NEW Clarion

SAM 1066 Newsletter

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SAM 1066 Website: www.sam1066.org

Editor:- John Andrews
12 Reynolds Close
Rugby
CV21 4DD

Tel: 01788 562632
Mobile 07929263602
e-mail
johnhandrews@tiscali.co.uk

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Editorial

Hi guys, with January out of the way we look forward to, hopefully, a full season of flying activity. The first area comps are at the end of the month and I have the fond hope that someone might write a few words about the activities at the meetings.
Appeal: this issue I was very short of copy initially, the regulars I knew would weigh in but there was nothing from what I will call the rank and file. **Please** some of you knock out a few words on any subject you like so that our magazine not just half written by myself and bulked up with repeats from days of yore. Pictorial records of any meeting with precious few words is most acceptable, but try to write something. Do not worry if you think your efforts are less than professional, I can knock anything into shape, just give me something to work with.
OK enough pleading, what did we finish up with this issue?

First up I delve back into my memory bank to my radio days and guest speakers at my club back then, not sure of dates but 60's I guess. We had this model engineer whose hobby was making engines, not singles as a lot of folk do, but twins, horizontal 4's, in-line 4's, a V8 and a big radial 9 cylinder. I dug out the photographs from one of my albums, scans not too bad.

Pylonius has a dig at armchair critics who insist on realism, also our US ready built flyers and a tilt at meaningless phrases invented by some modellers.

Lack of copy early on brought out another of my 'Clarion Past' articles from the old paperback Clarion but you will be pleased to know it's the last I have on record. If I need any more I'll have to bother our archivist Roy and persuade him to scan a few old paperback copies. That's another reason for you to write something.

Peter Hall outlines the Southern Coupe League fixtures for 2022 and a list appears in the adds.

The Engine Analysis is the Frog 80.
I've splashed a little colour around it as I have done on other articles. I do not really subscribe to the thought that colour enhances the magazine, I think that black on white is the best readable combination. I think I'm adding colour as some sort of boredom relief.

Regular Nick Peppiatt writes of possibly the first indoor model aircraft and presents a plan for a reproduction. Please let me know if you put one together.

There is a request for info from an Ian Parker who is seeking a magazine cover or article concerning an Old Warden meeting in 2009. Please scratch the old brain box and let me know if you can help.

Regular Roy Tiller continues his look at our oldest archived material, this time it's the Aeromodeller first issue.

The News Review from Model Aircraft 1947 indicates the take up of the then new SMAE Area structure and talks of negotiations with the Air Ministry on the use of airfields by Aeromodellers.

Samuel Pierpont Langley: was he the first FF Power flyer?

I have thrown in another parcel of Wallop pictures from my computer archive files just to help fill out the magazine.

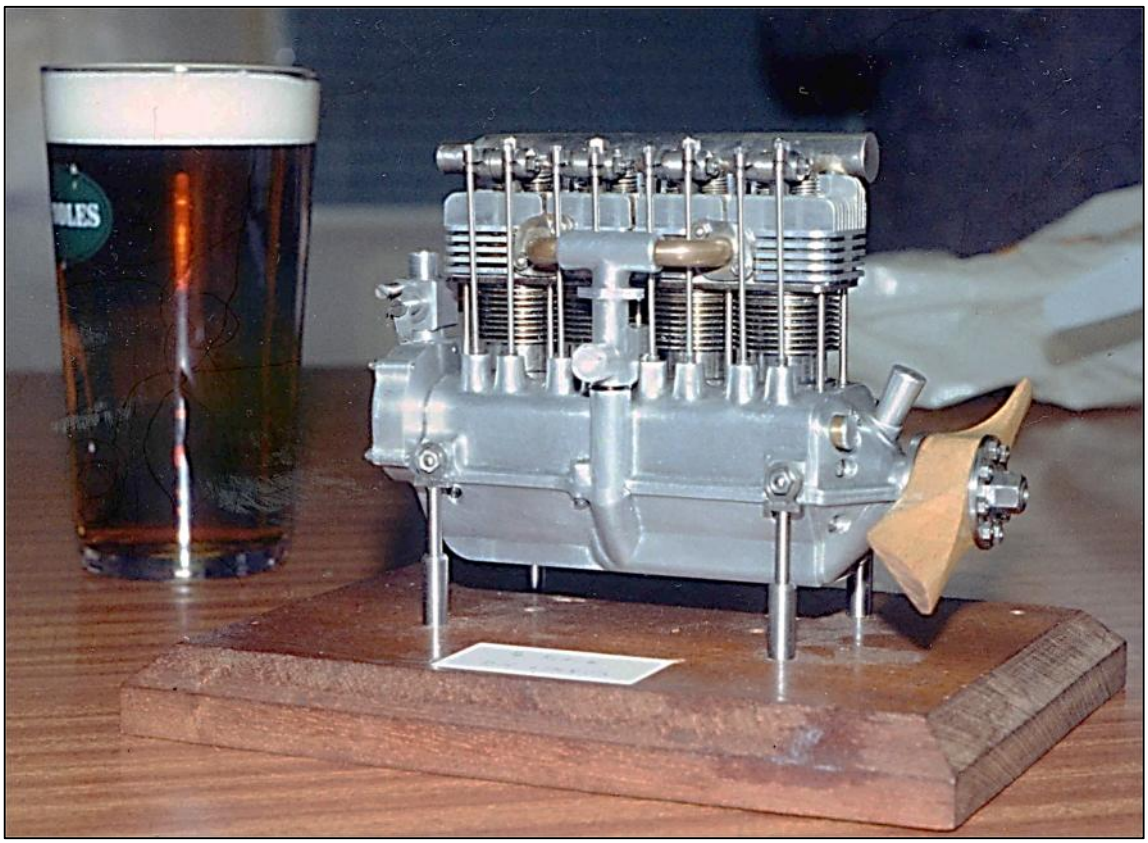
I've picked out plans of the 'Antoinette' from an old issue of Model Aircraft, I think it might make an interesting competition model for NoCal.

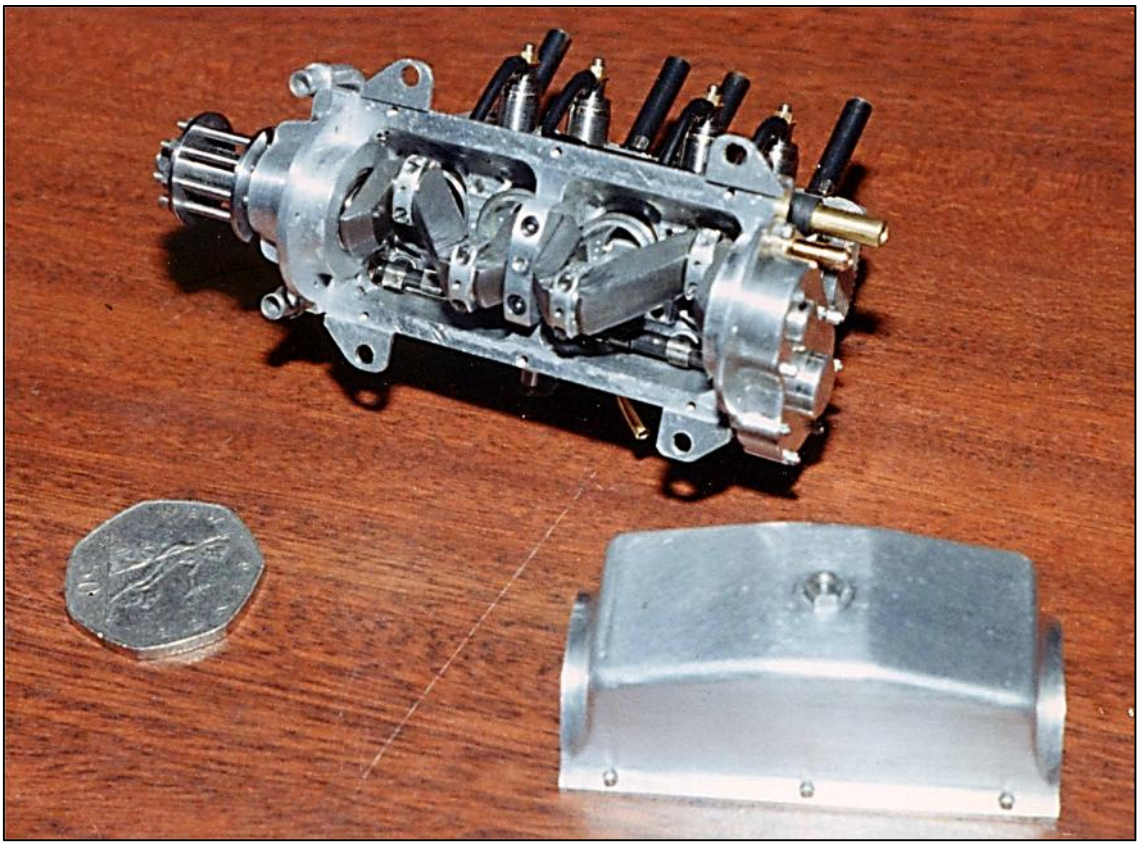
Once again we wrap up with our secretary Roger's monthly report, followed by the Plans for the Month.

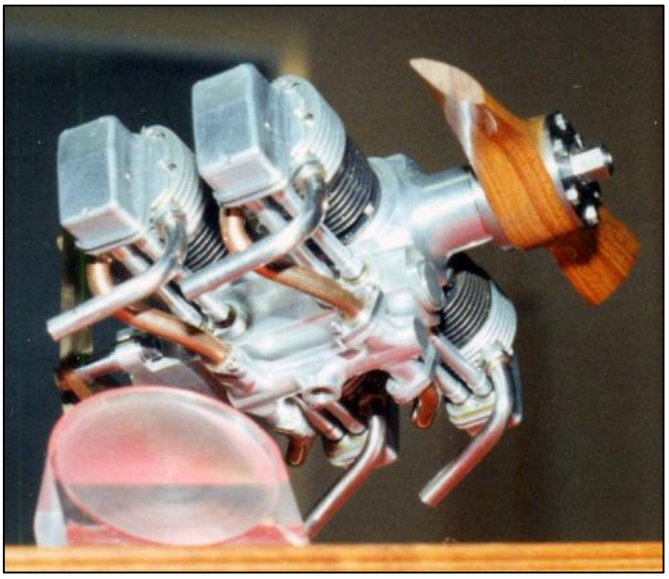
Editor

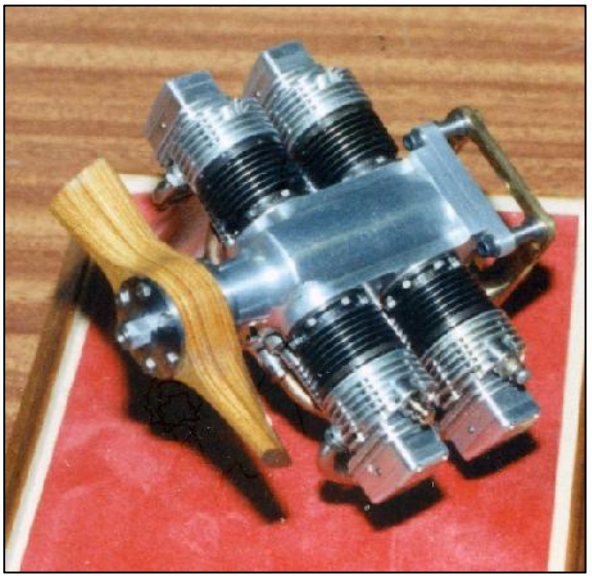
Recollections 2: Model Engines - John Andrews

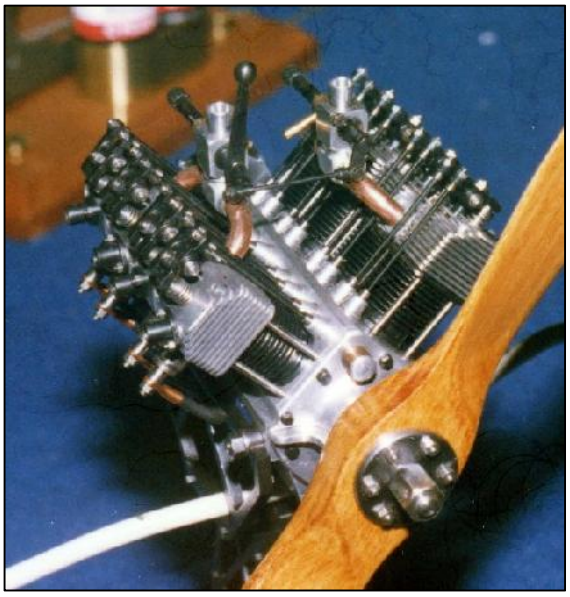
30 or more years back I was still into Radio Control and my club, 'The Fennis field fliers', had regular monthly club nights held in the bar of the local St Andrews Rugby Club. We were a fairly large group and had regular guest speakers at these club nights. At one of these meetings we had a guest who was a model engineer and made model engines, I cannot recall his name but the things he brought with him astonished us all.



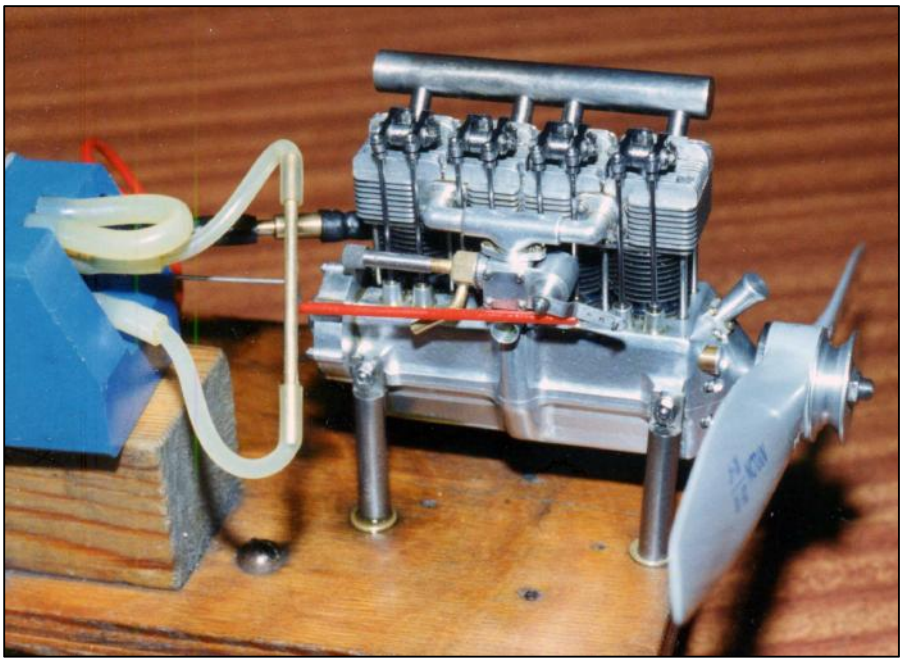


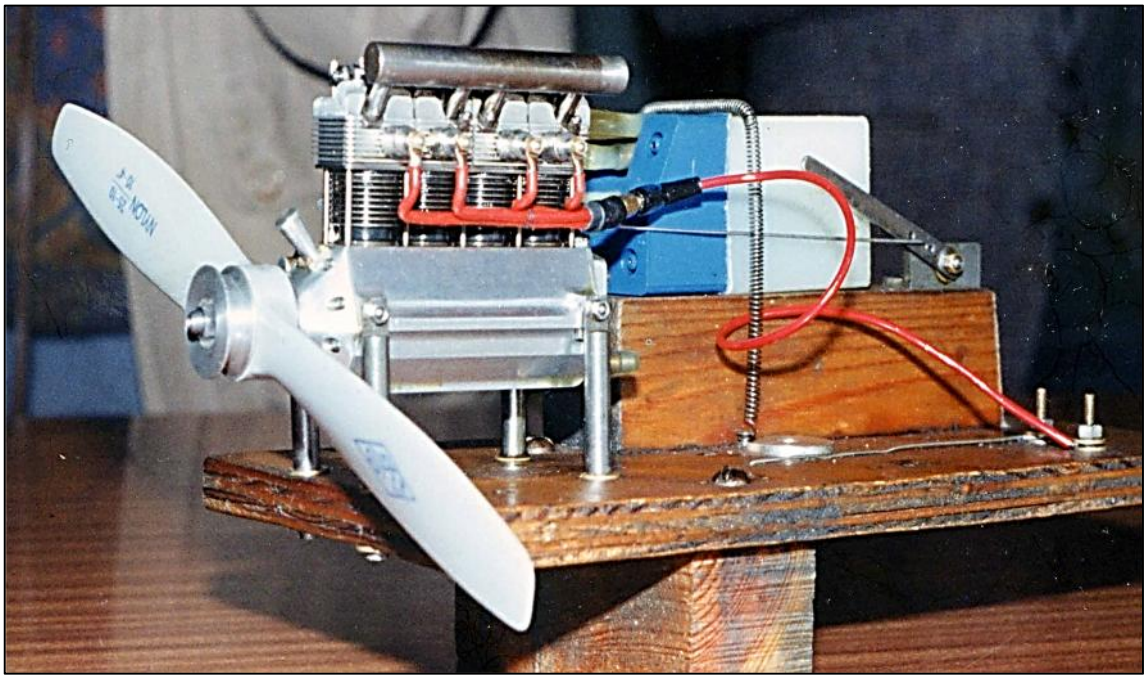






The guy's work was incredible to see. He entered his motors in Exhibition Competitions and had won prizes and that was no surprize after we looked over his collection. One thing I recall was someone asking about his big end bearings and he told us he just placed bronze shim in them and tightened them up. I still do not understand. Most of his motors were mounted on exhibition stands but one he had in a running jig with fuel tank, batteries etc.





The test rig awaiting clamping to the table and its exhaust extension.

This is where the fun started. The jig was clamped to one of the pub's tables near to the fire exit and a length of garden hose attached to the motor's exhaust manifold. This hose was passed through the partially opened fire door and we were all set to go.

There was a pulley wheel on the front of the propeller and the engine was started with a chord wrapped around it, starts being made model boat style. The motor fired up quite easily and hot restarts were readily accomplished without fuss using the chord.

The motor ran steadily, the power output did not appear to be outstanding but certainly sufficient to fly a model aircraft. The motor had a throttle which functioned well, the operating arm can be seen in the picture above.

Being modelled on the full size 'Gipsy' in line four aircraft motor, in a scale Tiger Moth or some derivative the engine would be the icing on the cake for such a project.

I have a 7 cylinder radial engine of my own. A mock-up built around an OS50, powering a bi-plane built in 1994. I always flew the model on rates as it was too much for me on full wack.

John Andrews

Topical Twists - Pylonius

Extract from Model Aircraft February 1953

Topical Twists

Teenage Tactics

Many and desperate are the measures which are being constantly applied to that age old problem of youthful origin, the junior club member. One which recently caught my attention was the idea of taking him into the club on a month's trial.

Now, while I quite agree that putting up with a junior member for a whole month is certainly a trial, I should have thought that "ordeal" would have been a better word.

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Purists at Play

Almost a century ago, so we are informed, the first model aircraft took the air. Its flight duration, though feeble by present standards, took it several hundred feet to establish the only world record yet unclaimed by the Russians.

Peculiarly enough, the designer of this first crop-destroyer made no further effort to improve upon its modest performance, and we must therefore presume that he was deterred from so doing by interference from the earlier purists, who criticised his model for not looking like the real thing. Possibly, he and the old gentleman who flew a model bird on television some time ago are one and the same person, having persisted all these years in making a model to look and fly like the only real thing in existence at that time—a bird.

Queer lot, these purists, come to think of it, with their fanatical insistence on the "real thing," and their almost grovelling desire to please the general public. Strangely enough, their conception of the "real thing" seems to be timelessly set upon a vintage type of high wing cabin model which few members of this jet-propelled generation have ever seen, or would wish to see. They are rather reminiscent of those "motoring" types one occasionally sees honking their way through the country lanes, complete with dust coats, flat caps and vintage Bentley, and who are totally oblivious of some thirty years of mechanical progress.

Having sought to petrify free-flight development to their own antiquated ideals it seems that they are now turning their attention to team racing. Already they are harping at the appearance of the few progressive designs that have broken away from the popular conception of a racing model. I pity the poor aeromod of some thirty years hence when he tries to introduce his tailless, wingless, bodyless rocket projectile into the happy circle.

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Model Pre-fab.

At one time, in America, model aircraft used to be quite some hobby; that is before commercial exploitation humbled it to the status of a sideline on the departmental toy counter. Now no longer does Junior gasp out his envious "Gee!" at the flying field pyrotechnics of the bigger guys, he just grabs himself a couple of bucks, hies off to the nearest toy bazaar for the latest, pre-fabricated, ready-to-fly super model, and is in there pitching with the best of 'em.

Since, on the American scene, model building is as dead as Vaudeville, we learn with surprise that there are still a few rugged individualists of the adult variety who manfully pursue the ancient hobby in the good, old fashioned way.

Some idea of the heroic nature of their struggle for survival can be got by imagining yourself trimming out the new Wakefield job in, say, Central Park. Inevitably there happens along a couple of the Junior breed, complete with television eyes and Hopalong Cassidy outfits. But they haven't come to gape at you in childish admiration. No Sirree! They're all set to try out a slick line in ready-to-fly stunters. And as they reel out the lines you wince to hear one remark to the other: "Hey! Get a load of the schmoo with the bagful of rubber. Guess some guys don't never grow up." After which they get down to a complicated stunt schedule under the indulgent glances of the passers-by.

Meantime, some public-spirited citizen, alarmed at the sight of a grown-up person playing with a toy aeroplane, has duly notified the authorities, and it is only a matter of time before you are being forcibly removed to the local psychiatric clinic.

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Topsyturvia

Browsing through a model journal I came across the delightful phrase: "Downward Lift." I, personally, could make no more sense of that than you will of the following, for which I make no apology:

Upward descending
The little plane flew,
And the farther it went
The bigger it grew.
The higher it climbed
The lower it sank,
And the straighter its course
The tighter its bank.
With its lateral pitch
All smoothly erratic,
And its forward momentum
Decidedly static,
The longer it flew
The shorter its flight,
Until quite close at hand
It went out of sight.

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Simply Gripping!

We read of a unique and daring feat performed by a certain stunt expert; holding the control handle in his teeth while executing various intricate manoeuvres.

This is somewhat reminiscent of my first attempt at looping. What happened to the handle at the time I don't quite know, but I don't think somehow that it was in my mouth—there was only just enough room for my heart.

Someone has remarked that you always meet the same people downwind of the contest area.

Possibly he was referring to those apoplectic old gentlemen who are given to the eccentric habit of waving angry fists from the edges of cornfields.

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From a personal point of view I find the reports of notable models being used as museum exhibits most flattering. Only too frequently am I asked from which museum I obtain my models.

Pylonius

Clarion Past - John Andrews

Extract from the old paperback Clarion circa 2004

John Andrews at 2004 BMFA Nationals

I travelled to Barkston each day for the three day B.M.F.A. Free-Flight National Championships. As is now my habit, I had made a block entry for all official events. The wife Rachel and I arrived reasonably early on Saturday day one and entered the aerodrome through a maze of traffic cones that were supposed to separate the pre-paid from the masses. I never did solve the mystery of which lane was which, in fact I never recognised two lanes, but that's by the by. We were there.

The wind on that Saturday was quite moderate and blowing from the entrance area so we set up camp, clear of the hanger turbulence and I set about assembling my open rubber job O-3. I had had O-3 out at Warwick Race Course during the week and it appeared to be performing nicely on a 14 x ¼ x 88gm motor. The model is over two years old and has never been flown in anger, in fact it had never had more than 400.turns on test flights.

O-3, the Authors best open rubber model to date

I had a quick check flight with 400 turns and O-3 looked hunky dory. Jumping onto the folding bicycle I was off to the flight control van. Peter Spalding was doing sterling service manning the stall, he booked me in and gave me my flight card. I peddled back to base raring to go

First problem, find a timekeeper. I approached the chap next to me and he promptly offered the services of his wife, solely for timekeeping of course. I consulted my Tan II turns table (Ex Clarion July 1996) and 920 turns was the figure from the table. I find that you can exceed the advice from the table but staying below it keeps the motor strands intact for longer.

I wound on 850 +, so my flight log tells me, then I got the confirmation nod from Kath my timekeeper and I pointed O-3 skywards. Off the model went, vertical at first then rolling into a steep climb. I nervously waited for the probable power stall, it didn't happen and O-3 was away climbing high in reasonable air. I was off down the runway on the bike and O-3 D/T'd still quite high. A comfortable 3-00 minute max. I was on a roll, ecstatic.

Second flight same pattern, but the power stall did occur this time, the model however was already about 100 feet up at the time, so no harm done and max. number two was in the bag.

Third flight, a repeat exercise, and I a full house of maximums in the bag. I retrieved O-3 from the end of the field I gave myself a metaphoric pat on the back, what could go wrong? I'll tell you.

On the way back up the runway on the bike, with O-3 under my arm, I am overtaken by Spencer Willis cycling up the other side of the runway. Unbeknown to Spencer, my cycling time trial experience of the past caused me to swing across the runway to tuck in behind him. Unfortunately, going across the wind, I neglected to keep my model facing into wind and as I tucked in behind Spencer, O-3's wing gave up the struggle and broke into two pieces with one hell of a crack. Spencer not knowing I was behind him screeched to a halt thinking it was his model that had broken. I managed to avoid

colliding with him as I was trying to save the bits of my model and Spencer, relieved to find his own model intact cycled on. I can't win can I.

Back at base camp Rachel, the wife, had discovered that our flying neighbours came from Amlwch in Anglesey and were non other than Kath and John Wingate. John and I had had correspondence through one of my articles on indoor round the pole flying. It was good to meet him in the flesh.

I looked at the broken bits of O-3 and decided that a repair on the field was not really on and gave thought as to what approach I would take towards the fly-off. The only other big model I had was O-2, but it was a bit of a mess to look at so embarrassment took hold and I resolved to fly my latest 36 inch model in the fly-off.

That was open rubber out of the way and so on to open power

Author assembles Stomper for open power onslaught

First things first, off to control for my open power flight card. I pick up the card and casually enquire as to the engine run requirements. This throws control into a bit of a panic, but when a copy of the rule book is found, I am advised that the engine run is 7 seconds. This then throws me into a bit of a panic as I'm not sure whether my Stomper will be out of reach in 7 seconds, let alone high enough to do 3 minutes. However, I had paid the money so I was going to give it a whirl.

Back at base camp I assembled the model and set about checking the engine timer for a 7 second run. It did not seem very long to me, but Hey Ho, give it a go. Kath was called in for timing again and after we had a dummy run at split timing with the watch, I was ready to go. Engine starting by hand is a time consuming process and any thoughts of watching mylar streamers for thermal passing is not really on, so my method is to fire it up and chuck it. I did just that and 1-44 later Stomper 2 was back on the ground. Not very high and no lift best describes the flight. I registered the flight at control and decided to rest on my wilting laurels. I was hoping that anyone looking at the results board would think I had dropped a flight by some misfortune and opted out.

The rest of the afternoon was spent in picnic/chit-chat mode, waiting for the open rubber fly-off. Eventually the PA speakers announced the fly-off times and open rubber was really late, about 7-30pm if memory serves. If you recall, I was travelling down each day and had a 70 mile trip to get home, so I resolved to wind 36-4 early and launch as soon as the fly-off hooter went and get away quickly. Any thoughts of my little 36 Inch model staying in sight longer than the huge fly-off jobs of the real contenders were too ridiculous to contemplate.

The hooter goes, and I set the D/T for 6 minutes, that's the laugh of the weekend. Up goes 36-4 into indifferent air and 1-35 later, with me right behind it, 36-4 glides down in crops just off the field. Then comes the real sickener, there's me with my model in hand and there are four of the big fly-off contenders circling overhead with their props still turning. That put me in my place. Back to base camp tail between legs.

Arriving back I find John Wingate clutching a huge trophy, he'd been quietly flying his Northern Arrow in SAM 35's 4oz Wakefield event, filled in his maximums and won the fly-off whilst I, wrapped up in my own little world, knew nothing about it.

After the late night finish on Saturday I was not too keen getting out of bed for the Sunday trip so we were a little late arriving at Barkston. The wind was quite light but was switching about a bit. We managed to find Kath and John again and a little shuffling of cars got us alongside of them again. I had my lucky time keeper.

Slow Open Power was my first competition of the day, I got my card from control and my Stomper 2 was made ready for the fray. SLOP gives me a 12 second engine run, so I was a little more confident of a better performance than that of my open power attempt on Saturday.

My confidence was soon dispelled. I still stuck to my start it and chuck it method and I, very soon had a full house of failures on record, namely 2-03, 2-37 & 2.13 not very awe inspiring.

I think I've got to look at the Stomper's trim and open up the power turn with a little left side thrust for a straighter climb. My Stomper's current rolley poley climb, although a safe trim, robs it of altitude and in this game there aint no substitute for altitude.

John Wingate, SAM 35 4oz Wakefield winner 2004 Nationals

Sunday then really fell apart at the seams, the wind had veered and we had to move camp. Then the thunder clouds rolled up and, in very short order, the heavens opened up as we all dived for cover into our cars. After a while, with the rain still falling, we heard the chilling announcement over the PA system that Pete Harris had been struck by lightning and taken to hospital. We all waited for what seemed hours, then finally came the tragic announcement that Pete had died. That was the end of Sunday, the rain eased and we all wandered aimlessly about whilst various authorities investigated the circumstances of the accident. Finally, at the conclusion of the investigations, we were allowed to leave and I, like many others I'm sure, headed home with a heavy heart.

Monday, late again, and we missed the short memorial service for Pete Harris that was held to start the day. The wind was light and we started the day down by the compound. I had left Rachel at home and my old flying buddy Ian Lomas was with me. We found the Wingates again and set up camp. Out came the old Hep-cat, which I had repaired and de-warped after my modest success at the BMFA 3rd area do at Luffenham. After a check flight or two to re-trim I was ready to go. The drift had been switching about and finally John Wingate and I decided we were in the wrong place, so we ups sticks and moved off back to the hanger end.

The maximum in the mini vintage event was only 2 minutes, so 850 conservative turns on the motor and I duly recorded my requirement of three maximums. John boy had really come of age, two consecutive fly-offs for the good old Hep-cat. Ian made the observation that each successive flight was slightly shorter than the preceding one but that was academic as far as I was concerned, over 2 minutes was over 2 minutes and I was in a mini vintage fly-off yet again.

We filled the rest of the afternoon playing with the bitsa glider I had put together recently and the first tow looked really good, straight up, no weaving, release was a bit sticky and the glide was stally but all in all OK. I had built a simple fuselage using a ½ inch square balsa boom behind a 3/32nd inch sheet front end. All the bits and bobs were external and the model had the look of some sea fishing rod on the one side with eyes all down the boom for the auto-rudder wire and the D/T line. I had used one of Spencer Willis's timers to which I had added a stop lever. This gave the front end the look of a rubber band store, one band to pull the stop off, one band to hold it on, one band to hold the auto-rudder and another for the D/T. Two pairs of hoops held a piano wire pin, to which the towline was attached. This pin was supposed to pull out on release to start the D/T timer and set the auto-rudder. Second tow up started off well but, on release, the piano wire pin would not pull out and this left me with the model still on tow but with a much further forward towing point. The line tension disappeared and there was I running about with a soggy towline and gliding glider still attached. It wasn't until the model was almost down that it finally turned away downwind and I managed to jerk the line free just before the glider hit the floor. We made an emergency rehash of system using only one pair of hoops and the pin released better so we managed to get a few flights in to trim the glide.

Mini vintage fly-off, 900+ turns and I waited to feel a little warmer air come through. I was labouring under the mistaken impression that I was now a recogniser of thermals. I didn't have my lucky timekeeper Kath as she was timing husband John Wingate so Ian was on the watch for me. "That feels a bit warmer" says I and nodding to Ian I release the Hep-Cat. The model climbed away but I think the dumb Hep-Cat still thought it was on 2 min maximums, and only did 2.05. John Wingate beat me by 39 seconds but we were over 6 minutes behind the winner. Still, better than previous years.

John Andrews

Southern Coupe League 2022 - Peter Hall

Southern Coupe League Programme for 2022

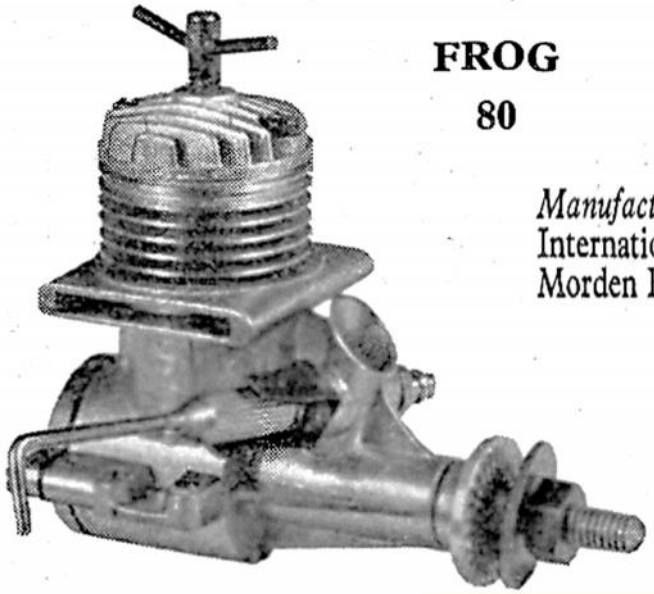
There are ten events in the programme if Dreaming Spires and Cagnarata Day are confirmed and Covid allows. Six of your best scores will count in the final tally. C. Foster and Chris Redrup, first and second at La Grande Coupe de Birmingham in December are off to a good start…*Hello yes, what is it ?……. Yes, yes O.K.*

Sorry about that, I've just received a directive from S.L.O.G. (Southern League Operating Group) Given these dreary depressing times, facing infection, lockdowns, tax increases, postponed operations, stagflation, supply breakdowns, the energy crisis, NHS collapse, global warming induced wild weather, and national bankruptcy let alone the depredations of mindless bureaucracy and the challenges of physical degeneration afflicting an increasing proportion of our dwindling numbers, it is likely that these Twenties will be not be Roaring like the last ones but Whimpering. What I am asked to provide therefore is a Johnsonian cascade of boostering rhetoric, a torrent of implausible metaphor, to motivate and cheer us for the coming season - a sumptuous feast to fill the belly of resolve, not a bowl of dry data to chew over, a reminder that Britain is still great and leads the world in stamp collecting and meal worm production. A Panglossian glow for all. So here goes-

Can you wait ? Can you ignore the call of those glorious enclaves of Olde Englande bathed in sunshine, decked with flowers, their names ring out like a peal of cathedral bells.
Ashdown Forest, Bodmin Moor, Beaulieu, Barkston Heath, Luffenham, Port Meadow. Salisbury Plain, Sculthorpe. Of course it's an effort, but when was not effort the midwife of success? When was carpet-slippered sloth not the father of mediocracy, the uncle of obesity and the second cousin of haemorrhoids'? Memories of the tedious journeys, the wind and rain, the silly mistakes, the lost models, should stiffen our resolve to improve our models, our preparation and our procedures.
Think of the creative pleasure of design and build. Think of the miraculous transformation of that pile of inert balsa, that limp tangle of rubber. Think of the forbidding intransigence of carbon and piano wire, the illusive quicksilver of mylar, the miniature perils of cyano waiting to be mastered. The new coupe emerging under your skilful hands like a gorgeous butterfly from its dowdy chrysalis.
Anticipation is the better part of pleasure so think of the first trimming sessions, the first competition - the Second Area on March 27th. Winding the motor, its tension and release mirroring your own, the agonising launch decision, the flood of relief when even in the first five seconds you know it's a boomer. Think of the perfect flight pattern, your spirit soaring, the timely D.T., the contented stroll back to base. 'I think the glide circle could be opened a bit.' - your modest response to the praise for your performance.
Think of lunch, two maxes in the bag, a flat calm afternoon. Lunch - plain and wholesome but elevated to gourmet quality by the fresh air and exercise. Chats with the chaps, what's new? Exchanges of lists of infirmities and condolences for loss. Then think of the fly-off, the nervy fumbling preparation, a ten minute launch window. This is a test of character. Do you follow or lead or simply ignore the others. The latter of course. Your senses are deployed like the finest spider's web to catch the micro -vibrations of the one approaching patch of sweet air in that ten minutes. Steady, steady, Now! Never mind the others, concentrate on your model. I leave the rest to your imagination. Then home, dinner and that special sleep that only a day like this can bring. Feel better now? of course you do so check your diary, March 27th the Second Area for round two of the League.

Peter Hall

Engine Analysis: Frog 80 - Aeromodeller Annual 1957-58



FROG 80

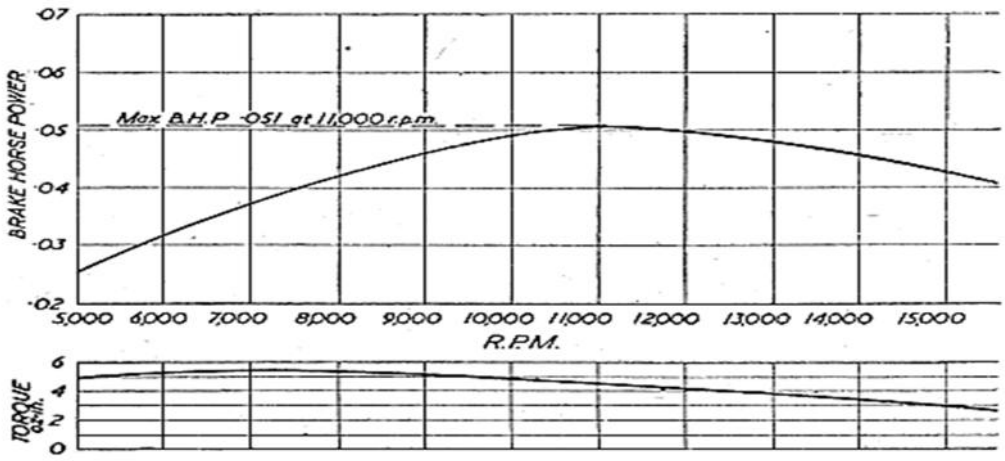
Manufacturers:
International Model Aircraft Ltd.,
Morden Road, Merton.

Retail Price:
45/- inc. Tax

Bore: ·400 in.
Stroke: ·390 in.
Displacement: ·804 c.c. (·49 cu in.)
Bore/Stroke ratio: 1·025
Weight: 1·9 ounces.
Max. B.H.P.: ·051 at 11,000 r.p.m.
Max. torque: 5·4 ounce-inches at 7,000 r.p.m.
Power rating: ·0635 B.H.P. per c.c.
Power/weight ratio: ·025 B.H.P. per ounce.

Material Specification
Crankcase unit: Light alloy pressure die casting.
Cylinder: Steel (no cylinder jacket).
Piston: Cast iron.
Contra-piston: Mild steel (with fitted O-ring).
Con. rod: Light alloy forging.
Crankshaft: Steel.
Bearing: Plain (reamed and honed).
Cylinder head: Light alloy die casting (nylon insert for compression screw).
Spraybar: Brass.

PROPELLER dia. × pitch	R.P.M.
9 × 6 (Frog nylon)	4,500
8 × 6 (Frog nylon)	5,250
6 × 6 (Stant)	8,000
6 × 4 (Stant)	11,000
5 × 6 (Frog plastic)	10,500
6 × 4 (Frog nylon)	12,800



Aeromodeller Annual 1957-58

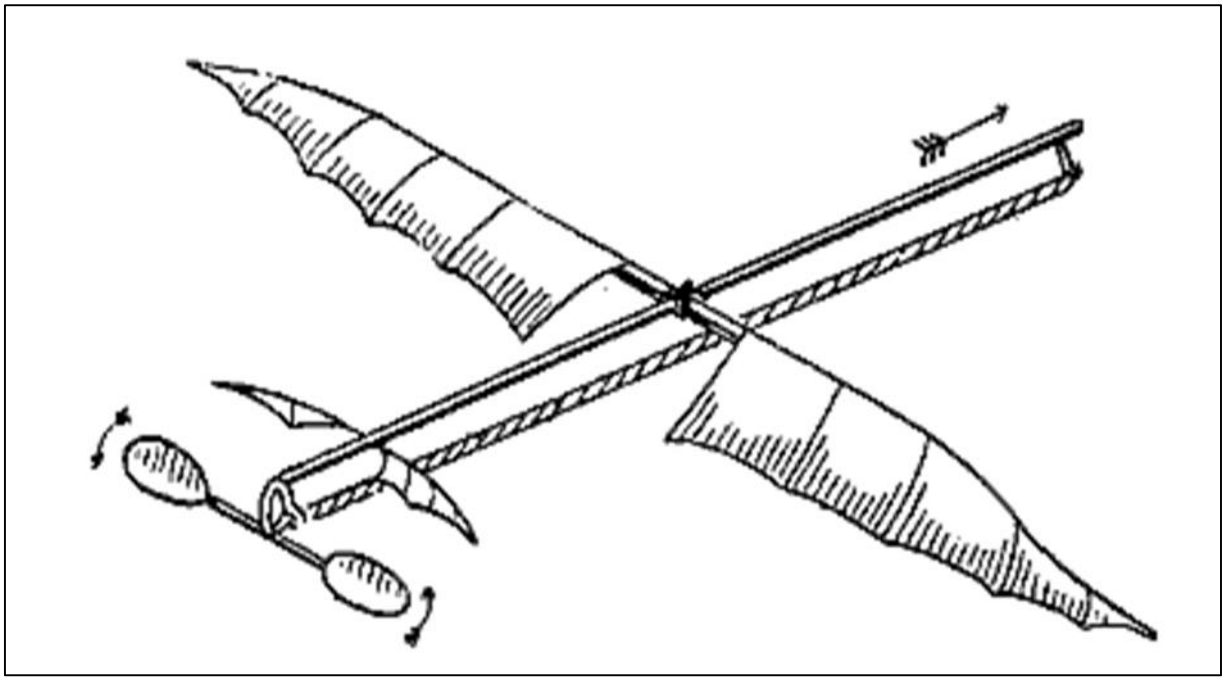
Indoor isn't for Everyone 49 - Nick Peppiatt

Alphonse Pénaud

Reflecting on the fact that the majority of indoor free-flight model aircraft are rubber-powered, it seems that a significant anniversary has been missed. At least, I've not seen any mention of it.

On the 18th August 1871, M. Pénaud successfully demonstrated his *Planophore* to members of the Société Aéronautique in the Tuileries Gardens in Paris, introducing the twisted rubber-powered model aeroplane to the world, 150yrs ago. According to the late Bill Hannan, he also flew it in the 'beautiful' Horticultural Hall, presumably making him the first indoor model flier. I have yet to identify the location of this particular hall, which is, presumably, in Paris.

Alphonse Pénaud (1850-1880), model aviation pioneer.



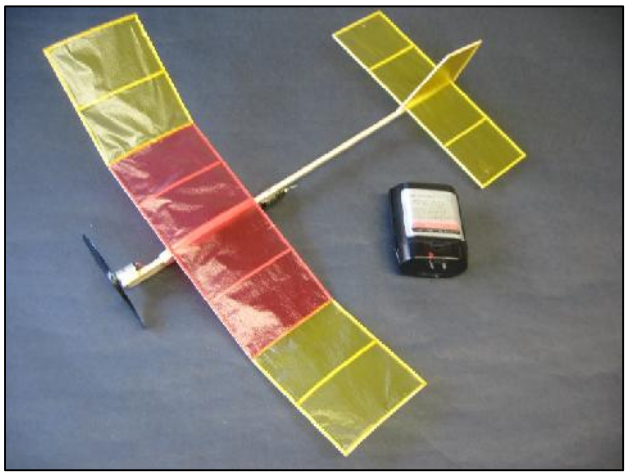
Drawing of the Planophore from Octave Chanute's 'Progress in Flying Machines'

The *Planophore* itself was 51cm long with a wingspan of 46cm. It weighed 16g, including 5g of rubber. The two bladed pusher propeller was 20cm dia. The demonstration flight covered 40m in 11s on 240 turns. All these values would still be perfectly recognisable and acceptable today. Contemporary illustrations do not show a machine with a fin, but in Octave Chanute's treatise 'Progress in Flying Machines' published in the early 1890s as a series of articles in 'The Railroad and Engineering Journal', there is the comment that it was 'guided horizontally by a small vertical rudder' – see Progress in Flying Machines: Aeroplanes, November 1892 (msstate.edu) Although, at first glance, the flight time of 11s appears short, it is more than enough to show that Pénaud had mastered the adjustment and trimming of his machine. As a comparison, minimum qualifying flight times for the indoor free-flight Open Rubber and CO_2/Electric Scale classes are 15s and for Kit Scale 10s. Further examples of his understanding of flight can be found in Chanute's writings. Pénaud also developed designs for a twisted rubber powered helicopter and an ornithopter. And, of course, he did not have the benefit of Tan Super Sport rubber.

Bill Hannan published a couple of articles on the *Planophore* in the first two volumes of his 'Stick & Tissue International' series, and I have included a copy of his plan for a practical flying replica.

The great advantage of a twisted rubber motor is, of course, its S-shaped torque-turns curve, which gives an initial power burst for climbing, a flat region for cruising, ideally close to the ceiling, and then a slow descent as the torque gradually reduces. It is these characteristics, along with the relative ease of adjustment of motor length and cross-section that have led rubber to predominate as the power source for indoor free-flight over the last 150yrs.

Capacitor power



Union Condenser Airplane and charger.

Banggood sourced foam plastic capacitor plane and charger.

West Totton Community Centre hall at the December Flitehook meeting. There are a couple of rubber-powered models flying in the middle of the picture.

Seen at Totton, Ted Horsey's capacitor powered semi-scale Lippisch P13b, using Chinese produced electrics

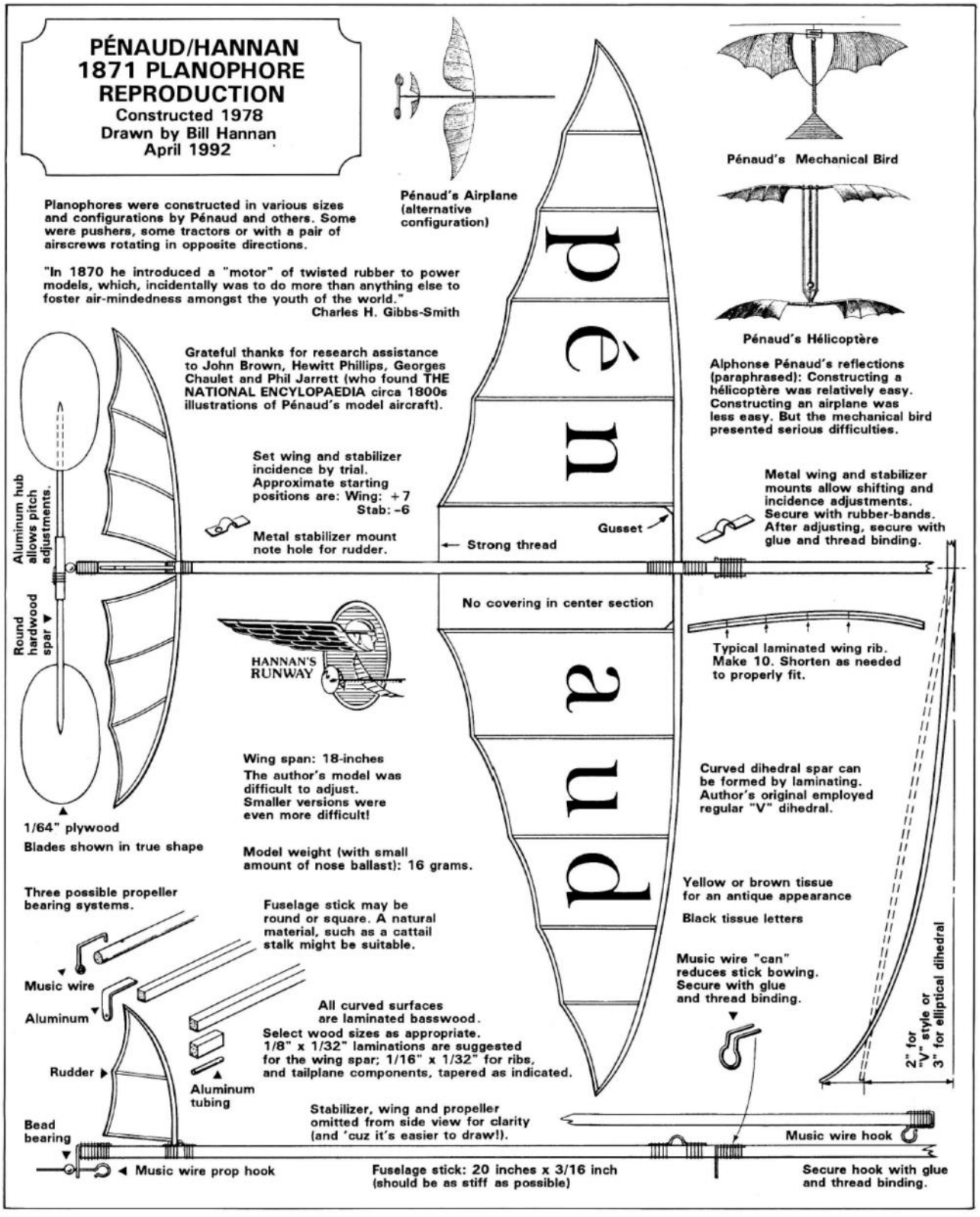
So what are the potential power sources to compete with twisted rubber power for indoor flying?

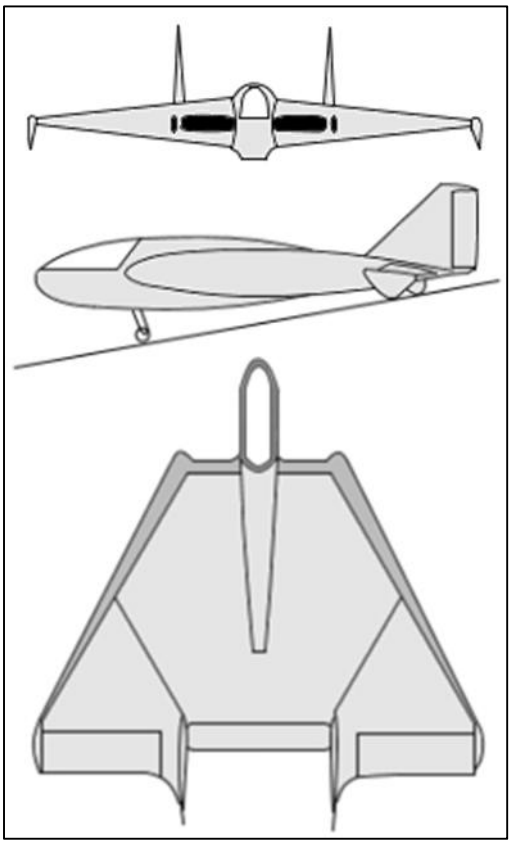
I have dealt with CO_2 motors at length in previous articles.

Another possibility is to use a capacitor to drive an electric motor. Capacitors have the advantage over batteries in that they are quick to charge and their performance does not deteriorate over time.

This idea is not particularly new. In the 1990s a Condenser Airplane kit was produced by the Union Model Co. Ltd. in Japan. It had a span of 350mm and used a 3.3F capacitor powering an electric motor, similar to that in the KP00, with a direct drive to an 80mm dia x 44mm pitch propeller. The weight given on the plan was 15g, the power system being 9g. To give a slight weight saving I covered mine with condenser paper (it's a Condenser Airplane, after all) rather than the Jap tissue supplied. The capacitor charger uses two C sized batteries.

I would describe its performance as adequate, rather than spectacular, but it flies quite happily in a smallish hall like that of the West Totton Community Centre.
More recently small ARTF capacitor planes made of foam plastic have been produced in China, available through sources such as Banggood. The example shown has a wingspan of 290mm, has a 5F capacitor powering a 6mm dia coreless motor and weighs just over 11g. The propeller diameter is 46mm and looks and appears quite efficient. The charger uses three AA size batteries. Being made of flexible foam plastic, I have found that they need frequent trimming adjustments, but, on the other hand they have been successfully launched and flown outdoors by my young grandchildren. The performance is considerably spritelier than that of the Union Condenser Airplane.





At the end of December Flitehook indoor meeting at Totton, Ted Horsey was dabbling with capacitor powered models using the system from the Banggood aircraft. His semi-scale replica of the Lippisch P13b delta, a modern three view at left, courtesy of Wikipedia, was flying particularly well. The model is constructed from balsa and foam plastic.
The full-size P13b project was designed by Alexander Lippisch in 1944/5 to be an interceptor aircraft powered by a ramjet using a solid fuel such as coal powder, because of the oil shortage in Nazi Germany. The ramjet was to be totally enclosed within the wing. Clearly, capacitor power is a far better option for indoor use.
The hall at Totton is relatively small, but, as can be seen from the photo, has the great advantage of a relatively clean ceiling with few hang up possibilities. There is, however, a model trap in the form of a ledge at the top of the green painted wall. I understand that a fuller report of this relatively well attended meeting is elsewhere in this issue.

Nick Peppiatt

Email to the Editor

ijp@solutek.co.uk 9/1/2022 11:39
To editor@sam1066.org

Good morning,

I don't know if you can help or point me in the right direction.
I attended a free flight mass fly off event at Old Warden back in 2009. There was an article in a modelling magazine where the cover of the magazine had a group photo of the participants. This included my late friend Chris Jordan and my family. Chris Jordan's daughter would like to see a copy of the magazine and I am trying desperately to see if I can find a copy or a copy of the cover photo.
Would you be able to point me in the right direction.

Many thanks

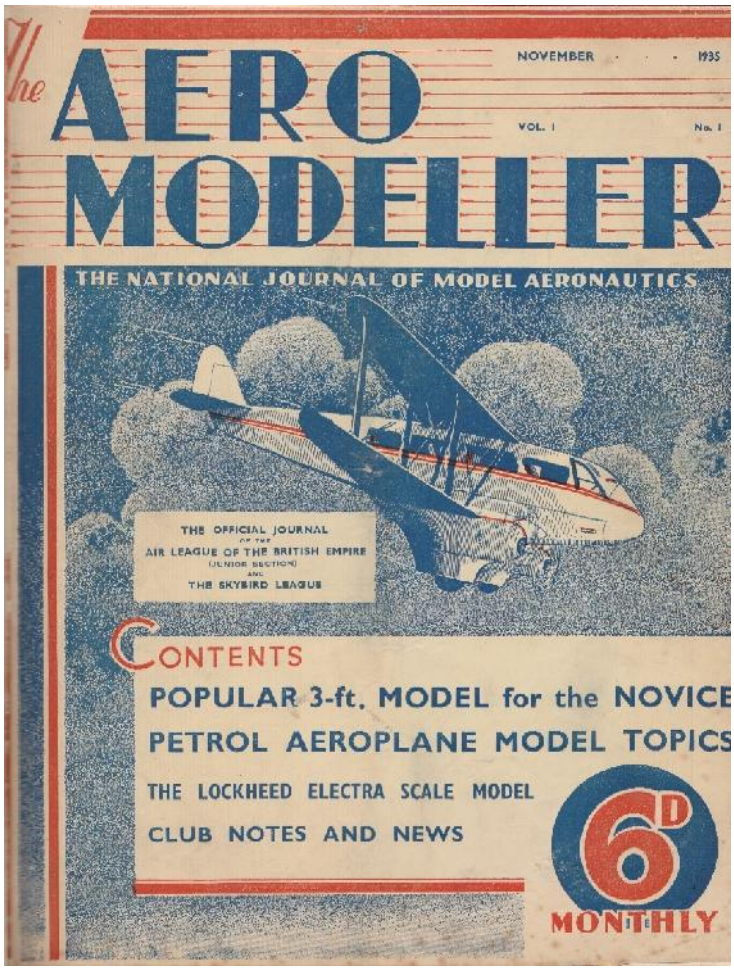
Kind regards
Ian Parker

(Editor: I received the email above and copied it to Roy Tiller our archivist who unfortunately was unable to find anything in our archives.
Aeromodeller, Model Flyer, SAM 35 Speaks and New Clarion all with no result.
The Aeromodeller at that time was "Aeromodeller within AMI".
We do not have AMI but Roy made a web search of the covers which found every month except August but there was no cover with a group photo.)

Can anyone help?

Report No. 132 Our earliest magazines continued.

At last we come to the first issue of ***The Aero Modeller***, dated November 1935 with a two colour cover showing a nice drawing of a de Havilland Dragon Rapide, just a nice picture, the Rapide does not feature in the contents. ***The Aero Modeller*** was, as we know, not the first magazine to have aeromodelling content, even if we confine ourselves to those published in England, and this is readily demonstrated by the plan in this issue, the Eagle, a 36" wingspan rubber powered model designed by C. J. Burchell. We know this gentleman from his 36" Spar Glider plan in Model Engineer June 1924, his Miniature Monoplane in English Mechanics August 1932 and his Snipe 46" span Rubber Model plan in Model Aircraft September 1932. This was not the Model Aircraft magazine later absorbed by Aeromodeller but was that published by The Model Shop, Old Kent Road and which lasted for just four issues, September to December 1932.



WELL AWAY.—A small 5-ft. span biplane built by Capt. Bowden and fitted with a 10 c.c. "Brown Junior" two-stroke engine. The total weight of the machine ready to fly is 4¼ lbs.

Captain C. E. Bowden gives his views on "The Development of the Petrol Model" which he divides into three classes, 30cc engine, 15cc engine and 10cc engine.

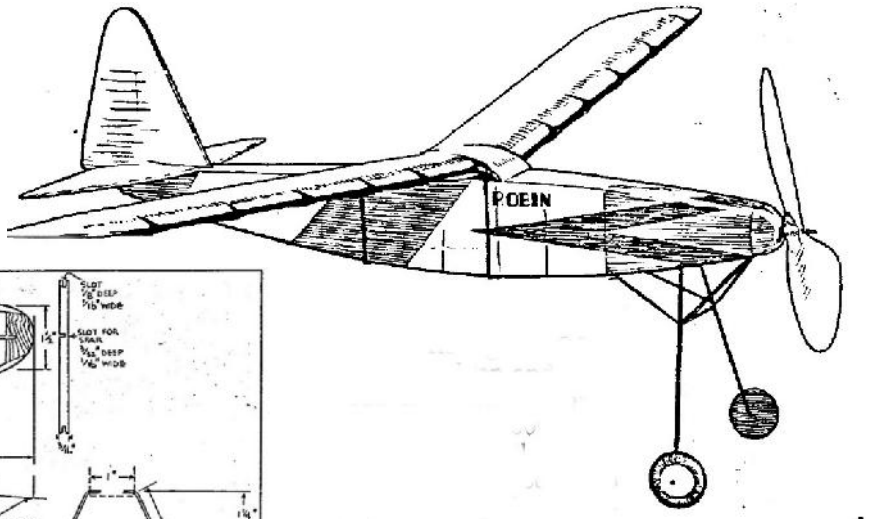
Three pages are devoted to "News from the Clubs" with the editor appealing to Club Secretaries to include items of general rather than local interest. Reports were published from Blackheath, Bournemouth, Bristol & West, Hayes & District, Lancashire, Leicester, Lymington, Clapham Park, Reading & District, Sheffield & District and Windsor.

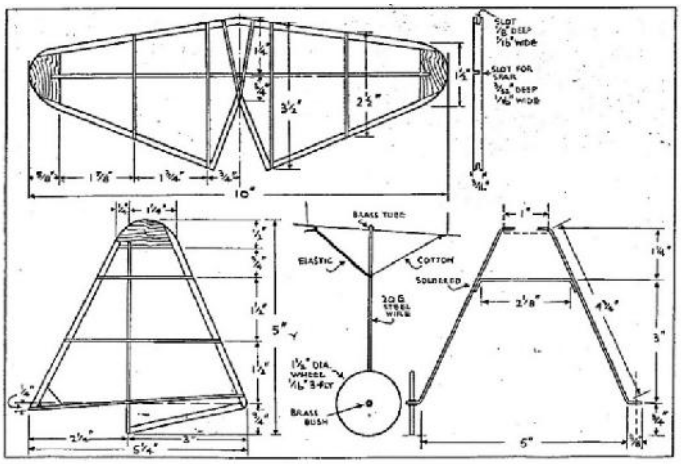
Fourteen pages were allocated to items not related to flying models i.e. "Air League of the British Empire (Junior Section), "Arm Chair Flights" and "The Skybird League".

Looking at this first issue alone one wonders how did it survive? The Eagle model instructions advise that the construction is all birch with the fuselage longerons and crossbars being drilled to avoid splitting the wood and then "glue and nail right through into the building board" this followed by steaming the fuselage "whilst still on the board with the aid of a fast boiling kettle." The advertisements are quite a contrast, Model Aircraft Stores Bournemouth offer kits for balsa models from 12" to 36" wingspan. Balsa wood is offered by Model Supply Stores Prestwick and by C. Lucas (Hobbies Depot) Liverpool.

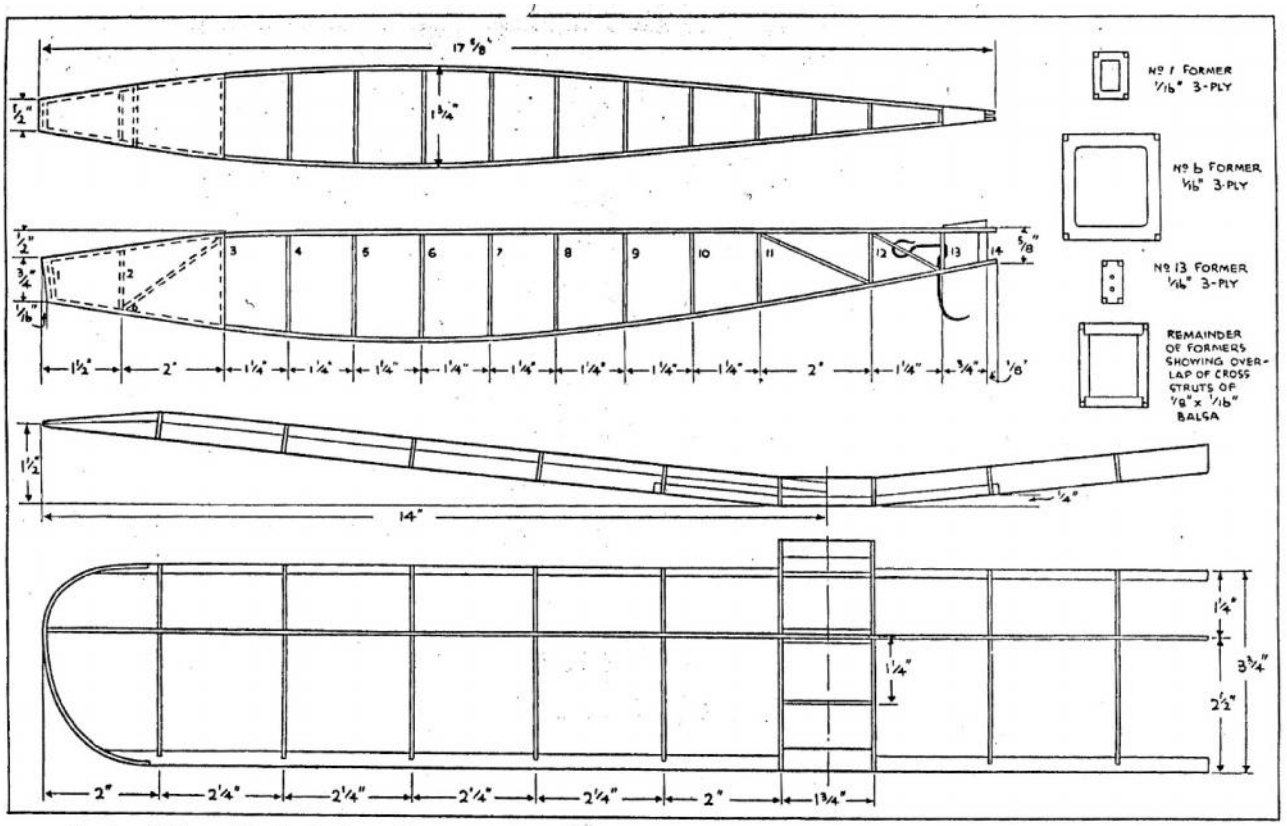
But survive it did, the current January 2022 full colour issue, has 58 pages, two full size plans, articles on free flight, scale, control line, engines and reports on current and long ago flying meetings, altogether plenty of interest for the vintage style aeromodeller.

The same cover design was used for the next two issues December 1935 and Jan/Feb 1936.
The December issue has an article on converting a large rubber powered model to a "reliable gas model" by two members of the Wembly Model Flying Club with a full page general arrangement drawing. There were no plans for building flying models in this issue.
The Jan/Feb issue has a plan and instructions for building the "Robin" a 28" wingspan rubber powered model by R. F. L. Gosling, which can be "built all in balsa". The wing section is Gottingen 532 with a top main spar and the designer advises that the C.G. should be at the main spar. As to performance "it will climb at an alarming angle to a good height before straightening out and continuing its flight. Often it will perform half a loop and right itself with a roll then continue in a steady flight. With 600 turns it will have a power flight of from 35-45 seconds to which must be added the glide."
What a joy! A design for which a young lad could afford the materials, and have a fair chance of completing and successfully flying the model.

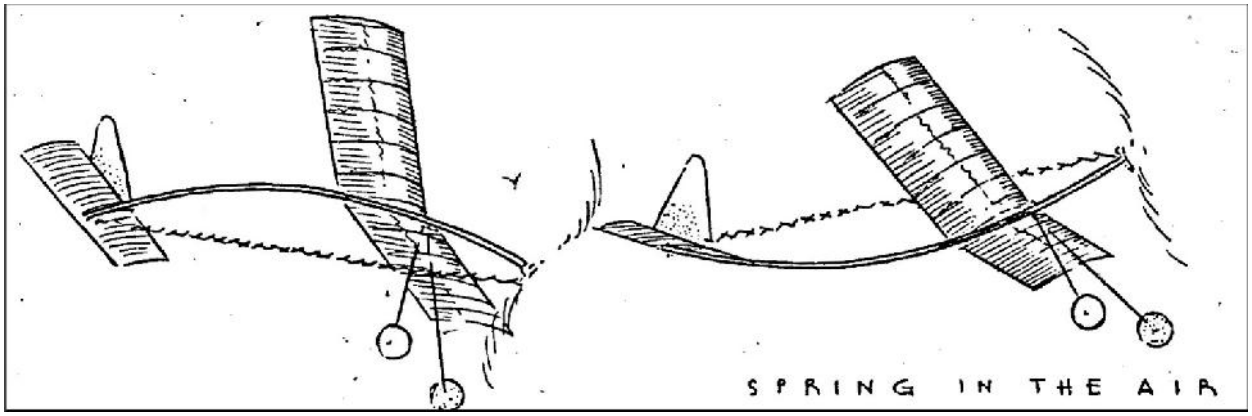




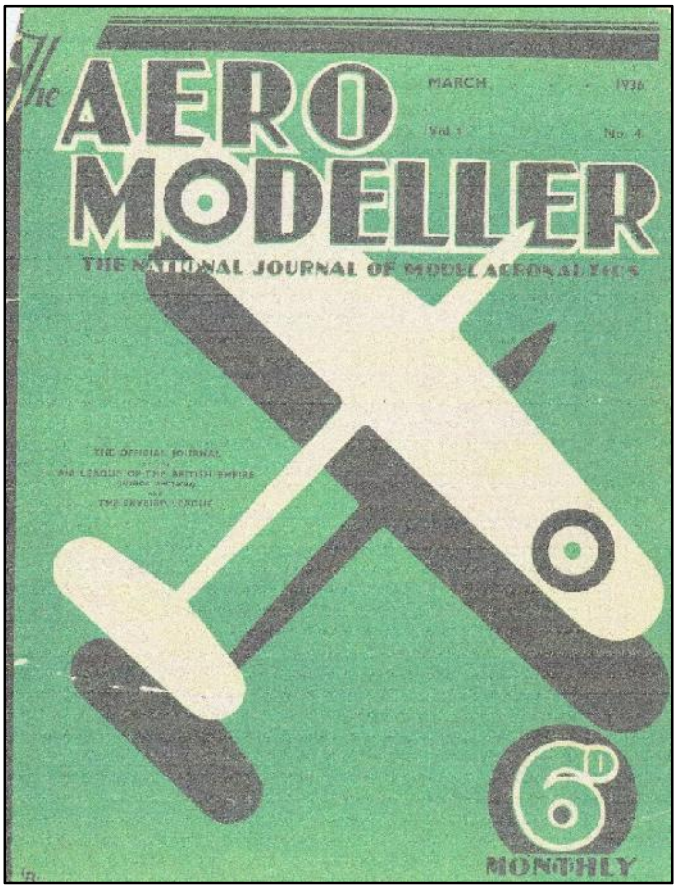
And the Editor said unto Mr. Gosling "How about a Baby Gull, an Ivory Gull, a Heron, a Nordic Tern, a Red Breast, and for a change a Judy." And it all came to pass.



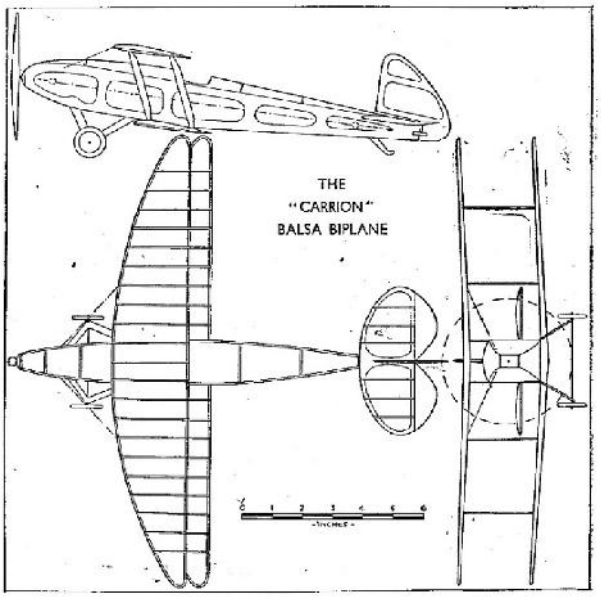
This issue also carried an article on "The Trimming of Rubber-Driven Model Aeroplanes" by J. B. Allman, holder of the Wakefield and National Cups 1934. More knowledgeable advice for the young aeromodeller to help get the best out of his Robin model. The picture of Mr Allmann with his trophies and one of his models did not scan with a good result so I am leaving that out and instead give the sketch from the bottom of the last page of his article.

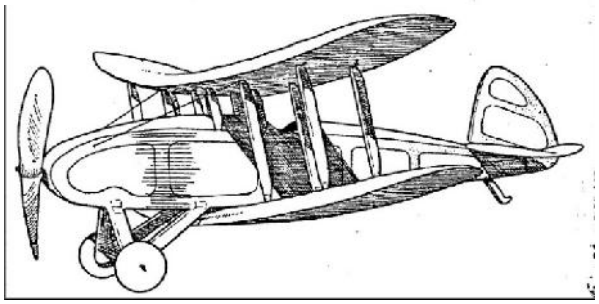


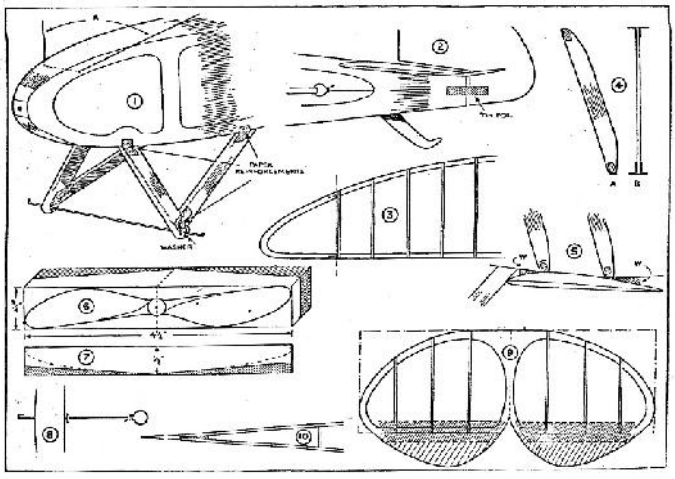
March 1936 brought a new cover design, more in line with general practice at the time of being in black plus a single colour.



The featured plan, the Carrion by Francis M. Hughes, is a 16" wingspan rubber powered biplane, again all balsa but I fear that is one of the few thing in its favour. Recommended to the beginner but not an easy build, particularly the wings and interplane struts which are attached by "small angular paper joints shown in Fig 4b."





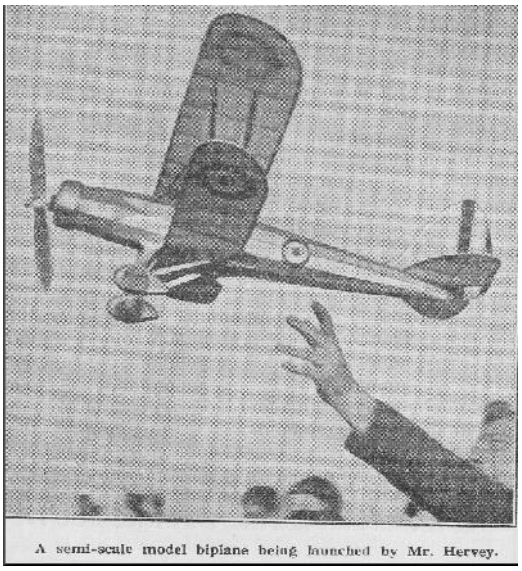


Also in the March issue the report below from Down Under

MODEL AVIATION IN AUSTRALIA by H. E. Hervey (Abridged version)

The history of the model aeroplane in Australia dates back to the latter part of last century when Lawrence Hargreave made many remarkable and successful experiments with model aeroplanes and flapping - wing machines, using steam, compressed air and rubber as motive power. Apart from the work of this pioneer, the period 1909-14 saw a small band of enthusiasts building and flying models, chiefly of the now almost - extinct pusher " flying - stick " type. The keen interest aroused in aviation during 1928-9 by several spectacular flights on the England - Australia route resulted in an enthusiastic revival of model flying, the direct cause being a competition organised by 3 D.B. a Victorian Broadcasting Station, in conjunction with the Melbourne Herald. Competitors had to build the model from plans and bits supplied by the organisers and broadcast talks and newspaper articles supplied additional hints on construction. In addition to the main prizes offered by 3 D.B. practically all firms interested in aviation contributed to the prize list, chiefly in the form of free aeroplane flights. With all this publicity the competition went with a bang. The original order for 200 kits was absorbed on the opening morning of the competition; within three days the supply of model aeroplane rubber in Melbourne was exhausted! This and other hold-ups only seemed to add to the fervour of prospective competitors. The flying tests, which took the form of a duration competition, were held at the Shaw-Ross Company's aerodrome, and was an all-day affair. There were three sections , juniors , seniors and ladies , half a dozen of the latter having built models, while ages of competitors ranged from 10 to 68! The best duration obtained was 57 seconds, a good effort considering the past history of model-flying in the country, and also the fact that the winner had never seen a flying model, let alone attempted to build one, before entering for this competition. Those who took part would have found it hard to believe that within the next few years official Victorian duration and distance records would stand at 24 minutes, 52 seconds timed out of sight, and 32 miles respectively.

The flying-stick type of the early days was soon dropped for outdoor flying, although it still survives in the form of super-duration models with microfilm covered wings for indoor events. Balsa wood construction is employed almost universally, and the writer was rather surprised on returning to England to find the prejudice against this material in some quarters. The suggestion raised by several modellists with whom he has discussed the subject, that climatic conditions in Australia are more suitable than in England for light balsa models, is not the case, at any rate, so far as Victoria is concerned. Strong winds are more the rule than the exception, and the effect of the summer sun on super-light construction is to turn the model into the semblance of a corkscrew. It must be admitted that in the early days of balsa models breakages were on the grand scale, but with accumulated experience and a better understanding of the vices and virtues of balsa this has been changed and weather has to be really bad to stop flying. I feel sure that Australian clubs would welcome news of activities in this country and a closer co-operation with model aeronautics. May I hope that this object will be achieved through the pages of The Aero Modeller.



A semi-scale model biplane being launched by Mr. Hervey.

All above mentioned plans as in The Aero Modeller and full Australia report available by email.

Roy Tiller, tel 01202 511309, Email roy.tiller@ntlworld.com

Roy Tiller

February 1947

News Review

Cover Story

This month's picture is of Mrs. Gunter, of the Bushy Park Club, who has for some time been a regular competitor in petrol contests in various parts of the country.

The picture was taken immediately after she had gained third place in the Petrol Duration Contest, held at Stoughton Aerodrome, Leicester, in September, with some very consistent flying.

Her model naturally follows closely the lines of those flown by her husband, " Gussie " Gunter, and bears a close relationship to the general style of the petrol models constructed by the members of the Bushy Park Club, but she deserves considerable credit for the consistency of her performance and for holding her own with the mere males.

The participation of ladies in our contests is welcomed and we hope that Mrs. Gunter's success will lead more ladies to take up competition work with aero-models seriously.

S.M.A.E. Area Councils

The interest which clubs in general are showing in the S.M.A.E. Area Scheme is very gratifying, and at the recent Area Meeting, held at Leeds, there was considerable enthusiasm shown by the clubs represented and many useful aspects of the scheme were discussed which should lead to improved working during the 1947 season.

Several new Areas are undergoing formation, and the latest to group itself effectively is the South East Coast Area, with headquarters in the Brighton district.

We wish it the very best of luck and we hope its example will be followed by other districts which are still operating in a detached manner.

The advantages which are to be gained by pooling local resources when such things as rallies are being organised are alone worth combining for, apart from the advantages and pleasure derived from the goodfellowship arising from regular contact with kindred spirits in other clubs.

From reports received, it would appear that a certain amount of financial assistance will be forthcoming from the S.M.A.E. to enable areas to function satisfactorily.

Statistics which have recently been compiled show that only a small percentage of model aircraft enthusiasts support the club movement and that quite a few clubs operate quite on their own without contact with other clubs. This is to be regretted, since it greatly restricts their scope and the contributions which they can make to model aircraft development and, incidentally, their own enjoyment.

It is to be hoped that all clubs which are not at the moment taking effective part in the Area Scheme will consider the matter seriously and either join one of the happy groups of clubs already organised, or form an area group of their own.

Light-fingered Gentry

We regret to learn that E. S. Bassett, of Doncaster, suffered the misfortune of having the engine and transmitter of his radio control model stolen while he was transporting it to London for exhibition at the Dorland Hall Show.

It appears that these two components were stolen from his car, which was broken into while he was stopping at a hotel on the way to London, and all modellers are asked to keep an eye open for these items and report their finding immediately. Since the engine is a five cylinder radial just recently received from America, it is unique, and should easily be recognised, as it is about the only one in this country.

Now! All you model enthusiasts, keep a sharp look out!

The Canard

There was a time when the vast majority of model aeroplanes were of the " canard " or tail-first type, and indeed in the early days of aeromodelling they reigned supreme so far as performance was concerned.

It is, therefore, interesting to note that there are a number of " canard " designs now built, or in the course of building, and that interest in the type is reviving.

This interest is not confined to models, and quite a number of full-sized " canards " are making their appearance.

Another old aeromodel feature which is being revived amongst full-sized machines is the " pusher " airscrew and it will be interesting to watch the developments which take place in this direction.

Both of these design features have their good points and model aircraft designers might well give them serious thought for the next machine they have on the drawing board.

Dates for Your Diary

We hear that the Midland Area Council are arranging to hold a Spring Rally on Perton Aerodrome, Wolverhampton, on April 13th, starting at 11 a.m.

There will be the following events : (1) Concours d'elegance (for competition models only) ; (2) Open Rubber duration ; (3) Open Glider ; (4) Petrol or Diesel duration (20 sec. motor run).

Cover is provided and there are ample runways for the power models.

This event will be held in conjunction with the S.M.A.E. Area centralised events for the Flight Cup and M.E. No. 1 Cup, so that visitors can fly for these events at the same time.

The Use of Aerodromes

The S.M.A.E. has for some time been in negotiation with the Air Ministry with the object of obtaining permission for Model Aircraft Clubs to use Ministry-owned aerodromes for model aircraft flying, particularly on Sundays, when the 'dromes are not in normal use. Negotiations have been long, due to the many legal technicalities involved, but agreement is now in sight and the S.M.A.E. hope to be able to be of real help to the clubs in this matter.

Briefly, the Air Ministry are prepared to consider the use of any aerodrome available on the following terms.

Use of aerodrome authorised by them is limited to members of established model aero clubs who must apply for permission to use the aerodrome.

Identification will be by the presentation of the club membership card showing the member fully paid up and the member's National Identity Card may also be called for at the discretion of the officer commanding the station.

Clubs granted permission are required to enter into a Deed of Licence and Indemnity with the Ministry which has now been standardised and which, while authorising the use of the airfield at such times as may be arranged from time to time by the officer commanding, calls for reasonable guarantees from the clubs against damage to the aerodrome and adequate insurance cover against third party risks.

An essential feature of the agreement will, therefore, be the taking out of an adequate insurance policy to cover the risks involved and the S.M.A.E. is in negotiation with its insurance company for the preparation of a suitable policy.

The Air Ministry will make a nominal charge for the use of the airfield and also for the legal fees entailed for the Deed, but the total cost to the clubs is not expected to exceed three guineas.

In addition, where clubs desire to avail themselves of the normal aerodrome storage facilities the Air Ministry are prepared to sanction this on the basis of 1s. per model per day or £1 per month.

Any clubs which desire to use a local aerodrome under these terms should let the chairman of the S.M.A.E. know as soon as possible and he will be pleased to send a copy of the proposed Deed, which provides full details of the terms.

It must be understood that the position of aerodromes is at the moment very liquid ; they are being closed down, converted, transferred from one command to another, etc., and no guarantee can therefore be given that they are available or that permission can be granted in every case.

The Air Ministry is, however, treating every application sympathetically and the S.M.A.E. has already obtained permission for the use of such important airfields as Burton Wood and Doncaster, amongst others, for the clubs interested.

Photographing Models

It is the natural desire of every model aircraft constructor to have a pictorial record of the results of his craftsmanship for future reference.

There is a mistaken impression amongst many aeromodellers that expensive cameras and equipment are necessary to obtain good results. This is far from being the actual fact of the case where " still " photographs for record purposes are concerned, and excellent results can be obtained with quite ordinary and inexpensive equipment, if you " know how."

To guide those who desire to obtain good photographs of their models, an excellent book on the subject has just been published by Messrs. Percival Marshall & Co. Ltd., bearing the title " Photographing Models," in which the author, John H. Ahern, F.R.P.S., clearly outlines the basic requirements for obtaining good results with the minimum of equipment. Those of you who wish to obtain good photographs of your models cannot afford to be without this excellent guide to procedure, equipment, lighting, exposures, etc. Perusal of its pages will give you the answer to your problems.

It costs 3s., plus postage, from the publishing offices of this journal.

An early Power Modeller

Right. Professor Langley at the age of 63 when he wrote the article we quote below. Bottom of page is a Science Museum model of his 1903 "Aerodrome"

SAMUEL PIERPONT LANGLEY, like many of the early pioneers, used aero-models as a basis for his experiments, and was, in fact, the first power modeller to make a flight of any consequence, this in 1896 when he proved with a successful flight of two-thirds of a mile that man-carrying flight in a heavier-than-air machine was a distinct possibility.

The true measure of his genius can only be assessed when it is realised that not only did he produce designs and constructional details for the aircraft, but developed what was then a completely new concept in regard to the theory of flight.

The story behind this remarkable achievement is best described in the words of Langley himself, written in an article in the Strand Magazine of 1897, but before passing on to the account by Langley, let us briefly sketch the historical background of this remarkable man. Born in Boston, U.S.A. in 1834, he was formerly a civil engineer, abandoning this career for astronomy, becoming a Professor of Astronomy at Western University, Pennsylvania in 1897. Twenty years later he was chosen Secretary of the Smithsonian Institute in Washington, and aeromodellers fortunate enough to visit that city should note that one of his models can be seen at the Institute, this particular version powered with a 1 h.p. petrol engine.

In determining the basic principles of flight Langley set up a "whirling table" with a revolving arm 100 feet long, driven by a steam engine. After three years of experiments he established, amongst other things, that a flat plate weighing 200 lbs. could be sustained in the air for the expenditure of only 1 h.p.

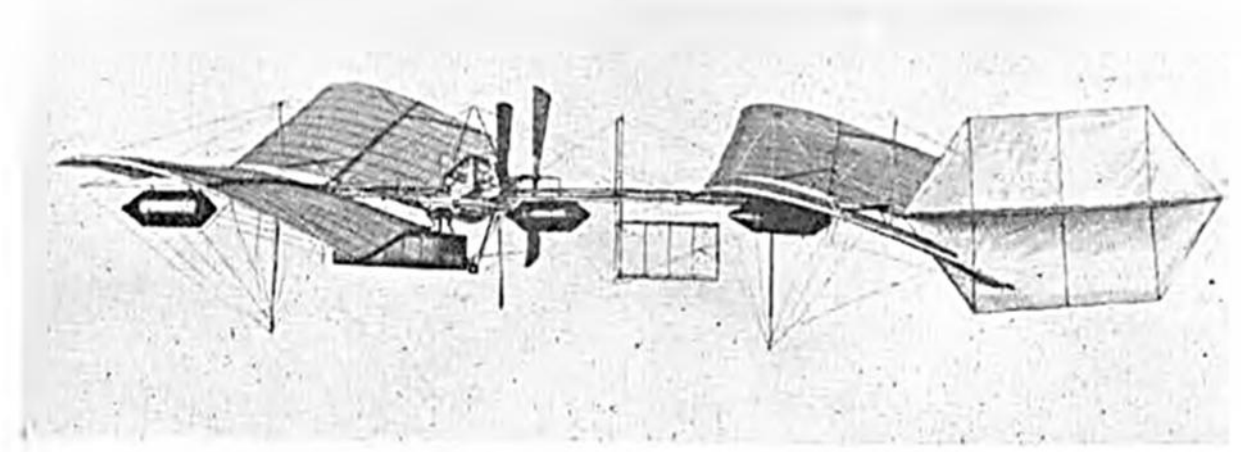
Next came the problem of design, and the professor wrote as follows:—

"At first it seems as though Nature must know best, and that since her flying models, birds, are exclusively employing wings, this is the thing for us, but perhaps this is not the case. If we had imitated the horse or ox, and made the machine which draws our trains walk on legs, we should undoubtedly never have done so well as the locomotive rolling on wheels."

There is a passing reference to Penaud, a Frenchman, who, 20 years before, had made a "toy" consisting of a wing surface, tail surface and a propeller of cork and feathers, driven by twisted strands of rubber. At that time, so far as the professor knew "no machine had ever flown for more than 10 seconds, unless it were Penauds' toy".

A first model fitted with propellers and a steam engine, was designed and laboured on for many a month. The weight was ever increasing beyond the estimate until the whole weighed more than 40 pounds. "It was clear that, whatever pains it had cost, it must be abandoned . . . but having learned from it the formidable difficulty of making such a thing light enough, another was constructed . . ."

There follows an account of successive machines powered by various means—compressed air, carbonic acid gas, and steam. Each one was lighter than the last. "But though each was an improvement on its predecessor, it seemed to become more and more doubtful whether it could ever be made sufficiently light, and whether the desired end could be reached at all . . . The chief obstacle was not the engines, but the boiler" and also sufficient structural strength in wings and frame.



"Crown Copyright— from a model in the Science Museum South Kensington"

Such were the difficulties after 2 years of effort. "... and it seemed at this stage again as if it must, after all, be given up as a hopeless task, for somehow the thing had to be stronger and lighter yet ... Everything in the work has got to be so light as to be on the edge of breaking down and disaster and when the breakdown comes, all we can do is to find what is the weakest part and make that part stronger, and in this way work went on, week by week and month by month, constantly altering the form of construction so as to strengthen the weakest parts, until, to abridge a story which extended over years, it was finally brought nearly to the shape it is now ..

The time had come for a trial flight.

"It became clear without much thought that, since the machine was at first unprovided with any means to save it from breakage on striking against the ground, it would be well, in the initial stage of the experiment, not to have it light on the ground at all, but on the water".

" ... A great many places were examined along the shores of the Potomac, and on its high bluffs."

None were suitable, partly for their publicity, also since the machine must "begin to fly in the face of the wind ... it was necessary to send it from something that could be turned in any direction".

Accordingly a scow was chosen and a platform, 20 feet above the water, was built upon it. A suitable site was found 30 miles down river from Washington and the boat anchored there in November 1893.

Then followed a succession of abortive visits to the site, each one requiring a trip of 60 miles.

Always the wind was too strong. Even the lightest breeze was enough to upset a launch, the machine being "the most unmanageable and helpless of creatures until in its proper element". We must remember too the tedious complication of raising steam on each occasion to supply the motive power.

"During most of the year of 1894 there was the same record of defeat ..Finally in October '94, an entirely new launching apparatus was completed"

This held the model firmly and was capable of launching in a moderate breeze. Fresh problems then arose.

"This new launching-piece did its work in this respect effectively, and subsequent disaster was, at any rate, not due to it. But a new series of failures took place, which could not be attributed to any defect of the launching apparatus, but to a cause which was at first obscure, for sometimes the 'aerodrome', when successfully launched, would dash down forward and down into the water, and sometimes (under apparently identical conditions) would sweep almost vertically upward in the air and fall back, thus behaving in entirely opposite ways, although the circumstances of flight seemed to be the same."

The cause was eventually traced to flexing of the wings during flight. The professor continues:—

"Has the reader enough of this tale of disaster? If so, he may well be spared the account of what went on in the same way. Launch after launch was successively made. Wings were finally, and after infinite patience and labour, made at once light and strong enough to do the work." Another year had passed.

"And now in the long struggle the way had been fought up to the face of the final difficulty.

"It is enough to look up at the gulls or buzzards, soaring overhead, and to watch the incessant rocking and balancing which accompanies their gliding motion, to apprehend that they find something more than mere strength of wing necessary, and that the machine would have need of something more than mechanical power, though what this something was, was not clear."

A study of the hawk in flight "suggests an acrobat on a tight-rope, only that the bird uses its widely outstretched wings in place of the pole ... There is something then, which is difficult even for the bird in this act of balancing."

After many experiments the final model was evolved and, for those days, was of remarkably advanced design.

Our illustration shows dihedral and camber and also the "rudder for horizontal and vertical steering". The wing span was 12 to 13 feet and the overall length was 16 feet. Weight was under 30 pounds. Boiler and engine made up one quarter of the total weight and developed 1 to 1½ horse power. Duration under power was two minutes.

At last, after 8 years of trying, the gallant professor's labours were to be rewarded.

"On the 6th of May 1896 I had journeyed, perhaps for the twentieth time, to the distant river station, and recommenced the weary routine of another launch with very moderate expectation indeed, and when on that, to me, memorable afternoon the signal was given and the 'aerodrome' sprang into the air, I watched it from the shore, with hardly a hope that the long series of accidents had come to a close. And yet it had, and for the first time the 'aerodrome' swept continuously through the air like a living thing, and as second after second passed on the face of the stop-watch, until a minute had gone by, and it still flew on, and as I heard the cheering of the few spectators I felt that something had been accomplished at last, for never in any part of the world or in any period, had any machine of man's construction sustained itself in the air before for even half of this brief time. Still the 'aerodrome' went on in a rising course until, at the end of a minute and a half (for which time only it was provided with fuel and water), it had accomplished a little over half a mile, and now it settled rather than fell into the river with a gentle descent. It was immediately taken out and flown again with equal success, nor was there anything to indicate that it might not have flown indefinitely except for the limit put upon it ..'It was like a miracle', said one who saw it."

It is interesting to note that Alexander Graham Bell, inventor of the telephone, was an enthusiastic witness on this occasion.

Finally, we come to professor Langley's conclusions:—

Continued on Page 160

Continued from Page 135

"And now, it may be asked, what has been done? This has been done: a flying machine, so long a type for ridicule, has really flown; it has demonstrated its practicability in the only satisfactory way—by actually flying, and by doing this again and again, under conditions which leave no doubt. There is no room here to enter on the consideration of the construction of larger machines, or to offer the reasons for believing that they may be built to remain for days in the air or to travel at speeds higher than any with which we are familiar; neither is there room to enter on a consideration of their commercial value, or of those applications which will probably first come in the arts of war rather than those of peace; but we may at least see that these may be such as to change the whole conditions of warfare, when each of two opposing sides will have its every movement known to the other, when no lines of fortification will keep out the foe, and when the difficulties of defending against an attacking enemy in the air will be such that we may hope that this will hasten rather than retard the day when wars shall cease."

"I have thus far had only a purely scientific interest in the result of these labours. Perhaps if it could have been foreseen at the outset how much labour there was to be, how much of life would be given to it, and how much care, I might have hesitated to enter upon it all. And now reward must be looked for, if reward there be in the knowledge that I have done the best I could in a difficult task with results which it may be hoped will be useful to others."

"I have brought to a close the portion of the work which seemed to be specially mine—the demonstration of the practicability of mechanical flight, and for the next stage, which is the commercial and practical development of the idea, it is probable that the world may look to others. The world, indeed, will be supine if it does not realise that a new possibility has come to it, and that the great universal highway overhead is now soon to be opened."

Prophetic words, indeed, in the year 1897.

During the course of these experiments recounted by Langley some thirty models were built, and following the successful flights he achieved Langley was persuaded by the American War Department to construct a man-carrying machine. It was here he suffered his greatest disappointment as the full size 'aerodrome' as it was called, crashed into the Potomac during launching and the project was abandoned. Only nine days later the Wright brothers made their historic flight at Kitty Hawk in North Carolina and thus became the first men to fly in a heavier-than-air, mechanically propelled, aircraft. The failure of Langley's flight was due entirely to wrong methods of launching, the aircraft fouling the launching carriage at take-off. It is interesting to note that in 1914 Glen Curtiss, the early American aeronaut, obtained permission to take Langley's original machine from the Smithsonian Institute, whereupon he fitted it with floats and flew it successfully from Lake Keuka in New York State, thus vindicating Langley's genius

Aeromodeller March 1956

Wallop Pictorial 2 - John Andrews

Still scratching about for content so here is another batch of pictures from my Wallop computer files, As I said last issue, no particular significance just a random selection as I browse through the file.

There must be one or two of you out there who also have pictures, be they digital or photographic, of the SAM1066 Hey-Days at our cultural home, stick a batch together and send them in.

Tony Thorn with a scaled down 'Dream Bogey' for the 36" bungie launch competition

In August 2010 there was a memorial event in memory of Laurie Barr. The event was for replicas of Laurie's well known lightweights, the 'Scram' and the 'Pinocchio', below are pictures of some of the entries in the competition.

Yours truly

John Worsley

Mike Sanderson

Robin Kimber

John Wingate

Event winner was Bob Taylor, with Mike Sanderson 2nd, and Rex Aldridge 3rd.

Coupe Europa 2013: Colin Shepherd waits for good air. Yours truly on watch & Terry Beese in support

Colin was having a bad day and to compound his frustration, on the only good flight he had, I failed to get the stopwatch started due to a mix up after an aborted launch. I was pensioned off and Rachel took over.

Coupe Europa 2013: Roy Vaughn tends his prop whilst a very happy looking timekeeper waits

In the background we spy Pete Brown readying himself for a flight having checked on what I believe was his ground based chart recording thermal snifter.

SAM1066 Championships August 2009: Timperley's Gerry Ferer with his winning entry in Large Rubber Pearl waits in comfort with the watch.

SAM1066 Champs 2009: Yours truly piles the turns on the 'Jaguar', Peter Martin assists.

I have to wind with model down side uppermost as you can see, the model keel gets in the way right side up. I won best 'Jaguar' time for the second time.

John Andrews

Prototypes Worth Modelling

No. 3. THE "ANTOINETTE" MONOPLANE

By C. B. Maycock

THE *Antoinette* monoplane of 1909 was noted for three things, good looks, superb workmanship, and being in advance of its time. It lends itself well as a subject for a flying scale model and owing to the general layout should appeal to the rubber-motor fraternity; any necessary alterations to the tail unit would be quite legitimate because it is true to say of all these early machines that no two were exactly alike, they had some variation somewhere, particularly in the tail.

The wings were perhaps the finest of any pioneer machine and were built up of two main spars and a multiplicity of profile strips which ran spanwise and chordwise. These when covered with rubberised fabric (this was before the days of dope) formed as near a perfectly contoured lifting service as was humanly possible, and those *Antoinette* joiners mostly recruited from the best of the piano and showcase-making trades certainly knew their stuff. Lateral control was by warping, except in the *Antoinette IV* (Latham's first Channel crossing attempt) where trailing flap ailerons were used.

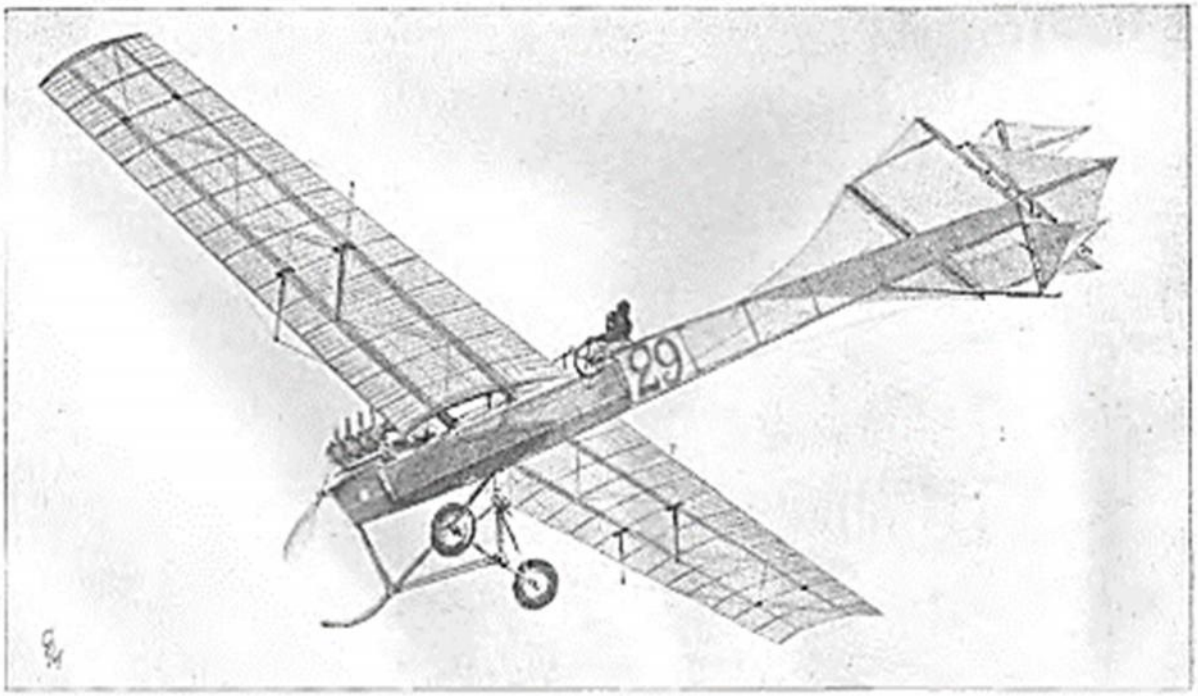
The fuselage was of plain triangular section, cross braced with piano wire and fabric covered as far as the cockpit and from then on covered each side with thin planks of polished cedar.

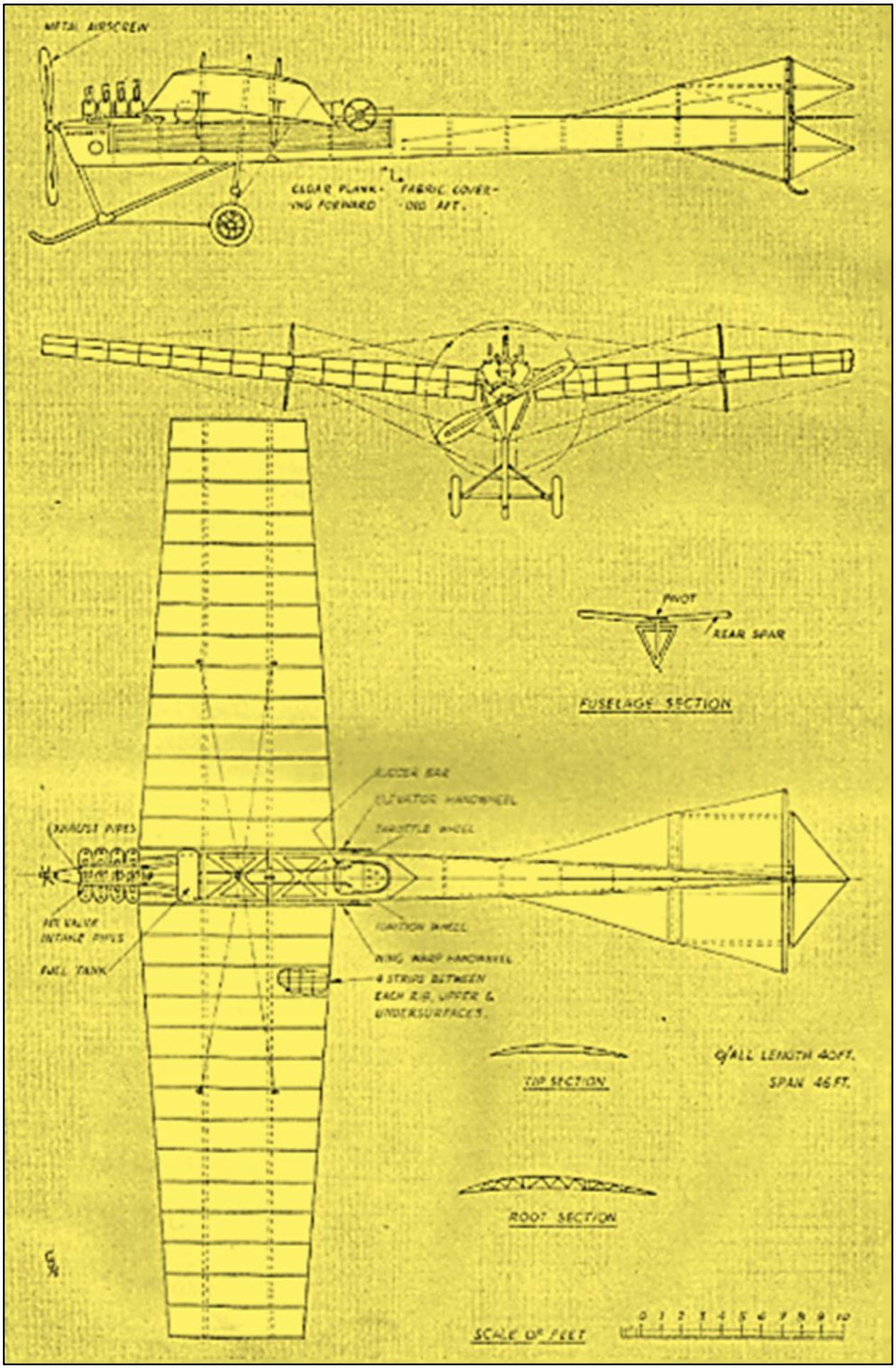
The tail surfaces were rigged in the manner of yacht sails, the fabric being laced to the spars of tailplane and rudders.

The undercarriage was interesting; a vertical steel tube combining the main undercarriage strut and centre section king-post, housed a spring plunger connected by a sliding collar to the diagonal struts to the axle.

Antoinettes had their own method of control which needed energetic handling, lateral control was by a handwheel on the port side of the cockpit and the elevator cables were connected in a similar manner to the starboard hand wheel, the rudders were connected to a foot bar in the normal way.

The power plant was usually a 50 or 80 h.p. vee-eight, steam cooled motor with petrol injection and coil ignition. Air was drawn into the cylinders through valves, which in a carburettor type of motor would be the inlet valves. The exhaust was expelled through separate pipes from each cylinder and grouped on the centre line fore and aft. Each cylinder was copper jacketed and the water carried was the minimum. The resulting steam was condensed in two radiators one each side composed of 22 aluminium tubes each radiator. To facilitate the air-flow the cedar planking was not extended behind these radiators. A small handwheel controlled the throttle or rather the stroke of the fuel pump and another the ignition. The crankcase of aluminium was extended to house the mainbearing for the airscrew shaft. The metal airscrew was adjustable for pitch but not in flight.

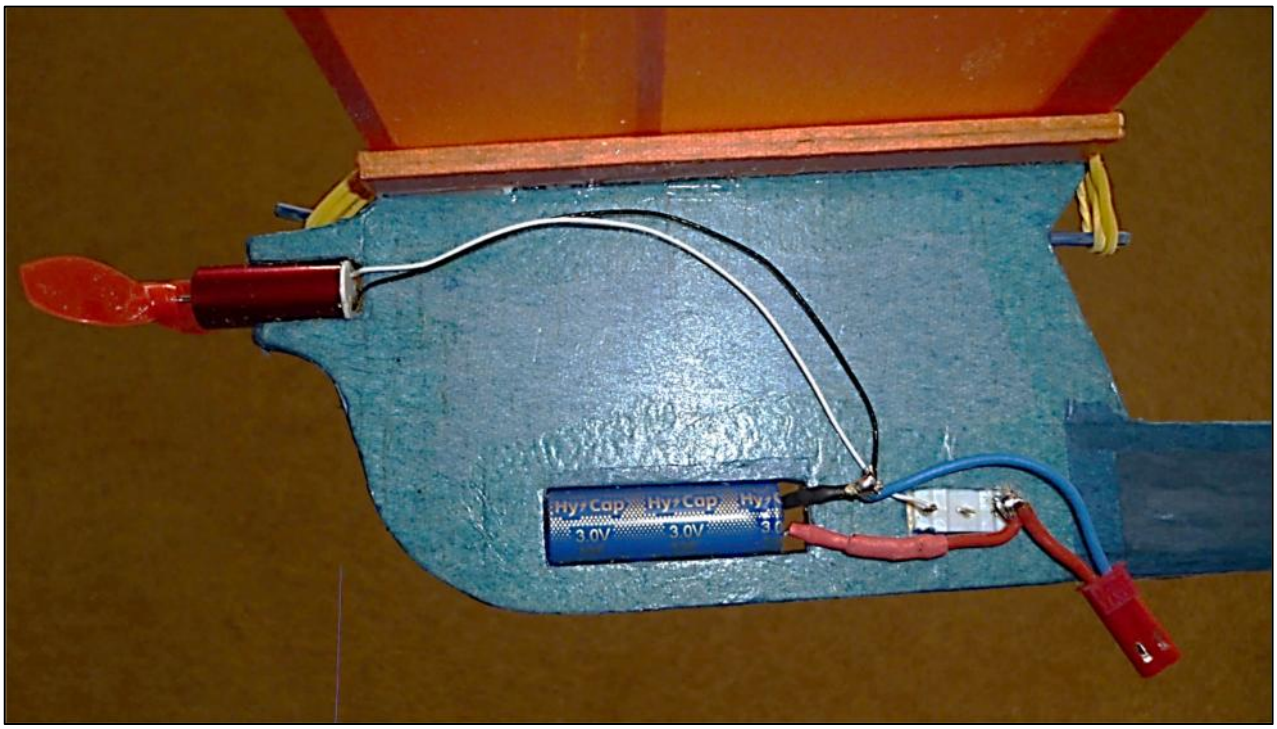



METAL AIRSCREEN
CLEAR PLANK-ING FORWARD
FABRIC COVER-ING AFT.
PIVOT
REAR SPAR
FUSELAGE SECTION
ELEVATOR HANDWHEEL
THROTTLE WHEEL
EXHAUST PIPES
IGNITION WHEEL
WING WARP HANDWHEEL
4 STRIPS BETWEEN EACH R.B. UPPER & UNDERSURFACES.
FUEL TANK
TIP SECTION
O/ALL LENGTH 40FT.
SPAN 46FT.
ROOT SECTION
SCALE OF FEET
0 1 2 3 4 5 6 7 8 9 10

Secretary's Notes for February 2022 - Roger Newman

Another quiet month with very little to report.
A date of 18th April (Easter Monday) has been agreed & "reserved" for the Croydon Wakefield day / SAM 1066 events – reserved in as much as planned to be held on Areas 8 of Salisbury Plain, always subject to approval by the MoD.
Also South Bristol has now received licence approval for the Cagnarata Day at Colerne on 24th July, which is good news.
The weather has been extraordinarily calm of late but somewhat damp. An excursion was made by a few hardy enthusiasts to Area 8 during the month, which I believe was achieved without recourse to the use of a 4 x 4 & towrope! Otherwise my flying has been limited to the local rec & preparing an assortment of CLG's ready for the summer & the grandchildren onslaught.
Frog Duration design: an appeal from Derick Scott – has anyone a copy of a duration design that appeared (he tells me) in the well illustrated Frog Compendium – unfortunately we don't have a page reference, but the design was a rubber powered model of about 38" span? Please let me know if anyone has a plan & is happy for it to be scanned. I can arrange the rest.
My little E20 Micro Starduster is now finished & ready for trimming. Just a motor, a 10 farad capacitor & a tiny microswitch which is held down for charging the cap & released for flight. For whatever reason, it triggered memories of a small model called the Scalded Kitten which was a product of one of the guys involved with the Low Speed Aerodynamics Research Association (LSARA) called RHW Annenburg. So I looked up both the plan & details of the LSARA. The plan is in our library & is one of the plans of the month. On digging further into the internet, I discovered a very well written article all about the LSARA by Adrian Duncan (better known for his excellent articles on model engines). This can be found at http://www.modelenginenews.org/people/lsara.html There is also an erudite article in the 1948 Aeromodeller Annual on low speed aerodynamics, written by one Peter Payne who was another member of the LSARA – complete with several nomogram charts for those who are interested. Anyway, the Scalded Kitten was a 27" span power model, designed for a "high speed vertical climb" propelled by any 0.5 to 1cc motor. Now there is a challenge that's a bit different, particularly with a modern motor like a Cox TD 049! Looking at the plan reveals one distinct disadvantage – it has an underslung tailplane & no easy means of getting it down after it has completed its vertical climb – so a prime candidate for a flyaway. However, I might be tempted to try one fitted with the same motor & supercap combination as the Micro Starduster.

MicroStarduster

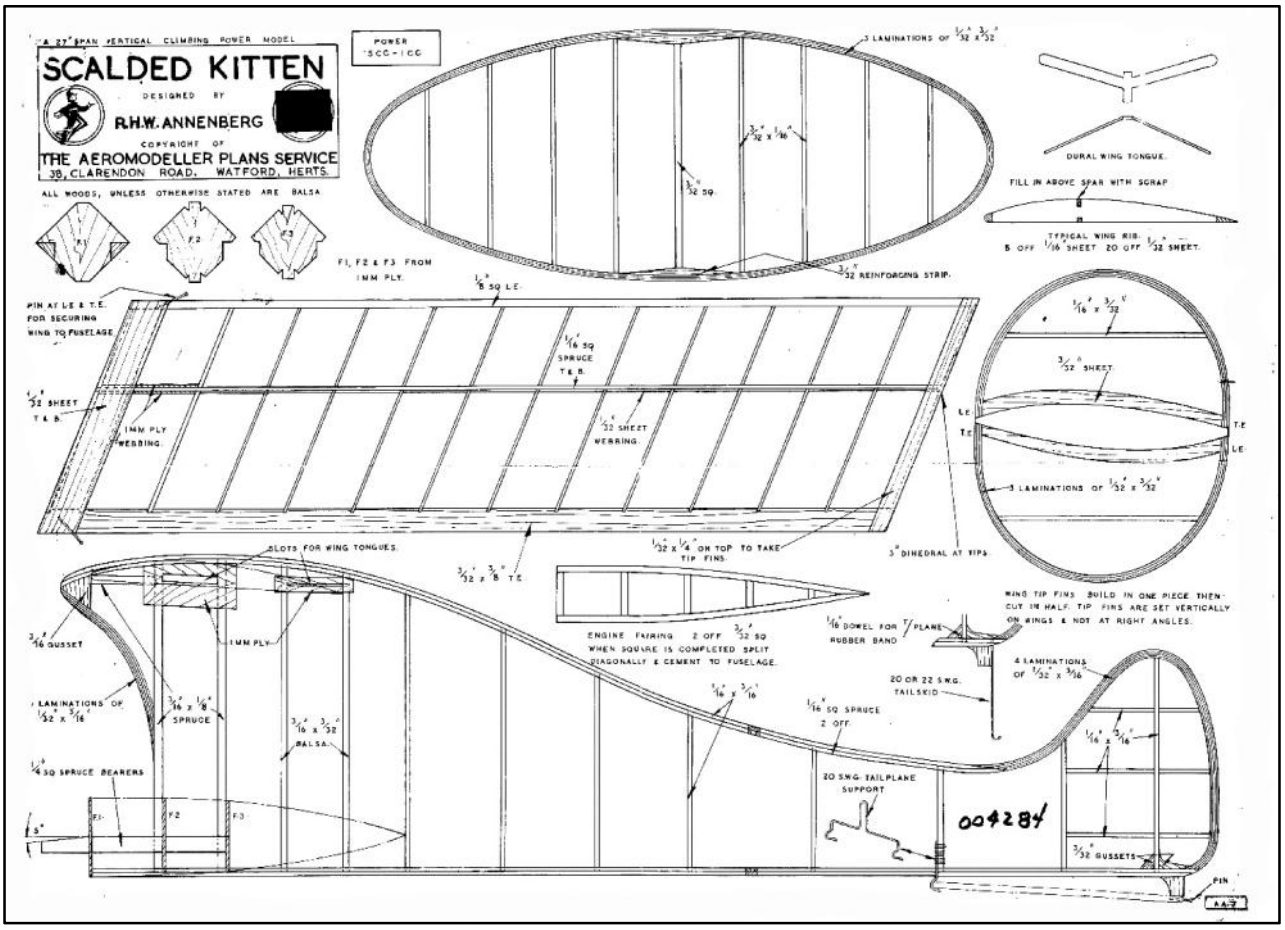


The Components

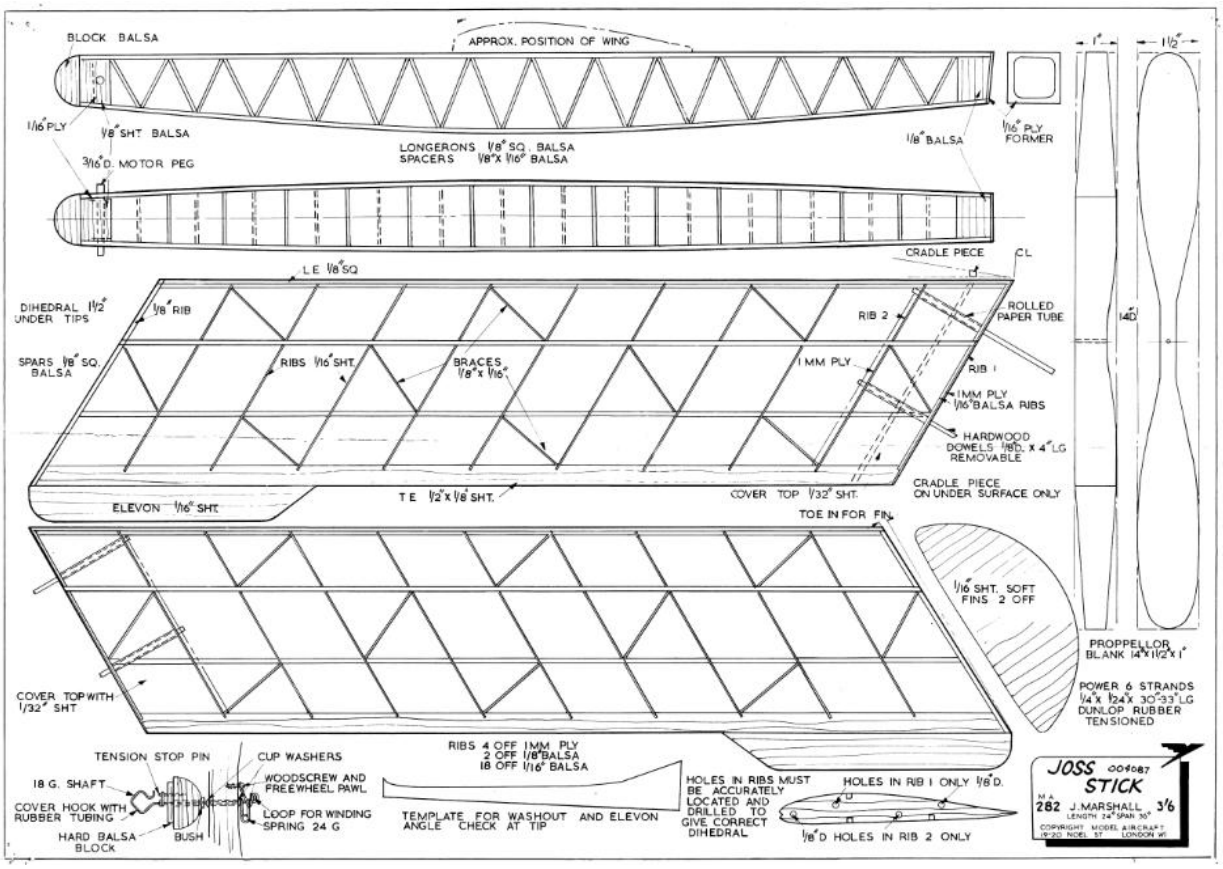
Roger Newman

Plans for the Month - Roger Newman

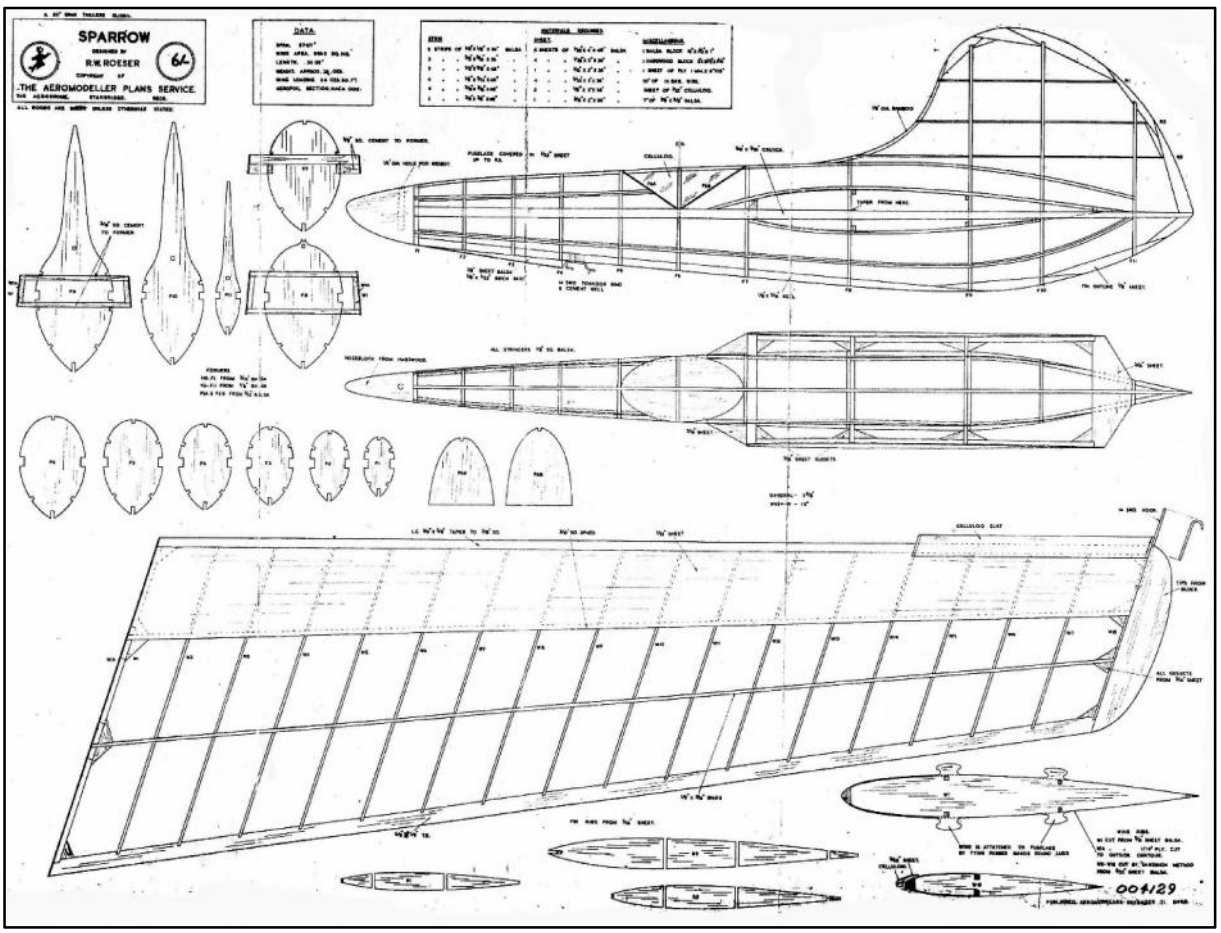
Power:- Scalded Kitten



Rubber: Tailless model by Josh Marshall published in Model Aircraft – Josh Stick



Glider: Continuing the tailless route - Glider published in Dec 1951 Aeromodeller - Sparrow



Roger Newman

BMFA 100 Indoor Flying Extravaganza

Supported by BMFA South Midlands Area, High Wycombe MAC, Hemel Hempstead MFC and West London MAC

Big Hall – 30m x 60m x 9m ceiling

Sunday March 20th from 1:00pm until 7:00pm

High Wycombe Leisure Centre, HP11 1UP (M40 J4)

Entry Fee: £10

BMFA Membership required. - Juniors go free with a pre-paying paying adult.

All R/C and free flight indoor models welcome. There will be slots allocated for different classes. Please see the event website for details: https://www.hwdmac.co.uk/BMFA100ife	Event website
Buy tickets now at ticketsource: https://www.ticketsource.co.uk/bmfa100ife	Buy Tickets
Buy your tickets now to be entered into our prize draw for a chance to win a fantastic **Microaces Albatross D.V. kit with choice of flight pack!** Many thanks to Jon Porter from Microaces who has generously sponsored this event. https://microaces.com/	Albatross D.V.

Salisbury Plain Permits

Salisbury Plain Area 8 will be available for General Sport Flying and Trimming every weekend (Saturday and Sunday) plus Bank Holiday Mondays, in 2022, from January to December.

During this period flying on area 8 is subject to clearance being granted by Army Air Operations on the preceding Friday. When the clearance is given, a clearance number and the times available will be notified to users via their email addresses.

Users must be in possession of a current permit. To apply for a permit you must complete the application form to be found on the 'Free Flight Technical Committee' website. The cost is £20. Retain the conditions of issue and code of conduct for future reference.

It is important that you read and understand the conditions of issue and code of conduct before submitting your licence application.

Please note that the use of Salisbury Plain Area 8 for Model Flying is delegated by the MOD DIO (SPTA) to the BMFA via the management of the FFTC.

No other use is permitted.

Free Magazines

There are:-
Aeromodellers: 7 x 1955, 6 x 1956 and Jan 2013 to Nov 2021 complete.
Sam Speaks 2007
AMI Aug '02 to Apr '04
The 2013 to 2021 Aeromodellers are all in perfect condition except for the removal of some free plans.
The 1955 & 1956 are without covers and consequently a little tatty.
The Sam Speaks are in perfect condition as are the AMI's

I want nothing for them just a good home!

They would need to collected either from my home or an Area meeting, as three boxes have a total weight of just over 20 Kg.

If interested contact john-richardson@btconnect.com or 01233 668767

Address is still 21 Beaver Road, Ashford

MODELS FOR THE CENTENARY EXHIBITION

As you probably know, there will be an exhibition at Buckminster next summer to celebrate a century (or a bit more) of British model flying. The aim is to look at our progress decade by decade, covering FF, RC and CL flying and models; obviously prior to the late 1940s there was only free flight to consider, but you, as a vintage enthusiast will know all about our first fifty years or so.

Jim Wright and Martin Dilly are organising this and we need offers of representative models, preferably original but possibly replicas, and significant bits of equipment to include in the exhibition. If you've been to the superb German museum of gliding and model flying at Wasserkuppe or the AMA museum at Muncie you'll know what's possible.

A few specifics. Does anybody have one of the L.G. Temple heavyweight gliders from the 1940s? A Rudderbug? A Chris Olsen Uproar? A Mick Farthing Lightweight glider (the one with the diamond fuselage and a pylon)? A 1920s-type compressed air model? A Banshee? A combat model from the days when they had fuselages? A Bill Morley Thunderbolt F2B model?

Any suggestions of what needs to be included, whether models, equipment or developments will be most welcome as soon as you like.

Jim is at jim.wright@dsl.pipex.com, phone 01525-221543 and

Martin is at martindilly20@gmail.com, phone 0208-7775533.

SOUTHERN COUPE LEAGUE CALENDAR 2022

7 Nov 2021	Grande Coupe de B'ham	N Luffenham
27 March	Second Area	Area Venues
8 May	London Gala	Salisbury Plain
2-5 June	Nationals	Barkston Heath
?	Dreaming Spires	Port Meadow
10 July	Fifth Area	Area Venues
24 July	1066 Cagnarata	RAF Colerne
21 Aug	Southern Gala	Salisbury Plain
18 Sept	Crookham Gala	Salisbury Plain
8 Oct ?	Coupe Europa	Salisbury Plain

INTERNATIONAL POSTAL COMPETITION

July 1st 2021 to February 28th 2022

The event will be held from July 1st to February 28th inclusive. A good friend well versed in global climatology did some extensive research on options presenting balanced timing of weather conditions for both hemispheres and this period appears to be potentially promising.

E vents:-

P30. Models conforming to AMA rules . ie. 40g minimum airfame weight, lOg maximum motor weight, no dimension exceeding 30 inches, unchanged commercially available plastic propellor 23 - 25cm in diameter. No gearbox.

Senator. Replicas of the KeilKraft 'Senator'

Common to both classes :- Three flights to 120 seconds maximum; flyoffs 150 seconds max until target is not achieved.

Classic 1/2A. Participation limited to 'locked down' models with no moving surfaces other than for d/t operation and powered with cross-flow engines; schnuerle ported units are not eligible.
Three flights to 120 seconds maximum; flyoffs 150 seconds max until target is not achieved. Engine run 7 seconds for first three flights, 5 seconds for flyoff flights thereafter.

In all instances multiple models may be separately entered during the contest period. It is not necessary to complete entry flights in a single day. Please forward details of a completed entry as soon as possible, at latest by email or post by **March 14th 2022,** together with any anecdotes or photos which I will endeavour to include in a closing report.
Requirements are: Entrant name. Country. Email address. Class. Model name, if from kit or plan. Full score(s)

Thank you for your participation and support. Good flying !

Jim Moseley j j moseley @.look.ca
50 Exeter Road, Apt. 1153, Ajax, Ontario, L1S2K1, Canada

PS: Update on competition above

International Postal Competition

July 1st 2021 to February 28th 2022

Greetings to all! It is now just over four months since I invited participation in this event for:

P30s plus supporting classes for Classic 1/2A and KK Senator.

A lot of positive comment was forthcoming but entries to date have been a little sparse in comparison even though much of favourable northern hemisphere flying opportunity is fading.
To some extent I have been remiss in not encouraging members of groups to fly but I have had very little time to spend in same or on modelling affairs in general due to personal problems.
I thank all who touched base and also those who have sent scores, whose numbers I trust will yet be swelled by others from Southern climes. Remember that scores are acceptable from any time in the July-February period so existing sets of times from any contest or flying sequence are valid, as are multiple entries where different models were flown. As said initially I have not been active in the group of late and time is still limited; I request anyone who may have left me comments or scores therein to please advise me direct at jjmoseley@look.ca and use that email for more to follow..... says he hopefully .... lol.... Competition rules also available.

Good flying, wherever in the world you might be.

Jim Moseley jjmoseley@look.ca

Le Petit Classique de Brum

North Luffenham 13th March 2022

(a relaxed day out or Mad March Hares?)

A competition of 3 flights no rounds. Start 10.00 end 16.00,
followed by Fly-offs as required.
Max and Fly-off (not DT) to be determined by the CD
on the day with regard to weather and other conditions.

Classes will be:
pre 1970 Coupe; Classic A1; Classic Glider (50m line)
Combined E36 + 1/2A power (both 8 second run), and Mini Vintage.
Competitors may enter two models, separately, in each event.
Highest placed entry to count,
NO SUBSTITUTION of parts nor model permitted.

Entry £TBC for the day, prizes for 1,2&3 in each class.

NOTE TO POTENTIAL FLIERS: -
March is traditionally SO WINDY there are poems about it!!
If the forecast is for VERY INCLEMENT weather,
then WE WILL POSTPONE the event.
To avoid an unnecessary journey, if you think you'll be there
PLEASE TELL GAVIN MANION BY EMAIL.
The decision to go ahead or postpone will be notified
by email by the evening of Thursday 10th March.

Gavin Manion: gavin.manion84@gmail.com
Stu Darmon: stuartdarmonf1a@yahoo.com tel 01858 882057

Peterborough Flying Aces Nationals

Saturday 3rd September 2022

at

Ferry Meadows, Nene Park, Peterborough PE2 5UU.
Competitions 10.00 to 16.15

Scale Modellers Please Note! ALL scale classes, except Masefield Rubber Scale are judged for flight profile and realism by the Flight Judges. They may ask for some verification, so please have the plan or, if scratch built, the 3-view available on the field.

Masefield Rubber Scale: Any scale rubber model, to which **Masefield** type bonuses will be applied. **No flight judging,** just duration plus bonuses. Present model to control for processing.

Open Rubber /CO2 / Electric Incorporating KIT Scale: Judged for flight profile and realism. Any C02 motor/tank permitted. See note re verification. Up to 36" Span. Judged for flight profile and realism. See note re verification

TSP L-1 Rocketplane Duration (New for 2022!) Models can be of any type of construction, propelled by a single reaction motor of the TSP L-1 type. These motors will be supplied on the day. No others will be allowed and motors may not be modified in any way. All motors shall be mounted in a tube or clip securely attached to the model. Note the motors have a diameter of about 10.2mm. Best Three from five flights to count to a Max set on the day (see www.peterboroughmfc.org for full rules and details)

Jetex / 1 Shot Rocket Motor/ EDF Authentic Scale: Judged for flight profile and realism. See note with regard to scale model verification

Jetex/1 Shot Rocket Motor /EDF Profile Scale: Judged for flight profile and realism. See note with regard to scale model verification

P-20: 20" span and length. Max 8" plastic prop, 6 gram motors (may be external), 3 flights to a Max.

Cloud Tramp: 5 flights NO MAX. (best and worst times discarded, and the remaining 3 times totalled. Note! If fewer than 5 flights logged the best and worst are still discarded.

Frog "Senior" Rubber Duration: (for plan see http://www.houseoffrog.co.uk)

VMC "PILOT" & KK "ROBIN" Rubber Duration: Senior and Junior Classes.
Models must use plastic prop and kit prop size. Note! We would like to see that any junior has had a hand somewhere in the building of the model.

Rubber Ratio: NO MAX. Any rubber powered model with wingspan 15"- 25" (tip to tip).
(KK "Elf " is eligible). Flight score is total time in secs (for 3 flights) divided by span inches.

Catapult Glider: Catapult, max 2 grams rubber on a 6" max handle. Any model permitted. 9 flights to a Max set on day, all flight times recorded, best 6 to count.

Tabletop Precision: Precision flight time Rubber event - models must Rise off Table.

36 inch Hi-Start Glider: Any glider up to 36", tip to tip, not flat span, launched by the supplied "Hi-Start" bungee.

Best Unorthodox: Unusual models. Flight must be seen by the nominated Scale Judge

Open E20 Electric Duration: Max length and span, 20 inches. Any motor, battery and timer. Max motor run 8 secs. DT and RDT permitted. Certificate for best "Ferry 500" Restricted Class model. (for rules see www.peterboroughmfc.org).

Rubber Scramble: 20 minutes, use any rubber powered model that qualifies for one of the above events. Competitor must both wind and launch, from box, but may use a retriever.

Flying Swarm: Mass launch for any model that is eligible for one of the day's competitions. Last model down is the winner.

Young Flying Aces: Prize for Best Junior: Scrolls for top 3 (Jun.17yrs or under on 3/09/22)

Prize for 1st place: **Scrolls** for 1st, 2nd and 3rd:

Bumper Raffle: Note: this is a Free Flight event: No Radio Control: Proof of Insurance required for all flyers.

PLEASE NOTE! NO GROUND PENETRATING STOOGES PERMITTED

Revel in the special atmosphere created at this unique event.
Toilets, Café, and Park Visitors Centre.

Contact: Luke Goymour on 07752 236645 or revgoymour@googlemail.com
See also Peterborough MFC Website at www.peterboroughmfc.org
Where applicable, Maxes for each class will be set on the day
Govt. and BMFA Covid restrictions applying at the time will be enforced

THE CROOKHAM GALA 2022

will be held on Sunday 18th September

on Salisbury Plain Area 8

EVENTS

Modern And Vintage Coupe combined

(3 flights only. Prize for best vintage score)

Combined Glider: Mini Vintage: E36

(Prize for best Classic A1)

COMBINED POWER

(Including George Fuller Trophy for best placed Dixielander) 1st, 2nd & 3rd cash prizes for best Dixielanders plus prize for best placed other George Fuller design.

CASH AND WINE PRIZES FOR ALL CLASSES

Comps Start: 10.00am Finish 5.00pm

Contact: Chris Redrup: Tel; 01483 487273
Mob; 07544533509, email chrisredrup@yahoo.com

Supported by Southern Area BMFA

Colin Shepherd's

West Midlands Indoor Meetings

Mainly Free Flight

Leasowes High School

Kent Road, Halesowen, B62 8PJ

2021

Oct 16th – Nov 13th – Dec 11th

2022

Jan 8th – Feb 5th - Mar 5th – Apl 2nd – May 7th

Flying 2-30 til 5-30

Admission - Flyers £8.00 - Spectators £2.00

Ultra-light R/C models may be flown for the first 15mins of each hour (quad copters or heavy fast flying models not accepted)

For further information phone Colin Shepherd
07749817767 or 0121 5506132 or e-mail cosh43@hotmail.com

Impington Village College Model Aeroplane Club

Free Flight Indoor Flying on Sunday 3rd April 2022 - 9 am to 5pm

This is our first event for 2 years, so to celebrate 100 years of model flying please come along for some relaxed FF flying and some low key competitions.

There will be two free flight competitions and one car race –

1. **A Peanut event** using a simplification of the international rules. Max size of model either 13 inches span or 9 inches length excluding propeller. A GA drawing or any other proof that the actual aircraft existed. A single judge for all entrants to award up to 30 scale points and up to 90 difficulty bonus points. Any number of flights with a 10 second bonus for ROG. Total of the best two flights plus scale and bonus points to decide final score.

2. The usual **duration event for Bostonian models**. Any design to the Bostonian formula. Minimum air frame weight 14g and all flights to ROG. Total score from best three flights.

All competition flights timed and reported to control.

We will feature a car race event as usual. This will be a fun event for rubber powered cars. We will vary the distance and number of heats depending upon the number of entrants on the day.

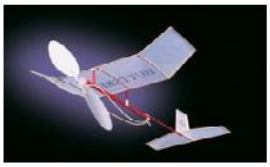
Sadly due to space restrictions it will not be possible to hold RTP activities or an exhibition but there is still opportunity to fly as many and varied free flight models as you wish.

How to find us - Impington Village College CB24 9LX. Leave the A14 at junction 27 towards Histon B1049. After approx. ½ mile take the first right onto New Road. The college is at the end of this road approx ¾ mile on the right. See directions on the club website here

Admission Adult flyers £5.00. Children, spectators and car parking free. Drinks and snacks available in the Sports Centre.

There will be a raffle during the day and prizes will be gratefully accepted.

Contact Michael Marshall 01223 246142
email mandrshall@gmail.com



Flitehook
Indoor Free Flight
West Totton Community Centre
SO40 8WU

2021/2

Wednesdays: 12.00 noon – 4.00 pm

29th Dec; 19th Jan; 23rd Feb, 23rd Mar; 20th April

BMFA Membership mandatory
£8 per session
Easy access; Café; Toilets; Parking
Flitehook Sales Table
Spectators & Juniors are free of charge
Any queries – email rogerknewman@yahoo.com or phone 02392 550809

Supported by Southern Area BMFA

Waltham Chase Aeromodellers

Indoor Free Flight Meetings

At

Wickham Community Centre
Mill Lane, Wickham
Hants, PO17 5AL

Thursday Evenings 7-0pm til 9-30pm, £5

2022 Dates:

Jan 20th - Feb 3rd - Feb 17th - Mar 3rd
Mar 17th - Mar 31st - Apl 14th - Apl 28th
May 19th - Jun 9th - Jun 23rd - Jul 7th
Sep 22nd - Oct 6th - Oct 20th - Nov 3rd
Nov 17th - Dec 1st - Dec 15th

Due to current restrictions, for the immediate future the organisers will need attendees to pre-book their slot at each meeting with the maximum number of attendees being set at **14**. If the number of pre-bookings is significantly less than **14** then the organisers may have to reduce the meeting duration to avoid running at a significant financial loss. Hopefully, in the not too distant future, the coronavirus situation will calm down and we will enjoy greater numbers of attendees such that pre-booking and event duration adjustment will not be necessary. For the time being it is also a requirement that you wear a face mask.

To book a slot at a meeting (and for any further information) contact the meeting organiser, Alan Wallington, via email at alan@ajwallington.co.uk or by phone on 01489 895157. This should be with Alan by the morning of the Wednesday before the meeting you wish to attend. You will receive confirmation of your slot on the Wednesday evening.

And finally all flyers must be current members of the BMFA. Please bring your 2022 certificate with you to your first meeting or alternatively email it to Alan with your first pre-booking request.

E30/RDT Batteries

I have had another delivery of 75mAh 1s lipo's which other users tell me are the best E30 batteries they have ever had. They are of course also suitable for RDT. If you send me £10 I will put 4 in a Jiffy bag and send them to you.

Ron marking, Pros Kairon, Pennance Road, Lanner

Redruth TR16 5TF

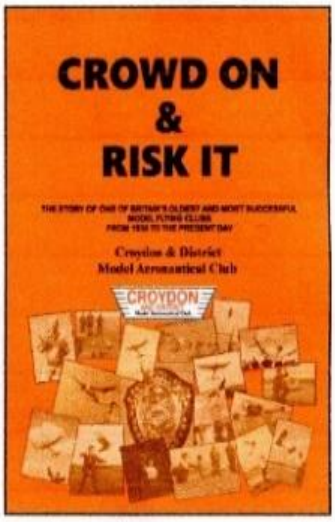
CARBON BOOMS
For Hand Launched Gliders

If you need tapered carbon tubes for HLG booms I may have what you want. As supplied they are 99cm long, taper from 5.2mm to 2mm and weigh 6.4gm. As a rough test a 58cm length, suitable for a Yashinskiy type of model, weighs 3gm after a little application of wet-and-dry paper (used wet, of course) and it looks as if there's quite a bit more that can come off. The thin end that's left is good for a catapult glider.

Price is £7.00. In normal times I'd sell direct at contests, but postage and packing would be extra, depending on how many you need.

Contact Martin Dilly to order
Tel: 0208 7775533 or e-mail martindilly20@gmail.com.

CROWD ON & RISK IT



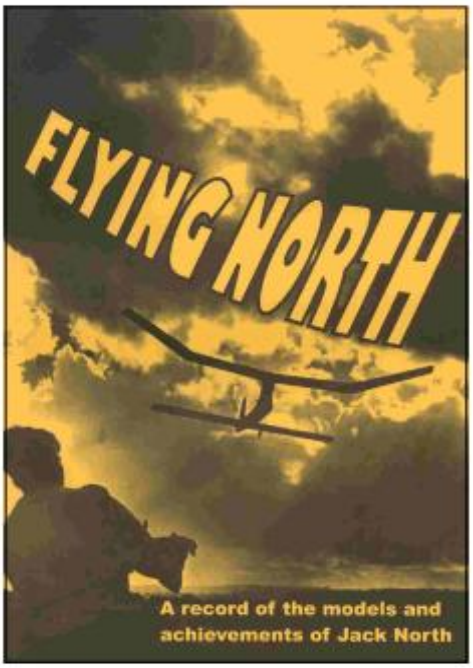
This is the story of one of Britain's oldest and most successful model flying clubs, Croydon & District MAC, from 1936 onwards. The club contributed much to aviation, both model and full-size, and the late Keith Miller compiled its history till around 1960. Now, this up-dated 73 page version of the club's history, copiously illustrated with many previously unpublished photos, takes the Croydon saga up to the present. Contributions by past and present members vividly capture the atmosphere of the heyday of free-flight, with almost weekly contests at Chobham or Bassingbourn.

53 designs by Croydon members have been published in the model press and 24 of its members have represented Great Britain in World and European Championship teams. Several have gone on to notable careers in aerospace. Crowd On & Risk It covers all this and more.

Just £8 by PayPal or cheque.

Contact Martin Dilly (martindilly20@gmail.com), phone/fax 020 8777 5533 or write to 20, Links Road, West Wickham, Kent BR4 0QW for your copy.

THIRD RE-PRINT JUST ARRIVED



FLYING NORTH

A goldmine for vintage and nostalgia model flyers -

FLYING NORTH traces the model flying career of Jack North, one of only three people to represent the UK on all three outdoor free flight teams, - Wakefield, Power and Glider. It covers his flying and models from 1938 onwards and includes no less than 24 of his previously-unpublished designs.

FLYING NORTH was compiled and edited by two of Jack's Croydon clubmates, David Beales and Martin Dilly, who had access to Jack's extensive notebooks, photographs, drawings and his original models.

FLYING NORTH is a fascinating 163 page book and includes 130 photographs, reminiscences by colleagues, re-prints of all Jack's published plans and articles, including his later extensive work on thermal detection, and an outline of the professional career that also made him such a respected name in high-speed aerodynamics.

FLYING NORTH proceeds go towards the costs of the national teams representing the UK at World and European Free-Flight Championships.

Price £20.00 in the UK, £24 airmail to Europe and £30 elsewhere.
Contact Martin Dilly on +44 (0)208-7775533 or e-mail martindilly20@gmail.com

Free Flight Supplies

Michael Woodhouse
mike@freeflightsupplies.co.uk & http://www.freeflightsupplies.co.uk

Free Flight Supplies is still operating. I have made arrangements to both receive and despatch materials. If you need stuff I can supply, it just might take a bit longer to get things to you. Carry on building!
Stay safe and look after yourselves.

We are only posting on an occasional basis. Any calls or e-mails asking "where's my order" will receive a curt load of invective from me or June.
If you get June the reply will leave you stunned!

ASUKA WASHI JAPANESE TISSUE

As most free flight modellers are aware ESAKI have ceased supplying Japanese tissue. ESAKI had been the place to go to for the supply of tissue. When couple of years ago ESAKI ceased their operation, the search was on for a replacement. After much to and froing of e-mails a new product has emerged in the guise of ASUKA WASHI. This new tissue is basically the same as ESAKI but in appearance a little denser and less shiny. In the autumn of 2019, I received samples which I passed around the various flyers and all the responses I received were favourable.

I now have a supply of ASUKA WASHI. The current range of colours is limited to red, yellow, blue, orange and white. The sheet sizes are the same as ESAKI at 450mm (18") x 600mm (24") the weight is 14 grams per sq. metre whereas ESAKI was 13 GSM. The range of colours will increase as production moves forward and demand dictates. Visually the colours muted compared to ESAKI but as noted denser. The price is £1.75 per sheet plus postage.

I still have stocks of ESAKI left particularly in the colours not produced by ASUKA as well as the chequer board colours.

DILLY JAP IS BACK

After a bit of a gap since the final 5 yards came off my last bulk roll of Japanese tissue several people have asked if it will be available again, so I've just received my seventh roll. Doing the sums, that means that there's now just over a mile of Dilly Jap covering models all over the world.

.To re-cap on the details, it's 12 gm/M2 and has a strong unidirectional grain. It's white and low absorbency, so remains very light when doped. For those of you old enough to remember, it's identical to the Harry York tissue sold at his South London model shop in the 1950s.

Anyhow, since the last roll came in 2015, the price is slightly higher (maybe as a result of you-know-what ...xit and its effect on sterling), but it's still only £13 for a five yard roll a yard wide, or £15 by mail to the UK. I normally sell it in rolls at contests, but lately many people have had it sent lightly folded, so I can do that if you prefer.

I'm on 0208-7775533 or e-mail: martindillv20@gmail.com

INDEPENDENT REVIEW OF DILLY JAPANESE TISSUE

The following appeared on the Hip Pocket Aeronautics Builders' Forum. Nine different tissues were tested, doped and un-doped.

"I am really impressed with how well this tissue performed. Dilly Jap tissue with 2 coats of thinned nitrate dope is around 8% stronger than the old 00 Silkspan with 2 coats of dope, yet Dilly Jap is 0.09 grams per square foot lighter. Here are the test results:

Test#	Tissue Type	gm/sqft	Avg Ten Str lb	Spec Str lb/gm
9a	Dilly tissue (UD)	1.20	14.74	12.28
9b	Dilly Jap Tissue (D)	2.04	19.70	9.66

So far, the Dilly Jap tissue has the highest specific strength of all the tissues and Silkspans tested. Doped Dilly Jap has nearly double the strength of doped Japanese Esaki tissue and yet doped Dilly Jap weighs 0.1 grams per square foot less than doped Esaki. Dilly Jap can't be beat for weight critical contest models requiring the torsional rigidity afforded by tissue papers!"

FREE FLIGHT FORUM REPORT 2021

Indoor Duration - A Challenge to Conventional Design - Tony Hebb
Coupe in a Box - Gavin Manion
Building Other People's Mistakes - Stuart Darmon
The Models of Ray Monks - Simon Dixon
Simulated 3D Flight Dynamics - An Approach to Gain Insight for Trimming and Aircraft Development - Peter Martin
Building During Lock-down - Phil Ball
Tame Your F1B and Related Thoughts - Mike Woodhouse
What Next for a Lady Flyer - Sue Johnson
F3 RES - RC for the Aging Free Flighter - Andy Sephton
From Wichita to Robin III - Mike Fantham
Further Thoughts on Carbon-Skinned Wings for F1A - Stuart Darmon
Geo Fencing and Electronic Stability - John Emmett

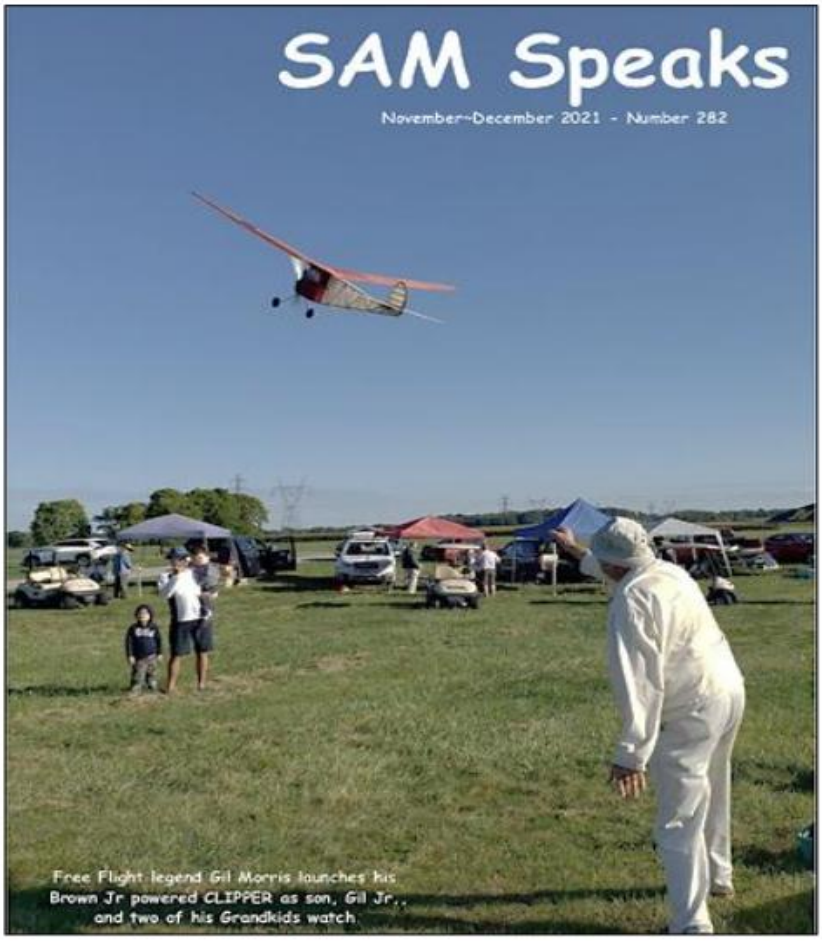
The UK price is £13 including postage; to the rest of Europe it's £16 and everywhere else it's £20. Forum Report sales help to defray the heavy expenses of those who represent Great Britain at World and European Free Flight Championships. Cheques should be payable to 'BMFA FF Team Support Fund' in pounds sterling and drawn on a bank with a UK branch. You can also pay by credit card, which is far easier (and cheaper).

Copies are available from: Martin Dilly,
20, Links Road,
West Wickham,
Kent
BR4 0QW

Or by phone: +44(0)2087775533
Or e-mail: martindilly20@gmail.com

SAM Speaks USA.

This bi monthly emagazine can be obtained from the Society of Antique Modellers. Web site http://www.antiquemodeler.org/ for the modest cost of $30 pa.
Quite a few UK people already belong, but a few more might help our Parent Body!



Provisional Events Calendar 2022

With competitions for Vintage and/or Classic models

All competitions are provisional and Covid restrictions may apply, **Check websites before attending**

February 27th	Sunday	BMFA 1st Area Competitions
March 13th	Sunday	Le Petit Classique de Brum, N Luffenham
March 27th	Sunday	BMFA 2nd Area Competitions
April 15th	Good Friday	Northern Gala, Barkston
April 18th	Easter Monday	Croydon Wakefield Day & **SAM1066,** Salisbury Plain
May 1st	Sunday	BMFA 3rd Area Competition
May 7th	Saturday	London Gala, Salisbury Plain
May 8th	Sunday	London Gala, Salisbury Plain
June 2nd	Thursday	**FF Nationals, Barkston**
June 3rd.	Friday	**FF Nationals, Barkston**
June 4th	Saturday	**FF Nationals, Barkston**
June 5th	Sunday	**FF Nationals, Barkston**
June19th	Sunday	BMFA 4th Area Competitions
July 10th	Sunday	BMFA 5th Area Competitions
July 24th	Sunday	SAM1066 Club (BMFA) Centenary event. RAF Colerne
July 30th	Saturday	East Anglian Gala, Sculthorpe
July 31st	Sunday	East Anglian Gala, Sculthorpe
August 21st	Sunday	Southern Gala, Salisbury Plain
September 3rd	Saturday	Peterborough Flying Aces, Ferry Meadows
September 3rd	Saturday	Stonehenge Cup, Salisbury Plain
September 4th	Sunday	Equinox Cup, Salisbury Plain
September 11th	Sunday	BMFA 6th Area Competitions
September 18th	Sunday	Crookham Gala, Salisbury Plain
October 2nd	Sunday	BMFA 7th Area Competitions
October 16th	Sunday	BMFA 8th Area Competitions
October 29th	Saturday	Midland Gala, Venue T.B.C.
November 6th or November 13th	Sunday	Buckminster Gala

Please check before travelling to any of these events.
Access to MOD property can be withdrawn at very short notice!

For up-to-date details of SAM 1066 events at Salisbury Plain check the Website – **www.SAM1066.org**

For up-to-date details of all BMFA Free Flight events check the websites **www.freeflightuk.org** **or** **www.BMFA.org**

For up-to-date details of SAM 35 events refer to SAM SPEAKS or check the website **www.SAM35.org**

Useful Websites

SAM 1066	-	www.sam1066.org
Flitehook, John Hook	-	www.flitehook.net
Mike Woodhouse	-	www.freeflightsupplies.co.uk
BMFA	-	www.bmfa.org
BMFA Southern Area	-	www.southern.bmfa.uk
SAM 35	-	www.sam35.org
National Free Flight Society (USA)	-	www.freeflight.org
Ray Alban	-	www.vintagemodelairplane.com
Belair Kits	-	www.belairkits.com
Wessex Aeromodellers	-	www.wessexaml.co.uk
US SAM website	-	www.antiquemodeler.org
Peterborough MFC	-	www.peterboroughmfc.org
Outerzone -free plans	-	www.outerzone.co.uk
Vintage Radio Control	-	www.norcim-rc.club
Model Flying New Zealand	-	www.modelflyingnz.org
Raynes Park MAC	-	www.raynesparkmac.c1.biz
Sweden, Patrik Gertsson	-	www.modellvänner.se
Magazine downloads	-	www.rclibrary.co.uk
Aerofred Plans	-	www.aerofred.com
South Bristol MAC	-	www.southbristolmac.co.uk

control/left click to go to sites

Are You Getting Yours? - Membership Secretary

As most of you know, we send out an email each month letting you know about the posting of the latest edition of the *New Clarion* on the website. Invariably, a few emails get bounced back, so if you're suddenly not hearing from us, could it be you've changed your email address and not told us? To get back on track, email membership@sam1066.org to let us know your new cyber address (snailmail address too, if that's changed as well).

P.S.

I always need articles/letters/anecdotes to keep the New Clarion going, please pen at least one piece. I can handle any media down to hand written if that's where you're at. Pictures can be jpeg or photo's or scans of photos. I just want your input. Members really are interested in your experiences even though you may think them insignificant.

If I fail to use any of your submissions it will be due to an oversight, please feel free to advise and/or chastise

Your editor

John Andrews