of power, so be prepared to experiment. A rubber band won't do!

"For every person who wishes to teach, there are thirty who do not wish to learn."

As for the CO2 option, motors are hard to get, expensive, high maintenance, have an unpredictable power curve...but sound right.

Scoring: Will be both static and flying, but in Peanut and Pistachio the flight time is taken into account.

"If you want to score well in Kit Scale, go electric."

Advice re. Static scoring:(Open classes):

Documentation requires a three view, a picture of the prototype (why not enlarge it to match the model?) and proof of colour and markings. The judges will compare the model with the pictures, so don't deviate.

"Study the rules: see how the judges judge the model."

Kit scale:

Building from a plan is OK as long as it has been kitted. Produce the plan. A ten second flight is enough for kit scale, so don't make it much longer in case it should become unstable and lose marks. Kit scale static scoring is judged under a variety of headings: see the rules for the categories. However, it was noted that outline and craftsmanship account for the bulk of the marks.

"Complexity is a minor contribution to success."

Don't use paint, don't deviate from the plan even to add additional detail. No trim tabs ,"or I'll stamp on it!"

Peck plastic props are good, with no modification. (NB, Peanut and Pistachio must be rubber.)

"Kit scale scores are weighted towards flight."

Trimming: Don't rely on (rubber) prop torque for turn, it'll open out as the flight proceeds. Use rudder for turn, slight wash-in on left tip plus right side-thrust. Run off the first few seconds of the power spike before launch.

.....

During the evening, Andy also showed video extracts of flights at the Indoor Nats .The talk ended with a Q & A session, and well deserved applause, followed by tea and coffee thanks to Brian Lever. An enjoyable and very useful evening.

.....

SOURCES:

www.ffscale.co.uk (Mike Smart) Among other material, a downloadable plan for a Comper Swift with highly detailed advice, (but ignore the bit about using paint!) Also, www.scalebmfa.co.uk

Andy also recommends his Lacey M10 design; strong, well able to survive in a fight, stable despite no dihedral. Also the KK piper Family Cruiser, and the KK Tiger Moth (examples passed round the audience.)

THE *MADNESS* OF F1D

By Mark Benns

At last!.. the long awaited taste of the "barley sugar," not a reward for a month's blood sweat and tears, you might ask, but a sugary additive mixed with saliva required to remove the wrinkles left at the dihedral joints of the F1D wing and tail in the 5 micron thick film covering.

An F1D on the face of it is a modest "stick and tissue" model but underneath lurks a pedigree of weight and stiffness powered by 0.6 grams of the finest rubber energy. Flown in the largest draft free buildings in the world, Airship Hangars, Communist Stadia and the Salt Mines of darkest Transylvania, its dainty 1.2 gram frame seeks a duration spanning an episode of "Mastermind" from an altitude nearing 180ft. with time to make a cup of tea whilst on pause.

The skeleton is wholly balsawood, sourced from the forests of Ecuador and the genetically modified plantations of Papua New Guinea, sailed to the UK and thereafter sifted through by oneself with a one in a hundred chance of being selected as quality enough for use. Blocks of 4.5lb per cubic foot the benchmark of success, with lighter worth a celebratory tipple or two, such is their rarity. The bones creak and bend unless stiffened by a material where its reputation precedes it! The lowly balsa rib receives three lengths a three thousanth of an inch thick, adhered by glue thinned within an inch of its life with no tack drying in seconds and applied by a 000 sable brush.

I hear you say "**Why?**" indulge me, please.

Weight!..yes, it is critical**, how?**.. Each component weighed individually, recorded dry and again after glued.

Example 1: the rib, of which there are four in a wing, cut from 0023" 4lb balsa 0050 high weigh 4.0 mg (milligrams) with boron and glue, 8mg.

A "witches" book of flight records, potions and weights logged for each model and component the only way to success. It's a lesson long in the making but engrained forever; four years of trial and error for it to finally stick!

A tapered tailboom rolled from 009" thick balsa soaked with boiling water around an arrow shaft, baked on low heat for an hour before allowing it to cool, a butt joint seam with that excuse for glue, before pre-tensioning three strands of boron on to it...oh, I forgot, try not to stick it to the mandrel.

Example 2; tailboom 18" long balsa weighs 0.10 grams with boron & glue, 0.15 grams ,finished with tail posts 0.165 grams.

Nothing happens quickly, try to and carnage ensues, planning and patience are key to a happy life. Oh! And not forgetting eye magnification and working lights, things are small to infinitessimal especially when we are looking at the "engine at the front." The gearbox of the model weighing in at an impressive 80mg. The variable pitch hub is by far the most interesting and fiddly bit of the ship. Providing the 19" propellor with 45 degrees of pitch movement, three adjustment screws and controlled by a hand wound spring from an 008 guitar string with acute tendencies to evaporate into carpet, the hub is just a joy to behold...and make, honest!

Energy...not just a Red Bull or two but the rubber born in the 1990's, rarer than "hens' teeth", hunted as the Crusaders sought the Holy Grail, a magic blend of 99.5 pure latex and a whole bunch of chemicals and badged May '99... *if you have any please email me...* Why this vintage?...books have been written, for me it is softer, welcoming more turns whilst packed with energy.

The airframe needs a covering; in years past I read about a mysterious concoction of chemicals mixed in ones bath, hung for days like pheasants, laid over balsa wings only to shrink and need a fag to relieve it! Now it's like toilet roll,.. with a twist.. Born of 3M for the Silicon Valley it is the thinnest plastic known to man, discarded by its maker and salvaged by enthusiasts this endangered film is safe for a while, so be gentle with it. Cut what you need and roll it to the size of a pea, then fan out and do it again, and again, and again...until you have removed static. Fix to a Vaseline smeared frame...it's ready.

Example 3; wing weight uncovered 0.26 g, complete 0.34g.

Indulgence Over! Here's the nub of it, finished at 1.2 grammes, 0.6 grammes of rubber, 1750 turns with an average RPM of 51 it flies for 34 minutes and is graceful beyond belief...oh, and I get to hold a balloon throughout!

(Mark's account of F1B building and flying continues in the next edition, unless the little men in white coats have taken him away before then!)

……

CORRESPONDENCE:

Richard Bould writes from New Zealand with fond remembrance of his visit to the Nats and Flying Aces, as recorded by his compatriot Stan in this magazine. It is somehow consoling to read: "We are now looking forward to our Nationals which are just outside Christchurch and on the Canterbury Plains. All we need now is the weather to calm down. It has been atrocious with wind and rain and more wind. Normally it is unsettled but a high has parked on the East coast of Australia* which shunts any weather up and over us."

The recent meeting of the Auckland club showed a strong emphasis on scale models. The display on the club Table looks very impressive: ask to borrow my copy of "Slipstream." Stan is building a simplified Auster at 48" in parallel to his detailed scale version to establish incidence, C of G and thrust angles before committing his "serious" scale T7c version. Interesting idea, showing great devotion to the cause. They also seem to be suffering a plague of "Tomboys." Hmmm..

*Also known as "Fourecks." A semi civilised landmass somewhere to the West of N.Z. Natives invented boomerang, Rolf Harris and sledging. .....(Moleypedia.)

TALKING TOUGH

Cry “Havoc” and let slip the dogs of war!

Thoughts on Free Flight Competition, by JMA.

Let’s be realistic, lads. It’s going to rain, it’s going to be windy, the model is going to suffer damage, we’re going to be physically and mentally exhausted. Most Free Flight competitions in this country take place in unsuitable weather. The average wind speed on Barkston is probably over 10 mph and we often have to fly in around 20. So what do we do? We must accept the conditions, build our models and adjust our minds to suit. So, let’s start again:

There is no such thing as unsuitable weather. Only the wrong model or the wrong mindset. If we are not prepared to lose the model, see it shattered and twisted or stranded in a treetop, if we are not prepared to be soaked (in rain or sweat, or both), if we are not prepared to fail miserably in the presence of our friends, we should stay at home.

If we have just one model for a comp. it must be the windy weather version. It’s no good building beautiful “concept” models for an event which takes place on any given date, that’s too much of a risk. (Build “aesthetic” models, by all means, but keep them for those few special calm days.) Have one or two well-worn, battle-scarred contest planes always on trim, to throw at the elements on occasions when a trim flight is out of the question.

Repair kits, interchangeable components, cyano, epoxy, waterproof gear, dry socks, these are the essentials. But more importantly, the right attitude. “Blow, winds and crack your cheeks”, so much the better for me! Did not all those of us who braved the conditions at this year’s Bowden thoroughly enjoy the experience? Well, all right, perhaps not, but in retrospect we did.

Diminish the risk, by all means. The secret of success (in C/L as well as F/F) is the kind of forethought and preparation that diminishes risk. So often, he who makes fewest mistakes wins. And the air. Understand the air. Or watch those who do. Some days, the conditions will be just awful. But they will be the epics we remember.

FROM THE TOP

Smoother controls for Control line Models

by Mick Taylor

Many C/L designs feature control set-ups which produce very "quick" controls, ie. a small movement on the handle produces a lot of movement at the elevator leading to a snappy model difficult for a beginner to keep level (or indeed, in the air!) Try this: for a non-flap model using a 3" bellcrank the pushrod output hole should be 1/2" from the centre line of the pivot hole. Cut wood away in the wing to allow approximately 160 degree swing of the bellcrank using plywood stops to ensure equal movement each way. Make the elevator horn pushrod hole 1" from the hinge line. A 4" line spacing at the handle will give 30 to 35 degree movement each way for about 45 degree handle movement. Increase or decrease the line spacing to give faster or slower elevator response respectively An additional hole in the elevator horn at approximately 13/16" will allow extra movement if required.

For 2" commercial Paxolin bellcranks, use the inside pushrod hole which is usually approximately 3/8" from the pivot point and decrease the elevator hole spacing appropriately. For flapped models use the same 1/2" spacing on a 3" bellcrank to a 1" flap horn then the elevator pushrod to matching holes in the flap/elevator horns will give a 1 to 1 flap/elevator control ratio which works well on most designs.

Use a minimum 14 gauge pushrod, 12g. for 25 models with power and upwards to prevent bending under flight loads. Better still, use carbon fibre tube or an arrow shaft which can be used with ball links for free control movement. Smoother controls will allow the model to maintain a more consistent speed through manoeuvres without being slowed down by excessive control surface deflection, leading to over controlling.

Attention to detail: leadouts on the Ringmaster

Mick Taylor's Control Line Contest Results 2012:

12/13 May,	Old Warden:	Vintage Stunt	2nd (Ringmaster OS30FS)
		Rascal SR (with BVW)	1st (Rascal PAW 149TBR)
2 June	F/F Nats, Barkston		
		Rascal SR	1st
29 July	Old Warden	P40 Profile Aerobatics	3rd (Ringmaster)
5 August	Slip End, Luton:	Vintage stunt	1st (Ringmaster)
		F2B	8th (SWD 1 ST60)
25 August	C/L Nats, Barkston		
		Vintage Stunt	2nd (Ringmaster)
8/9 Sept	Old Warden	P40 profile Aerobatics	5th (Ringmaster)
		Rascal SR *(See p. 18)*	1st

I have a few minutes of really bad, amateurish video that I took at Old Warden of Mick doing a demonstration flight. So calm, so smooth. Drawing shapes in the sky, knowing that the 'plane would follow his every command. Constant speed, absolutely no jerkiness. His hand movements were so slight, one could hardly discern the input. And apart from the launch and final lap, Mick did not rotate once! Grrr!.....(JMA)

.....

NEWS FROM PORTUGAL:

Attending the "Wings of Portugal" C/L event, as guests of Julio and Sandra Isidro, team Lever/Waterland flew in Phantom Racing (3rd), Mini Goodyear (2nd) and Rascal Racing (1st) . Brian Lever came 3rd in Phantom 1.5 Speed

Also, Brian Waterland flew in Vintage Aerobatics with the "Clown" (1st), and, borrowing BML's Phantom came 2nd in 1.5 Phantom speed and 2nd in 2.5 Phantom Speed.

After receiving all his medals, BVW said "I felt like Mark Spitz."*

* swimmer, won 7 golds at the 1972 Olympics. Poster of him wearing cossie and seven medals was "the most popular pin-up since Betty Grable."This also led to him inadvertantly becoming a prominent gay icon in subsequent years. Is BVW aware of this?
(Moleypaedia)

SCRAPBOX

On the subject of Mini Goodyear at the Nats (see p. 7) Brian Waterland reports that team Lever/Waterland posted the third fastest time of the weekend to make the final. Unfortunately the final became a shambles with two line tangling incidents. On the first the guilty party was allowed to restart the race. On the second one, Lever/Waterland were disqualified ,making them third. However, at the end of the race there was a "stewards' enquiry and they were awarded second place!

David Clark's protege and grandson, James, is hard at work on the Gyminie Cricket wing during Bernie's Expo. In foreground, the steel/magnet building board,, at back the plastic cups that provide propellor blades.

At Old Warden, on a perfect morning, Mick Taylor, the builder of this beautiful Rascal and pilot Brian Waterland achieved 10m 7sec. in a three-up team race final. This was over well cut grass, but required BVW to indulge in some slick southpaw shenanigans to survive the early laps. He was also able to glide the model in to pit from well over half a lap away, which saved many seconds for Mick, who had to perform four efficient pitstops. Not quite their best time, which is around 9.40 for the 160 laps, but a good target for other teams to aim for.

Why we need more young people in free Flight: Flying Aces at Ferry Meadows.

EAVESDROPPER

Bernie Nichols comes in from the cold, with a clubnight presentation on lightweight Gyminie Crickets

(Peakirk, 26th October)

About a third of the club was present for the first "demo" night of the Winter season. Bernie began with the building of a GK wing, showing the cutting of ribs round a template and then the assembling of the structure around a card former, slotting in the ribs, fixing them with "Carpenters' Mitre Super Glue" (E-bay.) Leading and trailing edges were cut with a hand held stripper from SLEC. Bert Whitehead, who had come forward as a volunteer, felt so comfortable working at the demonstration table that he stayed there for the duration, shortly afterwards to be joined by James Barratt. Bernie said his current version weighed 4.1 gm, but that savings could still be made. The Superglue was applied with a wire "nib" attached to a wooden handle: it could be unclogged with a cigarette lighter flame. Carbon steel blades from Flitehook, he said, do not crush the wood. He also used a steel building board, covered with a non-stick film and using magnets to hold timber in place. See photo on p.18. The magnets must not be too strong, or the wood could be damaged.

Use magnetic tape: type in E-magnets flexible Magnetic Tape 12.5mm x 10mm MAG661 and spend around £9; info from D. Shipton

I can't effectively describe his demo of bending the S-hook, but there is a good U-Tube tutorial on this. (See "Reverse S-Hook.WMV.") The idea is to prevent the motor riding up, as it would on a standard hook. Bernie can supply the mild steel wire for this.

Propellor blades were cut from a Morrisons Bio Yoghurt cup, firstly drawn round a template then cut out: after a little scraping with a flat blade over the cutting mat, they weighed 0.4gm each. The complete prop. was almost exactly 1gm, after the blades, set at 45 degrees on a simple jig, had been added, with tissue tubes joining the balsa shafts to a tube hub from cut down cotton buds.. The tubes, which will also be needed to attach the wing supports, come from 1" wide tissue wound round a 1/16" drill, using Ambroid balsa cement (from SAMS): glue one side, roll it like an old lag rolls his fag, leave to go hard.

Covering: Bernie doesn't like Condenser paper. Instead, he showed us Supermarket veg. counter bags or, better still, their sandwich bags. Spray the wing with photomount adhesive, then lay the wing/tail on the film which has already been stretched on a frame. The hard bit is cutting round the shape: New Blades, Please!

For photomount spray, try Britim.co.uk (Alistair Lever.)

(This article concludes on page 20)

(Bernie's demonstration on lightweight Gyminie Crickets, from page 19)

The combined demonstration team produced a tailplane that weighed 0.3gm. As for assembly of the components, tissue tubes should be fitted to the motor stick such that the model balances at about 50% of the wing chord. The tube installation also permits wing incidence adjustments.

By the end of the evening, Brian Lever was amusing himself by flying the very model that had been constructed during the demo. A round of well deserved applause thanked Bernie for his efforts and, particularly, for the extensive preparation prior to this event.

See also: BMFA Website, items by Bob Bailey, John O'Donnell and the late Laurie Barr. GK plans from Bernie, regs were in the last PMFC magazine .Now, where did you put it??

NB: If you do not have access to the Internet, and are slightly miffed at having to read all these strange references, please contact the Editor, who would be pleased to provide copies of the relevant pages on good, old fashioned paper for you.

.....

FROM THE AGM *report by Brian Waterland:*

Twenty three members attended. All the existing officers were returned unopposed. Thanks to the Flying Aces the Club had made a small profit on the year but it was feared that the additional cost of the Nene Park agreement* and the cost of postage could lead us to a loss in 2013. There was much discussion on the subject of club fees which was finally resolved with a decision to increase PMFC fees by £3, to: senior £15, Junior (up to 18) unchanged at £1. (The BMFA has increased their fees by £1 for 2013).

There was some concern expressed that F/F at Ferry had become an afternoon and evening "shift" arrangement, thus reducing the overall enjoyment and limiting comp. entries.

The year 2013 is the 75th Anniversary of the founding of the Club. Members were asked to suggest ways to celebrate it AND also a suitable project "for the benefit of the members" using some of our reserves. ALSO, what talks would the members like, and what changes to Flying Aces?

TROPHIES: The Eric Young to John Ashmole
Brian Oliver (unorthodox/experimental) Ian Middlemiss
Control Line to Steve Turner
Free Flight to Gareth Tilston
Junior to Joe Rabicano

* The Summer F/F and C/L available flying days and times are now continued into the Winter.

NB: Dope & thinners are not easy to come by these days, not even for ready money: have you tried www.sky-craft.co.uk. On Broadgate just north of Weston Hills.Ask JMA or Bernie for more info.

Remember me? I'm coming to visit you in your next issue, d'ye ken! So save up your groats and get those subs paid now!

HOT AIR

The Free Flight page

I'M Hooked!

Eighteen months ago after talking to Peter Gibbons, I decided to take part in Free Flight competitions with the club, in Coupe, P30 and P20 classes. I have found that there is a learning curve, a preflight routine and attention to detail if there is any hope of achieving progress in flight times.

This Winter I am building three P30 (nearly finished), three P20 and a Coupe if time allows. These models will incorporate various ideas from different plans, all models will have dt's fitted.

The great problem is weight: you start building with a two gramme twig and end up with a heavyweight branch.

Should all this go to plan I look forward to next year at the competitions. .I would like to thank Peter Gibbons, Martin McHugh and others for all the advice freely given on the subject.

Peter Adams

Peter launches, at Ferry Meadows

Pee Gee, whose Salad Days are not yet over.

While standing among the detritus of a day's flying at Barkston, we were approached by a prominent Wakefield builder/ flyer who addressed us as "...you real aeromodellers." The ensuing conversation posed the question, would you want to fly regularly a model which you had not built? Or, more pertinately, do you wish, in this brave new world to compete against opponents who have purchased rather than constructed, their models?JMA

P30 Update:

PG's new P30, the rolled tube "Yankee Mix" has flown at Ferry. He reports: "On 70% winds it flew straight off the board. Perfect! Climbed well: Magic! Then with full winds (1850 on a 4" x 1/8" motor,) in cooling air, 2m 20s. Martin: watch out! (The plan will be available from Peter soon.)

Since my page has been taken up by others this issue, I have just enough space to wish all PMFC members and especially the "Bus Pass Irregulars" a very good Christmas and New Year...and let's all be out there competing when the weather becomes flyable again... You, too can become hooked!

Peter Gibbons

Inter Club results:

Kiel Kraft Rubber: 1st: Bert Whitehead (Ace)
Frog Senior 1st: Bert Whitehead (Linnett)
3rd Bert Whitehead. (Redwing)

Final Club Championship results:

1st....	Gr*nth*m	32
2nd	PMFC	26
3rd	Cleemac	23
4th	Morley	20

So many thanks to Bert for his efforts! If only the Electric Precision event had not been postponed due to wind the scorers could have been a lot closer, but we understand that a malevolent Gr*nth*m glider flyer was standing by to put in a single flight for an extra point should it have been necessary.

So, thanks once again to Ken and everyone involved, the weather was not your fault!

PLANS LIBRARY

This selection is provided by Ian Middlemiss, who has admitted to possession of these traditionally built designs. If you would like to borrow one for perusal, please ask him.

Ian's Foam Free Collection:

Stomper George Fuller	48" for 1.5cc power
Yeoman Dixielander	48" for 2.5 to 3.5cc power
Dinky Dizzy Electric	18" Power
Aerbo	24" .020 power
RPM	24" .020 power
Fortastrop 049	30" power
Calypso (Contest Kits)	48" for 2.5 cc power
KK Gaucho (Spencer Willis)	48" power
Strato Streak	30" .020 power
Busy Bee	30" .020 power
Dream Weaver, Posner	54" Ollie 2.5 cc power
Trypos Biplane	for .75 power
Sixpence 1/2A with VIT and A/R	48" for .049 power
Zeus 1/2A	40" for .049 power
The Trainer (Dave Clarkson)	25 to 35 glow power
High Stepper 1/2A with VIT	TD 051 power
Big Brit	49" for 1.5 cc power
Boot 1/2A with VIT	44" for 049 power
Scalded Kitten (Annenberg)	30" for 0.5 power
Cuddy 1/2A	45" ffor .049 power.

(we also happen to know that, in the most inaccessible part of the loft, Ian has plans for Quaker Flash, Madcap, Slicker 60" Southerner, and even a Junior Sixty. But they'll be dusty.)

Oh, go on, somebody!

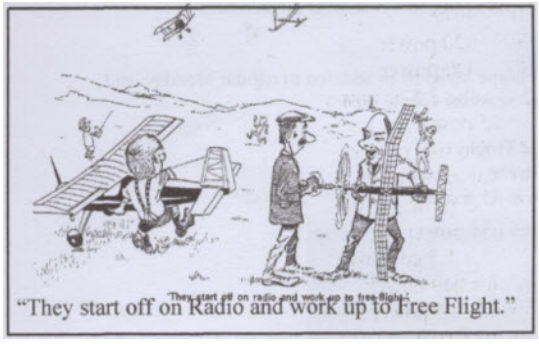
The Right Tool for the Job

Looking for an efficient sports model that can be used for the Electric Precision events at Inter Club contests, Ian Hibbert has built this Boddington designed Tipo, (the monoplane version, as opposed to the biplane Tipo Two.) He describes it as "Stable and sedate," weighing 8oz and with 8oz of thrust. Motor is the very popular Shockie 2204, which has its own widely-spaced mounting lugs. Using a 10Amp esc and a 2-Cell 320 LiPo, the pots on the KP timer are set at about 50%.

Ian with the Tipo on Blustery Barkston.

It's all sheet with a Jedelski wing, making it a practical model for contest conditions.

I noticed a single washer of downthrust, simple to fit behind these lugs. Paint is from tester pots, use enamel varnish to make it fingerproof if required. Easy with electric, innit?

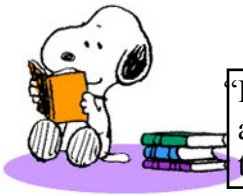


"They start off on Radio and work up to Free Flight."

Thanks, lads!

Thanks to Gareth for finding the very apposite cartoon, and to our many and illustrious contributors. Also Oscar Wilde (twice) and, of course, Shakespeare himself (five times.) Spot 'em?

How about that. lads:twenty four pages of Free Flight, Control Line and Indoor, and I still can't find enough space to fit every



Diary

"I never travel without my diary. One should always have something sensational to read in the train."

BMFA Indoor:

April 7th: Walsall Sports Centre..Indoor F/F and some R/C

April 21st: Nottingham University Sports Centre:
Indoor F/F Scale Championships. (See www.scalebmfa.co.uk)

Bushfield Indoor :

January 27th, and April 6th

Friday Evenings:

December 7th Oundle
14th Whittlesey
21st Peakirk
December 27th: Ferry Meadows Frostbite Fly-in 10.00 to 1pm.
December 28th no meeting!

January 4th Peakirk
11th Peakirk
18th Whittklesey (confirm before travelling.)
25th Peakirk

February 1st Peakirk
8th Oundle
15th Peakirk
22nd Whittlesey

March 1st Peakirk
8th Oundle
15th Peakirk
22nd Whittlesey (confirm)
29th Peakirk

Good Friday at Ferry: 29th March, 10am to 1pm (NB: last year, over 30 members Attended!)

Future planning for C/L flyers: (events at Thorpe Meadow in addition to regular Monday and Wednesday sessions 1pm to dusk.)

19th June	The Trainer Trophy
7th August	Mini Goodyear
11th September	Most loops in 45 seconds.

So much for the Summer of 2012!