


	<h1 style="color: red; text-align: center;">NEW Clarion</h1> <h2 style="color: red; text-align: center;">SAM 1066 Newsletter</h2>	<p>Issue nc062021</p>
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Editorial

Three cheers, the 2021 flying season is underway. The BMFA 3rd Area saw competition flying in action at last. From the result sheets on the Free Flight Technical Committee's website there appears to have been quite a good turnout. I managed to get to North Luffenham but only in spectator mode as I had to leave early. In any case you know me, I had no models nor rubber ready anyway.

Currently things are really looking up, the BMFA are looking into the possibility of re-scheduling the Free Flight Nationals to later this year. In addition the Indoor Tech Committee are hoping to stage the FF indoor Championships sometime in September. I really hope that Covid is now in the rear view mirror and the vaccination programme prevents any further resurgence of the disease.

OK what have we got this issue:

I kick off with a brief spectators report from the 3rd Area comp, all observations from the comfort of the car. It was cold and breezy.

The inevitable Pylonius extract is next, often there is a need to have seen the Magazine issue from the previous month in order to fully understand what he is poking fun at, but there is also amusement in trying to read between the lines and guess.

Tony Shepherd is up next with the account of his foray out to the plain of Salisbury to test out his chubby 'Popsie' that he wrote about some months back. Some nice pictures, presumably taken by Mo Peters, flesh out his article.

I chip in with a few memories of indoor flying in the airship sheds at Cardington. I'm no great shakes at indoor duration but sitting back in your chair watching an almost invisible 18" wingspan EZB circling around 150ft up in the roof with 7 or 8 minutes already on the watch makes one feel like a real expert.

There are a few more of John Taylors fleet of electric R/C models and there are quite a few more come.

In letters to the editor, Ralph Sparrow thanks us for digging out the magazine write-up and plan for the Bowden Humming Bird. He now can build the correct fuselage for his inherited model.

I've pulled yet another vintage article circa 2004 from my archive, this one is a bit of sports hall indoor flying. Back then I travelled to quite a few different venues. David Baker used to run meetings at Moulton near Northampton. Attendance was high and there were quite a few entries in the three flight $\frac{1}{2}$ size Wakefield comps.

As usual I have featured a few pickings from back issues of modelling magazines and some more of Keith Miller's B & W pictures. The article on rubber seems little different to similar articles of this modern era.

The issue is filled out with our regular contributors, Nick Peppiatt on indoor scale, Roy Tiller researching old magazines and our Secretary Roger Newman's monthly report on goings on. Finally there are the three model plans of the month. Pdf files of these plans are available free of charge from Roger.

One bit of bad news, Ray Elliott writes to inform us of the passing of yet another of our diminishing number, **Peter Jellis**, long time Croydon Club member.

Editor

BMFA 3rd Area contests at North Luffenham

The lockdown was relaxed and the BMFA Contest Calendar started up again, the first event being the 3rd Area.

Rachel and I, although Rachel was booked in for her second covid jab later that day, decided we could have a trip out for a look see. The forecast on XC Weather was fine but windy. As we could not do the whole day I did not pack any models, not that I had any ready to go. Nothing had been touched since way back and rubber motors would certainly have need of much attention if were to be used in anger.

We had commissioned a couple of nice soft batches and some sliced ham from my daughters shopping spree, so a couple of sandwiches were assembled and together with a couple of mini pork pies, crisps and rice pudding pots, the cool box was charged with enough to keep us fed for the day. I brewed a flask of tea and we were ready for the off shortly after 9-00am.

A steady drive along the A14 and then up the A6003 soon saw us approaching Luffenham around 10.00am. There were quite a few cars already lined up and we picked a spot on the end of the line from where we could see what was going on. We sat in the front seats facing the action, we had packed a couple of chairs but, with the fresh east wind blowing quite cool we decided that inside the car would be our vantage point for the day.

There were in excess of 15 cars but activity was a little sporadic due I suppose to the wind strength. Steve Philpot informed us that maxes were just reaching the compound at the other end of the field and I believe there is no entry into it. Phil Ball disappeared from the end of the line, leaving the airfield in his car so he was probably in the compound or out of the field. I cannot report on any flight times etc. as the only time I left the comfort of the car was to visit one of the two portaloos that have appeared. Several glider flights were made and I saw a couple of P30's flown but I've no idea how many competition entries there may have been.

The most active flier was Peterborough's Gerry Williamson test flying several of his electric power models, in fact I would estimate that he made more flights than the rest of the field put together. Of course he was radio D/Ting all the time making recovery easy.



There was a great flurry of activity just before we left when the CLG/HLG square was besieged by fliers. I believe there must have been Plug Cup points in the offing. Gerry was still at it and appeared with a female who flew one of his models, with Gerry breathing down her neck she still made a bit of a pigs ear of the launch but the model got away clean.

All in all a good day out for us and a welcome breath of fresh air.

John Andrews



Extracted from Model Aircraft August 1952

Special Aircraft

The most momentous event in the model world since the launching of the first thermal is the recent record application for a revolutionary type of special aircraft. By the simple process of mating the upper works of an autogiro with an ordinary glider a form of perpetual motion has now been established and the bogey of gravity at long last overcome.

The principle on which this unique machine works is of such utter simplicity that even a child can understand it. Perhaps, had I been a child I wouldn't have found it so incomprehensible. Still, I must say that the idea appeals to me. Even as a small boy, I never could understand why my little chum's kite could fly merrily aloft for hours on end while my own little aeroplane would persist in falling to the ground almost as soon as it was launched. This was just as inexplicable to me as the fact that, whereas I could quite easily lift up other little boys of my own size and weight I couldn't elevate myself one single inch off the deck. I'd stand in a basket and lug at the handles for hours, but always without result.

Now I no longer need be disturbed by the memory of that blooming kite. After tacking a set of vanes on the old glider I'll at last have a model which doesn't have to come down every few minutes for a shot of fuel, a wind-up of rubber, or a long, hard tow. And no strings attached either.

Observers at a recent High Court action were impressed with the judge's quick grasp of the fundamentals of R/C model flying.

This suggests to me that it would be a good thing for our learned judges to be brought into closer contact with those light-fingered airfield lurkers who have an equally quick grasp of the fundamentals of power model flying.

A Million Chuck Gliders

It is well said that the road to a certain torrid, subterranean domicile is paved with good intentions. This could be aptly applied to the recent efforts of a number of well-meaning back seat fliers to unleash a pestilential horde of chuck-gliding young perishers on to our already much abused flying fields.

That the scheme is a worthy and public spirited one I have no doubt, and were I not a selfish model flier without any concern for the well-being of the nation's youth I would unhesitatingly give every support to the policy of driving the destructive little brutes into large open spaces, where they would be rendered less harmful to the peace loving community. However, as a selfish model flier, with the usual dog-in-the-mangerish attitude towards his few privileges, I am quite happy to see the delinquent little juveniles tearing down my fence, breaking my milk bottles, or smashing my windows, just as long, as they *stay off the flying field*.

Where Two's a Crowd

Official eyebrows were raised askance when, recently a model club with a total establishment of only two members unabashedly applied for re-affiliation. On the surface of things it does appear rather an impudent request. Or perhaps a pathetic one—it all depends upon your point of view. My own view is that, if by happy chance, both members are on the active flying list, then the club, albeit small, must be regarded as a much livelier proposition than many a club with a long and impressive paper membership.

Indicative of this is the existence, in the London Area, of an informal body known as the Fairlop Mutual Aid Society. Only two qualifications are necessary for admission to the society; a model box and a lost look. The present membership, about a dozen, comprises the active flying elements of some 20 or more London model clubs. *Flying repeat flying*, meetings are held every Sunday, and all refugees from paper clubs are extended a hearty welcome.

Speaking to a newly joined member, I was informed that he was officially attached to a large and flourishing club. A really go-ahead sort of concern, simply swarming with brisk and efficient types busily organising its many and elaborate functions. Club meetings, A.G.M's and other official fixtures were models of their kind, and the annual programme was a star studded galaxy of exhibitions, dances and lavish club dinners. Yet in spite of all this commendable club activity our friend confessed to feeling rather out of things. He couldn't quite understand why, but thought it might be due to the fact that he was the only member who still flew model aircraft.

One club, we hear, has decorated its airfield clubroom with beer mats. Judging by the rate at which modellers are being kicked out of aerodromes all over the country I should have thought that prayer mats would have been more in keeping.

Pylonius

Having read Jim Woodside's letter to the Ed I felt that I was duty bound to get out and fly the Vic Smeed 'Popsie', the build of which I rambled on about a couple of months ago. So with lockdown restrictions relaxed and a day of near perfect weather conditions forecast for Salisbury Plain, I loaded up the car with two Top Bananas



(for trimming following cobbling together from parts of three models), a Tomboy (goto Model which always performs - in case nothing else did) and the virgin 'Popsie'.

First up was Top Banana No1. This had the fuselage from one I'd used for E36 but then converted to PAW55 power for mini vintage, and the wing and tailplane from my original Top Banana No1 (I think - but wouldn't guarantee). This was a reasonably successful exercise but was found to require recovering of the right inner wing panel as washout had set in over the years and no end of TE strips on the underside would stop it tipping to the right a few seconds into the climb. So that one was packed away for rework at home.

And then it was time for the big one and I could no longer put off the inaugural flight of the Popsie. In my mind I had Jim's comments on the untrimmability of his and also our Hon Sec's remarks about the difficulty of getting flights out of his in anything but totally benign conditions.



But the day's conditions were almost perfect and I just had to give it a whirl

The grass on the trimming field had recently been cut and the ground was rock hard having had no rainfall for some weeks so all could've ended in disaster if the model wasn't set up right. Despite this lack of Keil Kraft test flying ground conditions a couple of glides from hand were attempted but these were useless. The model is just too wide to hold and launch at anything even approaching typical glide speed and I breathed a sigh of relief that no damage was incurred. The only option was to put some fuel in the tank and go straight for the jugular with a low power flight.



Note the flying surfaces, all straight and level save a touch of left rudder

With a bit of left rudder applied, Uncle Tony's Mills 75 (I'll explain the significance of the Uncle Tony thing in a future article) was fired up and set to a bit more than the usual burble as befits a model with that much fuselage frontal area. The fuel level dropped to "not too much" so I had a very short trot and launched it. WOW! It gently climbed away to the left for a circuit or two before the engine cut and it broke out into a left hand glide just a little more open than the power run and finally landed on its wheels without tipping over. Absolutely bloomin' perfect!



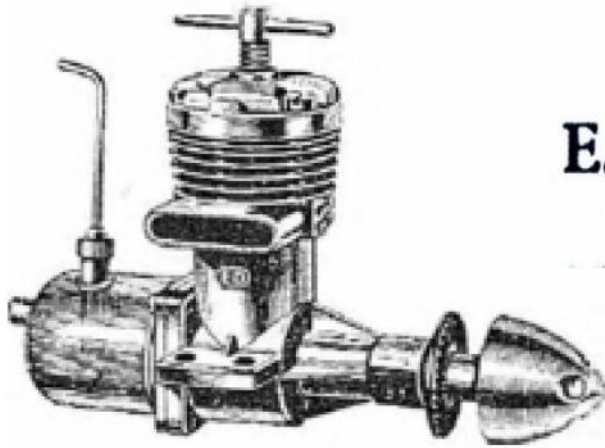
Salisbury Plain at its best

Several more flights followed before a full tank job was called for. The trim hadn't been altered one iota as I could really see no reason to change anything and this flight was just like the previous ones, just longer.



The Popsie landed, once again on its wheels, no more than 200yds from the point of launch. Super job. It wasn't going to get any better than this so the model was packed away with a smile on my face ready for another day.

The only downside occurred when unpacking at home. I pack the parts of my models in bubblewrap bags when they go in the box for transport and Popsie's red tailplane was put in a red bag. As usual, when I'd taken everything out of the bags I stacked them up and folded the pile in half for ease of storage but then there was a crack - Popsie's tailplane was still in its bag! "Oh no!" says I (yes, that was honestly all I said - surprised myself!) and I nervously investigated the outcome. Fortunately the fin had just broken off the top of the tailplane and it was easy to see exactly where it had to be fixed so the next evening the repair was performed and all is now well, hopefully, for a bit more calm weather Popsie flying.



E.D. BEE Series 2 1 c.c.

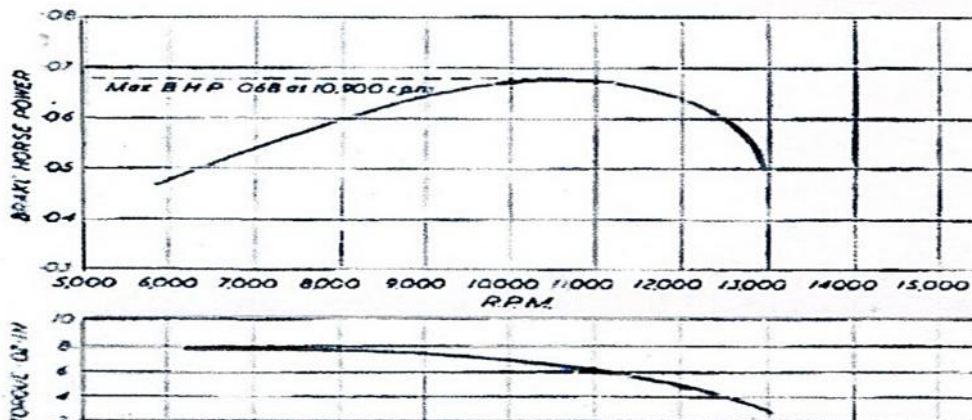
Manufacturers:
Electronic Develop-
ments (Surrey) Ltd.,
Island Farm Road,
West Molesey,
Surrey.

Retail Price: £2/15/0.
Displacement: .99 c.c. (.0605 cu. in.).
Bore: .438 in.
Stroke: .40 in.
Bore/Stroke ratio: 1.095.
Bare weight: 3 oz.
Max. B.H.P.: .068 at 10,900 r.p.m.
Max. torque: 8 oz.-in. at 7,000 r.p.m.
Power rating: .07 B.H.P. per c.c.
Power/Weight ratio: .021 B.H.P. per oz.

Crankcase: Pressure
die-cast light alloy.
Cylinder: Case-
hardened steel.
Piston: Cast iron.
Crankshaft: Ground
and hardened steel.
Con. rod: Case-
hardened steel.

Figures approx. com-
mon to E-D, Mercury
No. 8 and Allbon fuels.

PROPELLER	R.P.M.
dia. pitch	
8 × 4 (Stant)	7,900
7 × 4 (Stant)	9,500
6 × 4 (Stant)	10,750
6 × 4 (E-D plastic)	11,800
6 × 3 (constant g.m.p.)	12,200
7 × 5	9,600





The Airship Sheds at Cardington

T'internet tells me that the No1 shed (left above) was built in 1915, extended in 1924/25 and refurbished in 2015.

Internal dimensions: 812 feet long; 180 feet wide; 157 feet high.

Shed No2 (right above) was moved from Pulman St Mary in Norfolk and rebuilt at Cardington in 1928

After my renewed interest in free flight took hold I started dabbling with indoor flying around 1996 or 1997, flying with the Coventry club in Coventry Sports Centre. The models I started with were a bit rough and ready, all tissue or Condenser paper covered. I did manage to get a five minute flight with my old rebuilt large model that I had flown years before at the Dunlop Aviation Divisions lunch time sessions in deserted factory buildings. I had not yet met Mylar Film.

It was in 1997 that I contacted Laurie Barr and commenced my Cardington days.

First visit I took my tissue covered models and had a great time but mylar covering was discovered so I soon re-covered one of my tissued Penny Plane's with the new material. Incidentally this PP in its tissued form had already spent a couple of weeks above the netting in the roof of shed No1.

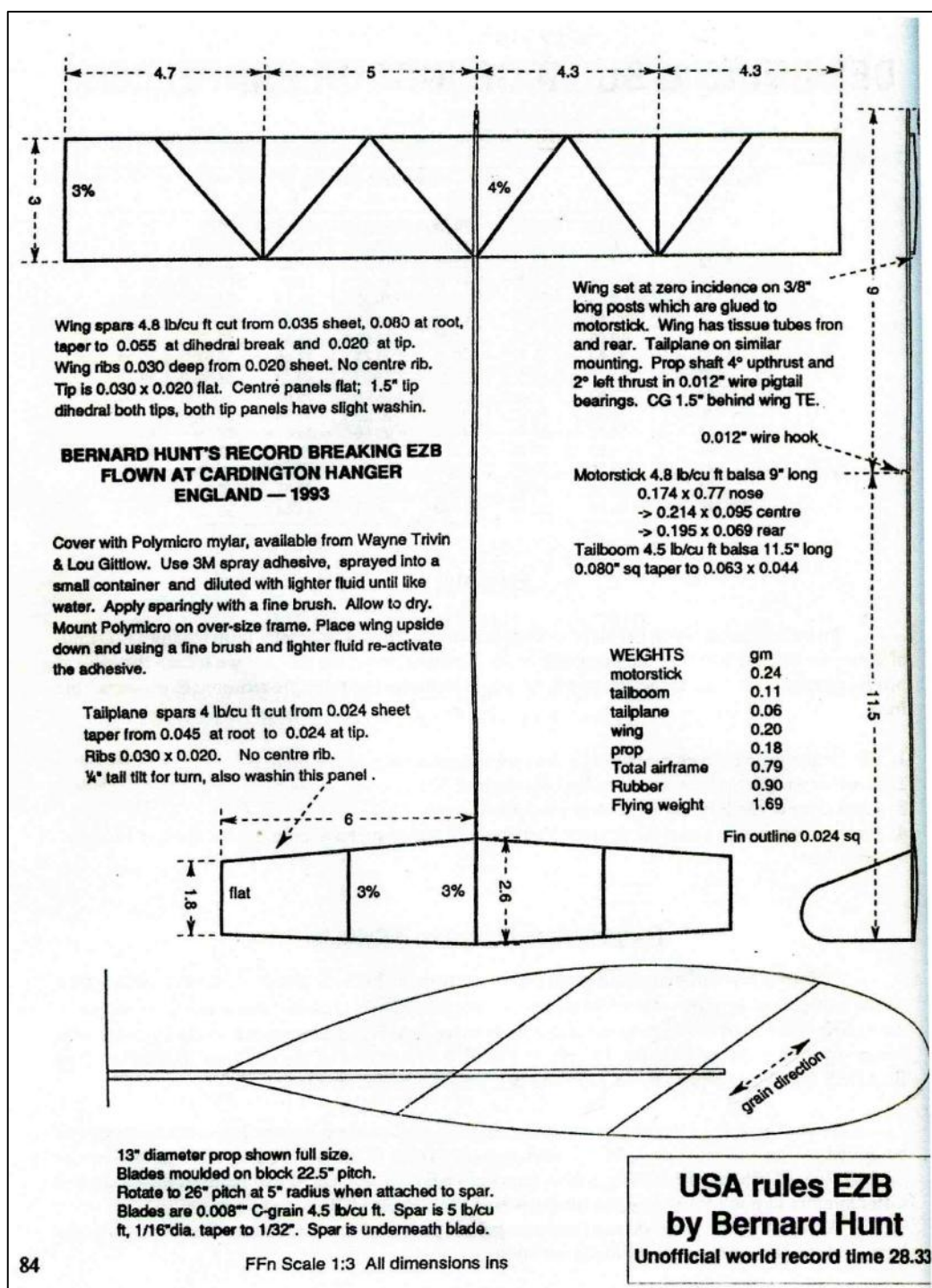
Digression, in my early days the shed was an absolute mess, pigeon gnu everywhere and littered about were numerous discarded objects: huge crates with large wooden patterns for lord knows what; piles of metal stillage's with what appeared to be army scrap; the odd lorry or two; a huge marque/tent workshop; an old WWII barrage balloon; a light aircraft and other bits and bobs too numerous to mention. The shed was on the verge of dereliction with roof and wall panels missing and the roof had sagging green netting suspended beneath to catch any falling debris.

We all parked our cars in the side wings out of danger from any roof debris. I don't have any pictures from my early days in the shed as I was into video tape camera work until about 2007 when my still pictures start. By then the shed had been cleaned out and fresh blue netting installed in the roof with extra netting above an airship which had appeared.



Where was I, back to the tissue Penny Plane, I got a bit too enthusiastic with the rubber x section and the model shot up at quite a lick, eventually bouncing around on the roof netting until it flew through a gap and continued flying above the netting until it landed on top of the netting. At the next meeting a couple of weeks later, John Tipper, who was a designated catwalk retriever, was up on the top roof catwalk at the end of the day recovering stuck models and pushing them back through the netting gaps with a roach pole if he could not reach them. I heard him shout "there is a tissue model up here" and looking up I saw my PP floating down. Having been in the heat of the roof for a couple of weeks the condenser tissue had shrunk and the wing looked more like a propeller. At home I straightened out the framework and recovered with Mylar. On reflection there did not seem to be any improvement in performance and I gave the model to one of the Coventry club flyers.

In 1998 I got a bit serious and built an EZB based on Bernard Hunt's 1993 record breaker, I used the planform but mounted the wing well above the fuselage.



I did not get the weight down below 2gms but the model was the lightest I'd ever built. Propeller weight had always been my Achilles heel but I must have got a piece of very thin sheet from somewhere.

I was flying the model in the No1 Shed at Cardington on 26th July 1998 and I broke my 10 minute barrier with a flight of 11-00 minutes dead.

Two weeks later I upped the ante to 11-23 and yours truly was a happy bunny.

Log Book reads:

EZB No6

Date	Motor	Turns	Time
26 Jul 98	110x17	1800	11-00
9 Aug 98	110x20	2100	11-23

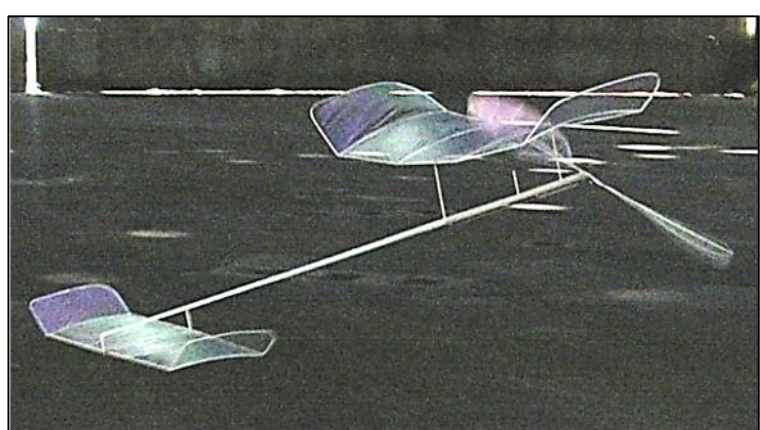
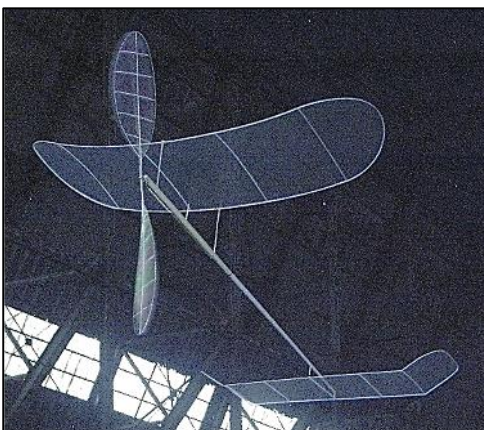
To put these times into context I must advise that the experts at that time were putting up times in the order of 20 minutes or so.



Bob Bailey with one of his EZB's, his models weigh just over 1.6gms

I dug out my original 'Indoor Records' log book to get my flight times and it was interesting to thumb through it. That first log book consisted of individual pages for each model flown and were grouped by class with tagged pages. Nowadays I record meeting by meeting results, I would not recommend any one method over the other. The Individual page method showed me the number of flights made with each model. My EZB No1 made 48 flights and EZB No6 made 69 flights spread over May 1998 to Nov 2006. No6 was my best performing indoor model and it may well have made more but I'd have to go through my latest books page by page. I think the model may well still be in my bits box in the garage.

This article is supposed to be about Cardington so here are a few pictures from my collection.



All pictures circa 2008/2009

A record of the halcyon days in the sheds at Cardington. We did also fly in shed No2 but I don't seem to have any pictures, I know this because we had to wear hard hats in shed No2 which was the building research establishment at the time.

Happy days.

John Andrews

February 1946

NEWS & Review

Cover Story

The cover photograph shows Bill White with his attractive 6-ft. span petrol model, undoubtedly the most photographed model of the 1945 season.

Possessing an unusually pleasing appearance, enhanced by meticulous workmanship, it attracts immediate attention wherever it makes its appearance.

As is often the case, much of the work which has been put into this model is not visible and this applies to the wings in particular, which are a monument to Bill White's patience and constructive skill. The built-up wing ribs and diagonal strutting have resulted in over a thousand separate pieces in the wing structure alone.

Unfortunately, Bill White has been dogged by ill-luck with his motors throughout the past season, but on the occasions in which the machine has taken the air successfully it has demonstrated its stability and an exceptionally flat glide. The builder deserves better luck for 1946.

This photograph was taken by your Editor on Baildon Moor.

"The Model Engineer" Exhibition

We are pleased to announce that arrangements are in hand for the first post-war Model Engineer Exhibition, which will be held in the latter part of August at the New Horticultural Hall, Vincent Square, Westminster, and that the Council of the S.M.A.E. has accepted the offer of participation in this exhibition which has been extended to them by Percival Marshall & Co. Ltd.

The exhibition will give model aircraft constructors all over the country the opportunity of displaying their craftsmanship under the best possible conditions and in good company.

We are sure that all clubs will desire to be represented at this exhibition and to enter the various contest sections for which substantial prizes are offered.

Here is your opportunity of showing the general public what model aeronautics really imply and the high degree of skill which you possess. Start on your exhibition models now! Don't leave them to the last minute.

Fairey's Aerodrome

The title of this paragraph will doubtless bring back many happy memories to pre-war enthusiasts who attended S.M.A.E. centralised contests, international contests, and rallies held on this fine airfield.

In its present enlarged form and under its new title "Heath Row," it will be less familiar to modellers, although it will rapidly become more familiar to the general public as it fulfils its new rôle of long-distance terminal aerodrome for London.

The aerodrome in its new form has cost some £20,000,000 to convert and now embraces the whole of the large stretch of land which lies between the original Fairey's aerodrome and the Staines extension of the Great West Road.

It is now undoubtedly the largest aerodrome in the country, with *positively colossal* runways.

As we go to press it is celebrating the inauguration of the first flight on the proposed South American Trans-Atlantic service by the "Lancastrian" air-liner "Starlight," which was piloted by Air Vice-Marshal Donald Bennett.

While model enthusiasts will regret the passing of Fairey's as the scene of model meetings, they will no doubt retain a feeling of pride in their association with this aerodrome in the past and will follow its future development with keen interest.

Jet and Rocket Models

In view of the large number of pitfalls, both legal and technical, into which the experimenter with jet-propelled and rocket-driven models can fall, we have taken the necessary steps to provide modellers who wish to build models of this class with the necessary guiding information in a series of articles in our pages.

The first of these appears in this issue and is well worth careful reading by all who are embarking on the construction of rocket-propelled models.

To be forewarned is to be forearmed, and we commend the elementary truths expounded to the attention of our readers.

The S.M.A.E., in conjunction with Mr. Howard Boys, have been instrumental in clarifying the position from the legal aspect to the extent that there is now no official impediment to the use of rockets *so long as they are made by, and obtained from, a licensed concern* such as Pain's or Brock's, and only the special rockets made for this purpose are used.

So many accidents have occurred of late due to schoolboys acquiring chemistry sets and attempting to produce gunpowder—we know of two such cases within our locality—that the authorities are apt to look upon experiments involving explosives with considerable dis-

MODEL AIRCRAFT

February 1946

favour, and it behoves every modeller to take the utmost care in this direction.

It will take only one serious accident to tie the whole field of experiment in this type of model in impenetrable red tape.

Competitors' Urge

On one or two occasions during power-driven contests it has been noted that competitors become fascinated by the fact that their motor suddenly springs into life and they then seem to lose their normal common sense and caution at the moment of launching the model under the urge of getting it airborne.

On one occasion a competitor was observed to point his model absolutely spot on towards a large notice board displayed for the benefit of the control of spectators. As was inevitable, the model struck the board and was badly damaged.

Had this been a spectator or a member of the public on his lawful journeys, the consequences might have been more serious, and it points to the necessity for flyers of petrol models to pause and have a good look round before they actually release the model.

Captured German Equipment

German aircraft equipment which has reached this country as a result of the activities of the technical units sent to Germany to pry into their wartime secrets reveal the frantic effort which was being made by the Nazis to attain technical superiority over the Allies, and give the Luftwaffe machines and equipment a sufficiently enhanced performance to enable them to cope with the Allied Air Forces.

Ingenuity has always been a feature of the Huns and one is therefore not surprised to find a number of striking developments amongst their experimental projects. In some cases one has to acknowledge their courage and temerity—as, for instance, in the case of their piloted version of the V.1 rocket, which appears to belong to the "suicide" class of weapon. With the pilot located in a cramped cockpit immediately in front of the motor unit, he has little hope of extricating himself should he encounter trouble, particularly as the captured example was not fitted with the "ejector" type seat which is used in other German aircraft, such as the rocket-driven M.E.163 and J.U.263.

The Germans also appear to have decided quite definitely that the tailless machine is the last word in aircraft development, as many of

their later designs show a strong leaning in this direction. For instance, the Horten glider seems to have been an actual flying test-bed for one of their more ambitious projects—a tailless bomber with a span of 30 meters (98 ft.), four large jet power units, an eight-wheeled partially retractable undercarriage and a cabin almost entirely sunk into the wing.

Dorland Hall

It is noted that the *Aeromodeller* in its issue for December, 1945, has returned to a general attack on the S.M.A.E., born of the fact that the Society has seen fit to decline to take part in the exhibition sponsored by our contemporary.

We cannot think that such displays of bad temper are in the best interests of the model aircraft movement. Some of us may feel that these attacks constitute in themselves ample justification of the Society's attitude towards a display which must cease to be primarily an occasion for personal advertisement before it can command respect.

As we announce elsewhere, the S.M.A.E. will be taking part in *The Model Engineer* Exhibition to be held in August, and Club members and aeromodellers everywhere will be grateful to learn that participation in this event is taking place on terms most beneficial to the Society and the movement it represents.

Facts about Radlett

Our contemporary also indulges in some unfriendly remarks about the meeting at Radlett. Its main accusation is to the effect that admission to the meeting was restricted to members of S.M.A.E. clubs. *This is not true.* Admission was open to members of all model aero clubs—any model aero club—affiliated to the S.M.A.E. or not, and, be it noted, *A.B.A. members were not excluded.*

What our contemporary seems to have overlooked is the fact that Radlett aerodrome is a *private aerodrome*, still under Air Ministry control, and that it could not in consequence be opened to the *general public*.

Sir Frederick Handley-Page made a very generous gesture to the model aeroplane movement in permitting its use on this occasion and allowed admission on the widest terms short of making admission open to all and sundry.

We would also emphasise that *admission was free* to all aeromodellers on presentation of the membership card of their club or an S.M.A.E. admission ticket.

The Thunderking.

This model at 11ft 4ins span was designed by Peter Gilbert in 1949. I remember seeing one or two of these monster gliders at Rallies in the 1950's when I was in my teens. The name PHAROS boldly displayed on the fuselage side.



When I received this model from Laurie Barr's estate there was that name PHAROS on the fuselage side. In the early 1950's there were many clubs with unusual names such as The Druids, Lee Bees, Pilgrims, and my own club Watford Wayfarers. On reflection I had read the name as PHAROAS and had wondered what the connection was with ancient Egyptian Kings. I asked Roy Tiller if he knew anything about this club. He came up with the full history of the club. It appears that Mrs Buckeridge, later referred to fondly as 'Ma' allowed a group of lads to use a room in her house to build their models. Her son Jim designed the very successful small rubber model known today as 'The Buckeridge'. In the group were Peter Gilbert and Laurie Barr. Mrs Buckeridge's maiden name was Pharos so that became the group's name. To tow that monster up on a 100 metre line you would certainly have to be fit



This model of Laurie Barr's now has a brushless motor and folding prop with rudder, elevator and motor speed controls. I know that it is not for the purist's among us but I do enjoy seeing this beautiful plane thermalling and with the prop folded it looks just like I remembered them from the old days

The MAMBA

This is a twice size Frog Senior series rubber model.

The model is 37ins span.

The rubber model had a trike undercarriage but I use a dolly for take-off and the model lands on its belly.

Hence the folding prop.

Power is from a brushless motor driving an 8"x6" folding prop.

The motor generates 100 watts from a 2 cell Lipo.

Wings and tail are covered in White Polyspan

and doped and sealed with a coat of satin finish floor sealer.

I ran out of dope!

The radio controls motor speed, elevator and ailerons.

All up weight is 24ozs.



It flies fast and is mildly aerobatic. The orange finish is heat shrink film by `Oracover` which I find does not wrinkle in hot sun.



The Javelin.

This 50" span model was Kitted by Halifax.

The model has Rudder Elevator and motor speed control.
The brushless motor drives a 9"x6" prop and gives nearly 100 watts.

The covering is Airspan over mylar.

The Airspan gives strong vibrant colour and does not fade in the sun.

Flying weight is 18 oz.



Letters to the Editor

Ralph Sparrow:

Thanks to yourself and Roy Tiller for the Bowden Hummingbird magazine article and plan.

I think the original Bowden design looks better than William Downey's subtly modified version. It will give me something to do.

Whenever I see any mention of Colonel Bowden I always remember the look of horror that would come across John Barker's face at the mention of the good Colonel.

John wrote to the Aeromodeller in his youth saying something like "the Colonel didn't fully understand the concept of model flight". He was referring to the use of wing slots on some of the Colonel's models to avoid stalling. John said that it was necessary to stall a wing to get a consistent turn. The Editor of the Aeromodeller published the letter, but added that the young Barker should have more respect for his elders.

John thought that Bowden put English model flying back 10 years behind the French and American designers.

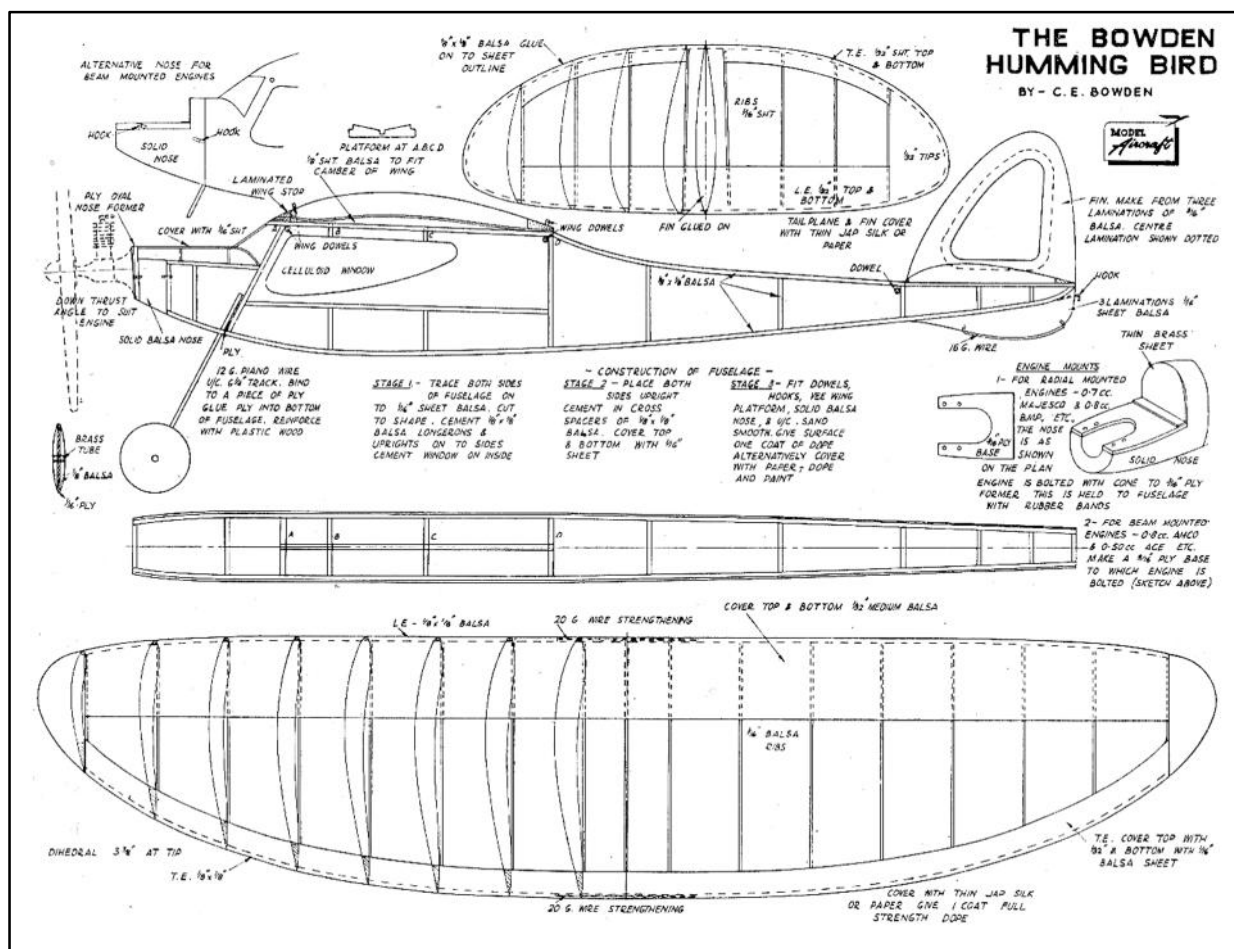
Ralph

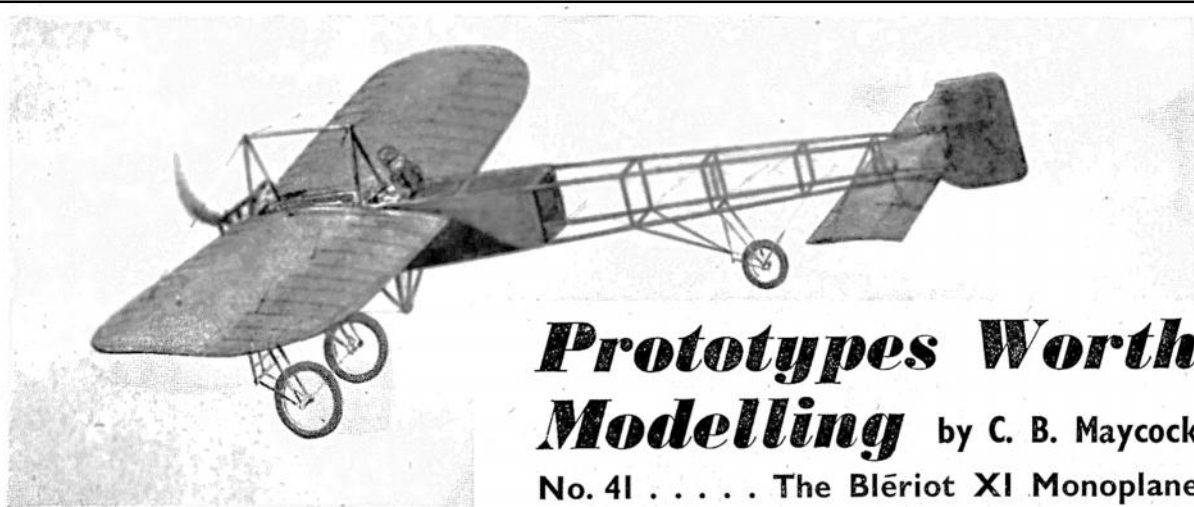


Model Aircraft June 1948



Downey's version





Prototypes Worth Modelling by C. B. Maycock

No. 41 The Blériot XI Monoplane

THE Blériot XI is perhaps the most famous of the early aeroplanes. If one consults contemporary records it is soon apparent that most record breaking flights of the day were captured on this machine and it was in a type XI that Louis Blériot flew the Channel in July, 1909. This historic occasion, when Great Britain ceased to be an island, stands out in the history of aviation. Blériot was by no means fit when he flew the Channel, having barely recovered from a crash in test flying a type XII (parasol monoplane) which was intended for Claude Grahame White at Pau. In fact he had to use crutches to get to his monoplane when he took off from Les Baraques for Dover. He made his landfall near Deal and turned west and flew along the coast until he sighted Dover castle landing on Northfall Meadow at 0520 hours on the 25th July. The actual spot can be seen today as the outline of his machine is laid in stone as a memorial of the event.

The engine fitted was a three cylinder 25 h.p. Anzani of 105 mm. bore and 105 mm. stroke, the design of a French motorcycle engineer. The Anzani was air-cooled and had automatic inlet valves. The angle between the cylinders was 120 deg. It drove a Chauvière propeller of 6 ft. 10 in. diameter.

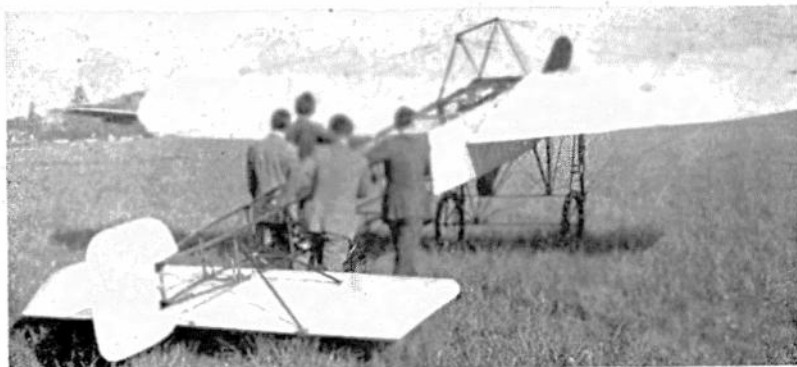
The monoplane Blériot flew is depicted in our three view drawing. The wings had pronounced camber and were braced with flat strips of steel, not cable. They were of two spar type, having twelve main ribs in each wing. Lateral control was by warping the trailing edge of the wings, the control cables running from the Blériot ball-and-socket principle control column up to the cabane above the fuselage and the pylon below. The fuselage was of the simplest

construction, consisting of four ash longerons with spruce vertical and cross bracing struts. The fuselage was covered by canvas on the sides and bottom at the front half only. In the event of ditching a canvas cylindrical flotation bag was fitted behind the pilot. The whole structure was braced with piano wire. The tailplane had pendulum elevators at the tips which made the machine rather sensitive in the fore and aft control, and was abandoned in later marks in favour of the trailing edge elevator. The rudder was of the balanced pattern. There was no vertical fin. The undercarriage was ingenious in conception, having bicycle type wheels carried in sliding cradles attached to the main frame at the front of the machine. Springing was by strong elastic cords in tension. The wheels were allowed a certain amount of castoring action for cross wind landing and were kept equidistant by a light pivoted axle. The tail landing wheel was sprung in a similar manner and was held in track by a trailing yoke.

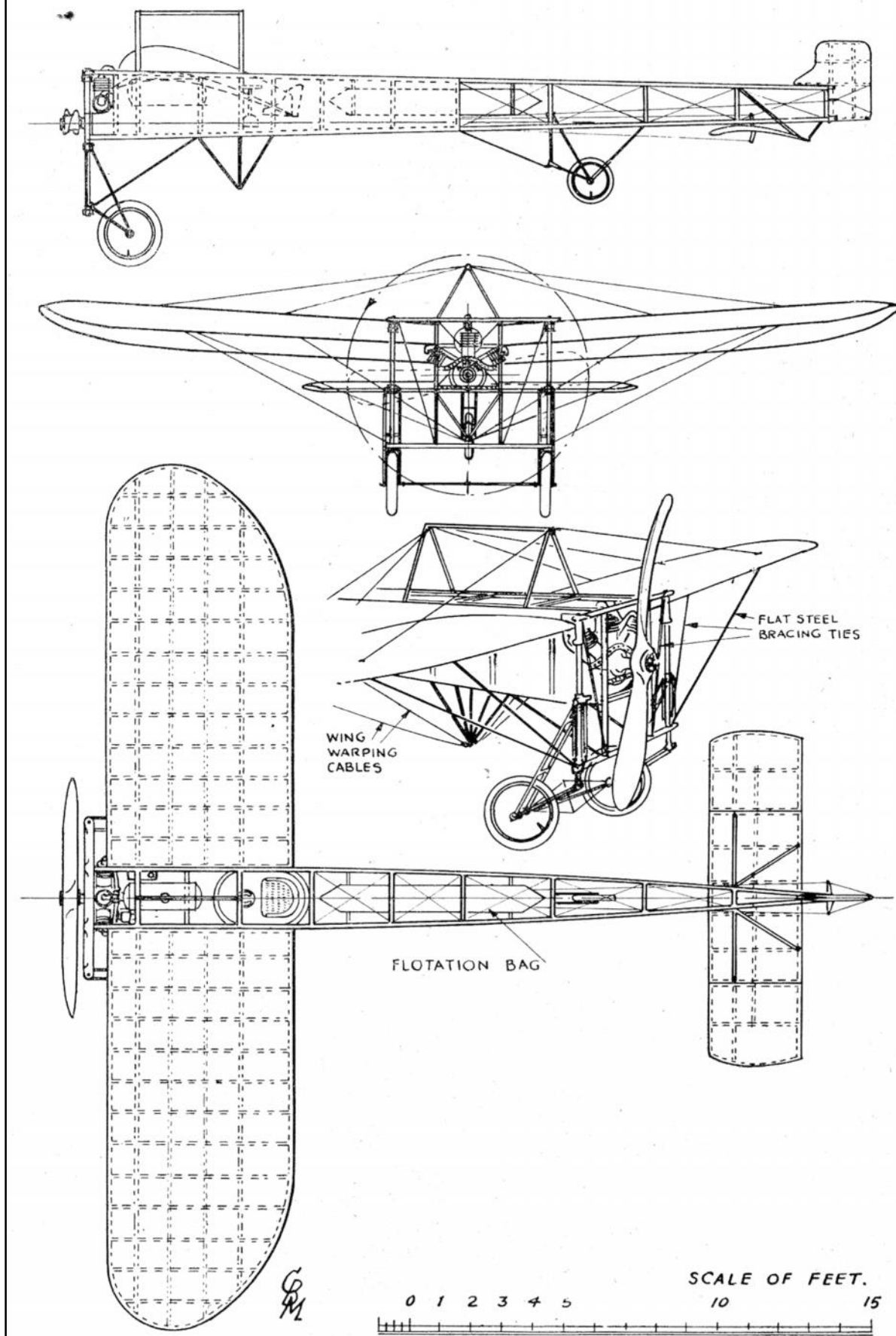
Regarding colours, all fabric surfaces were clear doped, longerons and struts clear varnished. The propeller was laminated alternate layers of mahogany and ash and highly French polished. The petrol tank was bright brass and the engine had bright steel cylinders with polished aluminium crankcase and engine bearers. These latter were copiously drilled for lightness. Undercarriage details black.

The main dimensions were as follows: Span 28 ft. 3 in., length 26 ft. 3 in., track 5 ft., diameter of main wheels 2 ft., tail wheel 1 ft. 6 in.

The heading illustration is from a drawing by the author. The photograph alongside was taken by the author at a recent air display and shows a preserved example that is still airworthy.



THE CROSS-CHANNEL BLÉRIOT XI.



Extracted from the old paperback Clarion circa 2003

John Andrews goes indoors again

Well, the outdoor season is well and truly over for 2003, so its back indoors in the sports halls again for me. My first event was a visit to Oundle, for their first Friday night do. The meetings at Oundle are well worth a visit, the hall does not have as much floor area as some of the other venues but it is more than adequate for us regulars. Anyway, the price is right, £2 for the 7pm until 10pm event and there is coffee and biscuits available for the inner man.

I went to their first event at the end of October, totally unprepared as usual. I went into my garage during the afternoon and quickly packed a box of models, I took my three Hanger-rats and a film covered lightweight. I boomed as usual; I took one of my rolled tube fuselages and to go with it, the plug-in back end and wing of a different model. The problem being, the plug-in tubes were different sizes, so it was a total rat night for me. I did rectify the error for my next trip to Oundle and arrived at the venue with all models complete.

Only problem, the 'good old boys' at the BMFA News had made a total botch of their event calendar, not only was the event not on, the telephone number of the organiser was also wrong. 80 odd mile round trip for nought, I could have had a game of indoor soccer with a bunch of youngsters, but I did not have my shorts with me. Anyway, I would not like to upset youngsters with the sight of my knees.

I think it's best, for your diaries, to list the forthcoming events at Oundle.

These dates are direct from the organiser Lionel Essam Tel. No. 01832 732003.

Friday January 9th 2004. 7pm until 10pm.

Friday February 6th 2004. 7pm until 10pm.

Friday March 5th 2004. 7pm until 10pm.

The events take place in the sports hall of:

Prince William School, Herne Road, Oundle, Northants.

My second foray was the Northampton MAC Indoor Rally at the Moulton Leisure Centre on Sunday October 26th, this being an all day event enabled me to fulfil my Winter League Golf commitment in the morning, and then I was off to Moulton for the rest of the day. This meant forgoing the intoxicating festivities in the bar at the golf club, but such is my dedication to aeromodelling.

We had a good turnout at Moulton; some of David's Friday gang were in evidence, particularly Ernie Hobson with a collection of Hanger-rats and Peter Rolfe with his polystyrene scale jobs. I took a few pictures and took some copies over to David's at the next Friday hanger meeting. One was of Peter Rolfe holding his Monty's Messenger in invasion colours. It was a terrible picture of Peter, he had thought I was only taking a photograph of his model and not himself. The totally blank look on Peter's face, in the photograph, defies description. It's best summed up by the tongue in cheek observation made by another hanger visitor, who suggested Peter should put the picture on his mantle-piece to keep his grandchildren away from the fire. I had a good meeting at Moulton, airing most of my indoor aircraft without major problems.

I also spent my prize money voucher from Wallop, at the ever-present Flight-Hook stall. It was a case of back to its roots, as John Hook had donated the prize voucher in the first place. Thank you John.



Ernie Hobson's Rats Nest at the Northampton Clubs Moulton Indoor Meet



**Peter Rolfe's Polystyrene
Monty's Messenger**

Overall I had a good afternoon at Moulton, I finished the day having a good chinwag with John Hook in the car park. The annoying thing is, that having spoken with John twice during the day, and cashed in my voucher, I still managed to forget to buy some nitrated thinners. I'm now down to the dregs of the last sauce bottle, so I used un-thinned dope on a rubber job fuselage and tailplane I have just knocked up to go with a wing I found when I tidied up the boxes in the garage. Got off track a bit there did I not, back to the thinners, well not thinners but the good old senile decay, I have finally admitted to myself, that I need a

procurement list on the wall in the workshop as I am forever running out of something I intended to buy.

The next event was Colin and Pete's do, on Saturday afternoon Nov. 8th, at Walsall, in the Alumwell Centre Sports Hall. I really like this hall; it has a big floor area and a sort of geodetic tube roof structure that repels enthusiastic climbers without quite so many hang-ups as usual. Having said that, I will now bore you with a couple of hang-ups, I had that day.

Number one was a beauty; there was a leftover balloon stuck up in the roof, complete with a raffia type, string tail hanging down. My Poly-Rat, flying along minding its own business, runs into this tail and the prop shaft wraps around the damn thing. Well! The thing wraps around the prop shaft to be more correct. Any way, the Rat was well and truly hung up. Out with Peter Martin's pole, mine was still in the back of the car as usual, a bit of poking and bashing about to no avail, and then someone suggests a pin to burst the balloon. Up goes the pole, complete with pin, but the balloon, being part deflated, just would not burst. Finally, Peter suggested a razor blade, cynoed across the end of the pole. This was the answer, two or three tugs cut the string and the Rat was back in hand.



**Authors Wilco Economy
Food Bag Covered model**

My, Wilco Economy Food Bag, covered special flew into trouble next. The model landed on top of one of the basketball backboards that were up in the roof. I went to get the attendant to lower the board only to be informed that the electrics had gone wrong and she could not get it down for fear of not being able to retract it again. Not all was lost however, I attached three or four feet of rubber strip to the end of the pole and flicked it about until I dragged it free. I did not get away without damage, the tailplane was broken and one half of the built-up prop is still up there. The model, however, is now repaired and has been flown again, during a second visit to Oundle.

Brian Roberts and Peter Martin are regular attendees at Alumwell; we normally all set up camp against the far wall. Brian and I always have an informal battle for the longest flight of the day and longest Hanger-Rat flight. Peter usually has a Rat with him as well, it is a lightweight covered with condenser tissue without wing bracing, a real performer.

I do not remember the Result, probably because I do not normally win against Peter's lightweight and Brian has a Rat covered in striped silver mylar, yet another lightweight. I normally come a poor third with my standard Rat or my Poly-Rat, but I am close. If I get it right, and get away with a few ceiling bumps without hanging up, I can clear two minutes.

It's the longest flight contest where I stand the best chance of coming out on top, I've got some Ultra film covered models that do double figure flight times in the hanger at Cardington. I still struggle to beat Brian though; he flies a couple of well-trimmed condenser tissue covered old Easy B's designed by Laurie Barr. One is the 'B Simple' and the other is a 'Fly Rod'. Brian does not fly his better model, the 'Fly Rod' in sports halls unless it is very quiet. These days there is a lot of high speed ready built polystyrene fizzing about in the hands of youngsters and collision damage is a definite possibility. It is good to see some new blood getting to grips with indoor, but let lightweight flyers beware. I hide mine under the table behind a box if I go out for a drink or something.

Brian and I normally wait until near the end of the days flying, then casually ask what flight times we each have had. After that, it's no holds barred to try to get one up on each other. We both had done nothing special at Alumwell; I think I was a few seconds ahead with something short of five minutes. This particular day our tussle went right down to the wire; it was our last flights of the day that decided the issue. We were up together and had launched at about the same time, I did a bit of banging about on the beams and dropped below Brian but I had a nice stable let down just missing collision with the end wall in the process. I was down in 5-47, beating Brian by 10 seconds or so. One up to me.

Indoor isn't for everyone 47

The construction of the Cessna 195 based on the Earl Stahl drawings published in the April 1950 edition of Model Airplane News proceeds slowly and will be further reported on in the future. However, somewhat to my surprise and at short notice, I received news of an indoor meeting. So on Saturday, 24th April, it was off to deepest Berkshire to join the Trinity crew. The meetings take place in a typical one basketball court sized sports hall and are organised by John Winfield. The four hour session was organised into eight half hour slots, alternately free-flight and RC. Obviously, facemasks were a requirement and with about a dozen fliers present social distancing was not too much of a problem.



Nearly complete Cessna 195, at time of writing



John Winfield's Keil Kraft Elf

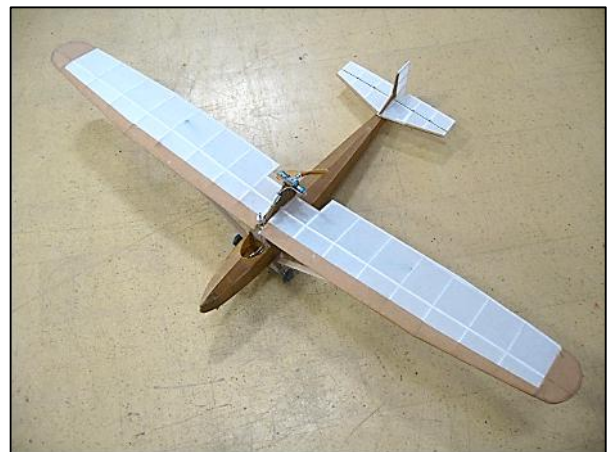
There was a three flight competition for the Keil Kraft Elf rubber powered design of 16in wingspan. A 10sec bonus was added for ROG and 5sec for an upright landing on its wheels. There were five entries, and a good number of flights over 30sec (without bonuses) were achieved. The eventual winner was Colin Hutchinson, the editor of SAM35 Speaks, again showing his versatility. The Elf plan is available from Outerzone, www.outerzone.co.uk, and the Vintage Model Company (VMC) produce a laser- cut kit.

The rest of the flying was for fun only. The ever prolific Pete Smart had a good collection of untested models. He has produced a Peanut Scale model of the Eaves Skeeter 1M homebuilt, which was a new aeroplane to me. Leonard R Eaves first home built aircraft was a modified Nesmith Cougar, which readers may remember from the build of the Peck Polymers Peanut kit that I described at the start of these IIFE columns. He then went on to design the two seat low wing Skeeter, registration N1111V, which Pete has modelled. It has a considerably longer fuselage length than wingspan. It will be interesting to see if he can get it to fly properly. Low wing Peanuts can be tricky, so I wish him every success.

Another Peanut was a reduced version of his 18" wingspan FW190 Bluebottle Squadron kit, now available from VMC. Pete also had several small Gasparin CO₂ motor powered models including a Beardmore Inflexible and a BAC Super Drone, with a single surface covered wing. He also had two WWII scale dimers (16" wingspan) based on the Stew Meyers' modifications of old Comet Hurricane and Spitfire kits. Stew is editor of the Flying Aces Club News, the modified Hurricane being published in the Nov-Dec 2018 edition and the original Comet plan for the Spitfire, along with CAD generated print-wood patterns, in the Mar-Apr 2019 edition. Back issues of FAC News are obtainable from www.flyingacesclub.com. Many of the Comet dime scale plans are also available from Outerzone.



Pete Smart's Peanut Scale Eaves Skeeter 1M



A couple of small Gasparin CO₂ powered models from Pete Smart's stable, a Beardmore Inflexible (left) and (right) a BAC Super Drone with a G10 twin.



Two more from Pete, a Spitfire based on the old Comet dimer, and a Peanut Scale FW190, reduced from his 18" span Bluebottle Squadron kit.

The props of his WWII fighters were cut from yoghurt pots and, as a result, are very flexible.

There were a couple of very nice Cessna Bird Dogs, built by The Lurker and Mike Langford from the VMC kit. John Winfield had a model of another very unusual prototype in the Breese-Wilde Model 5 'Aloha', which was built for the 1927 Dole Air Derby, a race from Oakland, California to Honolulu, Hawaii. John's 21" span rubber-powered model was built from Richard Crossley's plans published in the May/June 2013 edition of *AeroModeller*.

I flew a couple of over ten year old models in the RC sessions, a Kyosho Minium Citabria and a Stevens Aero Puddlebug. I have found that both of these are sufficiently slow flying for me in smaller sports halls. In the free-flight slots I had a go with a Peck Bostonian Pup.

This is strong enough to withstand contact with rafters and walls. On one flight it touched a wall and ended up in a basketball net! What I realised from having to wear a mask is that I use my lips to hold the propeller assembly whilst winding the motor.

The final photos show some indoor free-flight gliding fun.

The last indoor meeting that I attended was the SEBMFA meeting at Crawley, February 2020, report in the NC, April 2020. So this must be the largest gap in my indoor flying for over forty years and it was a welcome return to the great indoors.



A be-masked Lurker about to release his Wren glider. Pete Smart was the winchman.



And off it goes in a blur! Elf comp winner Colin Willow Hitchinson in the background.

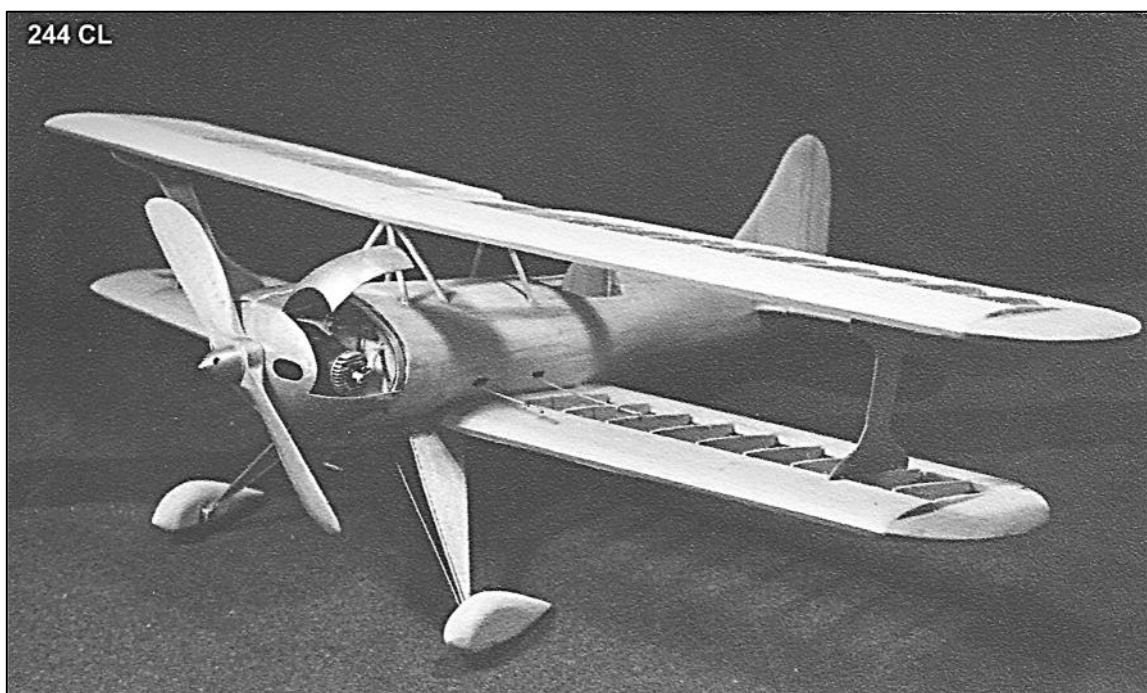
Many thanks are due to John Winfield for organising and running the event and to Andy Blackburn for his prompt production of the Trinity Indoor Newsletter, so that I was able check several facts.

Nick Peppiatt

Vintage in Black & White

-

Keith Miller archive



Jim Carter's (CDMAC) semi scale C/L "Pitts Special" powered by Vivell twin. Early 50's.



Peter Cook (Tunbridge Wells MAC) launches his single channel R/C model at a Kent Interclub event in the 70's



Don Denne (Tunbridge Wells MAC) launches his Cessna single channel R/C model at a Kent Interclub event in the 70's.



Roy Yeabsley (CDMAC) autographs Derek Ridley's (SAM35) "Super Sunbug" glider at a Crawley Indoor meeting.



48 Misc

Derek Ridley (SAM35) and Roy Yeabsley (CDMAC) pose with Derek's "Super Sunbug" glider (designed by Roy) at a Crawley indoor meeting.



Laurie Barr's EZB model at a Crawley indoor meeting.



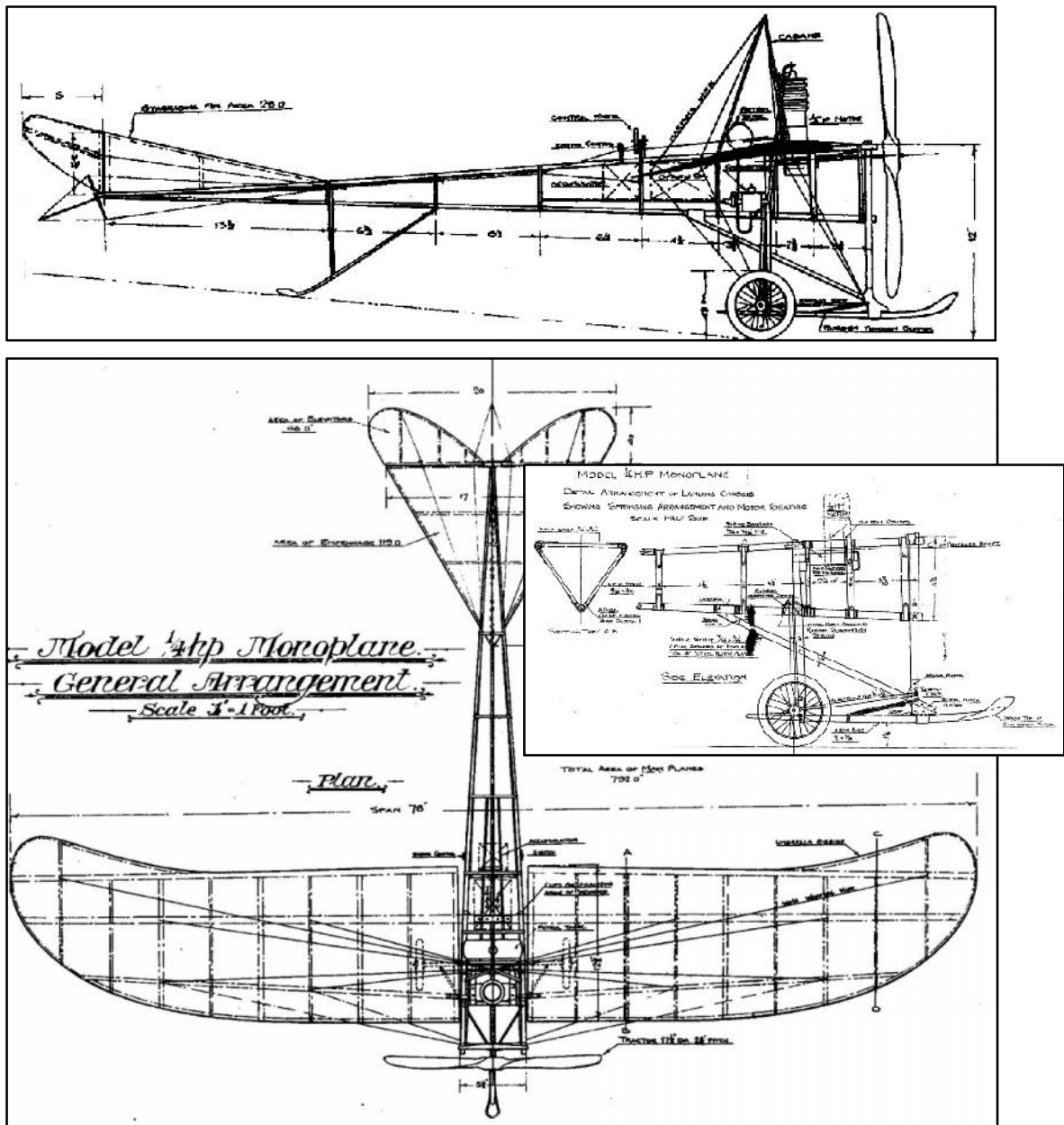
251 Wembley

Part of the SAM35 stand at a Wembley exhibition

Report No. 124 Our earliest magazines.

This month we are having a look at the earliest magazines held in the library in date order, just the first issue held of each title. Magazines only, not books which perhaps will feature later.

1912 *The Model Engineer and Electrician* dated September 12, is our very earliest and we have just four photocopied pages featuring a **Model Petrol-Driven Monoplane** by O. J. and H. E. Fossey who had previously built "model gliders and elastic-propelled aeroplanes, witha fair amount of success." The drawings show that the model clearly follows full size practice, see the following quote. "The camber and angle of incidence gradually diminish towards the tips of the wings, which are flexible and may be warped so as to give a slight negative angle of incidence. There is no camber at the tips. This principle is employed on the Weiss, Dunne, Handley - Page and Etrich machines, though to more pronounced an extent than that employed here. This form of wing is most efficient in securing automatic stability, both transverse and longitudinal, since it possesses the dihedral angle both transversely and longitudinally, owing to the slight negative angle of the tips, which operates in the same way as, and assists the function of, the flat non lifting tail." There is no report on the flying ability of the model.



1914 *Junior Mechanics and Electricity* January 15, Vol. II.-No. 14, again we have just photocopied pages, in this case showing a "Rise-off-the-Ground" Tractor Biplane designed by A. B. Clark described by A. C. Horth. See extracts below.

JUNIOR MECHANICS AND ELECTRICITY.

A Journal of Elementary Mechanics, Model-Making, and Electricity.

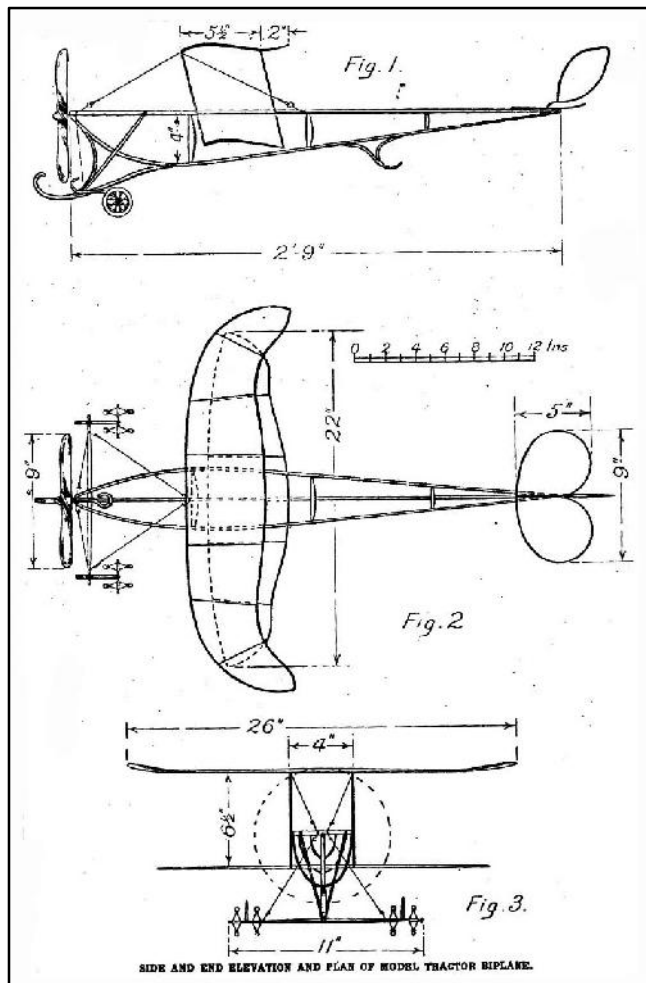
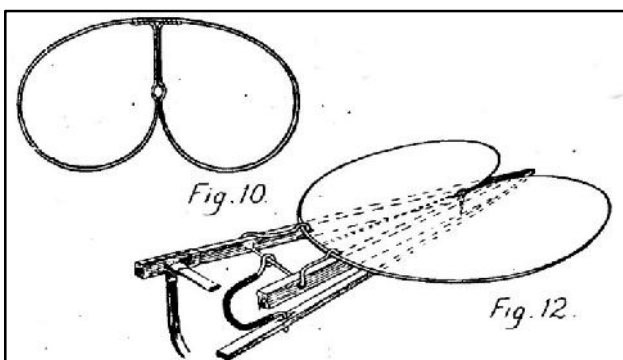
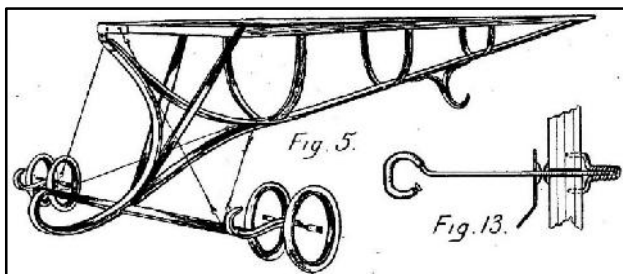
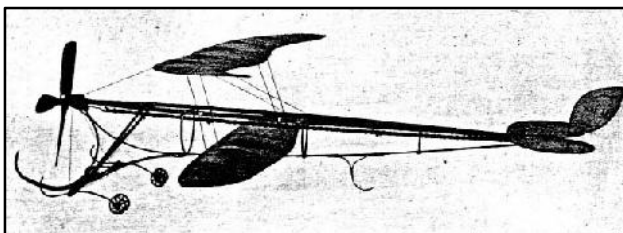
Edited by PERCIVAL MARSHALL, A.I.Mech.E.

VOL. II.—No. 14.

JANUARY 15, 1914.

PUBLISHED
FORTNIGHTLY.

A "Rise-off-the-Ground" Tractor Biplane.

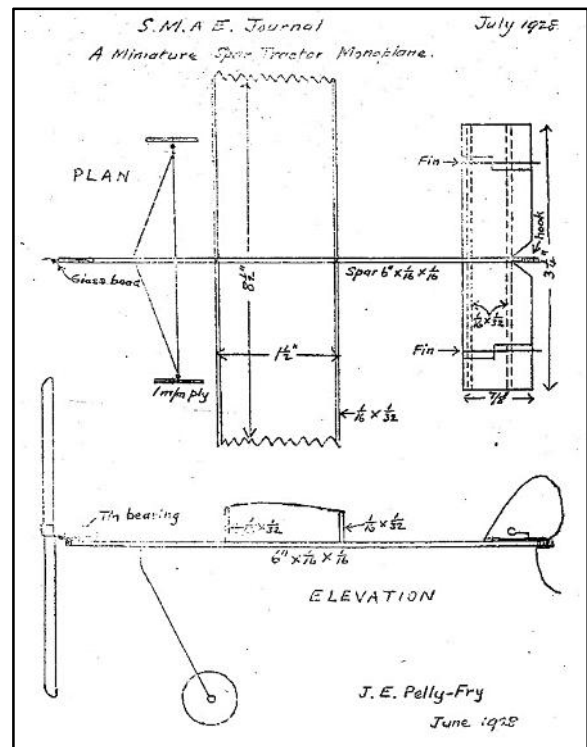


"One of the great advantages of the tractor model is the slow speed at which it flies, instead of having to spend one's time in running after the model, it is possible to watch its flight close at hand all the time. Anyone who has flown a twin-propeller model has no doubt experienced the discomfort of running a few hundred yards after every flight, and at the end probably losing the model in a tree or in some inaccessible spot. This sort of thing may be good exercise, but it is not real model flying and very little is to be learned from it." "To ensure straight flights the rear fin should be placed very slightly out of the true in order to counteract the torque of the screw." There is no report on the flight times or distances achieved.

1928 Yes a 14 year gap to the next magazine title and it is the **S.M.A.E. JOURNAL** dated July 1928 with a report on its distribution and an indoor model by J. E. Pelly-Fry.

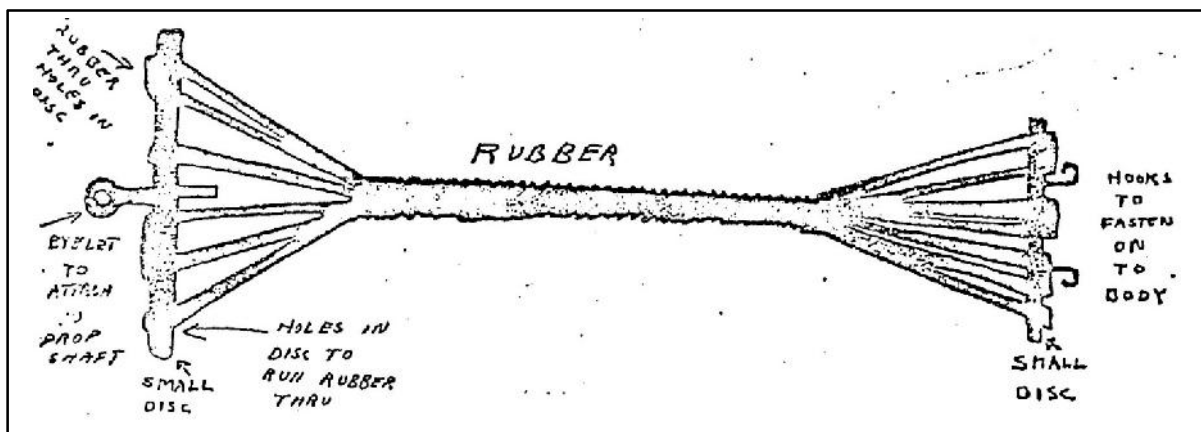
"The May issue of the S.M.A.E. Journal was evidently a good one because "Flight" said it was quite an interesting number. Several applications for copies were received owing to the publicity given to it in Flight dated 7th June. Owing to the limited number which it is practicable to produce by hand duplication all available copies have now been disposed of."

"A Small Monoplane by J. E. Pelly-Fry. The following is a description of my "paper-plane" which aroused such interest at the Halton Display. The dimensions are - Span $8\frac{1}{2}$ ins., chord $1\frac{1}{2}$ ins., size of Birch spar 6 ins., by $\frac{1}{16}$ th in. Propeller 4 ins. diameter carved from block $\frac{3}{16}$ in. by $\frac{1}{8}$ in. Four strands of $\frac{1}{32}$ square rubber is used although an extra strand or two is found to give a better climb. It flies for about 15 secs. without counting the glide."



1929 January Model Airplane News Vol 1 No 1. The editor and publisher, Sal Messina, uses a full page editorial to introduce himself and explain his hopes for the future of the magazine, but it all reads a bit like a one man band. The model build project included is part one of a series to produce a display model of the Dornier Super-Wal.

Flying models are also covered including an article titled "New Method To Drive Models Used by Young Man Who Finds It Very Successful" The arrangement described was to fit a rubber powered model having a dimension of 22" between hooks. Two plywood discs are required each having 8 holes drilled equi-spaced near the rim. One disk has two hooks for attaching to the rear of the fuselage and the other has one hook to attach to the prop shaft. With the two discs suitably spaced the rubber strip is pulled through a hole in the front disc and then through the rear disc and back to the front disc etc. until all holes are filled. "This being completed the rubber was then placed inside the body carefully and the plane assembled and covered. When the time came for another experiment and to see whether this ship would fly or go up on the piano, for its final resting place, the results were so startling that a patent was spoken of until I saw it and took all rights to publish this new idea."



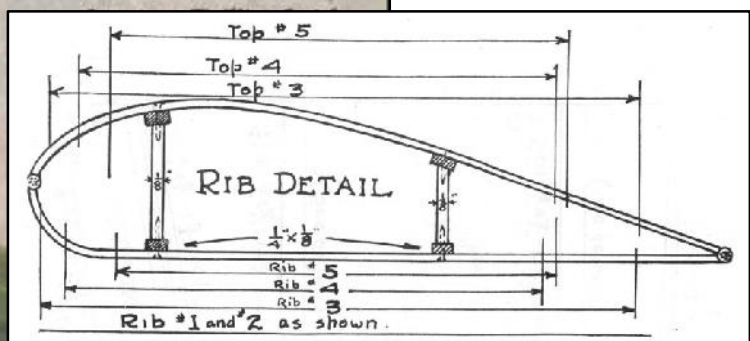
1929 July Model Airplane News Vol 1 No 1 again! This one is the real MAN produced by the Model Airplane News Corp. of Washington and New York. Copyright in U.S.A., Canada and Great Britain with named President, Secretary and Advertising Manager. I did not find a name for the editor but here is picture of him showing his qualifications.

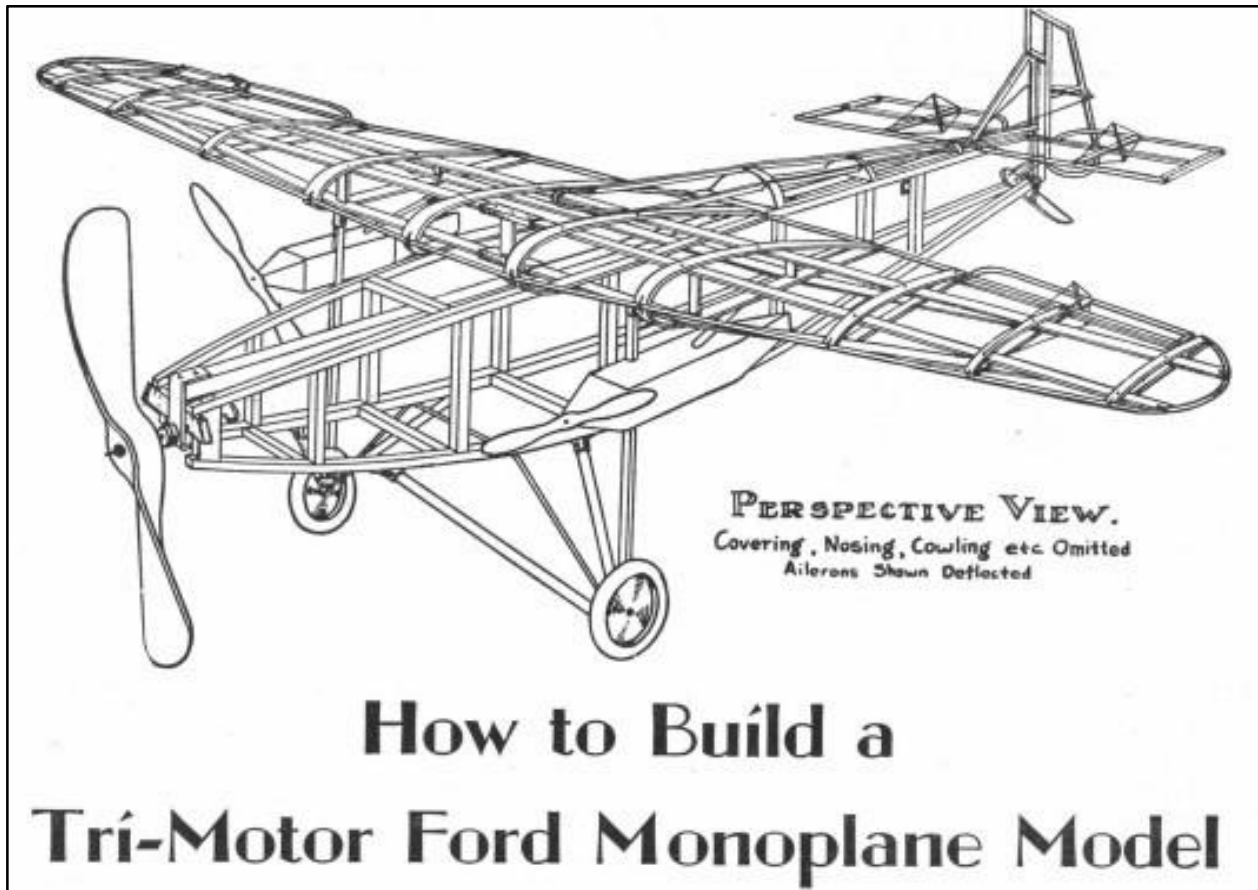


The model build project is a rubber powered

Ford Tri-Motor Monoplane

with plans, sketches and instructions spread over numerous pages.





Flying instructions are given as follows.

"Raise the rear enough to keep the skid off the ground, release the propeller, give the model a very gentle thrust forward, then let go, and it will taxi along the ground by its own power, and will make a short flight, then, if you have found that the model is properly adjusted, and its course was in a straight line, give the propeller 110 turns (the full amount) launch as above, and it will fly 70 to 100 feet."

The picture on the right is captioned "Colonel Lindberg examines a model while two of his friends examine him."

Well chaps if you fancy a real vintage challenge with plenty of bamboo and wood bending make your choice from the above. Plans and instructions as they appeared in the magazine available by email from:

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



Roy Tiller

MANY of my readers will be strangers to me, owing to my six years' absence in the R.A.F., but that can soon be remedied. What cannot so easily be remedied is the present shortage of rubber but now that it is becoming available again, much can be done to make or mar successful flights, and a knowledge of the right way to treat it contributes to longevity and satisfactory service.

There are three sizes chiefly used for duration flying, $\frac{1}{8}$ -in., $\frac{1}{16}$ -in., and $\frac{1}{32}$ -in. All of these sizes can be obtained in either $\frac{1}{24}$ th-in. and $\frac{1}{30}$ th-in. thicknesses. Any of these sizes can be used successfully and it is really a matter of personal choice rather than one of practical results. The following table will explain the application and suitable amounts for use in different sizes and types of models.

It is impossible to give an accurate table of turns for present-day rubber, owing to the great variation in its quality.

It is obvious that much more importance must be attached to the care of rubber these days, and if some of my readers consider parts of

rather than in small quantities, as, by so doing, several motors can be made up for testing purposes from one hank in order to find out the maximum breaking point of each, so that you can be assured of obtaining maximum results. There have been numerous articles written in the past quoting graphs and data whereby it may be possible to work out the maximum power and the number of turns, but by personal experience I have found that every batch of rubber varies considerably, particularly these days, and I therefore advocate, and use, the following method.

First of all decide upon the number and length of strands required and make up three identical motors. Always be very careful to get the lengths of the strands even, this being the essence of a successful motor, since one uneven length will lead to a broken strand; the reason being, of course, that when winding, the shortened strand will become overstretched and thus liable to snap; once broken, extra strain is placed on the remaining strands, leading to a complete breakage.

Weight of Wing		Thicknesses of Rubber					
Model	Area	$\frac{1}{8}$ in. \times $\frac{1}{30}$ in.	$\frac{1}{8}$ in. \times $\frac{1}{24}$ in.	$\frac{1}{16}$ in. \times $\frac{1}{30}$ in.	$\frac{1}{16}$ in. \times $\frac{1}{24}$ in.	$\frac{1}{8}$ in. \times $\frac{1}{30}$ in.	$\frac{1}{8}$ in. \times $\frac{1}{24}$ in.
8 ozs.	200 sq. in.	14 Strands	12 Strands	20 Strands	18 Strands	30 Strands	26 Strands
5 "	200 "	10 "	8 "	12 "	10 "	20 "	16 "
4 "	160 "	8 "	6 "	10 "	8 "	18 "	14 "
3 "	130 "	6 "	4 "	8 "	6 "	12 "	10 "

These equivalents are for pre-war rubber, but will serve as a guide when the new rubber comes along. All are for use on a diameter pitch ratio of 1-1 $\frac{1}{2}$ with fairly wide blades.

Chiefly used by Americans, but would stand a little experiment.

this article unnecessary, inasmuch as they appear very simple, they must forgive their inclusion on the score that if carried out, they will save them considerable disappointment.

Every model enthusiast will at some time or another have suffered from broken strands and motors, and have immediately complained to the retailers about it. In most of these cases the trouble could have been avoided by a little care on the part of the user.

Here are the essential items in the care and handling of rubber in order to obtain maximum efficiency. When purchasing, do so in bulk

Wash the rubber well in water, and then dry it thoroughly; this is a very necessary procedure, for appreciable quantities of grit and dust are picked up, also some manufacturers coat the rubber with French chalk, and if it is used without washing it will lead to breakages through chafing. Lubricate the rubber well with a solution of pure green soft soap, or any commercial makes of lubricant. Be very careful at all times to keep oil or spirits of any description away from the rubber, as this quickly causes it to deteriorate. Securely knot

(Continued on page 100)

RUBBER REVIEW

(Continued from page 89)

the two free ends and bind the knot on either side with stout thread, finishing with a reef-knot.

Having done this, obtain a winder with a stout hook in the chuck and another hook attached firmly to a bench or wall.

Take the first motor, and stretching it twice its own length, commence to wind on 200 turns. Allow the motor to run out slowly, then repeat the procedure, stretching the motor this time to three times its length and winding on 300 turns. Continue in this way increasing the stretched length by the original length until the rubber has been stretched five times its own length, winding on an additional 100 turns each time, until breaking point is reached. It is necessary to keep a careful check on the number of turns used, for reference. Having obtained the breaking point of the first motor, proceed in exactly the same way with the second and third motors, being careful to keep 300 turns below the breaking point of first, 250 of which can be used at contests if considered necessary.

On completion of these tests, and "running-in" procedure, wash the rubber well in water, dry it thoroughly, and lay it loosely in an airtight tin. This will allow it to contract naturally and I feel sure you will find that this careful pre-winding and preparation will repay you on the contest day, for you will then be confident of just how much your rubber will stand.

For successful contest flying it is necessary to use a tensioning device, to prevent the completely-unwound motor from falling in the fuselage in such a position as to alter the centre of gravity, and consequently spoiling the glide owing to the change of trim.

Numerous spring devices have been described, but most of them are inferior to that devised by H. E. White, B.Sc., in 1939, which has proved a great advantage to duration flying.

For those who are unfamiliar with this device, we will assume that we are making a 12-strand motor, 36 in. long. Measure out six strands on the table 72 in. long and tie a small loop of cotton to mark the exact centre. Join the ends as described previously, remove the motor from the table and attach the ends to the winder and a hook in the wall or bench. Wind on 100 turns without pre-stretching. Whilst still wound, remove the winder from the end and attach this end to the other hook, being careful to hold the rubber motor at the centre while doing so. Re-attach the winder to centre of the motor and allow the rubber to run out normally; this will result in a rope effect and a finished motor much shorter than 36 in. When the motor is now fitted to the fuselage, it will be noted that it is tensioned between the hooks. For longer motors it may be necessary to increase the number of turns to 200, according to requirements.

The following points should be noted on the day of the contest :—

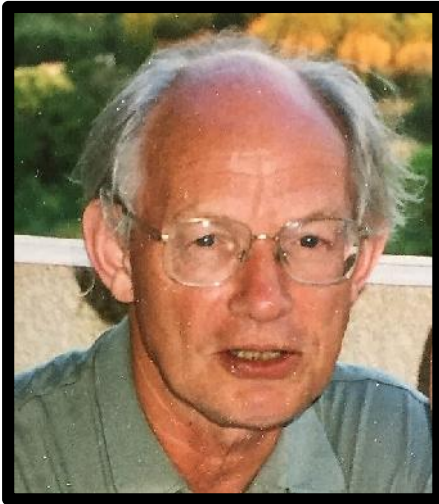
Keep the rubber from the direct rays of the sun or from bright light.

See that it is well lubricated prior to fitting it in the fuselage.

Even if using the "White" tensioning device, all contest flights should be wound with the motor stretched to five times its own length. Commence winding at this distance from the model, and wind on half the required turns. Continue winding, slowly walking towards the model, so that you complete the desired number of turns close to fuselage nose. Disengage the winder, and place the noseblock in position.

Do not put further turns on. If you do, this will assuredly lead to a broken motor and more work than you can handle in one day.

E Chasteneuf



Peter Jellis passed away on April 5th at the of age 85.

Peter was a long-time member of the Croydon Club, flying mainly F1A for many years, but also power, open rubber, and, more recently, P30, Coupe and E36. He also built an F1B in the late 70's coming 2nd to Ron Pollard in the Gutteridge.

When Peter left school he was apprenticed as a toolmaker and then in the 1960's he went to work in the civil engineering labs at Imperial College, retiring in 1997.

In one way he carried on a tradition of fellow Croydon member Jack North; he'd served a 'proper' apprenticeship and if you talked to him about a problem, particularly in connection with a lathe or milling job, he'd probably call back soon with suggestions of how to solve it.

He was a regular visitor to France for Pierre Trebod in the 1970s and then Poitou and Moncontour. His last visit was in 2018 with me, and I also took him to UK contests after he stopped driving.

He was good company on trips and a loyal club member and will be sadly missed.

R.I.P.

Ray Elliott.



It seems that the weather hasn't yet heard about the relaxation of rules regarding Covid-19 restrictions on gatherings, as the weather has been simply awful. So not a lot of flying.

However, on a slightly more optimistic note, I have been advised that permissions have now been granted for our proposed day at RAF Colerne on 25th July, courtesy of the South Bristol Club to whom we are very grateful. The broad plan is to run a Cagnarate Day coupled with a Tomboy Precision event, with sports flyers most welcome. Our Chairman currently holds the Tomboy Vase trophy & is keen that it can reside elsewhere for a change! The day is, of course, subject to the final lifting of Covid-19 restrictions by the Government on 21st June but for a change, things are beginning to look more positive. For those who have forgotten all about Cagnarata, a summary is given below - essentially a "fun" event.

Assuming all things slot into place, final details will be in the July NC, inclusive of venue location details, times etc. To cover the cost of the licence fee & toilet facilities, we plan on a £10 charge inclusive of comp entries - an attendance of approx 30 would just cover our costs, which given a fine day should be achievable.

Look up RAF Colerne on Google maps - SN14 8HT - satellite view to see the airfield, south west of Chippenham off the M4 J17.

'CAGNARATA' CONTEST

This contest format is popular in Italy and is basically an all-in event where models of different classes are flown against each other. We would like to stress that whilst a competition it is also a fun event and competitors are encouraged not to take it too seriously! It is also very much an experiment and we would welcome any feedback/comments.

The concept is to encourage anyone who flies free flight to enter a low key contest & to enjoy their flying. Differences in performance of the various classes are taken into account using a handicap system (K factors) with different maxes depending on the K factors. The classes to be flown with associated K factors and maxes are set out below. Each flight time is calculated by taking the actual flight time & multiplying it by the K factor.

Classes	K Factor	Max (secs)
E36	1	120
M/V Power	1	120
FIG / Vintage Coupe	1	120
F1H /A1	1	120
M/V Rubber	1	120
Open Vintage/Classic Glider	1	120
P30	4/3	90
E30	4/3	90
CO2	4/3	90
Under 25in Vintage Rubber	3/2	80
Hi Start Glider	3/2	80
Cat /HLG	2	60

Note 1: 250 gram maximum model weight applies to all classes

Note 2: 3 flights, no rounds

Note 3: Competitors may enter more than 1 class

Note 4: D/T fly-offs may be used as appropriate,
fly-off time as per max in class

Latest on BMFA/Drones et al

As many of you may have seen, the BMFA has very recently released an updated version of Model Aircraft Article 16 Authorisation. Within this updated version there is a specific section concerned with free flight, which is reproduced here such that all can be made aware of our responsibilities.

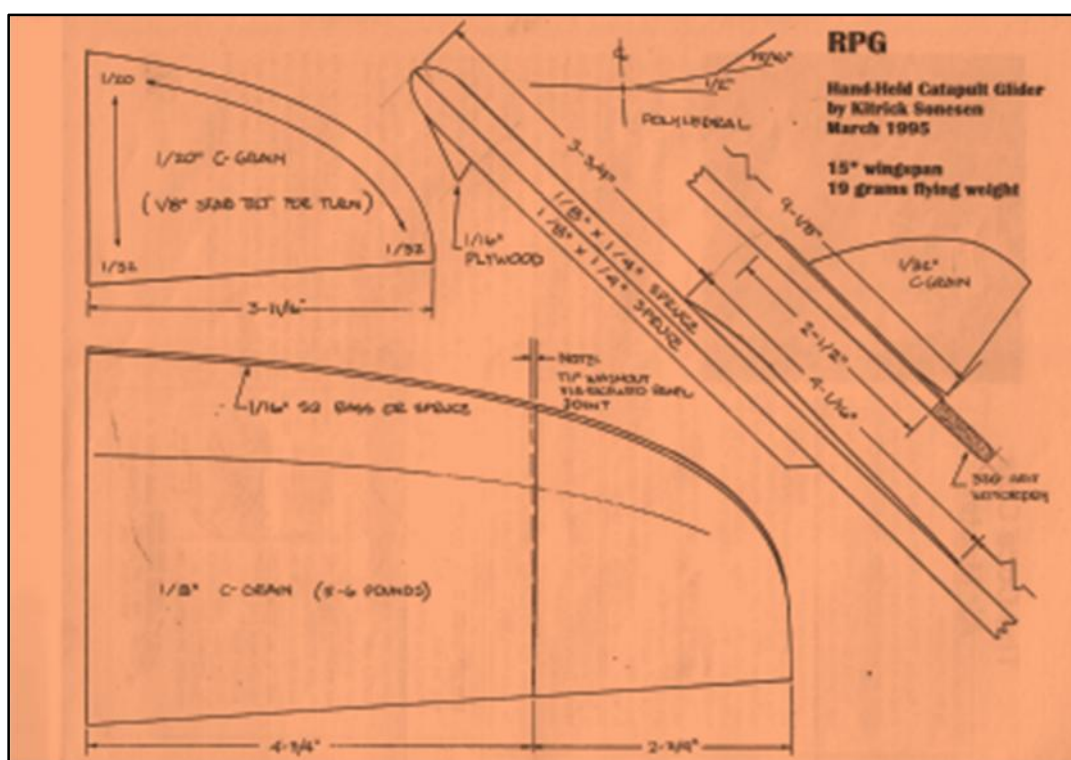
Section 4.2: Free Flight Model Aircraft

- (1) Before launching a 'free flight model aircraft' the remote pilot, taking into account the expected performance of the aircraft, the weather conditions, and any flight termination device fitted to the aircraft, shall be reasonably satisfied that the expected flight path will not infringe a Flight Restriction Zone, or any other airspace restriction (unless prior permission for flight within the airspace has been obtained).
- (2) The operation of free flight model aircraft must only be carried out within the limits and conditions of this authorisation, or within the Open category of operations.
- (3) A 'free flight model aircraft' shall not be:
 - a. Launched, unless from an area which the remote pilot is able to satisfy themselves is free from uninvolved people.
 - b. Launched, until the remote pilot has identified the area within which he or she believes the aircraft will remain (the 'flight volume') based on the considerations in (1).
 - c. Flown, unless the remote pilot is satisfied that the aircraft will remain within the flight volume.
 - d. Flown, unless the remote pilot is satisfied at the point of launch, that no uninvolved persons will enter flight volume and may be endangered by the flight of the free flight model aircraft.
- (4) A 'free flight model aircraft' shall not be deliberately flown beyond the visual line of sight of the remote pilot, unless otherwise in accordance with a suitable authorisation.

There is also a guide published by the BMFA as a synopsis of Article 16 that can be accessed via their website, it is strongly recommended that everyone reads it.

YAC or yet another catapult/chuckie from Gianni

Here is the latest from Gianni, who is busy building - not one, but two for exercise in his local park in Rome. Bit different from the normal efforts.



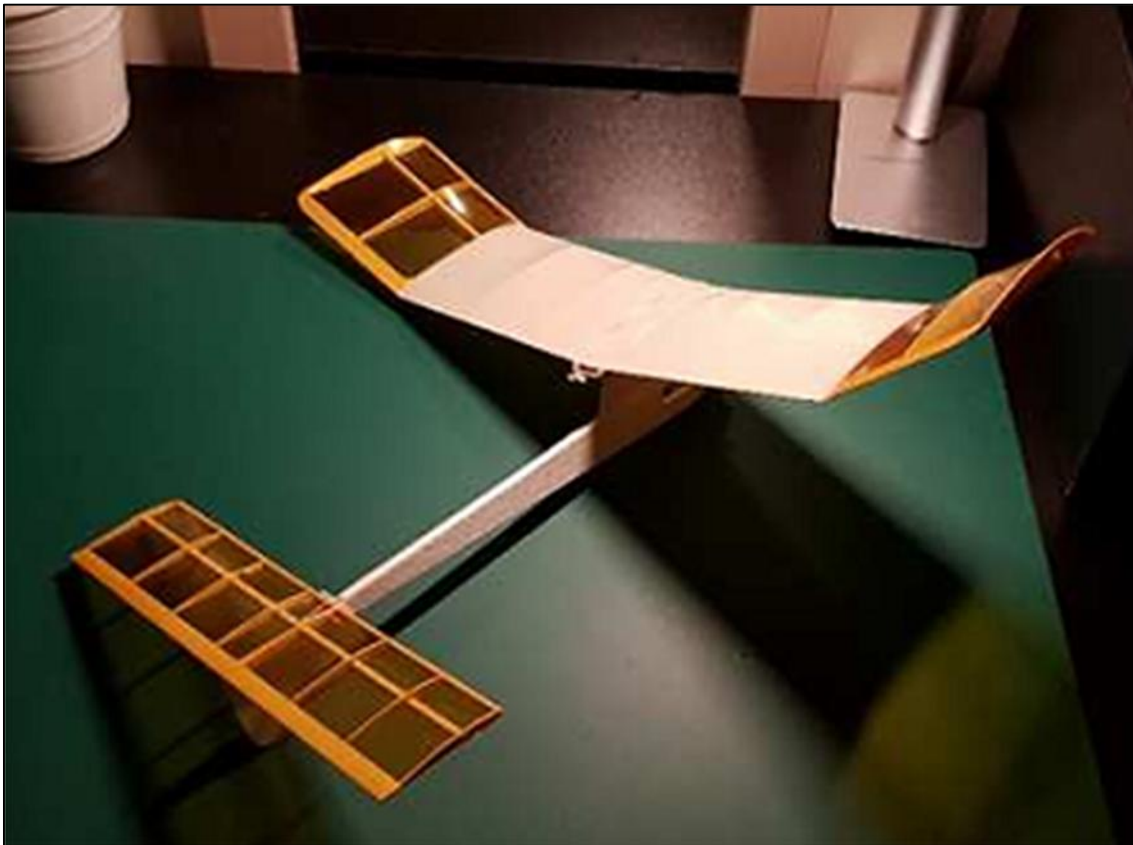
Adventure (or a venture) into E20

If I recall correctly, it was Peter Tolhurst recently circulating a little note to a few of us that stimulated interest into the world of E20 & aroused my curiosity. It seems the Peterborough Club have been very active in this class of model & have published a set of sensible rules for small field comps, inclusive of a well documented note on how to construct an electronic motor timer to limit the motor run.

However, it all looked too complicated for my poor brain but I then came across a mention of a very much more simple approach - which apparently has been around for some time. This needs only a small electric motor & a supercapacitor - no battery. Some further research on the web revealed that a scaled down plan of the Sal Taibi Starduster had been published in the April 2019 edition of Free Flight Quarterly that uses exactly these components. Even more research located an inexpensive source of motors, props & supercapacitors, inevitably the former from China. An order was placed & the bits received in 12 days! Currently I am seeking permission from FFQ to reproduce the plan in the next NC, in the meantime I had mentioned all this to our Chairman & he dug out a YouTube video of this very same model (MicroStarduster) being flown - the link is:

<https://m.youtube.com/watch?v=CZg88R8F1UE>

Have a look as this could be real fun for OAPs!



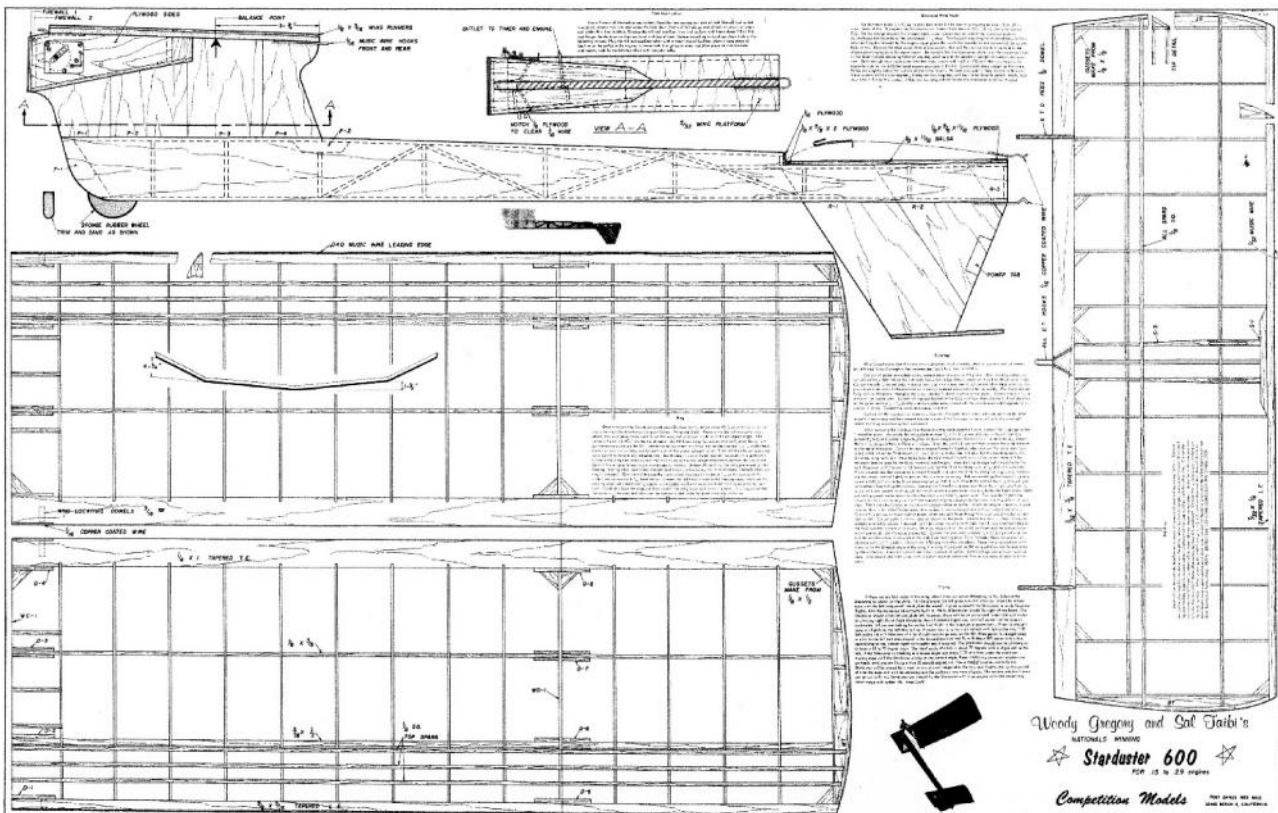
MicroStarduster

The flight characteristics are well demonstrated in the YouTube clip, with an initial burst of power as the supercap begins to discharge, followed by a gentle reduction in power as the voltage drops to give (hopefully) a nice smooth transition to the glide pattern.

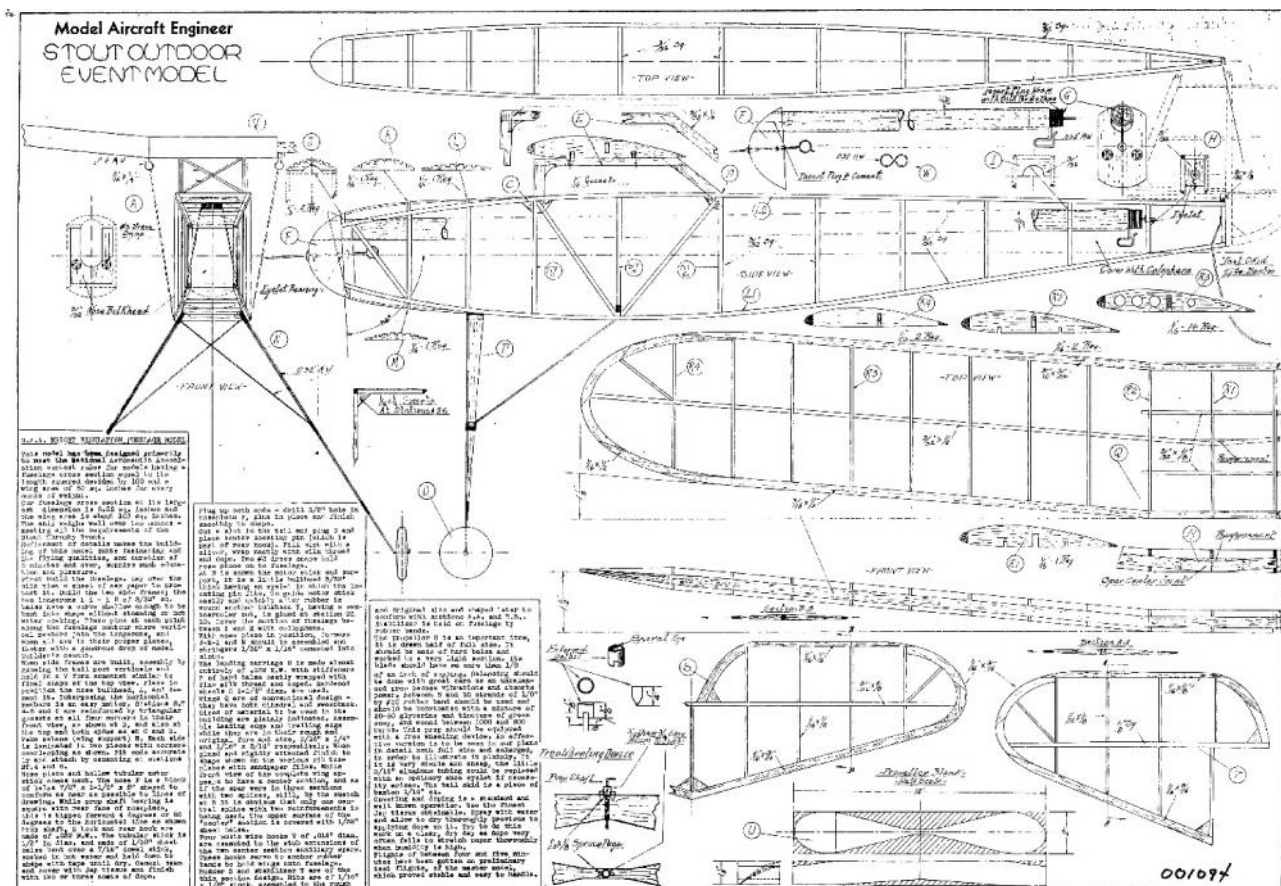
The only additional component I'm adding is a very small micro switch to break the motor circuit when charging the battery - hopefully more next month. Construction has started!

Roger Newman

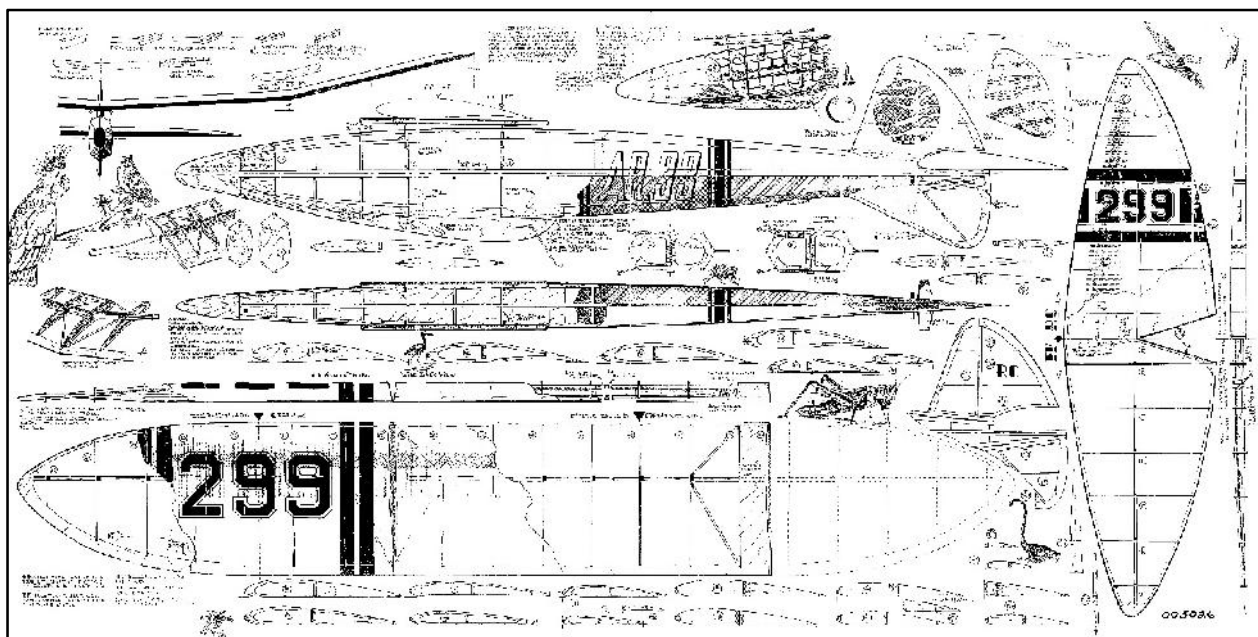
Power: The real Starduster 600 by Sal Taibi



Rubber: A pretty old design from Model Aircraft Engineer - The Stout Outdoor Event Model



Glider: Italian Slope Soarer from 1942 - AR-33



Roger Newman

Radio DT Systems

Hi All

A few of you may be aware that I am involved with Leo Bodnar Electronics.

Come July 2021 it is intended that this will no longer be the case.

From that date or before, some of the products sold by LBE, such as the RDT system starter kit may not be available as they are at the present.

This is a heads up message to that effect.

Thanks

Peter Brown

Classic A1 Email International Important Update

Anyone interested in entering the Classic A1 Glider 'postal' contest organised by Stuart Darmon please note that you now have until December 31st. 2021 to complete your entries. The original six-month time window, which was to have closed on July 1st, has been extended due to public health restrictions remaining in much of Europe, and to the recent severe flooding in parts of Australia. All other details of the event remain unchanged, and entries already made will not be affected.

Details from: stuardarmonf1a@yahoo.com

Classic A1 Glider Email International 2021

Eligible Models

A Classic A1 glider is any Free Flight towline glider of total projected surface area not exceeding 18 square decimetres, built in accordance with a design published or kitted between January 1951 and January 1961, as per BMFA Classic Glider rules (<https://britishmfa.sharepoint.com/sites/public/Rule Books>)

Maximum length of towline 50 metres under 2Kg. tensile load

The Contest

All flights for each entry must be made on the same day between 01 January 2021 and 01 July 2021 inclusive. All flights must comply with local regulations governing model flying and with the guidelines of the national aeromodelling governing body (BMFA, AMA, etc.)

All flights for each entry must be made with the same model. An individual may make up to three separate entries provided that each is made with an entirely different eligible model.

A model may not be used by more than one individual over the age of 16 years.

Juniors below this age may fly a model borrowed from another entrant.

The maximum for the first flight of each entry is 30 seconds. If this is achieved, the entrant is permitted a second flight of maximum 60 seconds, and so on, the maximum increasing in increments of 30 seconds until either a max is not achieved, or flying cannot continue (e.g. because the model is lost or damaged). The score for that entry is the total flight time including the sub-max final flight.

All flights must be timed by a person other than the entrant. Procedure for starts, timing, attempts etc. is per F1H except that a flight aborted by RDT does not qualify for a second attempt, even if less than 20 seconds (in line with BMFA classic rules)

Entry

Entry is free of charge. Once the flights are completed, entry is submitted no later than 07 July 2021 by email to classica1postal@gmail.com by sending the following information;

The name & contact email* of the entrant

The name(s) of the timekeeper(s)

The score, in seconds, in the form of an addition, e.g.

30+ 60+ 90+ 120+ 124= 424

The name of the model and where it was published

The country and location where the flights were made

If entrants aged 16 or under wish to be eligible for the junior prize they must include their age in years (D.O.B. not required). Juniors are also included in the overall results and are eligible for the other prizes.

In order to qualify for the team prize the entries of all three team members must be submitted in the same email, also stating the name of the team. Entries received in this way will also be included in the individual results.

Information about the flying, the site, etc. plus photographs will be very welcome and will help in reporting the contest in the modelling press.

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.

Events:-

P30. Models conforming to AMA rules . ie. 40g minimum airframe weight, IOg 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.moselev@look.ca

50 Exeter Road, Apt. 1153, Ajax, Ontario, L1S2K1, Canada

La Grande Coupe de Birmingham 2021

Preliminary Notification -

This year's event will take place at its traditional home of MOD North Luffenham on the
6th or 7th of November 2021.

Do please note that this is a month earlier than the traditional date for this meeting. The reason for this change is to try and pre-empt any restriction of travel which may be brought about by a winter surge in Covid19 infection rates. We all hope that the vaccination programme now underway will mean a return to "normality" by Autumn, but many experts still caution that the Winter will see a rise in Covid19 infections as happens with all respiratory viruses.

So that's why we're moving it, now some changes, hopefully improvements, that we will be making to the event:

Many Coupe fliers will be aware of the on-line 1960s Coupe postal run by Mark Braunlich and for several years we have included these coupes as a separate classification within the F1G event. We believe that these models have great potential as a reduced technology alternative to F1G and to raise their profile we intend to introduce a new three flight event "pre-1970 Coupe d'Hiver". To encourage participation in this new event we will award prizes for the top three places with a trophy for the winner.

Within this event there will continue be a classification for Vintage Coupes which meet our existing "pre-58" cut-off date and fliers should declare such models as "Vintage" to control when entering. The top 1st, 2nd and 3rd placed models meeting the pre 1958 date will all be awarded prizes, with the first placed receiving the Vintage Plate Trophy.

A flier may use up to 2 models in the pre-1970 class; to be eligible for the Vintage Coupe awards all models flown must meet the pre-'58 cut-off.

As ever the F1G event for the Aeromodeller Trophy will be flown in five rounds to a published timetable and with an unrestricted fly-off. Any model which meets the current F1G rules is eligible to fly in this event and up to 3 models may be flown.

As soon as we have some certainty of how the year will unfold we will confirm details of venue and timing. This early announcement is to make fliers aware of the change in date and prompt those who's lockdown building may have stalled to start that pre-1970 coupe that they've always fancied.

Stu Darmon

Gavin Manion - gavin.manion84@gmail.com

Revised Southern Coupe League 2021

Date	Competition	Location
30 May	London Gala	Salisbury Plain
11 July	Fifth Area	Area Venues
15 August	Southern Gala	Salisbury Plain
t.b.a. early Sept midweek	Oxford Gala	Port Meadow
18 or 19 September* (tbc)	Crookham Gala	Salisbury Plain
9 October	Coupe Europa	Salisbury Plain

*-- Weather dependent

Peterborough Flying Aces Nationals 2021

SUNDAY 12th September

at Ferry Meadows, Nene Park, Peterborough PE2 5UU .

Competitions 10.00 to 16.15

A NEW EVENT FOR 2021 !

Keil Kraft "Sedan" / "Rapier" / "Sportster", Nostalgia Rubber Duration Competition .

A rubber duration event for these great old KK designs:

Cash Prizes to 3rd Place! Model to be built to plan but plastic prop up to 6" dia. permitted

Plans available from Brian Lever blever@btinternet.com or 01733 252416

SCALE MODELS 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 CO2 motor/tank permitted. See note re verification. Up to 36" Span. 'Judged' for flight profile and realism. See note re verification

Jetex / Rapier/ EDF Authentic Scale:- Judged for flight profile and realism. See note re verification

Jetex/Rapier/EDF Profile Scale:- Judged for flight profile and realism. See note re verification

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

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 wing span 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. This equates to a 280mm length of 3/16" rubber tied into a single (140mm) loop. Any model permitted.

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, 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 non-electric 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 12/09/21)

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 Brian Waterland on 01778 343722 (07717 461000 on the day).

See also Peterborough MFC Website at www.peterboroughmfc.org

Note! Govt. and BMFA Covid restrictions applying at the time will be enforced.

Cocklebarrow Vintage R/C

5th September 2021

**Signposted from Aldsworth Glos.
on the B4425**

**between Cirencester/Burford
and**

**off the A40 between
Northleach and Burford**

[follow SAM 35 signs].

All types of R/C up to 1969 sport flying only
— no competitions.

BMFA insurance essential.

Contact: Tony Tomlin

Tel: 02086413505, Mobile: 07767394578

Email: pjt2.alt2@btinternet.com

AREA 8. SALISBURY PLAIN. 2021.

Area 8 has been booked for free flight use, every Saturday/Sunday, plus 3 Bank Holiday Mondays in 2021, subject to final approval on the Friday morning preceding each weekend.

Those wishing to sport fly/trim must hold an annual season ticket. 2020 season tickets remain valid for 2021, with no new tickets being issued, or payment requested in this case. Those not having a 2020 season ticket may obtain one for 2021 via donna@bmfa.org for £20. The terms and conditions remain the same as in previous years, although users are also reminded that when driving they should stick to established tracks and avoid creating new ones.

On contest days only, non-permit holders can sport fly/trim on payment of a site access fee of £5.

All flyers entering a contest must also pay the site access fee. This applies to Club Galas, Centralised and Decentralised BMFA events. The exception to this is for BMFA Contest Season Ticket holders, who will not be required to pay the site access fee for BMFA Centralised events, and the World Cup events. You are reminded that the BMFA pay for an annual licence to use the site via the FFTC.

Driving on Salisbury Plain.

We have frequently been reminded by the authorities that allow our access to Area 8 of,

The need to drive and behave safely, as it is a potentially dangerous place. Respect the environment, as it is a conservation area with numerous vulnerable species.

More recently all users of the Plain have been asked to avoid creating any new vehicle tracks.

The Salisbury Plain Military Lands Byelaws 1983, state that a driver may only leave the road (Public Right of Way), by 15 yards, and then only to park. For practical reasons, the interpretation of this can be somewhat liberal for our purposes.

Three farmers have grazing licences for Area 8, and an annual hay crop is taken from the plateau. Their rights and livelihoods must be respected.

This leads to the conclusion that vehicle movements should be kept to a minimum on grassy areas, and any motorised retrieval should be confined to the well-established tracks.

We never know who is watching our behaviour on any of our few remaining flying sites.

Peter Watson. FFTC Area 8 liaison.

E30 Batteries

I have bought some batteries direct from China which are suitable for E30. They are labelled 75mAh. I have so far only had time to test three and I can report that they are all good and in fact give a better performance than any I have previously tried. If you send me **£10** I will put four 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.

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.

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!



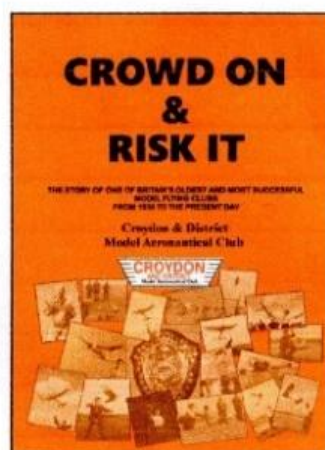
CROWD ON & RISK IT

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 Basingbourn.

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.



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: martindilly20@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 Silk-spans 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 Flyer - 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

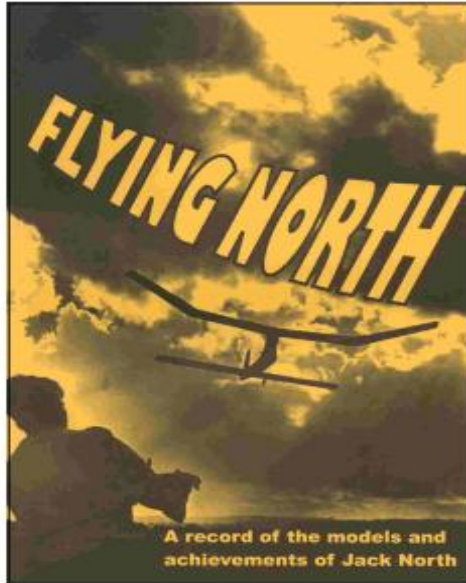
The UK price is £13 including postage; to the rest of Europe it's £16 and everywhere else it's £20. Forum Report sales help to defray the heavy expenses of those who represent Great Britain at World and European Free Flight Championships. Cheques should be payable to 'BMFA FF Team Support Fund' in pounds 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



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.

READERS' FEEDBACK

"... no other modeller's life and times can ever have been so comprehensively covered"

"I hope it becomes a classic."

"I am glad I bought Flying North. such a huge chunk of nostalgia"

"... am immensely impressed. A splendid effort"

"A fitting memorial to an unforgettable personality. I am sure the book will become an instant classic, treasured by aeromodellers all over the world"

"A very balanced record of Jack's modelling and professional activities"

"The best aeromodelling book since the Zaic Yearbooks"

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

*Ed Bennet's Wake actually got away from this one ;
but almost decapitated photographer Keith Miller!*



Breaking News

Free Flight Nationals 2021 substitute contests

The replacement contests for a cut down substitute Free Flight Nationals will not be the same as the "real" Nationals. We will apply a "light touch" organisation. The contests will be flown for their respective Free Flight Nationals trophies. The contests will be run to the standard gala format.

Free Flight Scale - Sculthorpe

The STC will run a casual free flight scale session with no specific contests at the East Anglian Gala.

Bowden Trophy – Sculthorpe

PMFC will run the Bowden at the East Anglian Gala.

SAM35 - Sculthorpe

The 4.0- and 8.0-ounce Wakefield to be run at the East Anglian Gala

Entry and Fees

There will be no pre-entry requirement. Entry on the day. The entry fee is covered by the contest licence or payable at £5.00 per day allowing the entrant to fly in as many events/classes as they desire.

Facilities

There will be no camping or other facilities except for the provision of toilets. The entrance gate at Sculthorpe will be manned.

Free Flight Open – Salisbury Plain - August 28/29th

Saturday

Combined Glider
Combined Rubber
Combined Power
Combined Electric
Tailless
Woman's Cup
Catapult Glider
FROG Junior
E30 Electric
S3A Parachute Duration
S4A Boost Glider Duration
S9A Helicopter Duration
S5C Scale Altitude

Sunday

SLOP
P30 Rubber
Hand Launch Glider
Vintage Rubber/Power
Mini Vintage
CO2 Duration
Vintage Glider
Classic Rubber/Power*
Classic Glider
BMFA 1/2A power
S6A Streamer Duration
S1B Altitude
S2P Precision Payload Altitude
S8EP Rocket Glider

*Classic/rubber power will include the Cranfield Classic
Start 09:00 finish 18:00

Free Flight FAI - Salisbury Plain – September 4th/5th

Saturday

F1A
F1B
F1C
F1Q

Sunday

F1H
F1G
F1J
E36

Number of flights to be decided on the day. There will be no rounds
Start 09:00 finish 17:00

Provisional Events Calendar 2021

With competitions for Vintage and/or Classic models

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

February 28th	Sunday	BMFA 1st Area Competitions
March 21st	Sunday	BMFA 2nd Area Competitions
April 2nd	Friday	Northern Gala, Barkston
April 3rd	Saturday	Croydon Wake Day & SAM1066, Salisbury Plain
April 25 th	Sunday	BMFA 3 rd Area Competitions
May 29 th	Saturday	Free Flight Nationals CANCELLED
May 30 th	Sunday	London Gala, Salisbury Plain
		London Gala, Salisbury Plain
June 20 th	Sunday	BMFA 4 th Area Competitions
July 11 th	Sunday	BMFA 5 th Area Competitions
July 25 th	Sunday	SAM1066 Cagnarata +, RAF Colerne
July 31 st	Saturday	East Anglian Gala, Sculthorpe
August 1 st	Sunday	East Anglian Gala, Sculthorpe
August 15 th	Sunday	Southern Gala, Salisbury Plain
September 4 th	Saturday	Stonehenge Cup, Salisbury Plain
September 5 th	Sunday	Equinox Cup, Salisbury Plain
September 12 th	Sunday	BMFA 6 th Area Competitions
October 3 rd	Sunday	BMFA 7 th Area Competitions
October 9 th	Saturday	Croydon Coupe Day & SAM1066 , Salisbury Plain
October 17 th	Sunday	BMFA 8 th Area Competitions
October 30 th	Saturday	Midland Gala, North Luffenham

**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
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