NEW Clarion

SAM 1066 Newsletter

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Editorial

It seems to have been a short flying season this year as we now only have a few competitions or so to go and we will be into the indoor meetings. Attendances at indoor meetings seem to be declining here and there as fees for hire of sports halls increase and flyers decrease. This makes the cost of a meeting rise for flyers and when it looks like going over £10 for a three hour session folks will think twice.
If you want to fly indoors then we must bite the bullet and pay the price.

The Peterborough Flying Aces is one comp I always attend, it may be a small field but the many classes makes for good entertainment even for spectators like myself.

OK what is in this somewhat bumper issue:

As promised by David Brawn we have the tried and tested Biggles methods of model recovery from trees.

Another profile of a coupe flier by Peter Hall, this time in the shape of Spencer Willis.

Jim Paton posts a warning about 'Ticks' and their possibly deadly effects.

I've included a missing report from Martin Stagg on his 5th Area coupe performance missing from Peter Hall's report on the event.

I miss identified a DH Hornet as a Mosquito in the last issue so I have ferreted out the aircraft details, good old Wikipedia.

I report on my trip to Sculthorpe and follow up with the full results courtesy Michael Marshall.

Regret to report the demise of yet more aeromodellers in the persons of:
John Knight and Bob Cheesley.

Ken Brown sent in a collection of pictures from the blown out meeting at Colerne.

There is a report on the Odiham event by Chris Redrup.
Followed up by further reports by Peter Hall, Roy Vaughn and Alan Brocklehurst on the Southern Coupe League content, pictures & results from the Odiham event.

Nick Peppiatt sends in his 56th article on indoor matters, a welcome regular contributor.

Roger Newman spent a few days 'up north' and has written a detailed pictorial report on his visit to the BMFA Centenary Exhibition at Buckminster.

All the above articles are interspersed with my usual bits and bobs dug up from aeromodelling magazines of the past: Pylonius's 'Topical Twists' and 'News Review' from Model Aircraft; and 'Heard at the Hanger Doors' from the Aeromodeller.

Roy Tiller still brings us articles from our archive store of magazines from way back in the early days of our sport, yet another welcome regular contributor.

Our secretary, fresh from his wanderings, pens his brief report on our societies current goings on and supplements his report with pictures from his recent visit to the 'Newark Air Museum'.

Finally we wrap up this issue with the usual selection of three model plans from the Library:

1st:	**Glider** -	old fashioned sailplane from Australia
2nd:	**Rubber** –	a scale peanut called Fred
3rd:	**Power** -	a Lee-Richards Annular Monoplane

Editor

Recovery from Trees - David Brawn

Retrieving from Trees in our 2020s

Back in the golden days we would watch our models glide, or dt, down onto the mown grass sward. Walk to pick up the model and then walk back to our launch point. Those were our Area Centralised events at RAF Henlow in 1964. If a flight flew far enough to end in a tree it was quite an event as we all strolled over to view this rarity. A nimble fetchermite, with the climbing ability of a gibbon, would be dispatched up the tree to shake the model free. Those indeed were the golden days.

In the 70s and 80s we built better models that flew for longer, and further, and we flew in more contests. This meant we started getting 'treed' on a regular basis. Just when we needed them we found that the fetchermites had all defected to radio control, so we were stuck with our own resources for un-treeing our models. Out of need we developed our pole, line and sinker method of recovering models from trees.
With the re-wilding, and our increased use, of Salisbury Plain the planting of copses of trees over the last 20 years has meant that even normal max flights are in danger of being treed; making treed retrieval a normal part of our flying day.

A pole is our first essential to give us a way of reaching into the tree. Choosing lengths of aluminium tubes that slid into each other, these were cut to transportable length. Then with each join of approx 10cms we drilled two holes to take 6ba bolts and nuts to lock the sections together. A cheaper alternative was to convert the poles of your old frame tent into a retrieving pole. Technically we could produce a 'slide and bolt together' pole of almost any length, but in practice trying to control the movement of the pole's tip way above you limits us to about 10 metres in length.
Tighter joints give a stiffer pole resulting in better control of the tip.
A modern telescopic fishing pole is my pole. 10 metres extended it extends in seconds for use and packs neatly back into its carrying tube; think £40-50 from an ebay seller.

Pushing the model out of the branches is favourite. Get the tip of the pole under a sturdy section of the model and gently push, then push a bit more until your model comes free. The tip of a fishing pole is not tissue friendly so invest in an old squash ball, ping pong ball, or similar. Make a slit in the ball and slide it onto the tip of your fishing pole; it will save you getting holes in your Senator.

If pushing doesn't work then jiggling, or breaking, the tree's branches is our next choice. To attach a hook onto my pole I use two large 6mm brass tubes. One is slid onto the top section of my pole and the second is epoxied to the tip. I then cut a plastic coated clothes hanger into a couple of hook sections and strip the plastic coating from the straight section. The hook is then located by sliding through the fixed tube, the sliding tube holds the end and gaffa tape used to fix the hook to the pole. Then position the hook over the offending branch and pull back and forth until it breaks or releases your model. Repeat until your model is out of the tree.

Warning – poles have some strength along their axis; so pull towards yourself or push away. Do not use lateral force or you could find you have a broken pole!

If pushing and pulling have not freed the model we need to up the force on the branches. The easiest way to do this is to drop a weighted line over the branch, I use 80lb fishing braid and sea fishing weight of 30-60 grams. I cut about 25 metres of line and tie a large loop at each end. Thread through the eye at the end of my fishing pole and slip over the lead weight. Now we position the end of the pole over the offending branch and drop the weight; the streamlined shape and thin line should avoid hook ups on its descent.

Grey lead is not a good colour against tree branches and leaves so I spray mine yellow so they are easy to see for positioning.

Now, holding both ends of the braid and using gloves, to avoid cuts from the thin braid, I see if I can generate enough force to shake the branch and free the model.

If it is not enough force I tie my roll of cord onto one end of the braid and pull it over the branch so that I now have a heavy duty loop of cord over the branch. Applying considerable force to pull and release, pull and release, pull and release, has defeated every tree so far.

After releasing the model we simply retrieve the cord and braid to rewind onto their spools and collapse the pole into its tube.

Too high to reach with your pole? We can either use our bow and weighted arrows or fishing weight and line to cast a line higher than we can reach with a pole. With a bit (or lot) of practice it is possible to reach heights of 50 metres, though you may need a few attempts before getting close enough to the model for the line or strong cord to be effective.

If this has not released your model then it is time to find a tree surgeon for a professional retrieve.

House and Hanger Roofs present a different challenge. House, and hanger, owners are reluctant to allow people to throw lead weights or brass weighted arrows onto their roof.

Our answer is the humble bean bag. A thrown bean bag with line attached lands with a delicate 'spluff' on the roof rather than the 'Kerang' of lead or brass weights. Having thrown the bean bag so that the line is over the model we simply rewind the line, pulling the model to the edge of the roof where it drops to glide down. If the model gets stuck in the roof gutter, usually a pesky vintage undercarriage, then it is back to the pole to push it free.

David Brawn

Topical Twists

Public Enemies

An increasing school of thought holds to the view that we should not indulge our hobby for our own delight and edification, but for the more unselfish purpose of providing a spectacular sideshow for the general public.

A recent article, written in this public-spirited vein, seeks to enlighten us on the best ways and means of winning the interest and approval of the gaping masses. Perhaps the writer of this article would be interested in some of the stratagems used by my own club in dealing with the public attending its Sunday-at-home events on the local common.

As members arrive at the flying field they move into a special concentration area, well screened from public view. When the main body of the club is amassed and the all clear signal sounded by the recce patrol, an attack in force is launched for a surprise occupation of the airfield. Once secured, the airfield becomes the scene of frantic activity as members strive desperately to get in a few flights before the first wave of cars, bikes, dogs and small children move in to counter attack.

In the ensuing battle against the mighty hosts of the public with all its formidable array of model-destroying weapons, the gallant club members, finding themselves hopelessly outnumbered, make a tactical withdrawal to prepared positions of concealment.

Having won the field, the public quickly tires of celebrating the joys of its empty victory. The dogs get bored and snappy without a chewsome model to worry; the children get fidgety once deprived of the elaborate "sword dance" game among the model wings; and, finding their machines no longer of any obstructive value, the owners of the cars and bikes drift moodily away. Very soon the flying field is once more deserted, whereupon the club again returns in force to snatch a few moments of peaceful flying ere the public shock troops assemble for another counter attack.

In this way "The Battle of the Common" rages, back and forth throughout the day, and only when dusk descends is a truce called until the following week.

Generally, though, our relations with the public are most cordial. Picture the happy scene as the small child pokes an exploring finger through a model wing, whilst the proud parents smile their fond encouragement and the modeller, in his turn, pats the little dear on the head. Perhaps if there is one mild note of discord it is the parents objecting to the modeller using a model box for the purpose.

"So much for your 'still-air' test flying!"

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A Rank Sport

All adventurous young bloods are reminded that the colonel-baiting season is once again upon us. They are also asked to note certain rule changes which have now come into effect. These include a substantial reduction in the use of weighty formulae, and the adoption of the three page letter limit. All events will be open as before, and the number of contestants per colonel remains unrestricted.

A hopeful start has already been made to the new season, which shows every promise of being the best ever. By contrast, it will be remembered that the sport last season was rather poor, apart from a few lively exchanges centred upon the twin-thrust gambit and a great deal of double-torque.

Possibly the reason for the improvement is the development of a much fiercer strain of colonel. Evidence of this is the severe mauling suffered by two of the early contestants. Highly fancied, and full of confidence, they made their attack with all the headstrong vigour of youth through the conventional slotted opening move. A sudden diversional foray in the delta tail region scored them some useful points, but their main assault from a negative wing warp angle was a definite washout.

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A Good Plane Name

I've upset the neighbours again! From the chap who lives a couple of pages away comes the peevish complaint that all my nasty insinuations about this girl friends have prevented him from dubbing his latest model, "Fifi."

This I regard as a shame, since, nowadays, the crisp, opposite name is so difficult to beget. Already the most fertile sources of inspiration, the starry heavens, the zoological gardens, and the American model mags., have exhausted their bountiful quotas of Jupiters, Jaguars and Gee-Whizz's, and most of us are left floundering among such pitiful fatuities as "Nimbus Nudger" and "Slick Chick."

Bird life, too, has yielded up the greater part of its feathered fancies, and only a few unlikely ones, such as the Common Prangwing and the Lesser Spotted Flyaway, remain unplucked.

The other form of bird life is equally uninspiring, though "Fifi" does at least capture the spirit of a flighty, frisky performance. By the same token initial tests of my latest creation suggest something in the nature of "Ermentrude." Pursuing this feminine angle still further, some comp-happy type might possibly put a subtle complexion on things by styling his model, "Max Factor." (Anyone failing to see this latter point will receive a full-size diagram free on application.)

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We read of a model "hooking a thermal." Seems they are carrying this pre-entry business a bit too far.

Pylonius

Couprofile No.4 - Peter Hall

Couprofile No.4 Spencer Willis

Spencer with the coupe used at the Nationals

1. You recently won the F1G event at the Nationals, North Luffenham . I can think of no-one with more devotion to and experience of rubber powered free flight than you. Can you tell us a bit about your obsession.

   Firstly I can confirm it is an obsession ! I can even tell you when I was smitten. I took up aero modelling around 1980 and whilst flying at Chobham I bumped into an old school friend who told me about SAM 35. They used to have a monthly meeting there on a Sunday. Pete Michel was a regular there and on this occasion was with Vic Dubery. The reason for them to be together this time was to fly their vintage Wakefields to assess a cut off time for the forthcoming mass launch at the vintage weekend at Old Warden, which became a highlight of future weekends. The sight of these two beautiful Wakefields gaining height against a clear blue summer sky got me hooked. It's too late to thank Vic but -Thanks Pete.

2. Tell us something about your coupes.

   In the mid 80's I fancied the challenge of Coupe and wanted to design one of my own. I wasn't sure about dimensions so I copied the layout of a George Batuik model featured in M.A.N. I used the aerofoil which was very thick and made a sheet fuselage. The model was heavy but flew o.k. I started to improve the model by making rolled tube fuselages, thinning the aerofoil and increasing wing and tail sizes. They started to fly really well and I got a third place at a Southern Gala which inspired me to build five models on the trot. They have been growing in size ever since but the wing chord kept to 4.5" with a couple of exceptions. All the models have two piece fuselages and two piece wings with 18.5" props.
   Early ones had pylons, later ones a midland mount. But as I now use Tomy timers and a tracker the pylon makes more sense for housing them.

3. How do you pick the air?

I've never been very sensitive picking thermals. My doctor told me I have very dry skin which could be the reason, so I have to resort to a thermistor and mostly a streamer. I use old VHS tapes which are cheap at car boot sales and contain a lot of tape. Someone pointed out recently that this tape, being heavier than the usual Mylar, is a better indicator of lift.

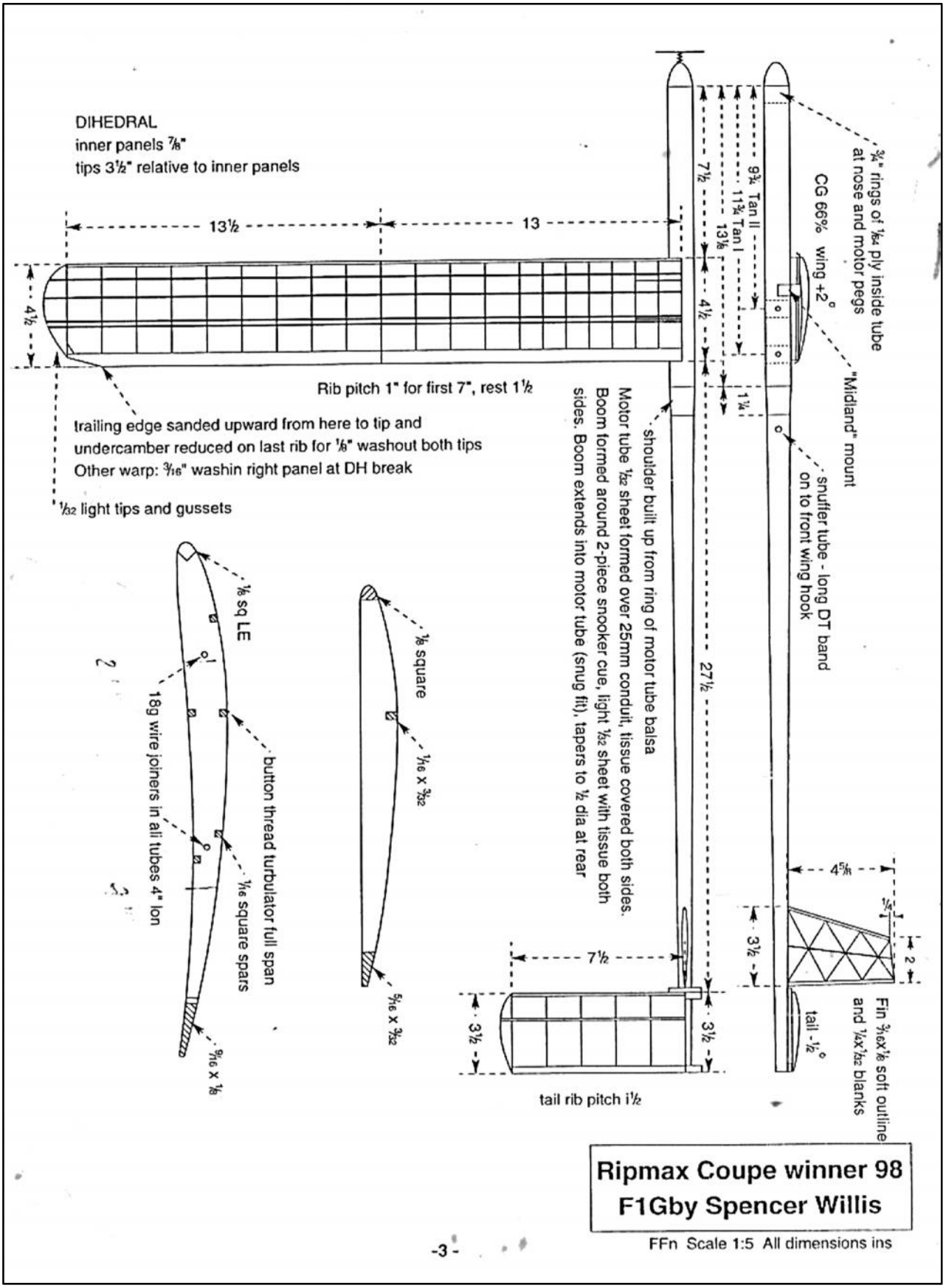
4. What will your next coupe be like?

My next coupe will be the same as all the others, no bells or whistles. I'm building at the moment to replace the one I lost at Luffenham, which is what I call my standard model. Dimensions: 43.5" span, 4.5" chord, 36" fuselage, 15.75 x 3.5" tail. In this country Coupe flying is more a case of getting three (or five) decent flights in rather than ultimate performance. I won 80 gram Coupe at the Nationals. once before and I remember my first flight was 45 seconds.
My most memorable win in Coupe was the Ripmax event 1998 where 69 people flew in 80 gram and 25 reached the fly off. I remember thinking at the time, "I've reached the fly off and I could still end up 25th." But I won with my admittedly large "gadget-less" model. The French were there and motor heaters were still allowed and being used.

The 285 sq." coupe and a tip dihedral variant

The drawing below was featured in the Free Flight Quarterly Coupe Survey originally from F.F News.
My ideal length of motor is 9.75" throughout the model sizes as is the 18.5"prop with the exception of the 285 sq" one.

published courtesy of Free Flight News.



Peter Hall

September 1947

News Review

Cover Story

Our Cover Picture this month is of a well-known aeromodeller from the North of England who has been a consistent performer in contests and rallies for some years. He is B. V. Haisman, of the Liverpool Model Aircraft Society and the present claimant for the World's Distance Record for Rubber-driven Models of 18.3 miles, made on the occasion of the North Western Area rally on July 6th.
He is here shown with the very attractive sailplane which he flew in the National Contest at Gravesend Airport, where this photograph was taken by your Editor.

The "Model Engineer" Exhibition

The outstanding feature of The *Model Engineer* Exhibition which has just closed its doors to the public was the high quality of the exhibits, which showed a marked improvement over those of last year, and the more pleasing layout of the Hall, affording an improved view of the competition models, with less overcrowding in the gangways.

The decision of the organisers to provide the visiting public with practical demonstrations of the capabilities of some of the power-boats, racing cars, and U-controlled model aircraft was a bold departure from previous shows and fully justified itself. There is a vast difference in viewing a static model on an exhibition stand and actually seeing it perform in the way it is intended. In fact, it is surprising what a small percentage of the general public are aware of the actual performances of which models of all classes are capable.

If the exhibition just concluded succeeds in converting a reasonable number of the general public to a more realistic outlook towards models, it will have more than justified itself.

So far as the model aircraft side of the practical demonstrations was concerned, the U-control innovation proved a great success, and the three primary operators, R. Moulton, W. A. Dean and M. Booth, are to be congratulated on the consistency and brilliance of their performances, particularly in view of the relatively small radius of operation imposed by the conditions existing in the hall. Their demonstrations of the simultaneous use of two models was particularly effective, and their skill in overtaking and passing each other was much admired.

In the competition section, one was struck by the high level of constructional excellence in the exhibits as a whole, and there were more outstandingly good models this year than ever before. Indeed, so high was the general quality in some classes that the judges found great difficulty in picking out the best example amongst them, and it can be safely said that so large a number of outstanding models have never been grouped together before. This is all the more remarkable from the fact that there was no pre-selection of the exhibits.

Each class brought forward an unusually large number of outstanding examples of workmanship and constructive skill and in many cases one was left with the definite feeling that it would be a shame to fly them and that they should be retained as museum pieces. That their owners *do* actually fly them is unbounded credit to their faith in the aerodynamical qualities of their products.

The combined flying, boating and car arena in conjunction with the practical layout and modern conception of the stand architecture contributed in no small measure to the pleasing impressions left in the minds of all who attended the 22nd *Model Engineer* Exhibition.

What is the S.M.A.E.?

A remark by a member of a club affiliated to the S.M.A.E., which was overheard during the Bowden Trophy contest, revealed an amazing lack of appreciation of the constitution and "build-up" of the Society, and one wonders how many other aeromodellers are equally blind to the actual position, particularly as other expressions of opinion overheard from time to time point in the same direction.

The type of remark in question invariably refers to the Society doing this—or the Society doing that, as though it was an entirely detached entity over which they have no control, and which carries out various actions which either please or displease, according to whether the functions attended is running smoothly or otherwise.

Similar loose thinking is prevalent these days regarding the Government of this country, and one hears all too frequently the expression "Oh! the Government can pay," the speaker invariably forgetting that the Government is not a bottomless pit of wealth, but that it obtains its money from the public and that it is the public—including himself—who has to pay in the long run through the medium of taxation.

Now the S.M.A.E. is not very different from the Government. It is no concrete body, but merely an association of clubs, *each of whose members has an equal voice in the election of the officers of the Society* in collaboration with the country members who form the remainder of the membership.

As the members of the Society are individually responsible for the nomination and election of the

officers through their Clubs, each has an equal share in, and responsibility for, what it does and the manner in which it is run.

The effectiveness of any society is a measure of the quality of its officers, and it is, therefore, up to every member of every club to see that the right people are nominated and elected to serve as officers of the Society. In particular, persons of the right character who have both the capability and the time required. It is equally essential for all club members to remember that the work of the Society is far too great to be undertaken by any one man as a part-time job, and that its success or otherwise, depends upon adequate help—your help—as well as that of others.

It has been noted with regret that there is a growing body of aeromodellers who turn up regularly at every contest, expecting to find everything " laid-on " for them, without contributing anything themselves towards the actual work of preparation and organisation, and this type is generally loudest in its condemnation of the Society and its officers should anything go wrong.

A little help of a practical nature, such as assisting with timekeepers, stewards, recorders, runners, etc., would go a long way towards ensuring smooth running of the Society's events and would be far more use than some of the idle comments one hears so frequently.

It's up to you ! *You are* the S.M.A.E.

Insurance Cover

Some confusion appears to exist concerning the extent of the cover given by the insurance policies issued under the S.M.A.E. Insurance Scheme, particularly in so far as power models are concerned.

In order to clarify the position we have been requested by the Council of the S.M.A.E. to point out that there is *no* restriction regarding the grounds where the model is flown, and that the policy covers the use of the model on any ground in the United Kingdom, provided such ground has not been specifically banned for the flying of model aircraft by the owners or controlling authorities.

It is, nevertheless, imperative to obtain permission to fly power driven models on any ground before doing so, particularly where public open spaces are concerned, and failure to do this may possibly invalidate your insurance cover if it should be shown that careless or wanton flying was indulged in.

Quite apart from any question of insurance cover it is surely only common courtesy to the owners or controllers of the ground to apply for permission before making use of it. Much bad feeling towards the model aeroplane movement has been engendered recently by the indiscriminate flying of power models on public and private grounds through owners taking their models out for a flight without first obtaining permission to do so from those in authority over the ground, and several cases of bans having been applied to the flying of power models have been reported recently from various parts of the country.

If modellers wish to retain their present freedom of action it is essential that they should make a tactful approach to the owners of the ground they chose for flying, and obtain their blessing before making free use of it. Adherence to the simple rules laid down by the S.M.A.E. for the safe flying of power models will also help to avoid trouble.

Remember always to fly with care and consideration wherever you are, and above all to avoid careless flying on public open spaces.

Divided Effort

The value of unified effort is clearly brought out by the situation in France before the war where the model airplane movement had been divided in two by political activities, so that the genuine aeromodeller had little say in the matter of the establishment of regulations for his sport. Indeed, from recent news received from that country it would appear that the French aeromodeller is not yet free from the fetters of politics in the movement and that its progress is suffering accordingly.

Let us hope that the genuine modellers in that country will eventually prevail.

Missing Trophy

We learn from the A.B.A. that the Elite Trophy, which was competed for during their gala day at Eaton Bray in July, 1946, and won by W/O Lamb, has not been returned to them and they have not succeeded in locating W/O Lamb's present whereabouts.

Will W/O Lamb get into touch with the Secretary of the S.M.A.E., Londonderry House, 19, Park Lane, London, W.1, if this should catch his eye. At the same time, if anyone reads this who is aware of W/O Lamb's present address, it would be appreciated if they would send this vital information to the Secretary of the S.M.A.E.

Credit

At all the field events held throughout the year there are always a number of workers behind the scene whose efforts are responsible for making the meeting a success, but who seldom get the credit for the time and trouble they expend on behalf of their fellow areomodellers.

Chief amongst these this year has been Mr. H. R. Turner, who, as secretary of the S.M.A.E. Contest Committee, has shouldered the lion's share of the organising work. Considerable thanks are due to him !

Thanks are also due to the members of local clubs who go to the trouble of assisting the parent body when events are held on their own ground and in this connection we would pay tribute to the help given by members of the Ilford, Essex Power, East London, and West Essex Clubs in the erection of field equipment on the occasion of the Bowden Trophy on Fairlop on August 3rd.

Ticks - Jim Paton

I thought I might inform members about tick bites and Lyme disease. A fellow Oxford club member got bitten by a tic on port meadow. He had the classic target lesion which can be seen on the nhs internet. A few days later he started to feel ill. He looked up Lyme disease but dismissed it as it was stated it is rare. After two weeks he had a blood test which was positive and he got better with antibiotics.

A few pertinent points here for us aeromodellers. First, it's not that rare. Secondly it can be really nasty if not treated quickly as it attacks the nervous system. I know of another case in a relative that wasn't treated quickly and has left the person with disabilities.

Although it is not a sexually transmitted disease😬 it progresses very like syphilis. Do not be afraid to pressure your nhs initial contact for an immediate blood test and treatment. The antibiotics for it are cheap and simple. They won't affect your GPS budget. Consider this if you are ill within a few days of an insect bite.

https://www.nhs.uk/conditions/lyme-disease/

Jim Paton

PS to Peter Hall's report on 5th Area coupe - Peter Hall

Missing item from Peter's 5th Area coupe report last issue.

Martin Stagg in tenth place writes:
I was able to go to the 5th area meeting on Salisbury plane. Arriving a bit late I joined Alan Brocklehurst & Chris Chapman in 'coupe corner' at the end of the line of cars. The weather was good, hot sunshine and a light breeze. Time to don my state of the art hi tech head protection equipment (a knotted handkerchief) and prepare for the excitement the day would bring. Alan had already done one good (is there any other kind?) max and was preparing for his next flight. I broke off from my preparations and timed him for his second max. I readied my new Coupe and had a test flight. In spite of all the adjustments I had made at home after its last outing it still persisted in circling left under power with an even tighter left turn on the glide. It clearly needed more work. So I decided to fly another model which was on trim. Unfortunately I picked the wrong time to launch and was on the ground again for a poor score (I cannot remember what it was, (nature tends to blot out bad memories!). Discouraged, I had some lunch, then timed Alans remaining flights.

Decided to fly mini vintage. Prepared model, wound up and launched for a very nice (that must be the other type) max. retrieved model and wound up for my second flight. Bad launch had the model stalling all over the sky and down for an attempt. Tried again but had a repeat performance, two attempts so I packed up in disgust.

All in all a pleasant if unsuccessful day. I am not having a very good season. Must try harder!

Martin Stagg

Engine Analysis: Barbini B40 TN - Aeromodeller August 1957

ENGINE ANALYSIS NUMBER 38

UNUSUAL GLOWPLUG ENGINE DESIGN FROM ITALY, USING ROLLER BEARING SHAFT & CON-ROD

BARBINI

B. 40. T.N.

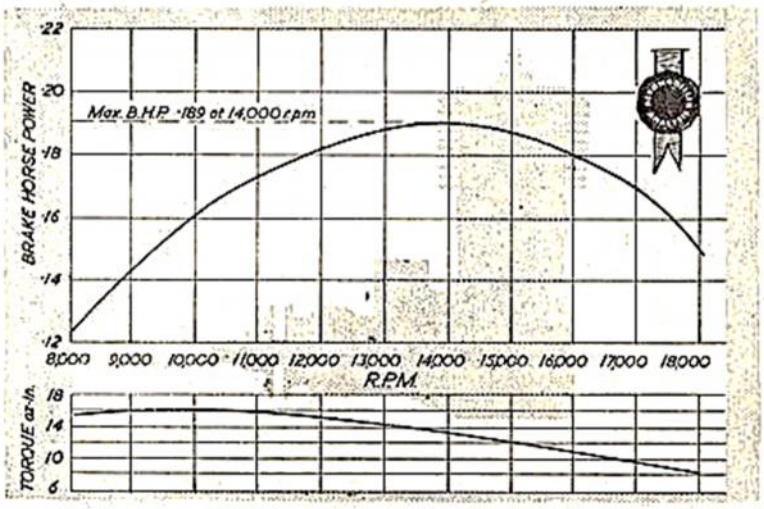
reviewed by R. H. Warring

IN MOST RESPECTS the larger B.40 is similar to the 1 c.c. Barbini diesel (May issue) scaled up. Main point of difference is the use of roller bearings for the crankshaft and the big end.

The power curve peaks appreciably earlier than one would expect for an engine of this class, the effect of piston friction being to flatten the curve out as speed increases. The B.40 has all the attributes of a high speed engine with, like its smaller brother, the highest possible attention paid to interior workmanship and again a rough exterior. The only possible criticism of it as a design is that it is a modified diesel layout (using the same crankcase as the 2.5 c.c. Barbini diesel) with diesel porting not often the best possible arrangement for glow plug running.

Main interest in the B.40 centres around the main bearing and the big end bearing. The front bearing of the crankshaft is a conventional ball bearing, located by a circlip. The rear main bearing is a caged roller assembly, consisting of twenty diminutive needle rollers mounted in a properly fabricated brass cage. These needle rollers run on the hardened shaft and a hardened outer ring pressed into the crankcase casting.

The reason for choosing a roller race here is a little obscure as the radial load is within the rating of standard ball bearings and the best of roller races normally have many times the friction of a good ball race. Certainly, also, it offers no benefits as regards oil sealing. The plain length of the bearing is generously oversize with regard to the shaft diameter (it appears to be a standard bronze inserted bearing as used on the plain bearing crankcase unit, drilled out) and there is appreciable oil leakage from the front end when the engine is running.



SPECIFICATION:

Displacement: 2·5 c.c. (·152 cu. in.)
Bore: ·574 in.
Stroke: ·590 in.
Bore/Stroke ratio: 0·95
Bare Weight: 4¼ ounces
Max. B.H.P.: ·189 at 14,000 r.p.m.
Max. torque: 16 inch-ounces at 9,500 r.p.m.
Power output: ·0725 B.H.P. per c.c.
Power/Weight ratio: ·04 B.H.P. per ounce

Material specification:

Crankcase: Gravity die casting in light alloy
Cylinder: Hardened steel
Piston: Cast iron
Connecting rod: Hardened and tempered steel
Big end bearing: Cageless needle rollers
Main bearings: Ball race (front) and roller race (rear)
Crankshaft: Hardened steel
Propeller drive washer: Aluminium, mounted on split collet

Similar size needle rollers are used for the big end bearing, this assembly being cageless and retained on the crankpin by a thin steel washer and a circlip.

As in the 1 c.c. diesel, the connecting rod is machined from steel, hardened and tempered, with a hollow gudgeon pin retained in the piston by spring wire circlips; the piston is again of cast iron, but the top is castellated to give four angled deflector faces corresponding to the port positions cut in the cylinder. This is a convenient means of altering porting in individual engines.

The cylinder is similar in construction and port arrangement to the 1 c.c. diesel, but with a somewhat greater overlap on the transfer. The transfer ports appear to have been formed in two operations —first a slot cut and then re-worked upwards at an angle by an end cutter with the cylinder rotated. Taper relief at the bottom of the bore is less than normal (the liner had not been honed after grinding), leading to the stiffness previously mentioned, but piston-cylinder fit was otherwise exceptionally good, with a higher compression than is usually found on a glow motor.

The cylinder seats on to a flange on the crankcase casting, that on this particular example having a moderate finish. The cylinder jacket is of dural, sliding over the top of the cylinder and sealing by a copper and brass gasket in the head. Four hold-down screws passing through the cylinder jacket into the crankcase casting then hold the cylinder unit in place. In this instance, the holes are asymmetrical and excessive tightening of these screws was found to cause some distortion of the cylinder. However, no trouble was found with the liner rotating. So it was not necessary to assemble very tight.

Propeller Test Data

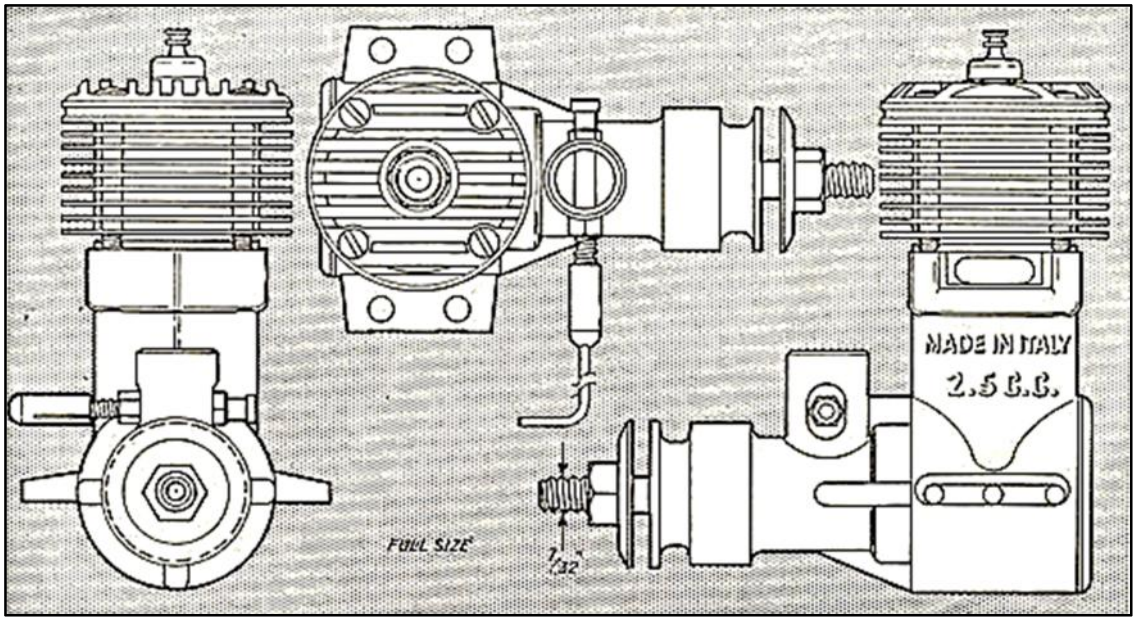
Propeller dia. x pitch	*r.p.m.*
8 x 6 (Stant)	9,600
8 x 4 (Stant)	12,500
8 x 5 (Stant)	11,200
9 x 4 (Stant)	9,400
7 x 6 (Stant)	12,400
7 x 4 (Stant)	13,900
6 x 4 (Stant)	16,400
6 x 4 (Frog Nylon)	18,000
8 x 5 (Frog Nylon)	10,500
6 x 9 (Tiger)	12,900
8 x 3½ (Tiger)	14,000
8 x 4 (Tiger)	13,000
9 x 3 (Tiger)	11,100

Fuel used: Standard 2 : 1 methanol : Castrol M plus 20% Nitromethane.

The crankshaft is a heavy unit (1 ounce), stepping down from 8·5 mm. (·334 in.) diameter to 5 mm. (·1964 in.). The crank web is a full ¼ in. thick, relieved at the crank pin side by two cut-outs drilled through for lubrication passage. The crank pin (4 mm. (·1575 in.) dia.) is unusual in that it is pressed into the crank web after hardening, which operation appeared to have generated a couple of cracks in the top of the web in our first (oversize) test engine.

The B.40 is easy enough to start, after generous priming with the needle valve open a turn or two past the running position. The needle can then be closed down for best running, there being ample time to recover without the engine stopping if the needle is inadvertently closed too much. At the lower speeds, power markedly drops off as the engine warms up and 6,500 r.p.m. is about the lower limit of speed at which consistent running can be maintained. The ability to run consistently and smoothly increases with increasing r.p.m. Propeller tests were continued up to 18,000 r.p.m. (6 x 4 Frog nylon propeller) with hand starting readily achieved in all cases.

Continued overleaf



ENGINE ANALYSIS. Vibration caused by an unbalanced propeller can become a problem above 15,000 r.p.m., requiring trial-and-error positioning of the prop. to achieve satisfactory results. The cylinder gets extremely hot after a short running time and the engine normally runs quite "dirty".

Various fuels are recommended by the manufacturer: a 2 : 1 methanol/castor mixture for running in, increasing to a 3 : 1 proportion for normal running. For "performance" work a 2 : 2 : 1 mixture of methanol, nitromethane and castor is specified.

The makers recommend 40 per cent. nitromethane and the 12·5 per cent. nitrobenzene for a competition fuel. No trouble was experienced with the original glow plug (a pleasant change, this, with foreign plugs), although it did have a tendency to leak unless tightened up really hard against its copper sealing washer.

Summarising, a most interesting design, beautifully engineered internally. The 2·5 c.c. Barbini is, of course, the engine which surprised nearly everyone by placing third in the 1956 World Speed Championships; and speed control line is, of course, the real test to sort out the best from the "indifferent". The engine used by Cellini had been subjected to some revision of the intake and transfer port areas and a lightening of the reciprocating parts, but otherwise was a standard model.

When originally tested, the B.40 was found to be over capacity. The manufacturers have since modified our test example and the capacity now stands at a marginal 2·5 c.c. with no change in performance. Those who own earlier Barbini B.40 engines can have capacity certified by returning their engine to the manufacturers.

De Havilland 'Hornet' - Wikipedia

In the last issue I miss-identified the model that Ivan Taylor was flying at Buckminster as a DH 'Mosquito', whereas, as one Howard Funnell pointed out, it was a DH 'Hornet'. I must confess that I have only a passing interest in full size aircraft and was completely unaware of the 'Hornet' so I've dug up the details.

The **de Havilland DH.103 Hornet**, developed by de Havilland, was a fighter aircraft driven by two piston engines. It further exploited the wooden construction techniques that had been pioneered by the de Havilland Mosquito. Development of the Hornet had started during the Second World War as a private venture. The aircraft was to conduct long range fighter operations in the Pacific Theatre against the Empire of Japan but the war ended before the Hornet reached operational squadron status.

The Hornet entered service with RAF Fighter Command where it equipped several day fighter units and was commonly stationed in the British mainland. It saw combat in the Far East, being used as a strike fighter as part of the British military action taken during the Malayan Emergency. A naval carrier-capable version, the **Sea Hornet**, had been envisaged early on and was procured by the Fleet Air Arm of the Royal Navy.

D.H.103 Hornet
Sea Hornet

Role	Land and naval-based fighter aircraft
National origin	United Kingdom
Manufacturer	de Havilland
First flight	28 July 1944
Introduction	1946
Retired	1956
Primary users	Royal Air Force Royal Navy
Produced	1945 to 1950
Number built	383

In the autumn of 1941, de Havilland found that it had the spare design capacity to work on a new project. At this point, the Mosquito had entered full-rate production and preliminary work on a jet-propelled fighter aircraft, which became the Vampire, was waiting for the production of prototype engines. The company promptly recognised a need for a high-speed, unarmed, night bomber powered by a pair of large Napier Sabre piston engines and a design for such an aircraft was first proposed under the designation *D.H. 101* in October 1941. A design team led by R. E. Bishop with C. T. Wilkins assisting, was assembled with the aim of developing the D.H. 101, which was initially pursued as a private venture.

The Sabre engine was suffering from availability problems at that point and the DH. 101 was soon replaced by a lower-powered design, with the internal designation *D.H. 102*. This proposal was intended to be powered by a pair of Rolls-Royce Griffon or Rolls-Royce Merlin engines but either engine would have meant that the aircraft would be somewhat slower and less attractive than the Mosquito.

By November 1942, de Havilland had elected to shelve the night bomber project and concentrate on producing a long-range fighter, the *D.H. 103*, that would make the maximum possible use of the Merlin engine. The D.H.103 resembled a small Mosquito, with a single seat; it was intended to take on other single-seat fighter aircraft, particularly those operated by Japan, while still being capable of conducting very long range missions to be of use in the Pacific Theatre. The long range requirement led to the fuselage being highly streamlined. An independently developed version of the Merlin engine which possessed a low frontal area was selected for use on the D.H.103.

By the end of 1942, a mock-up of the D.H. 103 had been completed at de Havilland's Hatfield facility and was soon afterwards demonstrated to officials of the Ministry of Aircraft Production. Due to the war, the ministry did not immediately issue permission to construct the D.H.103. In June 1943, the project stopped being a private venture when the Ministry released Specification F.12/43, which had been written around the D.H.103 proposal; soon after, the D.H.103 project received the name Hornet.

It was envisaged that the Hornet could be adapted for naval use and operated from the flight decks of aircraft carriers. Priority was given early on to ensuring that such adaptation could be readily done: measures for ease of control, especially when flown at low speeds, were incorporated and attention paid to providing the pilot with a high level of visibility. The two propellers were driven in opposite directions to improve take-off and landing characteristics and high-drag flaps were integrated to provide for greater power during approaches.

By January 1944, the fuselage shell for the first prototype D.H.103, *RR915*, was under construction on production jigs at Hatfield; *RR915* was rolled out for engine runs on 20 July 1944. On 28 July 1944, only thirteen months after the official sanction to proceed with development, *RR915* conducted its maiden flight, piloted by Geoffrey de Havilland Jr., the company's chief test pilot. Flight tests of *RR915* led to it achieving a recorded speed of 485 mph (780 km/h) in level flight. Within two months, over fifty flight hours were accumulated by *RR915*. The second prototype, *RR919*, was more representative of production aircraft, having provision for a pair of 200-gallon drop tanks and a pair of 1,000 lbs bombs on hard points underneath the wings.
Towards the end of 1944, the assembly line for the Hornet F.1, the initial production model, was being established at Hatfield and orders had already been received for the Royal Air Force (RAF). On 28 February 1945, *PX210*, the first of 60 production F.1 aircraft was delivered to the Aeroplane and Armament Experimental Establishment (A&AEE) at RAF Boscombe Down. On 29 October 1945, a production Hornet F.1, *PX237*, was used for the type's first public appearance at an open day at RAE Farnborough.

Wikipedia

Sculthorpe - John Andrews

Visit to the Anglian Summer Gala, July 30th & 31st

Rachel and I packed our bags and drove the 111 miles across country to Fakenham where we had booked our usual B & B. We had booked for 4 days to make it a bit of a break. Sadly Rachel's badly bruised leg made it a bit of an ordeal but never the less we enjoyed ourselves and being in the company of Ireland's Peter Watt, with whom we ate out each night, it was business as usual.

Day 1: July 30th

Breakfast at 8am, drive out to the airfield, flash the BMFA membership form to the gatekeeper and off onto the airfield. The wind direction was such that the flight-line was not far from the entrance. We parked by Peter and prepared to spectate. Weather was a bit miserable with frequent passing periods of drizzly rain. Not enough to deter the contestants however. Peter started to assemble one of his many models that he had brought and soon decided that it was to be a trimming day as he did not fancy long recoveries in the drizzle and damp grass.

Peter Watt assembles and winds his 'Urchin'

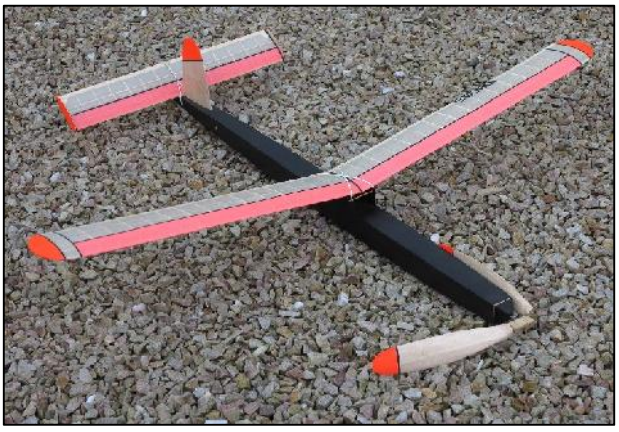
Peter put on a large amount of test turns and launched the model. The 'Urchin' climbed away looking good, and it appeared the model was still on trim from its last outing. However on prop fold the model developed an unacceptable stall and a few subsequent flights were made attempting to eliminate it. The model was sensitive to trim adjustments and it was concluded that perhaps the CG was a little too far back.

Present was a sight for sore eyes in the shape of a lady flier, one Susan Johnson flying a tastefully decorated KK Senator. It is a pity that more ladies do not take up the sport as they stand as much chance as anyone of picking up a prize or two.


Here we see Susan checking on all the paraphernalia and then preparing to install it all in the 'Senator'

Susan was observed dancing up and down with joy when she saw her model climb up into the sky on its first flight. We men know the feeling but are not so demonstrative, more's the pity.

Peter Watt also trimmed his 'Gerald Thomas Wakefield' but I missed it all being asleep in the car at the time, I really wanted to see that model fly.




A couple of pictures of the 'Gerald Thomas Wakefield' that Peter sent to me in 2021

Peter, as he was intending to compete in Mini-vintage next day, decided to check the trim of his 'Senator' and it was a fitting end to the day's flying.

The 'Running Horse' Inn that we intended to eat in that evening was fully booked when we rang, being a Saturday night we had left it too late so that evening we ate in the Indian Restaurant in Fakenham.

Peter feeds in the 'Senator' motor

Whoops!! nearly missed it completely

In the Indian Restaurant Peter and I retire embarrassed behind our menus
whilst Rachel, containing most of a bottle of wine causes the poor waiter more than a little grief.

On the subject of eating, one of the plusses of Sculthorpe is the Café on the main road just outside the venue. We adjourned there around 2pm each day for a cuppa and a lite-bite.

Day 2: July31st

The second day was much the same as the first, but with less rain. The wind was very variable with periods of almost calm and others quite strong. The quiet spells never lasted long enough to complete a flight so a long recovery was always on the cards. Long grass was also a hazard, good at hiding models. Peter needed the assistance of Gordon Warburton and a yagi aerial to recover his second flight. Gordon had been in the wars as he had had a tumble off his electric bike and he had a blood soaked bandage on his arm when I saw him.

Attendance was good but appeared somewhat lower than in the event's heydays. We had a good weekend and are already booked in for next year.

John Andrews

Sculthorpe Results - Michael Marshall

Saturday 30 July 2022								
	BMFA	Club	1	2	3	Total	Fly Off	Pos'n
Combined Rubber								
Phil Ball	57180	Grantham	2.30	2.30	2.30	7.30		1
Peter Woodhouse	679	Morley	1.53	2.30	2.30	6.53		2
Neil Cliff	07067	Biggles	1.22	2.30	2,30	6.22		3
Derek May	56714	Delyn	1.57	2.30	1.20	5.17		4
Guy Coulson	145433	Morley	1.54	2.24		4.18		5
Simon Richardson	135810	Oxford	2.26	1.33		3.59		6
Vintage R/P								
Colin Foster	17203	Morley	2.30	2.30	2.30	7.30		1
Stephen Barnes	51987	Morley	2.30	2.04	2.30	7.04		2
David Norwood	193646	Delyn	2.30	2.30	1.53	6,53		3
Spencer Willis	34982	Croydon	2.30	2.30	1.50	6.50		4
Peter Woodhouse	679	Morley	1.40	2.30	2.30	6.40		5
John Wheeler	224280	Country	2.22	1.16	2.10	5.48		6
Susan Johnson	212096	MH MAC	0.49	1.03	1.16	3.08		7
Classic Glider								
Chris Parry	62625	Biggles	2.30	2.30	2.30	7.30		1
Roger Heap	73338	Biggles	2.30	2.00	1.50	6.20		2
Stephen Barnes	51987	Morley	2.30	0.47	2.30	5.47		3
Ken Bates	51145	Cleemac	1.47	0.45	2.11	4.43		4
Ian Wilkinson	85998	Morley	2.30			2.30		5
Colin Foster	17203	Morley	1.35			1.35		6
Guy Coulson	145433	Morley	1.07			1.07		7
E36								
Colin Foster	17203	Morley	2.00	2.00	2.00	6.00		1
Gordon Warburton	58428	Morley	2.00	2.00	1.51	5.51		2
David Ginns	64835	MH MAC	1.55	1.30	2.00	5.25		3
Gerald Williamson	170419	Peterborough	1.25	2.00	2.00	5.25		3
John Cooper	3432	Biggles	2.00	1.06	2.00	5.06		5
Stephen Philpot	64218	Birmingham	2.00	2.00	0.51	4.51		6
J Partington	9428	Timperley	1.40	2.00	0.42	4.22		7
Peter Gibbons	765977	Peterborough	0.57	1.09		2.06		8
SAM 4 0z								
Tony Rushby	52257	Cleemac	2.30			2,30		
P30								
Brian Lavis	73264	Biggles	2,00	2.00	2.00	6,00	2,41	1
Simon Richardson	135810	Oxford	2.00	2.00	2,00	6.00	2.08	2
Peter Gibbons	76597	Peterborough	1.40	1.36	2,00	5.16		3
Stephen Fielding	67400	Morley	2.00	1.38	1.37	5.15		4
David Norwood	193646	Delyn	2.00	1,42	1.22	5.04		5
Paul Hoey	48541	Impington	1.20	2,00	1,22	4.42		6
David Ginns	84235	MH MAC	1.05	1.35	0.23	3,03		7

Sunday 31 July 2022								
	BMFA	**Club**	**1**	**2**	**3**	**Total**	**Fly Off**	**Pos'n**
Combined Power								
Alan Jack	56873	Birmingham	2.30	2.30	2.30	7.30		1
Combined Electric								
David Ginns	84325	MH MAC	2.30	2.06		4.36		1
Paul Flyn	9010	Grantham	0.50			0.50		2
Combined Glider								
John Carter	50520	Grantham	2,30	2.30	2.30	7.30		1
Andrew Moorhouse	62373	Vikings	2.30	1.54	2.30	6.54		2
Chris Parry	62525	Biggles	2.30	1.53	2.30	6.53		3
Roger Heap	73338	Biggles	1.14	1.57	2.30	5.11		4
Mini Vintage								
David Norwood	193646	Delyn	2.00	2.00	2.00	6.00	0.20	1
Phil Ball	57180	Grantham	2.00	2.00	2.00	6,00		2
Colin Foster	17203	Morley	2.00	!.47	2.00	5.47		3
Peter Watt	108095	Mid Ards	2.00	1.47	2.00	5.47		3
Hugh Stevenson	202328	Impington	1.56	2.00	1.23	5.19		5
Classic Rubber/Power								
Phil Ball	57180	Grantham	2.30	2.30	2.30	7.30		1
Derek May	56714	Delyn	0.53			0.53		2
C02								
Luke Guymour	217395	Peterborough	2.00	2.00		4.00		1
Stephen Philpot	64218	Birmingham	2.00			2.00		2
Vintage Glider								
Roger Heap	73338	Biggles	2.30	2.05	2.03	6.38		1
SAM 80z Wakefield								
Tony Rushby	52257	Cleemac	1.41			1.41		1

Michael Marshall

Editors comment:
Many thanks to Michael Marshall for CD'ing the event,
it is one of the highlights of the contest calendar, long may it continue.

Aeromodellers Departed: John Knight & Bob Cheesley

John Knight 1930---2022

Picture from August 1950 Model Aircraft Cover

John Knight who, as a very young man flew in the British Wakefield Team about 1950, has died. John and his father H J (Pop) Knight were keen members of the Dartford Club in the 1950s.

John worked for Vickers and British Airways and he was involved with wind tunnels and acoustics etc..

Following retirement to Cullompton Devon about thirty years ago, he built a fleet of very carefully crafted vintage and open rubber models and joined Bristol and West MAC. Those were the days of Woodbury, Merryfield, Middle Wallop, and of course The Nationals at Barkston. To give just one example of his many successes he had a good weekend at the 2007 SAM Eurochamps where he won 8oz Wakefield with one of his original designs , mini vintage with a Senator and the very tricky Earl Stahl low wing scale with a Magister.

The Celebration of his life at Uffculme Church emphasised his quiet thoughtful way of getting the job done, his knowledge and listening skills, his family values and Christian Faith, and his overwhelming enthusiasm for his lifetime interest in free flight aeromodelling. One of his models, an immaculate rubber powered Puss Moth decorated the coffin.

R.I.P.

Bob Cheesley

Bob Cheesley passed away on 3rd August after a long illness. He will be remembered on the flying field for his wonderful sense of humour and comradeship. Bob mainly flew F1B Wakefield and always showed great innovation especially in the early days of composite materials. He was a member of 1997 FIB team at the World Championships in Czechoslovakia and was assistant or team manager on various other occasions. Although he retired from flying after a foot injury, he kept in touch with his flying friends and often helped, gave advise or just had a chat. Bobs' other love was engineering and his workshop, where he built amongst other things stationary steam engines. The precision was amazing. He will be sorely missed.

R.I.P.

1952 Nationals

Thanks to the good offices of Lieut. Commander Sproule, the Royal Navy have offered the use of Gosport Aerodrome as the venue of the 1952 Nationals, an offer which the S.M.A.E. Council has been happy to accept. As this is the first time this event has been staged on a R.N. airfield we need hardly urge the necessity for aeromodellers to leave it "shipshape and Bristol fashion". For careful readers who have not yet acquired their S.M.A.E. Competition Programme we would mention that the date is again the August Bank Holiday week-end, August 3rd/4th.

Godalming M.A.C. have offered to run a Team Race on this occasion, and in addition to offer a suitable trophy for the winning team, which will provide a growing section of the model community with an event of their own besides giving Southerners an opportunity to enjoy a thrilling spectacle featuring some of the best model pilots in the country.

The Indoor Nationals, scheduled for August 17th will be held later in the year. Date and venue will be announced shortly. An opinion has been expressed that they might with advantage be held in London this year, and thereafter on a rota basis, on a similar system to the main Nationals contests.

2nd World Speed Championships and 4th Championship of Europe

The blue riband of Control Line fliers will again take place this year at Knokke-sur-Mer, that Belgian watering place which, with its associate towns of Zoute and Albert Plage, has done so much to further this branch of the hobby.

In order to provide better facilities for teams and their friends to be housed in the same or adjoining hotels, the date has been advanced to the first week-end in July, exact dates being 4th to 8th of the month. Continental holiday-makers traditionally start their "high season" on July 14th, and this slightly earlier date avoids both excessive crowding and the higher holiday tariff.

The team will, as usual, be the guests of the organisers, who once again are offering special terms to "supporters" who fancy a pleasant and sporting week-end in Belgium. Terms have not yet been finalised, but will be between 400/500 frs. Belgian for the period of the contest, that is about £3; add about the same for pocket money and the fare from London to bring the total to about £15, or a little less if travelling third—no great hardship.

A special feature this year is the introduction of a team racing event. Rules are a simpler version of our own with the addition of a rule that filling must be done from a 30 c.c. graduated bottle. However, the organisers assure us that if tanks are processed there will be no objection to using the larger pressure fillers common to British events.

Translations of the draft rules are available from our offices, and will be sent to interested readers on receipt of a stamped addressed envelope marked "Knokke Rules".

There is also the possibility that a British team will be competing at the Namur Control Line Meeting, scheduled for the same week-end as the Knokke eliminators. If, as appears, the team is invited not only as guests of the organisers, but also with a travelling grant, there will be no ifs or buts, a team will go, and the eliminators be set back to May 15th, the same team representing us at the two Belgian meetings. We hope this can be fixed, as we understand a veritable model stadium has been built at Namur, and this will be its inaugural meeting.

Going Down!

The advent of really reliable small diesels of 0·5 c.c. capacity, four well-known makes being already on the British market or imminently available, in the shape of Frog, E.D., Elfin and Dart, invites some thoughts on size through the years in model aircraft engines.

It was in 1914 that Stanger first established petrol-driven model records with a V-twin engine weighing 2¾ lbs. and a four-cylinder job weighing 5¼ lbs., according to Col. Bowden's book *Petrol-Engined Model Aeroplanes*. This record stood until Bowden's *Kanga* beat it with a 30 c.c. engine developed by E. T. Westbury from an American two-stroke taken from a speed boat. Other interesting engines of the intervening period included Westbury's Atom I of 52 c.c., his Atom

Minor of 14·2 c.c., and Stalham s flat twin 30 c.c. design. Then, in 1935, came the famous Brown Junior of only 10 c.c. from America, which heralded the downward slide of engine sizes. By 1936, 6 c.c. engines were available, and even 2·4 c.c. had been attempted commercially. Enthusiasts in their workshops were toying with even smaller models, and we note our own Laurence H. Sparey published a 1·75 c.c. design about this time.

All these designs were handicapped by the difficulty of scaling down the weight of the necessary electrics that provided the essential spark, until Vantini's experiments in Padua at the beginning of the war with platinum coils, which eventually led to the glowplug, and Klemenz of Dyno developed the hot-bulb or semi-diesel with more immediately successful results.

That day to some extent sounded the knell of the larger engine, until today the 10 c.c. enjoys a vogue only in its class for speed control line models and to a very limited degree for the larger radio control planes, though even here smaller and smaller radio control seems the trend.

Looking through the appendices of *Model Diesels* published in 1946, the first edition lists only Buchmann's 0·6 c.c., Allouchery's 0·7 (his ·16 was experimental only), Maraget's 0·8 and Micron's 0·8 c.c.—the last three of which enjoyed considerable popularity, and led to such miniatures as Sparey's 0·8 c.c., its commercial equivalent, the Amco 0·87 (now incidentally on the market as a going concern to any enterprising enthusiast !), the little Clan 0·9 c.c., which never established itself, the tiny Kalper 0·32 c.c. and the Kemp 0·2 c.c. which had some vogue as a mechanical " smallest ever ".

Now in this first year of the new Elizabethan age we have four designs of 0·5 c.c. that can be relied upon to function even in the hands of the comparatively unskilled, powering models as light as Wakefields—a development that few if any of those pioneers can have envisaged, as they swung their 22-in. props. to bring to life their weighty prototypes. But let us spare a thought now and then for our old timers—many of whom are still with us flying modern descendants of their early prototypes—and say a quiet thank you for their sterling efforts !

Better than Ever

The Northern Area have some new ideas this year to make the " Yorkshire Evening News " Second National Model Flying Festival the most spectacular event of the year.

From the modeller's point of view it will surpass last year's record breaking event. There will be nine classes, and besides the Yorkshire Evening News Perpetual Trophies, 8 personal Trophies will be awarded to winners for keeps. Thirty other prizes will be available, all of a useful nature, as last year's winners will witness.

Don't miss this " American size meet "—make a note of the date (September 7th at Sherburn in Elmet, near Leeds) and start arranging your transport now. Further details will be published in due course.

Keep off the Grass

We reprint below a warning that has been issued by the S.M.A.E. that should be regarded as meaning exactly what it says. Readers are reminded that strict adherence to these instructions is essential if that goodwill and tolerance that has made so many fine flying grounds available is to continue.

WARNING

All model fliers are warned against the grave consequences which will be incurred if models are recovered from private property without permission first being obtained from the owners.

Furthermore, even when permission has been obtained, the greatest care must be exercised so that there is no damage to crops or property. The Society will take strict and immediate action against those who disregard this warning.

Model fliers are reminded that they have no right to trespass on private property to retrieve their models.

Issued by The Society of Model Aeronautical Engineers Limited,
Londonderry House, Park Lane, London, W.1.

Many fliers living in urban districts may have some difficulty in recognising growing crops, and to them we would give the further advice to avoid *anything* in a field that looks as if it had been planted for a purpose—that green pasture-like field may well be young corn ! And the damage done by even a *careful* man recovering one model may exceed its value several times over.

The Stag at Eve . . .

. . . had drunk his fill down at the " Crooked Billet ", Penge, where we had the pleasure of imbibing at the annual Zombies Stag Party. In between pints of mild and bitter we were entertained by aeromodelling's Rabelais Geoff Moss (appearing by kind permission of Northern Heights) and also the trio below, featuring from left to right, Frank Dobson, Unknown Guest and Sam Mayo.

Late Taste of Colerne - Ken Brown

Editor: I received the following pictures, taken by Ken, of the airfield and prize winners at the Cagnarata event at RAF Colerne on Sunday July 24th. The event itself was blown away by high wind strength and only 6 plucky fliers entered.

The empty windswept runway at RAF Colerne

The toilet tent bravely resisting the efforts of the wind to blow it away. Only the Control Tower stood firm

Our Secretary Roger addresses the few hardy contestants prior to the Prize Presentation

The winner of the event Dave Hanks

Dave Hanks in fact took the first three places using an E30 model, a High Start Glider and a Mini Vintage Senator.
Ben Hobbs damaged his coupe but undeterred re-entered and made a couple of flights with a catapult launched glider

Ben Hobbs

Nick Peppiatt

Ken Brown/Editor

Odiham, Southern Area Gala - Chris Redrup

RAF Odiham 6th August 2022

On Sunday the 6th August we were back at RAF Odiham for the 73rd Southern Area Gala, after a break of two years during Covid. Thanks to a lot of hard work by Peter Carter and the willing cooperation of the Station Commander and his staff, we were fortunate to have this superb airfield all to ourselves on a day when the weather gods smiled on us. The two serving officers who gave up their weekend day to look after us had even provided tea, coffee and biscuits, plus an air conditioned room to use if the weather got too much for us!

Although the wind was only 5 to 8mph NNE, concerns about boomers meant the max was set at two minutes for all the classes. In the event, this worked well, with most flights ending only half way across the available area and only one model landing outside the boundary, which was easily retrieved.
Despite the sunny weather or maybe because of it, maxes were relatively rare so there were not any fly offs, although Nick Peppiatt bucked the trend by maxing out in both of the classes he flew.

38 people attended, being a mix of contest fliers, sports fliers and even a few spectators. One gentleman was an ex RAFMAA member who flew models in Aden in the 1950's and had come along to see how things had changed. I suspect that much of what he saw was familiar, particularly the models but no doubt the numbers competing were fewer than in the past.
All in all, an excellent day's flying with everyone saying they had thoroughly enjoyed themselves and would happily attend again if possible.

Amazingly in these times of sites being denied to us, Odiham are actually keen for us to hold the event again next year. The only threat to it will be a lack of entries. It takes a great deal of organizing and we can't expect the RAF to make this site available to us for a small number of fliers. This year's entry is really the minimum for it to go ahead so if you didn't go or haven't been before, please consider attending next year.
Of course, we can't guarantee the weather but with a flat airfield, toilets on site and maybe even tea, coffee and biscuits provided, why would you not want to come?

Results

F1G

Alan Brocklehurst	5.50
Ray Elliott	5.29
Roy Vaughn	5.23
Don Thompson	4.19
Ben Hobbs	3.09
Peter Hall	2.46

Mini Vintage

Nick Peppiatt	6.00
Ken Taylor	5.50
Dave Etherton	5.00
John Thatcher	4.07

Vintage /Classic Glider

Dave Cox	4.00
John Hook	3.47
Dave Etherton	2.32
Ken Taylor	0.37

Vintage/ Classic HLG/ CLG

Ted Horsey	5.10
Ken Taylor	3.48
Bob Taylor	1.41

4oz/8oz Wakefield

Nick Peppiatt	6.00
Bob Taylor	0.25

E36

Chris Redrup	6.00

Odiham Picture Parade

Awaiting Peter Hall's launch: clearly the event of the day.

Dave Etherton launching Dave Cox's Vintage glider prior to its flight off the field.

Don Thompson gets his F1G away.

Chris Redrup

Southern Coupe Lg.Rd.7 Odiham - Peter Hall

Seventh Round Southern Coupe League
August 6th 2022, RAF Odiham,

Thanks to Peter Carter and the R.A.F. chaps we celebrated our return to Odiham. Attendance was about double that of the average event but many were of the hedonistic tendency and chose sport flying, picnics and conversation rather than the rigours of competition. Rigour is perhaps too strong because only three flights were required for the Coupe event and retrieves were made easy by the flat going and the light breeze. Six flew but no-one maxed out. Read on and see why.

Alan Brocklehurst in first place writes -
It is always nice to fly on a flat airfield in warm sunny weather with just a gentle breeze. However, the high-pressure, clear blue sky conditions made it tricky to find the small, strong thermals that were plentiful throughout the day (and were surrounded by sink). I think my first flight must have started to one side of a thermal as the climb seemed rather soggy but then as the model changed from its right climb to circling left on the glide it encountered rising air and gained sufficient height for a max. My second flight wasn't quite so lucky and although it initially climbed away well, raising my hopes briefly, it soon became obvious that the model was flying in poor air and it landed 10 seconds short. My third flight was almost a carbon-copy of the first, albeit with the addition of a mild Coupe-swoop, just to confuse me, followed by an hesitant climb, after which it glided nicely in helpful air gaining height on every turn until it D/T'd down for a max. Fortunately, the flights didn't go very far and were all easy to retrieve, which left time to picnic and take a few photographs. Other competitors also dropped time in the tricky conditions which maintained the excitement until the end without the need for a fly-off.

Ray Elliot in second place reports -
I didn't fly E36 because the Eureka was the only one I have that is (was!) trimmed and I broke it at the last area meeting. It did a wing over and went in vertically. Although I have repaired it, on Friday I found a problem with the speed controller and thought sod it I'll fly F1G instead. Chris was the only one to fly E36 and he maxed out.
As regards F1G, as it was relatively calm I elected to fly my large'ish Mylar covered model which has a new (but old) fuselage. A short check flight suggested it was somewhere near trim. First comp flight it managed to creep into good air after a less than impressive initial climb. It did 1.58. Don thought it had D/T'd early but it was low down anyway. Second flight was a comfortable max. Third

flight I launched with Roy who maxed comfortably whilst my model came down quite quickly on the glide for a flight of 1.31.

Roy Vaughn in third place laments -
Beautiful day, warm welcome from the RAF and a reasonable turnout, what could go wrong? After two comps where my new long model let me down in the first round, I tried yet again with the usual result but for yet another reason. It's going back in the box until I've done some serious mods and some serious trimming. I reverted to an old reliable wing-wiggler-only model and managed two easy maxes to finish the day. There's always next time.

Don Thompson in fourth place writes
A lovely warm day, which deceived almost everyone with tricky conditions. I started off by having my C20 wing fracture again while sitting in the stooge; it is definitely an ex-wing now. My first 2 flights were downed by sink, the 3rd went through areas of lift and areas of sink, but maxed. It seemed that 3 flights are more challenging than 5, no room for error.
No fullsize interruptions this year, we must try to keep Odiham on the calendar.

Peter Hall in sixth place admits -
I thought I wasn't bad at picking air. Hot and calm, wait for the blow, windy and overcast, wait for the next but one or two lulls and dither. But Saturday at Odiham like at most of this summer's events did not offer the familiar patterns. On a sunny day you expect complicated air in the morning but this was neurotic. Waiting for ages until it stopped jittering about was indicated, but. My first two flights with my systems Coupe 19 were erratic and in poor air. I discovered that the pylon had split and the wings were wiggling. My third with Coupe 20L - very high aspect ratio model was chucked flat, landed hard and broke a wing root so I retired. I've been telling myself for ten years that you can't consistently do V.I.T. without instant or delayed prop release but I haven't listened. I'm going to lock down my coupes. Probably.

Results				
	Entrant	**Club**	**Score**	**Time**
1	A.Brocklehurst	B&W	12	5.50
2	R.Elliott	Croydon	9	5.29
3	R.Vaughn	Crookham	8	5.23
4	D.Thomson	Croydon	7	4.19
5	B.Hobbs	Oxford	6	3.09
6	P.Hall	Crookham	5	2.46

Alan Brocklehurst and Gavin Manion are neck and neck in the league table with three events to go The next one is the Southern Gala on Salisbury Plain, August 21st. which is looking dry but cooler and breezier.

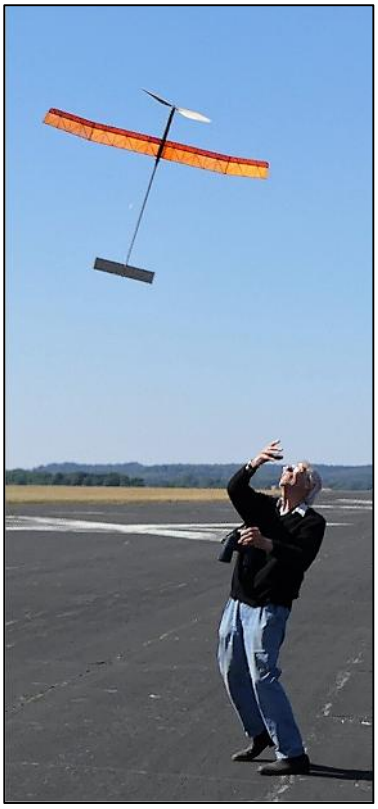
Peter Hall

Southern Coupe League Standings Rd.7 - Roy Vaughan

	Entrant	Club	Coupe De Brum	Second Area	London Area	Nationals	Fifth Area	Cagnarata	Odiham	Southern Gala	Crookham Gala	Coupe Europa	Total
1	G. Manion	Birmingham		12	12	3	8						35
=	A. Brocklehurst	B&W		8	8		7		12				35
3	R. Vaughn	Crookham		5	9		5		8				27
4	D. Thomson	Croydon		7	1	4	4		7				23
5	I. Davitt					8	12						20
6	D. Jiricny	Birmingham	6	2	4	7							19
7	B. Dennis	Oxford	3	9		6							18
8	C. Chapman	B&W		5	6		6						17
9	R. Fryer	Oxford			5		9						14
10	M. Marshall	Impington	5	3		5							13
11	C. Foster	Morley	12										12
=	S. Willis	Croydon				12							12
13	P. Woodhouse	Morley	4	7									11
=	R. Elliott	Croydon	2						9				11
15	C. Redrup	Crookham	9	1									10
=	A. Crisp	Oxford	7		3								10
=	A. Moorhouse	Vikings	1			9							10
18	B. Hobbs	Oxford					3		6				9
19	D. Norwood		8										8
20	P. Hall	Crookham					2		5				7
21	B. Silcocks	B&W			2								2
=	T. Winter					2							2
23	M. Stagg	B&W					1						1
24	S. Fielding	Morley											0
=	B. Taylor	E.Grinstead											0
=	K. Taylor	E.Grinstead											0
=	K. Best	Birmingham											0
=	P. Ball	Grantham											0
=	W. Butler	Crookham											0

Roy Vaughan

Random Pictures from Odiham - Alan Brocklehurst



Alan Brocklehurst

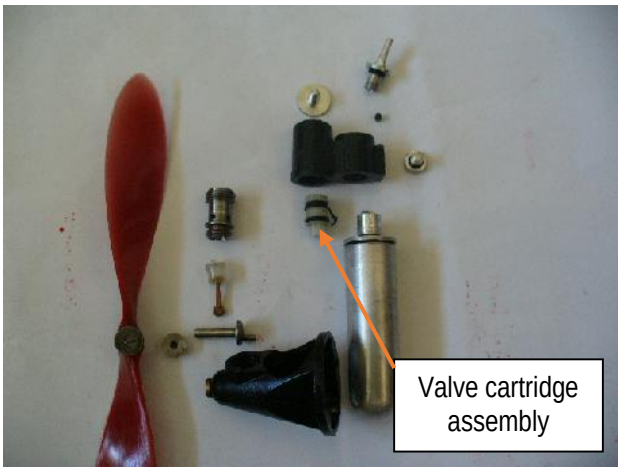
Indoor isn't for everyone 56 - Nick Peppiatt

As a result of some welcome correspondence and feedback this episode contains some more details on the intricacies and subtleties of variants of the Powermax Shark CO_2 motors.

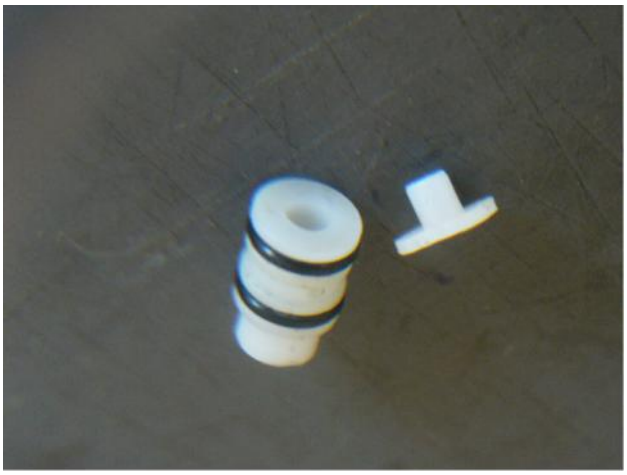
Humbrol mach 2

Shortly after I had written my last article on CO_2 motors (IIFE 54), but before it was published in the July NC, OEE received and forwarded to me a request for the identification of this motor from Joe Northrop. It is clearly another example of a Humbrol mach 2, and it was also another non-runner.

Joe Northrop's motor (JN photo).



Humbrol mach 2 component parts (GM photo).



Valve cartridge assembly with plug cap removed (GM photo).

Valve cartridge assembly with cap in place (GM photo).

I handed the example from Lindsey Smith's estate over to Gerard Moore and he soon was able to unravel its mysteries. The novel feature here is that the ball valve seat assembly position can be adjusted relative to the cylinder bore with the screw at the top of the cylinder head to control the lift of the ball and, thus, the speed of the motor. This avoids the problems of twisting the feed pipe as the cylinder is screwed in or out. Indeed, this motor has no vulnerable feed pipes. It is also a very different approach to this problem compared with the eccentric crank-shaft bearing used on the Telco. It might also offer a practical means of throttling for R/C use by attaching an arm to the throttle screw and linking this to a servo.

The tank on Lindsey's motor did not appear to fill when I tried it.

Gerard reported back as follows: -

'I have managed to disassemble and fix the filler valve without any trouble. A test fill revealed a leak from the speed control knob. It did manage a few seconds of running though. After removing the poppet valve and replacing the two faulty O-rings I thought it would be pretty

much there. But no, the next test promptly blew out the safety valve stripping the plastic thread in the process.
I think that safety valve is why this motor was not much of a success, a little like the Telco Turbo tanks, ok when new but asking an awful lot of a little bit of moulded plastic. I'll have to think if anything in the way of a repair is possible, without weakening the moulding unduly or having the same type of failure.'
A day later I received the following: -
'I'm pleased to say that I have had some success.
The safety valve has been replaced with another incorporating a finer thread and an additional O-ring. This fitted into the existing hole without having to enlarge it. There is a tiny leak initially when filled with a liquid charge but it is of little consequence and shows that the tank will vent if required.
Having done this the next test revealed that there was still a leak from the speed control knob. Closer examination of the poppet valve cartridge showed that its cap was just pushed in without any sign of a seal. I suspect it was once welded or glued in.
Knowing of the futility of trying to glue plastic together that can withstand gas pressure I have replace the cap with a screwed in aluminium part incorporating an O-ring for sealing.
The bonus of this is that now the valve seat and the ball can be cleaned.
The photos show the poppet valve cartridge and its cap in its original form. When running, the speed control knob bears against the cap and the whole cartridge moves up and down it housing to regulate the speed.
I have retained the piston although it would run better with a new one.'
Gerard also commented:-
'All Humbrol motors were let down by poor pistons. They are soft and it only takes a bit too much throttle to damage the sealing lip as they pass the razor sharp exhaust ports. I have also realised that the mach 2 has four exhaust ports as opposed to the Shark that has only two. They look smaller in diameter and would have the effect of reducing the velocity of the exhaust stream and hence less damage to the piston lip seal. A subtle but nice attention to detail.'
There is a thread about this motor on Hip Pocket Aeronautics

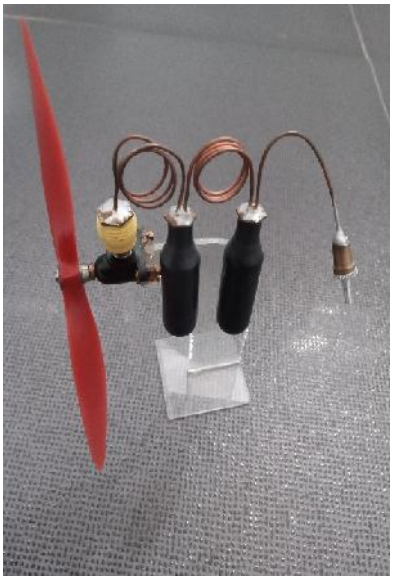
www.hippocketaeronautics.com/hpa_forum/index.php?topic=12872.0

The Humbrol mach 2 is a motor with interesting and worthy features. However, it was clearly not a commercial success. I was only vaguely aware of it until I encountered Lindsey's example. There is one known plan showing this motor – the Humbrol Kompetitor powered glider of 34" wingspan, which shows the installation of both the PMS1 and mach 2 motors. The plan from this kit is available on Outerzone.
Many thanks are due to Gerard – through his efforts we now have a rare working example of the Humbrol mach 2 motor.

More on the Shark

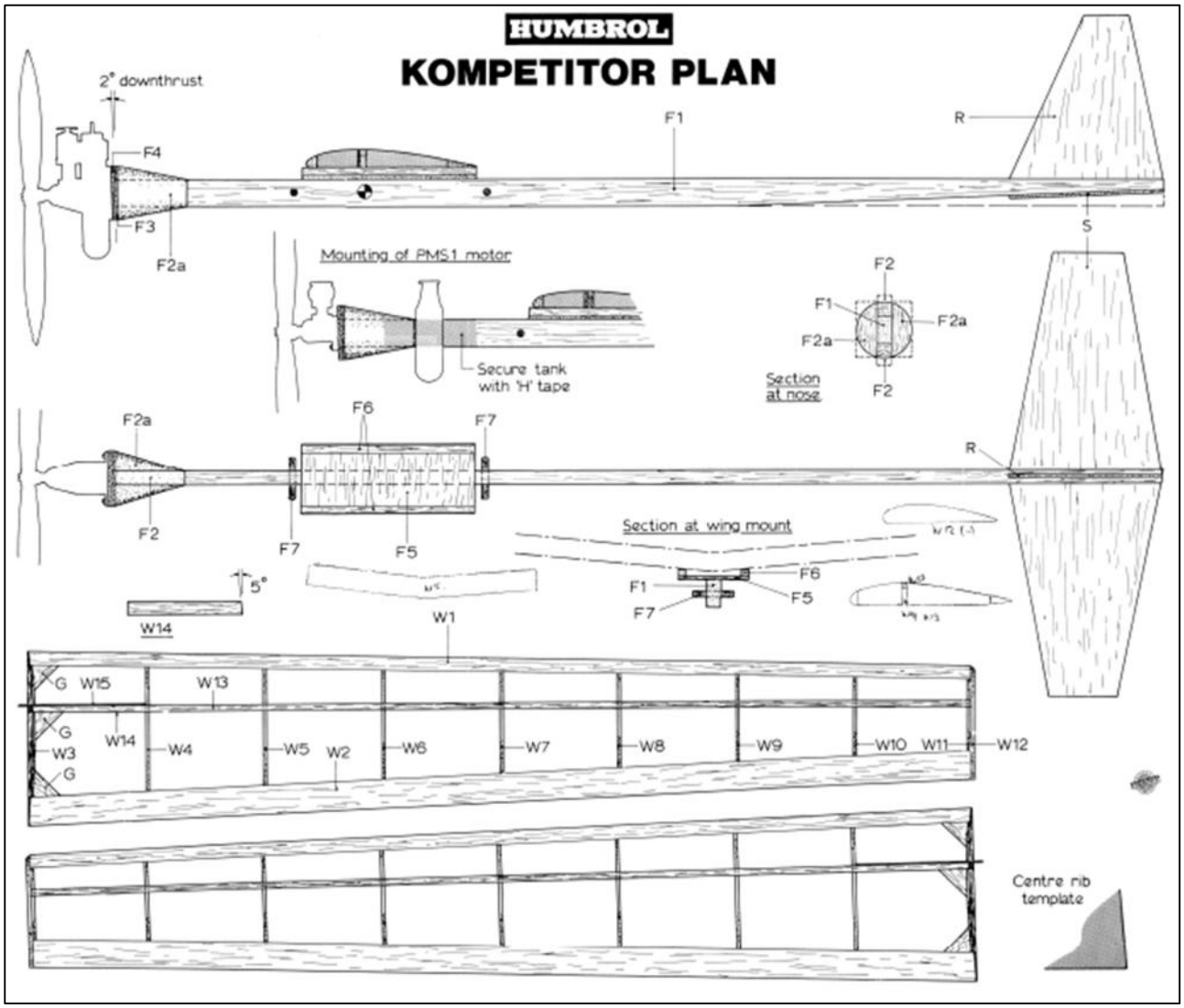
In response to my query two months ago about the colour of Shark cylinder fins, Mike Watters confirmed that in his experience Sharks with the tapered metal-to-metal pipe joint had blue cylinder fins (PMS2 and PMS5), but has examples of different colours, other than red, for motors with soldered pipe fittings – see photos above. I had always associated Micro-Mold with the later production of the Telco motor and had not realised that they also marketed what looks like a badge engineered Shark PMS1 with blue cylinder fins and blue anodised tank as the Gnat. He also has an example of a PMS4 with yellow fins.
Gerard Moore offered an interesting thought on the development of the tapered metal-to-metal pipe fitting in that it would make the assembly of the twin cylinder PMS5 motors easier, in that the pipes could be soldered to the tank fitting before attaching to the motor after the cylinders had been screwed into position onto the crankcase.

Micro-Mold Gnat, soldered pipe, but blue fins and light blue anodised tank (MW photo).



PMS4 with yellow fins (MW photo).

Are there any more Shark variants out there?



Nick Peppiatt

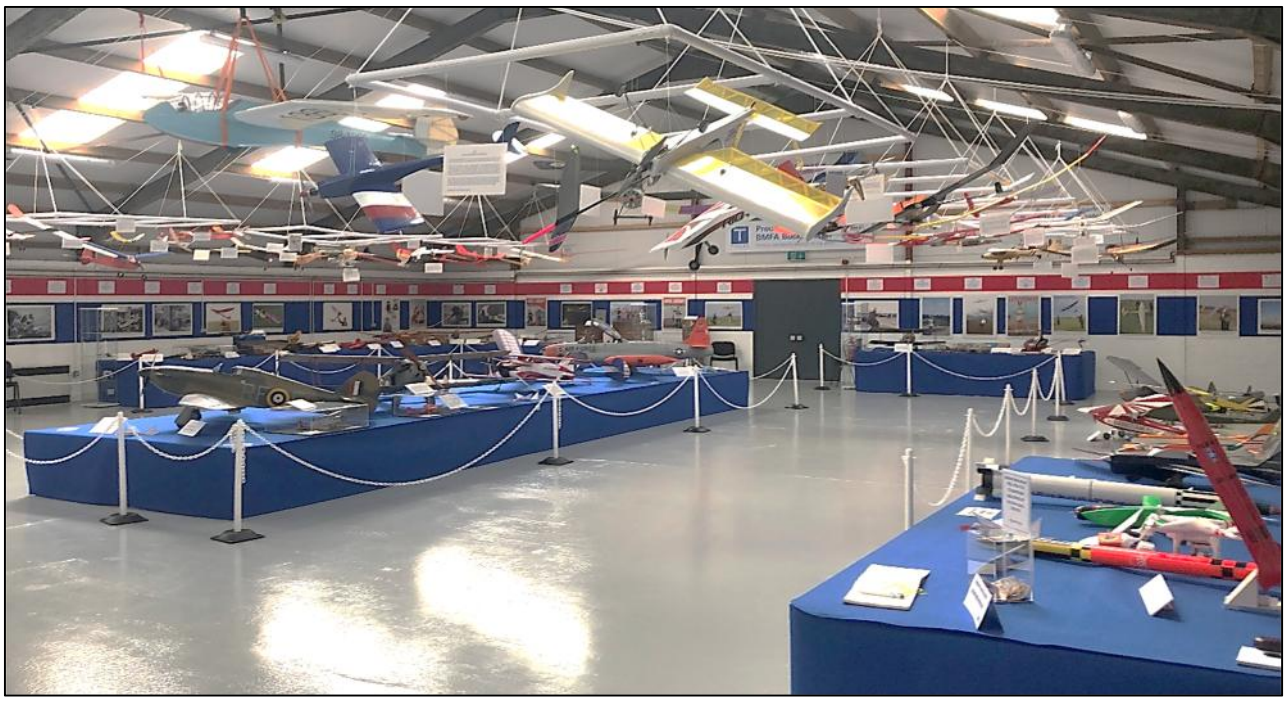
BMFA Exhibition Report Pt.1 - Roger Newman

BMFA Centenary Exhibition

As most of you will know, the BMFA has put on an exhibition at Buckminster to celebrate a centenary of model flying in the UK. Your esteemed Editor has previously reported on the opening day in some detail, so this note follows on with more about the actual exhibition & exhibits.

To open, it is fair to say that the project has been driven primarily by Martin Dilly & Jim Wright, ably assisted by a small team of willing volunteers (who incidentally have a done a tremendous amount of work at Buckminster – all over the site). They have achieved a remarkable result with a display of models, the like of which will never be seen again – hats off to all who contributed.

What of the exhibition. It is being held in what was the old indoor equestrian building, which when I last saw it in 2019 (with your Chairman) was in quite a state. It has been transformed into a light, bright & very acceptable venue, with access via roller doors (if needed) or via a side door. There are facilities for visitors to make hot drinks,with ample chairs dotted round for the occasional rest. The exhibits have been arranged in a time line sequence round the periphery of the space with a central isle for further models, which are displayed both on tables all round the room & suspended from racks held above the tables.



View on entry to hall

The Time Line begins

through the ’40s

through the ’50s

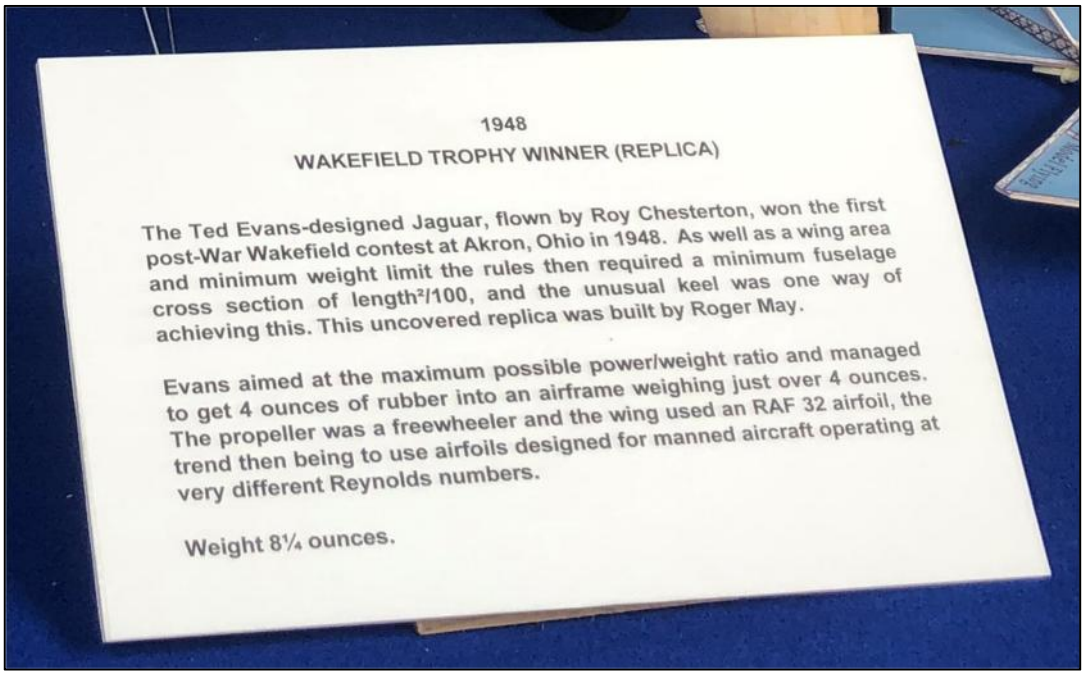
into the ’60s & ’70s

into the ’80s

to more recent times

& the central isle

The models & exhibits each have a placard card, describing the model or exhibit in some detail, thus providing visitors with adequate information on each item. The time line progressed from early days of compressed air & rubber power, through development stages of the hobby over the years to very modern day & highly complex technologically advanced models, showing the different aspects of aeromodelling ranging across free flight, control line & radio control.



1948

WAKEFIELD TROPHY WINNER (REPLICA)

The Ted Evans-designed Jaguar, flown by Roy Chesterton, won the first post-War Wakefield contest at Akron, Ohio in 1948. As well as a wing area and minimum weight limit the rules then required a minimum fuselage cross section of length²/100, and the unusual keel was one way of achieving this. This uncovered replica was built by Roger May.

Evans aimed at the maximum possible power/weight ratio and managed to get 4 ounces of rubber into an airframe weighing just over 4 ounces. The propeller was a freewheeler and the wing used an RAF 32 airfoil, the trend then being to use airfoils designed for manned aircraft operating at very different Reynolds numbers.

Weight 8¼ ounces.

Typical Placard

What of individual models. There are far too many to give a description of each so in pt.2 will be but a few that either caught my eye or evoked memories of the past for me.

(to be continued) Roger Newman

The DBHLibrary (Magazines) - Roy Tiller

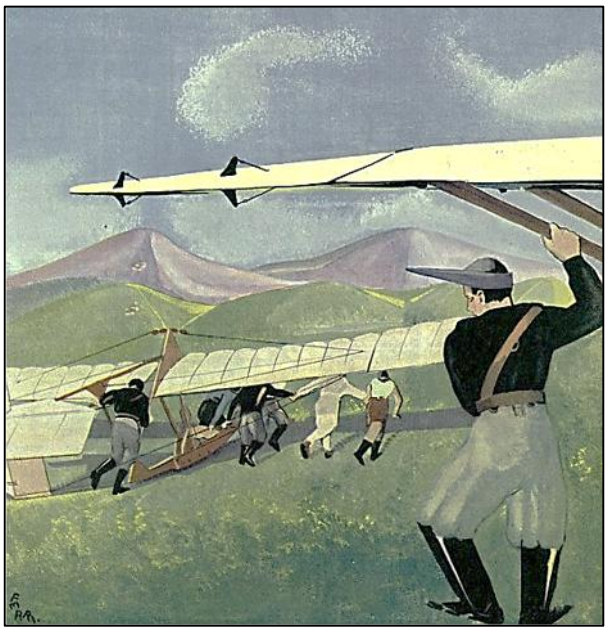
Report No. 139 Our earliest magazines, continued.

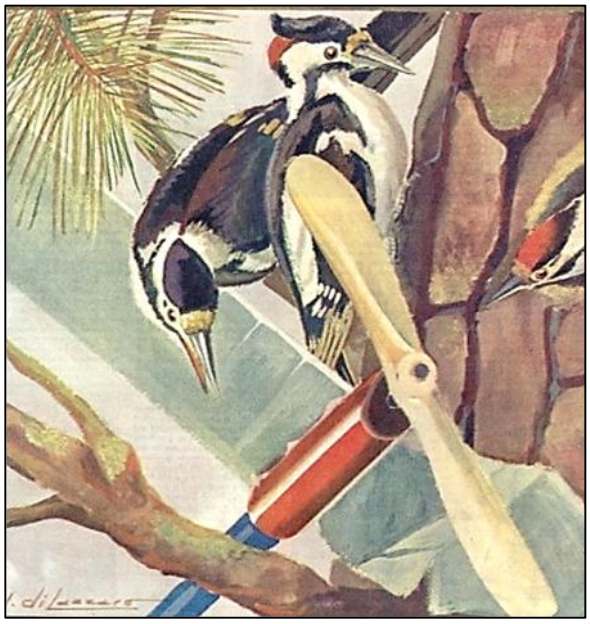
This month, as has been promised for the last couple of months, we come to Italy. The earliest magazines in the library from Italy are in the form of a full run of "L'Aquilone" from 1931 to 1945, for which we must thank Eraldo Padovano who has made these available in digital form.

Reference to these magazines has been made in earlier reports published in New Clarion issues of December 2015 and March 2016, so please excuse the repetition of the cover of the first issue. The title translates as "The Kite" and the stated aim is as an "Aeronautical Information Journal for the Young of Italy".

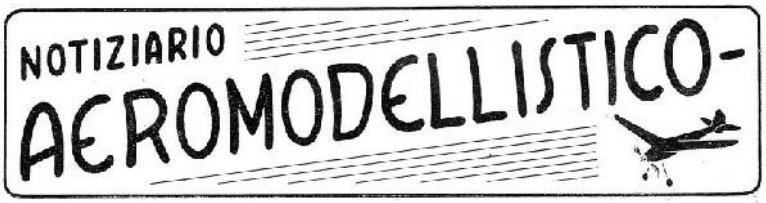
Italy was very active in long range over water flights at this time and the cover picture shows a flight of several flying boats over a rather turbulent stretch of water. These efforts led to the historic 1933 flight of a formation of 24 Savoi Machetti S55 twin hulled flying boats from Italy to Chicago U.S.A. These magazines were, as stated, aeronautical rather than aeromodelling but did have some aeromodelling content. Model building articles were spread over several issues which meant that plans tended to appear in many parts, with detail further limited by the rather small, about A5, size of the pages.

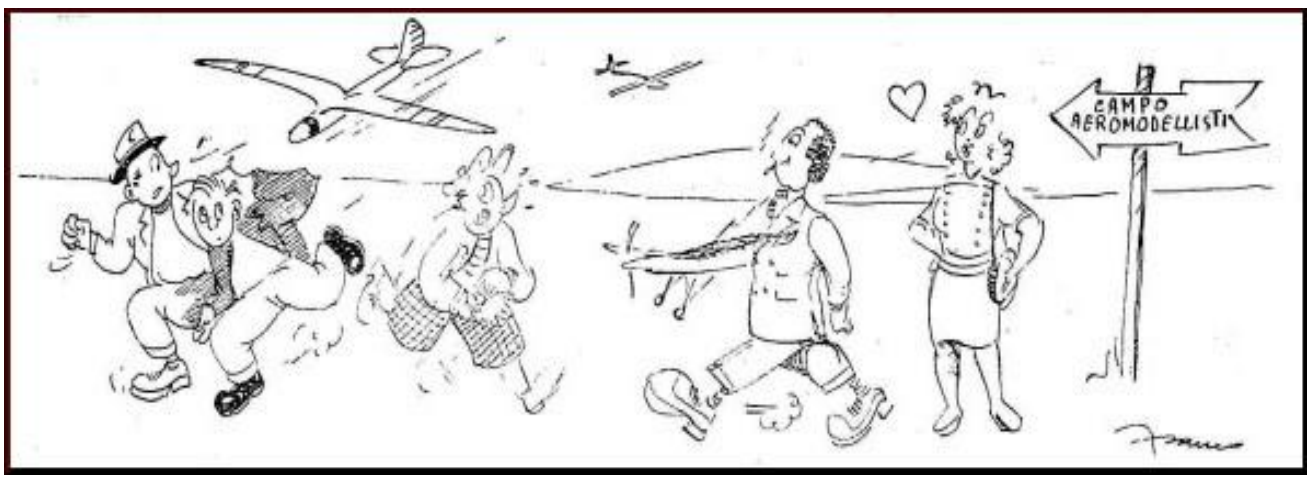
Many of the covers depicted the sort of difficulties, antics and imagined situations that tested early pilots, both young and old. Below are a few examples to hopefully raise a smile.

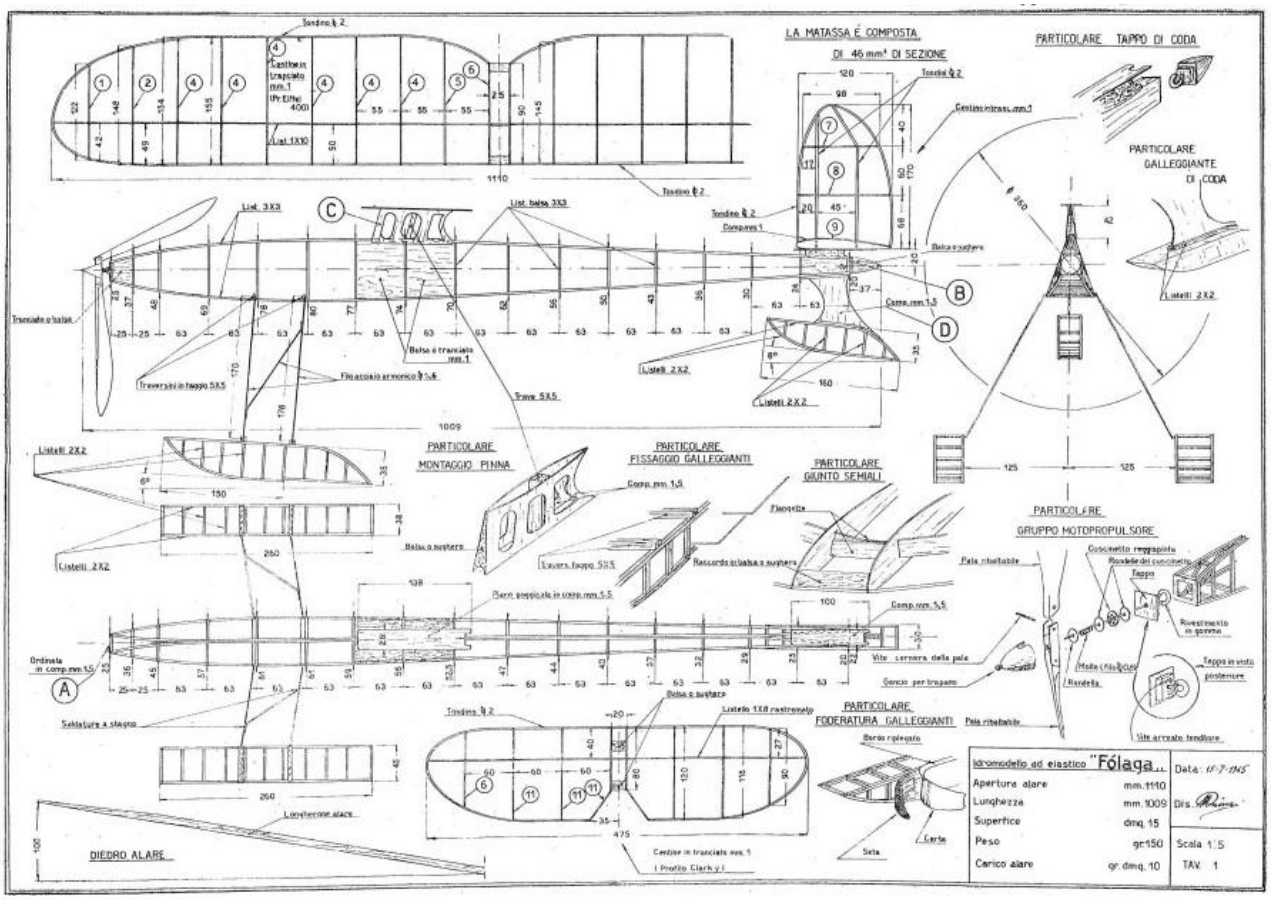


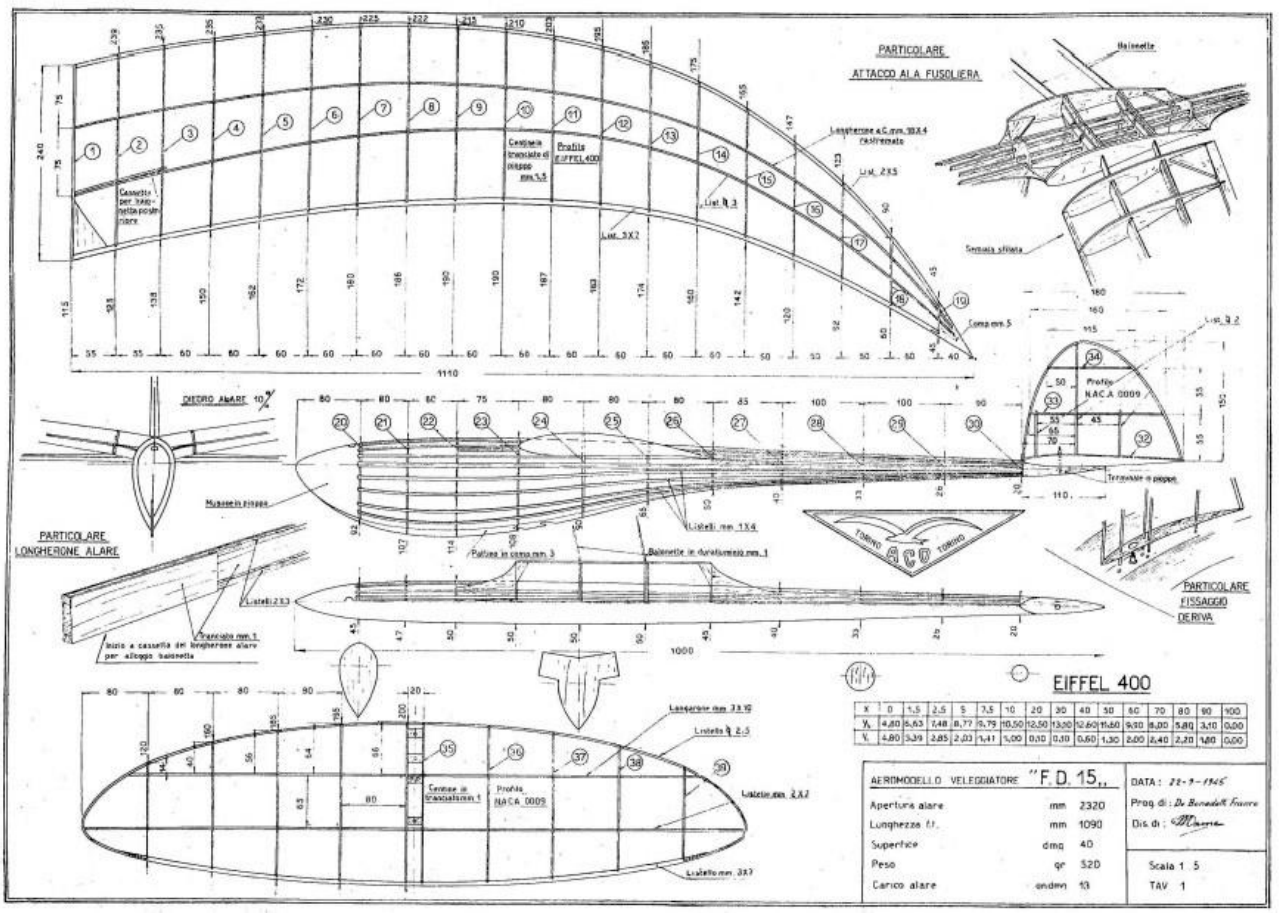


Next we come to "Notiziario Aeromodellistico" launched in August 1945 and, even for English speaking readers, there is no need to translate the title or the direction sign in the sketch below.

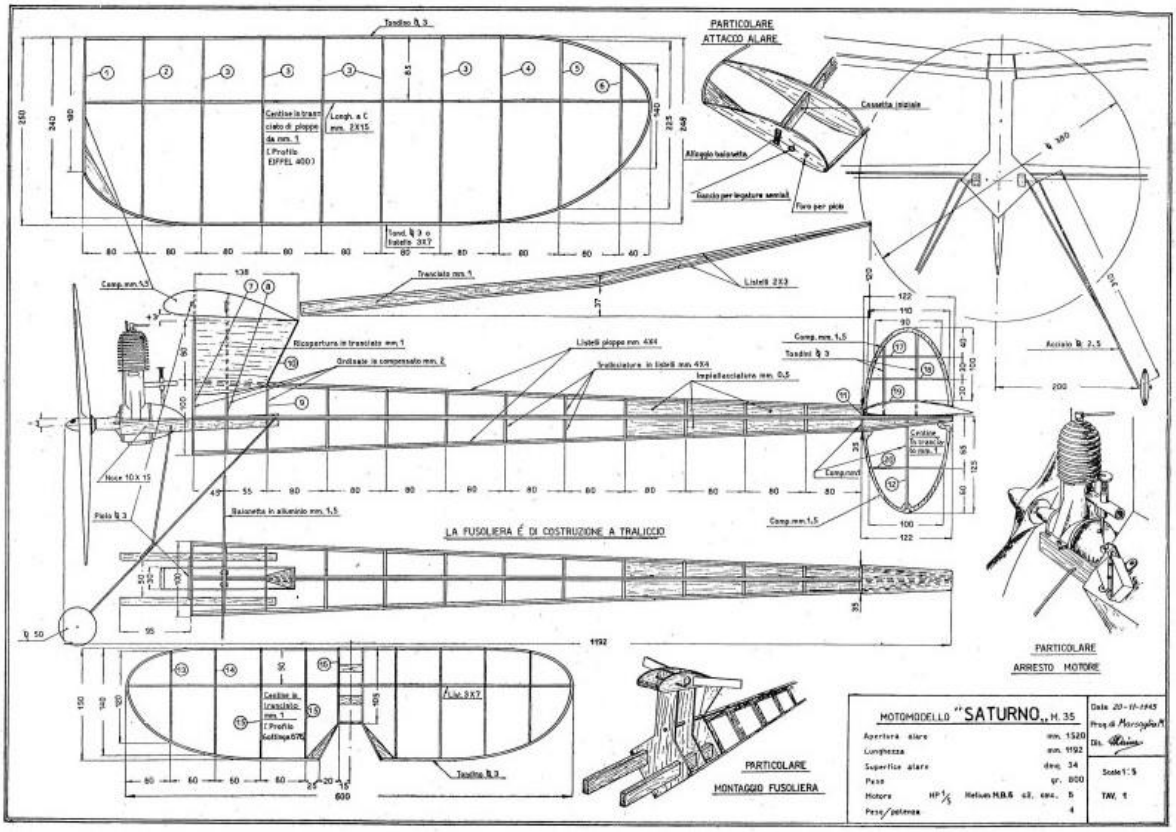






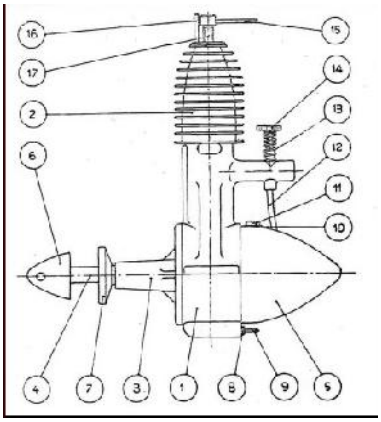


All our copies of "Notizario Aeromodellistico" are in digital form so the page size is not immediatly clear to me, however I am guesing it was about A4 and most issues included a plan printed on a double poge spread. The plans shown below are the "Folaga", a 44" wingspan rubber powered model on floats by Franco Muscariello, the "FD 15", a 91" wingspan glider by Franco de Benedetti and the "Saturno" a 60" wingspan power model by Mario Marsaglia.



Issue No 1 also gave an introduction to a series on building your own compression ignition engine, with an interesting evaluation of the merits of such engines, Google translation below.

THE HELIUM MB 6 ENGINE



"We wanted to present a self-ignition engine from the very first issue because we are sure that its malice is such that it will certainly prefer it to its glorious predecessor: the two-stroke petrol engine. There are many changes and improvements that can now be made to these engines, but the mere fact of having abolished the batteries, the capacitor and the spark plug marks a truly remarkable progress in aircraft modeling engineering. The powers obtained with such engines are also relatively high. We have said relatively why the combustion cycle in question is certainly not the most profitable from the thermal side. As with all the now famous medals, this one also has its reverse which is precisely constituted by the small thermal output. The fuel consumption of these engines is very high compared to a similar petrol engine and this is due to a large number of factors which will be discussed in a specific article. Even the mixture used has a lower calorific value than that of the oil-petrol mixture used in electric ignition engines, & although the former is much more compressed than the latter, balance is not achieved. However, despite all these qualities we say so negative, we all model aircrafters prefer to use the self-ignition engine because it is very easy to use, it has a weight-power ratio enormously lower than that of a similar engine with electric ignition, it does not go crazy to put it in place. motorcycle and, above all, does not require you to go to the field with extra batteries. We wish all those who are about to build the engine of our Fre-gonara a good result and we assure them that if they work with the due precision they will not encounter any disappointment. Those who were not experienced mechanics do not even try, and if they want an engine ... to buy it beautiful and made. They will earn time and money."

Next month more of our earliest magazines

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

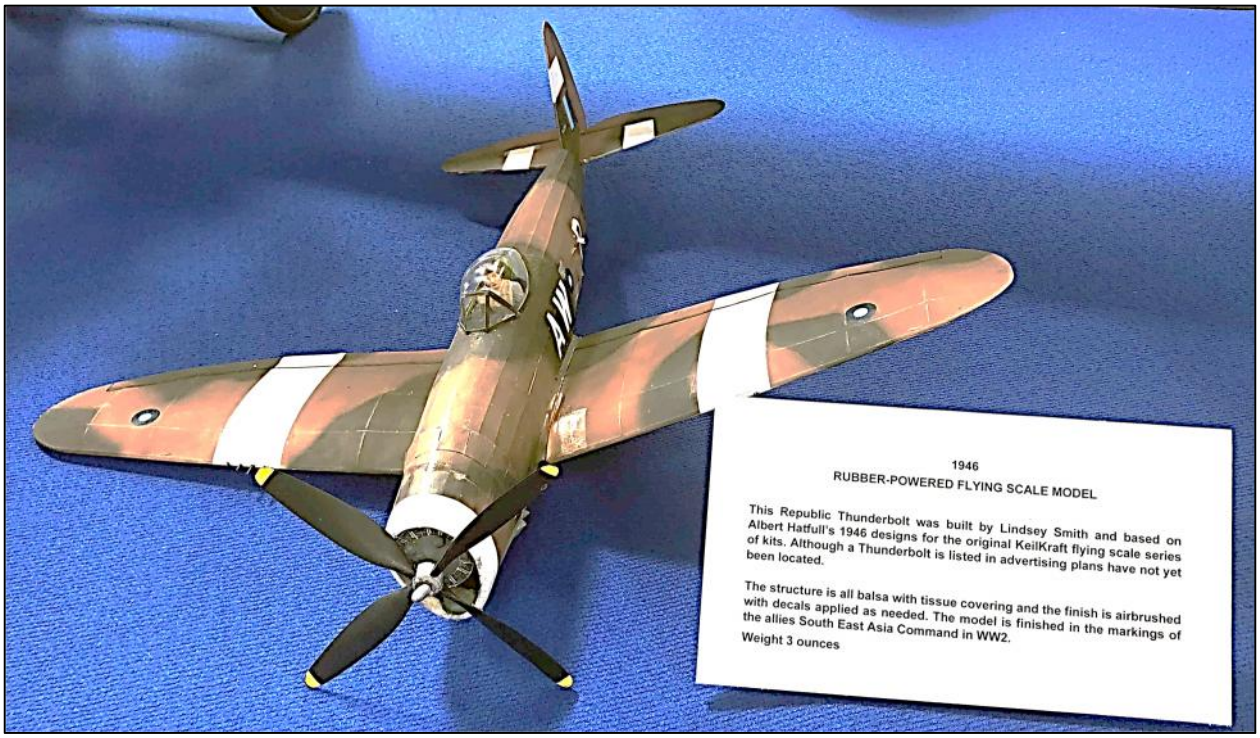
Secretary's Notes for September 2022 - Roger Newman

Short note this month as I've been away for most of the time – see separate article on BMFA Centenary exhibition.

Pleased to say that five of Robin Kimbers gliders found a good home with Stuart Darmon, who kindly had arranged to come the exhibition when I was there, so he took them complete with model box – nice as Stuart had been in touch to identify certain of the models that have appeared in my notes over the past three months. Another four went to Stuart from Northumberland, who had also arranged to visit the exhibition. Of the four that are left, I plan on keeping two & converting the Tomy timer dt to rdt during the winter – the other two have been promised a home locally as well.

The balance of kits & other stuff from Lindsey's estate were taken to Buckminster for the BMFA auction to be held at the end of October & handed over to Linda of the BMFA. Hopefully they will be sold & that will complete the disposal of assets kindly donated by Lindsey's family.

One of Lindsey's scale rubber models was on display in the Centenary Exhibition– a Republic Thunderbolt, which was very good to see.



After my stint at the exhibition, I managed to get to Newark Air Museum – well worth a visit. They have a lot of aeronautical material on display. Lots of interesting aircraft – in one of the hangers, there were a few gems of interest to the model enthusiast.

One was a Clutton "FRED" Series 2 – for those who are unaware FRED stood for Flying Runabout Experimental Design & is a homebuilt parasol airplane that was designed by one Eric Clutton – if my memory serves me correctly, he emigrated to the USA quite a while back & traded as Dr Diesel. It is believed that over 400 sets of plans for FREDs have been sold & that some 25 are still flying somewhere in the world. Apparently the unique thing about the FRED design is that it has folding wings & can be towed behind a car at speeds of up to 70 mph! Designed to be stored in your garage thus avoiding hanger costs. There is a Peanut plan version in our library.

Another was a replica Lee-Richards Annular Monoplane. This was built as a non-flying replica for the film "Those Magnificent Men in their Flying Machines". I believe there is also a model of the same machine on display somewhere in the Science Museum. We also have a digital plan of this machine in our library.

Lee-Richards Annular Monoplane

I recall seeing a scale model of this aircraft flying on several occasions at Middle Wallop & it appeared to be very stable.
If you are in the area with a spare few hours, the museum is well worth a visit & it has an excellent cafe.

What else – not a lot really as I've missed flying events on Salisbury Plain. No doubt there will be reports elsewhere.
To repeat what I said last month about forthcoming events in Sept & Oct - we have the Crookham Gala on 18th September.
This will be followed by the annual Croydon Coupe Day on 9th October, at which it is planned to have a couple of SAM 1066 comps – namely Combined Vintage / Classic glider & Mini-Vintage, just to counterbalance the rubber classes of the Croydon event.
Both events are – inevitably – on Area 8 of Salisbury Plain. This latter event is sandwiched between the last two area events of the season, so it promises to be a fairly hectic time.

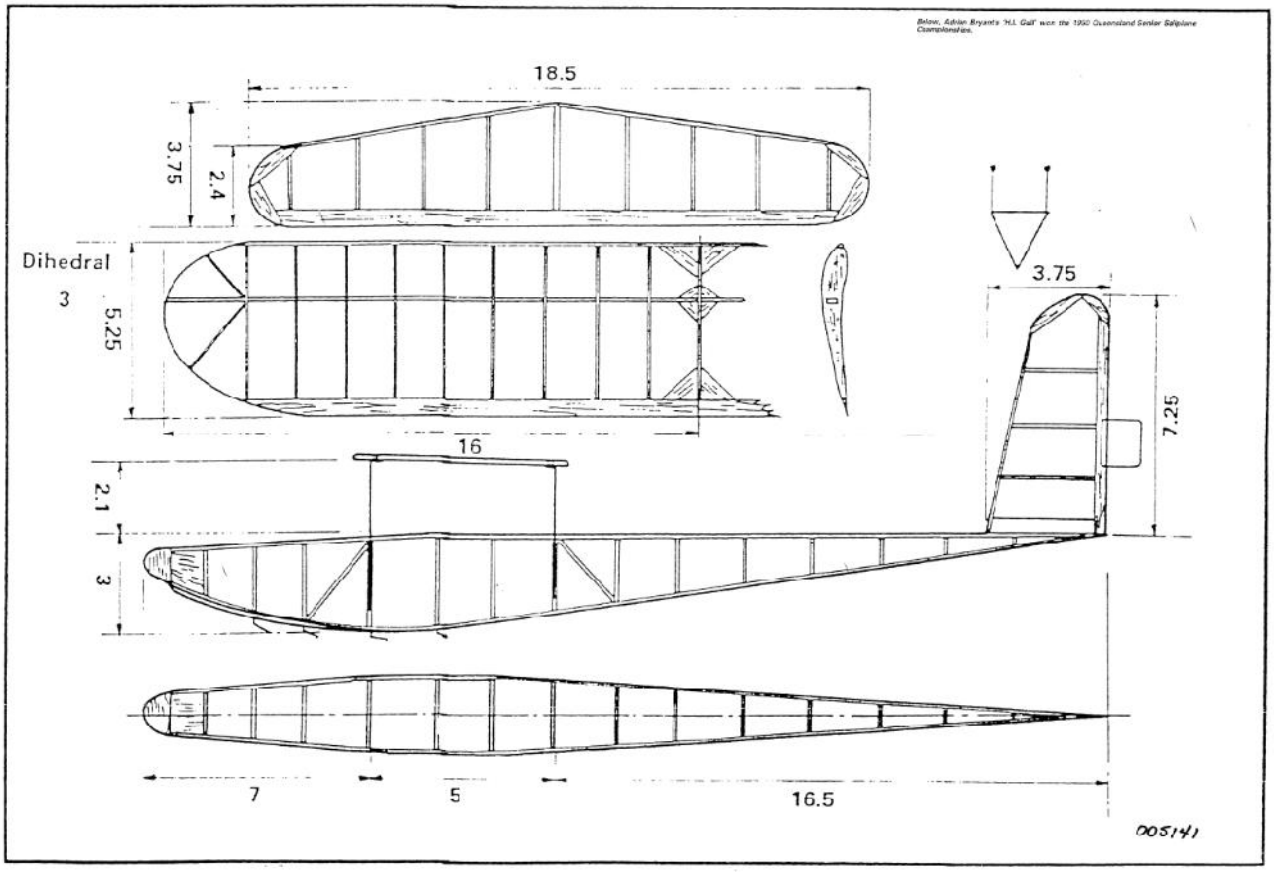
No time to do background searching on canards – maybe next month?

And lo! The winter season slowly beckons as indoor meeting recommence at Totton on 21st Sept – the ad is posted elsewhere in this month's edition.

That's it for this month. *Roger Newman*

Plans for the Month - Roger Newman

Glider - old fashioned sailplane from Australia - see note top right of plan!

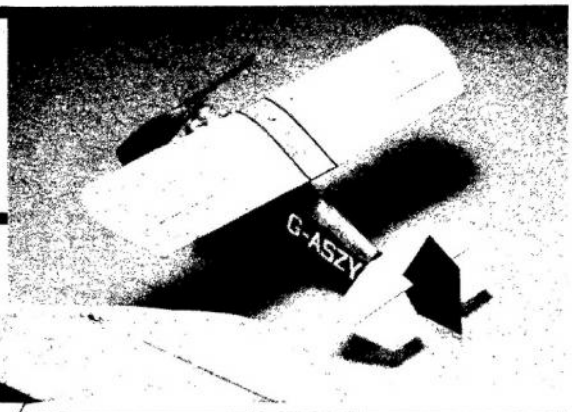


Rubber - Peanut FRED

FRED

A peanut scale replica of Eric Clutton's famous homebuilt light aircraft

By Siegfried Glöckner



FRED is the abbreviation for Flying Renahout Experimental Design. The aircraft is designed for recreational weekend and evening flying, not as a fast cross country plane.

Its thick high lift wing section (Goettingen 535) gives the plane safe stall characteristics, but not high speed. Except for high stressed parts like cabane struts, landing gear, hinges, etc., the aircraft is built from wood. Recommended engine is a 1500ccm Volkswagen engine or equivalent power plant.

Fred can be towed behind a car and stored in one half of a double garage, thus saving hangar fees. The horizontal tail and rudder are detachable and fit inside a small car. With the wings folded alongside the fuselage, 'FRED' can be towed on his own wheels behind the same car to the owner's garage.

The model

The P-Nut version of 'Fred' is built in conventional manner and needs no detailed description. Some perhaps unorthodox construction sequences are thoroughly described.

Fin and Stabiliser: These are built from 1mm square balsa strip over the plan.

Wing: Wingtips are laminated from 0.5 × 1 mm balsa strips to be light and strong. Note thicker ribs W2 at centre section. Drill holes for cabane attachment into W2 before they are glued into wing construction. The centre section is to be sheeted with thin balsa, 0.4mm thick, from leading edge to the spar to simulate the fuel tank. Do not forget rigging point attachments.

Fuselage: Construction is from 1mm square balsa. Build the right fuselage side on the plan, cover it with clear plastic (household) film. Build the left side on the right fuselage side to get two identical fuselage sides. Note the front end: the top longeron extends to the nose former F1, the rest of the nose area is filled with 1mm sheet balsa, cut to size. Add rigging point reinforcements.

Glue F1 between fuselage sides. Glue fuselage sides at rear end together. After glue has set add F2 to F6 between fuselage sides. Glue 1mm square balsa spacers between bottom of fuselage sides, take length of spacers from plan. The fuselage's top is sheeted with 0.4mm balsa. Note that the formers F1 to F6 do not extend to the outer edges of the top longerons. They are slightly undersize so that the sheeting will be flush with the fuselage sides. Cut the top sheeting slightly oversize. Glue the sheeting to the top of the formers at first, then fold around formers. Take a sharp balsa knife and cut the planking along the top longerons so that the sheeting will fit to the formers with no overlap at the fuselage sides.

Now glue sheet to top longerons. Glue F7 to top of F4, cut sheet for the headrest from 0.4mm balsa, the cut the 0.4mm balsa sheeting oversize and shape it to fit to the fuselage's top to form the headrest.

Landing Gear: The highly stressed parts are built from bamboo (see plan). Glue fairing to lower wheel strut (note wood grain direction). Wheel axle is a short piece of 0.8mm dia. steel wire, bent to shape over the plan and glued to lower wheel strut with epoxy or high viscosity cyano glue. Glue reinforcement F8 on bottom of fuselage under former F5 (see plan). F8 is needed later for landing gear attachment.

The wheels are cut from light balsa, doped and painted.

Noseblock and Engine: These parts are cut from light balsa, sanded to shape doped and painted. Exhaust pipes were made from thin plastic tubing, bent to shape over the flame of a candle.

Covering: Cover model with your favourite paper. I used Micro-X tissue but did not dope it. The tissue was shrunk with a light water spray from an airbrush. Add registration markings and windshield.

Assembly: Wing, tailplanes and fuselage have to be covered before assembly. Engine, wheels, landing gear must be ready for installation and painted.

Cut cabane struts from bamboo, and sand to shape. Glue together the two sticks of the front cabane struts at correct angle. Glue front cabane struts to fuselage.

Glue rear cabane struts to wing centre section. Push front cabane struts into drilled holes of centre section and add some glue to joints. Now check incidence between wing and fuselage, if correct, glue rear cabane struts to fuselage. Glue stabiliser to fuselage, note incidence between stabiliser and fuselage. Glue rudder in place.

For installation of the landing gear you have to poke small holes at the forward side of F6 at both fuselage sides (see plan). Glue lower L.G. struts to F5 at correct angle. After glue has set install upper L.G. struts, install wheels and secure them with small drops of glue to the axles. Make wheel hubs from paper or thin balsa.

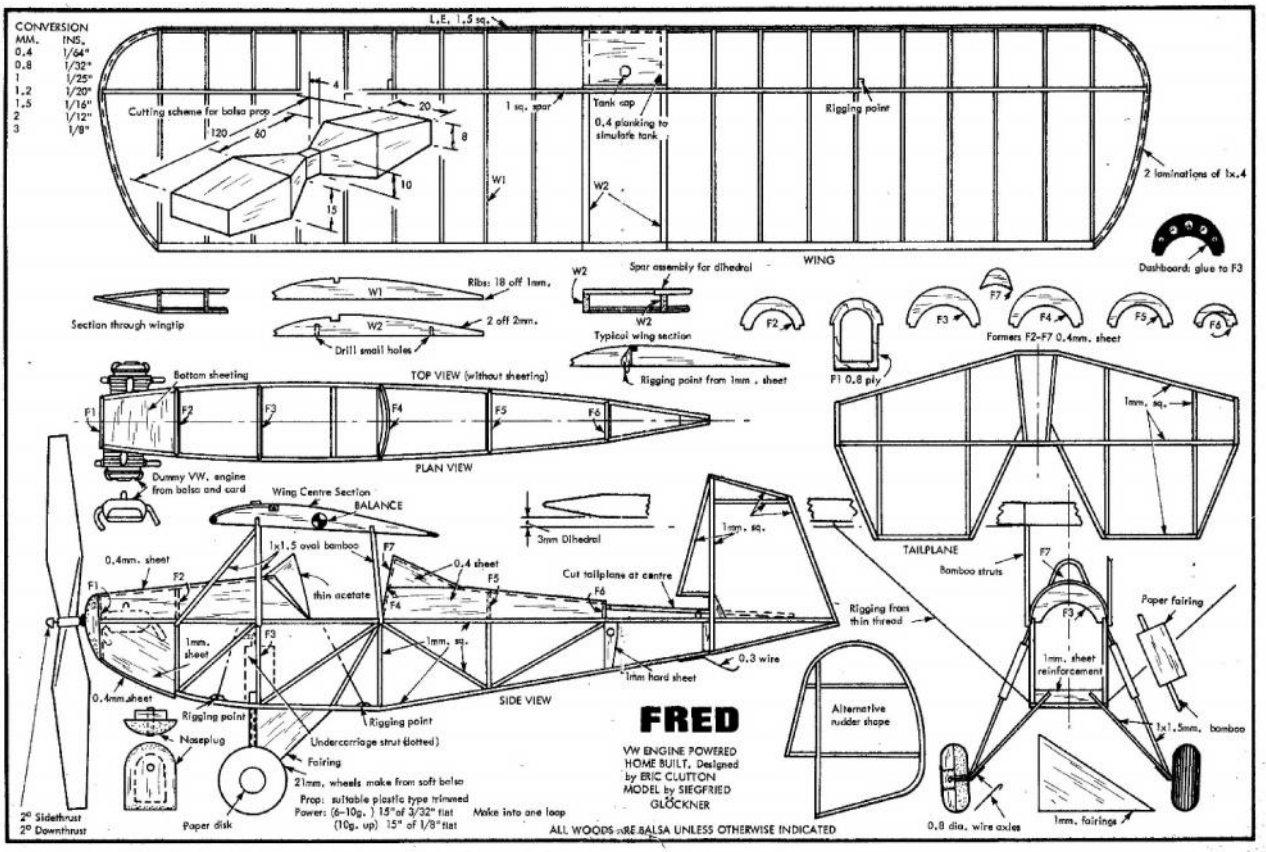
Glue engine in place.

Bend small wire hooks for rigging points (ox piece) and glue in place. Make rigging from thin thread.

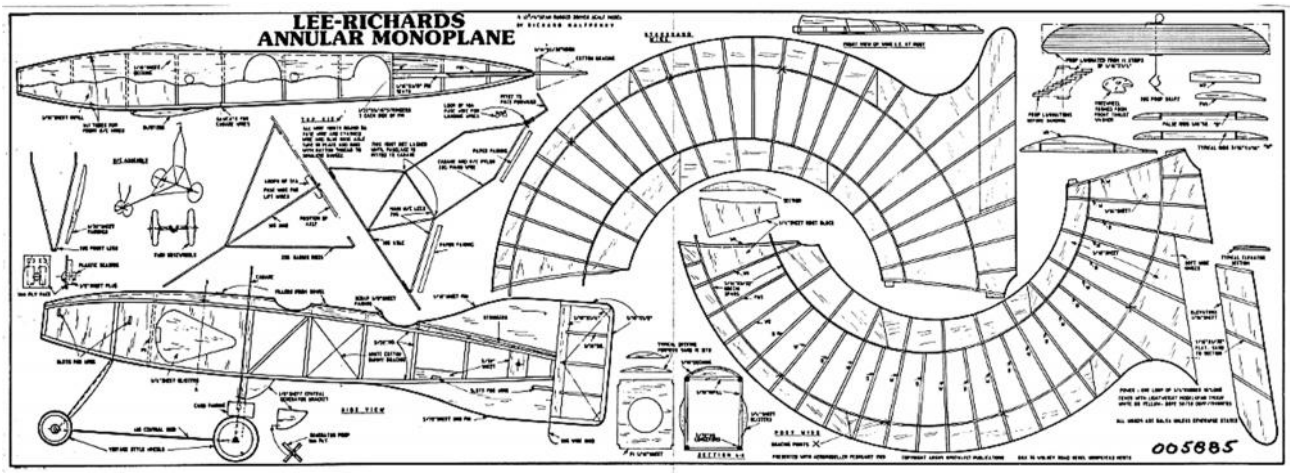
Flying: 'Fred' is a stable reliable flyer. My first model weighed 17 grams. With a North Pacific prop and 1/8 Peck rubber it managed to fly for 88 seconds. The second model, weighing 8.8 grams flies a lot better. With a self-made balsa prop and a loop of ⅛ × 15 in. Peck rubber flights around a minute are standard. The model on the photos was 4th at West Baden in Modern Class in 1982 and 5th in 'Duration' at Flerselle/Belgium in 1982.

'Fred' has no bad trim characteristics. Both models I built flew 'from the building board', and needed only fine tuning for higher performance. The second 'Fred' which weighs 6.8 grams has the ability of circling very tight, which has some advantage at smaller indoor contest sites.

To everyone who intends to build a 'Fred' I wish a lot of fun and many long flights.



Power - Lee-Richards Annular Monoplane



Roger Newman

Aeris/Sidus standalone radio DT for sale.

I have my late fathers (Trevor Payne) radio DT for sale.
As far as I am aware the device works, (both transmitter and receiver).
I've also attached images should they be needed.

Interested parties contact: **stephen payne at** stefan.payn@gmail.com

L'AQUILONE SAM 2001

TOMBOY RALLY INTERNATIONAL POSTAL CONTEST

01/07/2022 – 30/06/2023

We wish to present this competition to all the lovers of this nice model with the only aim of having fun in a postal contest which is organized to provide some fun flying together or at the same time as are all postal contests. The Tomboy Rally wants to prove the performance of this model alongwith the ability of the builder and pilot, without reaching the peak agonism of usual contests and only wishing to fly the model having fun in a relaxed manner. After having carried out some tests we have decided to admit the use of i.c. engines and electric motors trying to reduce the gap between them.

Model

- The **30" or 44"** wing span (as per plan Aeromodeller) and **48"** (as per Boddington plan or 30 " scaledup) models are admitted;
- - Models may be fitted with floats as per plan (scaled-up for 48" version);
- - no minimum weight;
- - reinforcement or lightening of the structure with respect of the basic outline of the original
- model are admitted;
- - materials to be used are those found on the plan;
- - plastic covering in place of tissue, silk or other is admitted.
- - More than one person can use same model;
- - Same model can flight in L.G. or float version;
- - Lone fliers can self launch and time

Engine/motors

I.c. engines and electric motors are admitted within the following limits:

30"-44" WINGSPAN

I.C. Engines:

- Any engine with 1 cc. maximum displacement;
- Fuel tank : 3 cc.
- R/C carburettor is admitted.

Electric Motors:

- Any electric motor is admitted with direct drive
- The engine cannot be stopped and started again: the motor must run continually withoutinterruptions till the end of the battery charge or competitor's decision;
- no folding prop is admitted; if a folding prop is used the blades must be held open with a rubber band;
- freely assembled admitted batteries:
- -450 Mah 2 cell LiPo
- separated batteries pack for Rx alimentation is allowed

48" WINGSPAN

I.C. Engines:

- **Any engine with 2, 5 cc. maximum displacement;**
- **Fuel tank : 6 cc.**
- R/C carburettor is admitted.

Electric Motors:

- Any electric motor is admitted with direct drive - The engine cannot be stopped and started again: the mot must run continually
Without interruptions till the end of the battery charge or competitor's decision;
- no folding prop is admitted; if a folding prop is used the blades must be held open with arubber band;
- freely assembled admitted batteries:
- -500 Mah 3 cell LiPo
- separated batteries pack for Rx alimentation is allowed

Flights and results

- Each competitor may fly as many flights as wished during the admitted period but only the best flight will be considered for the final result.
- Hand launches are admitted.
- The flight time start when the model is released or takes off. The flight time ends when the model lands or hits a fixed obstacle. In case the model flies out of sight the timekeeper will time for 10 seconds after losing sight of the model . Timing will continue if model is seen again or stopped after 10" deducting this time from the total time of the flight..

Awards :

A diploma for all competitors and prizes for the first three in each version rank. Special prize for best flight in float version.

Results

Results, address, photos and technical specification about model must be forwarded to the Organization within the 15th July 2023 to Curzio Santoni (cusanton@tin.it) or to Gianfranco Lusso (gfl@orange.fr). Many pleasant flights and happy landings to ALL !!!

SPECIAL PRIZE VIC SMEED

SAM 2001 have scheduled an extra Diploma that will be awarded to the best flight in Tomboy floatplane version (30",44" or 48") taking off from water. The Editor will send to the winner a Diploma signed By SAM 2001 President and a bottle of special Italian Wine to drink to Vic Smeed!

Good ROW and flight

SPECIAL PRIZE DAVID BAKER

The 2012 was the 5° edition of SAM 2001 Tomboy Rally and we have scheduled a special prize for the three best
flights obtained with 30" Tomboy F/F. Only engines diesel max 0.75 c.c. shall be used. The other rules are the same for 30" or 44" wingspan type. It is possible to use a R/C Tomboy, however, being this a free-flight contest, the time must be stopped when transmitter is used, since the aircraft model should fly freely from any control
from the ground.

Good thermals

Salisbury Plain Permits

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

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

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

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

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

No other use is permitted.

Flying on Area 8.

Flyers are reminded that it is Military (and therefore BMFA FFTC) requirement, that when civilians are accessing areas away from public rights of way that an adequate number of Red Card holders must be present. A Red Card holder is deemed to be responsible for up to 6 non-Red Card Holders.

It is also imperative that a Red Card holder phones 24 Hrs. Ops. before any flying takes place, and at the conclusion of flying. 24 hrs. Ops. need to know that there are civilians on a restricted Area, and that air movements are likely to take place. Remember that we have authorised, controlled access, and these requirements are for the safety of all concerned. Failure to observe these simple requirements could have consequences.

Anyone wishing to obtain a Red Card, can obtain one by attending a briefing at Westdown Camp.

I can arrange this.

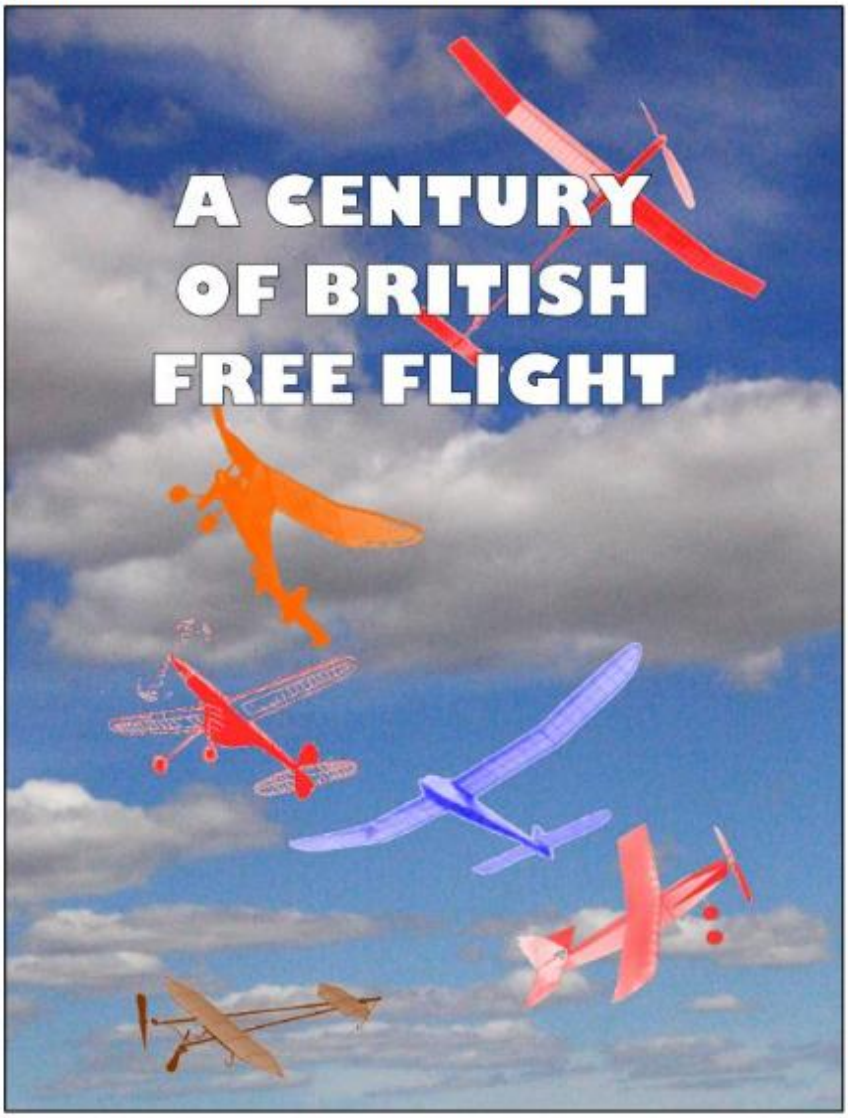
Peter Watson. e mail. peterwatson47@hotmail.com

A CENTURY OF BRITISH FREE FLIGHT

A new book, A Century of British Free Flight, has just been published to mark the BMFA's centenary. 155 pages of text, plans and photographs in colour and black and white trace the development and history of free flight from before Bleriot crossed the Channel to the present day. Nine authors have pooled their talents to cover everything from the rise of the Vintage movement to electronic timers and GPS tracking.

The histories of gliders, scale, rubber, electrics, power models and indoor are all explored by people who've spent most of their lives flying their classes. Although there's no 2022 Free Flight Forum Report we think A Century of British Free Flight will more than fill the gap. All proceeds will go towards defraying the expenses of those representing the United Kingdom in teams competing at the World and European Free-Flight Championships.

The UK price is £20.00 on the flying field or £22.00 by mail; to Europe it's £25.00 and anywhere else it's £28.00. Cheques should be payable to 'BMFA F/F Team Support Fund' in pounds sterling, drawn on a bank with a UK branch; you may also order by credit card, which is a lot easier (and cheaper).



Copies are available from:
Martin Dilly, 20, Links Road, West Wickham, Kent BR4 OQW
or by phone: (44) + (0)20-8777-5533,
or by e-mail to martindilly20@gmail.com .

Cocklebarrow Vintage R/C

Peterborough Flying Aces Nationals

Saturday 3rd September 2022

at

Ferry Meadows, Nene Park, Peterborough PE2 5UU.

Competitions 10.00 to 16.15

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PLEASE NOTE! NO GROUND PENETRATING STOOGES PERMITTED

Revel in the special atmosphere created at this unique event.

Toilets, Café, and Park Visitors Centre.

Contact: Luke Goymour on 07752 236645 or revgoymour@googlemail.com

See also Peterborough MFC Website at www.peterboroughmfc.org

Where applicable, Maxes for each class will be set on the day

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

THE CROOKHAM GALA 2022

will be held on Sunday 18th September
on Salisbury Plain Area 8

EVENTS

Modern And Vintage Coupe combined

(3 flights only. Prize for best vintage score)

Combined Glider: Mini Vintage: E36

(Prize for best Classic A1)

COMBINED POWER

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

CASH AND WINE PRIZES FOR ALL CLASSES

Comps Start: 10.00am Finish 5.00pm

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

Supported by Southern Area BMFA

Croydon Coupe Europa

9th October

Salisbury Plain Area 8

Start 10.00 am
F1G (in rounds), & Vintage Coupe
Contact Ray Elliott tel 07513 649734
Email ray.elliott8@btinternet.com
There will also be events organised by SAM1066

Southern Coupe League Calendar 2022

Date	Event	Venue
7th Nov 2021	Coupe de Brum	N Luffenham
27th Mar	Second Area	Area Venues
8th May	London Gala	Salisbury Plain
26th May	Dreaming Spires	Port Meadow
29th May	Nationals	N Luffenham
10th July	Fifth Area	Area Venues
24th July	SAM1066 Cagnarata	RAF Colerne
6th Aug	Southern Area Meeting	RAF Odiham
21st Aug	Southern Gala	Salisbury Plain
18th Sept	Crookham Gala	Salisbury Plain
9th Oct	Coupe Europa	Salisbury Plain

La Eighth^eme Grande Coupe de Birmingham

With the approval of the FFTC this event will take place at its traditional home MOD North **Luffenham on Sunday DECEMBER 4th 2022 starting at 10:00**

F1G for the Aeromodeller Trophy: Two flights between 10:00 & 12:00 then three rounds to published timetable.

Pre 1970 Coupe Three flights (no rounds) start 10:00. Within this event models which meet our pre 1958 cut-off date will fly as Vintage Coupe. Pre 1970 Coupe may double up with F1G as at last year's event. Contacts below for details if unsure.

Both events finish at 14.45 followed by fly-offs as required (Not DT!)

Maxes will be determined by conditions on the day.

Prizes for 1,2 & 3 in F1G, Pre 1970 Coupe and Vintage Coupe. The winner of F1G will be awarded the Aeromodeller Trophy and in Vintage Coupe the Vintage Plate.

Entry Fee £10 covers both events (includes £5 field fee for ALL competitors)

Impington Village College Model Aeroplane Club

Free Flight Indoor Flying on Sunday 23rd October 2022 9 am to 5pm

This is our second event for 2022, so please come along for some relaxed flying and low key competitions. There will be three competitions and a car race.

- **A Peanut event** using a variation of the international rules to encourage unusual models. Max size of model either 13 inches span or 9 inches length excluding propellor. Scale points will be awarded on two bases – up to 30 points for fidelity to scale plus up to 90 points for choice of model. Any number of flights with a 10 second bonus for ROG. Total of the best two flights plus scale bonus points to decide final score.
- **A duration event** for Bostonian models. Any design to the Bostonian formula. Maximum wingspan 16 ins, max length 14 ins, 'box' within fuselage of 3ins x 2.5 ins x 1.5 ins. Minimum air frame weight 14g and all flights to ROG. Total score from best three flights.
- **A No Cal event**. A duration event for models with a profile fuselage and representative of a full size aircraft. Max wingspan 16 ins. Evidence of the original aircraft to be provided. Any number of flights with the total of the best 3 to count.
- **A Car Race** for rubber powered cars. The number of laps and heats will be decided on the number of entrants on the day.

Sadly no RTP activities or exhibition due to space restrictions.

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

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

Contact Michael Marshall 01223 246142 or Email - mandrshall2@gmail.com

Flitehook
Indoor Free Flight

West Totton Community Centre
SO40 8WU

2022 Autumn/Winter Dates

Weds: 21st Sept; 19th Oct;
16th Nov; 21st Dec;
12.00 noon – 4.00 pm
BMFA Membership mandatory
£8 per session
Easy access; Café; Toilets; Parking
Flitehook Sales Table

Spectators & Juniors are free of charge
Any queries – email rogerknewman@yahoo.com or phone 02392 550809

Supported by Southern Area BMFA

Waltham Chase Aeromodellers

Indoor Free Flight Meetings

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

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

2022 Dates:

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

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

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

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

Peterborough Model Flying Club

Free Flight Indoor Flying

at the Veracity – Bushfield Leisure Centre,
Orton, Peterborough, PE2 5RQ.

Car Park on site.

Contacts Brian Waterland 07717461000
or Martin Skinner 07774863008.

Small Rubber/electric or Co2. No R/C, Drones or shockies.

Dates

30/10/2022.	Sunday.	10:00 AM to 1:00 PM.
12/11/2022.	Saturday.	10:00 AM to 1:00 PM.
26/11/2022.	Saturday.	10:00 AM to 1:00 PM.
7/1/2023.	Saturday.	10:00 AM to 2:00 PM. Extra hour.
5/2/2023.	Sunday.	10:00 AM to 1:00 PM.
4/3/2023.	Saturday.	10:00 AM to 1:00 PM.

E30/RDT/BMK/E20 Batteries

The 75mAh lipo's which I sell for E30 now come with Micro JST plugs which make them suitable for BMK timers etc. Since they do not have the current limiter, they work well with the Band Burner and can also be used as lightweight E20 batteries. Just send me £10 and I will put 4 in a Jiffy bag. I still have some without connectors which are now 5 for £10. Ron Marking, Pros Kairon, Pennance Road, Lanner, Redruth TR16 5TF. Alternatively, use PayPal but e-mail me your address. ron.marking@btinternet.com

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 J. WOODHOUSE
12 MARSTON LANE, EATON, NORWICH
NORFOLK, NR4 6LZ, U.K.
Tel/Fax: (01603) 457754 International Tel +44-1603-457754
e-mail: mike@freeflightsupplies.co.uk.
Web site: http://www.freeflightsupplies.co.uk.
Face book https://www.facebook.com/groups/266212470107073/

I supply items, which are needed by the free flight modeller, or any other modeller, items that cannot be readily obtained through the normal model shop outlets. I also believe in the builder of the model principal so what you will find, on my list, are components, plans and kits etc. Although I am not a shop, if you are passing through Norwich, you are welcome to call in, a quick telephone call first to check that I'm at home will save a wasted diversion.

ORDERS and PAYMENT

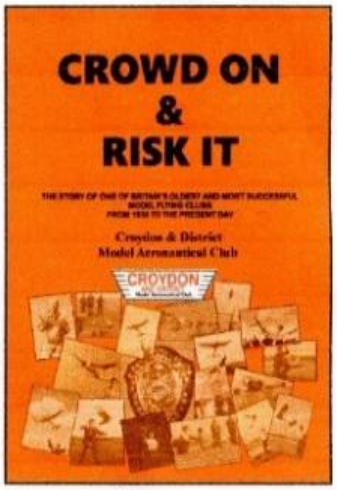
Place your order by telephone, by e-mail, CASH, DIRECT TO FREE FLIGHT SUPPLIES BANK ACCOUNT, CREDIT/DEBIT CARD, MORE!
WESTERN UNION, PAYPAL

AVAILABLE

LIGHTWEIGHT COVERING MATERIALS - HI-TECH MATERIALS – FIXINGS - RUBBER - RUBBER MODEL PROPELLERS – TIMERS - KP AERO MODELS - TOOLS - PLANS – KITS - "HOW TO DO IT" PUBLICATIONS – BOOKS.

Full details of the above items are on
the Free Flight Supplies Web site.

CROWD ON & RISK IT



This is the story of one of Britain's oldest and most successful model flying clubs, Croydon & District MAC, from 1936 onwards. The club contributed much to aviation, both model and full-size, and the late Keith Miller compiled its history till around 1960. Now, this up-dated 73 page version of the club's history, copiously illustrated with many previously unpublished photos, takes the Croydon saga up to the present. Contributions by past and present members vividly capture the atmosphere of the heyday of free-flight, with almost weekly contests at Chobham or Bassingbourn.
53 designs by Croydon members have been published in the model press and 24 of its members have represented Great Britain in World and European Championship teams. Several have gone on to notable careers in aerospace. Crowd On & Risk It covers all this and more.

Just £8 by PayPal or cheque.

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

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

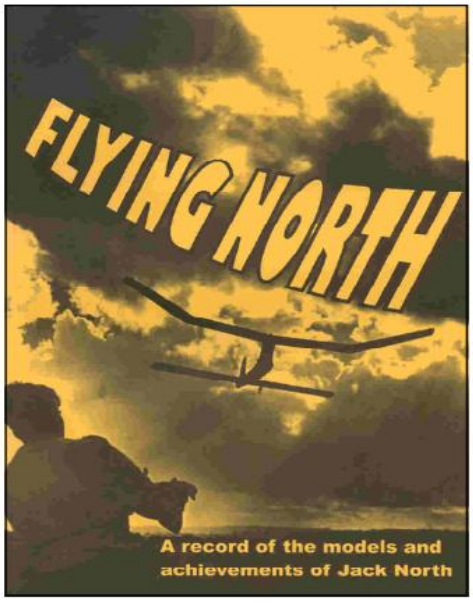
The following appeared on the Hip Pocket Aeronautics Builders' Forum. Nine different tissues were tested, doped and un-doped.

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

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"

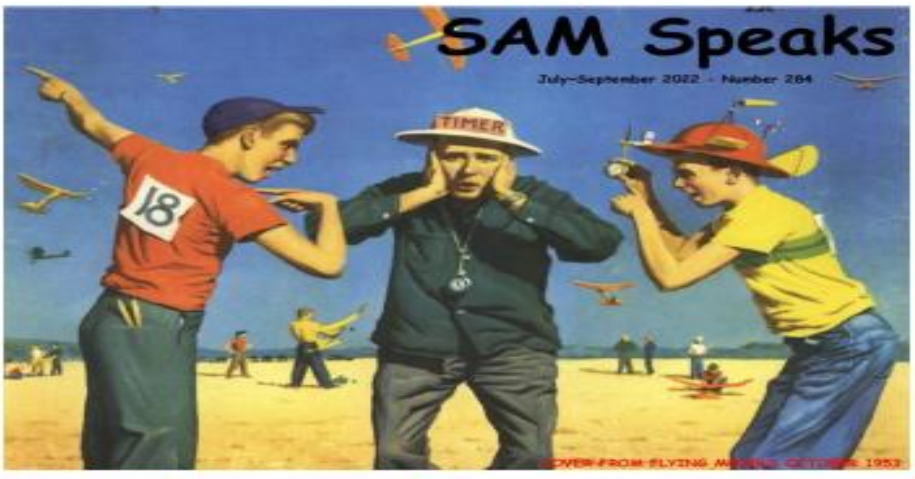
"A very balanced record of Jack's modelling and professional activities"

"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

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!



FREE FLIGHT FORUM REPORT 2021

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

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

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

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

FREE FLIGHT FORUM REPORTS OVERSTOCK SALE

There's an excess stock over the years of the following Free Flight Forum Reports – 1997, 1998 and 2016. There's an enormous amount of information there on a wide range of free flight topics as the following contents list shows.

1997- Slow Open Power - One Man's View by Dave Clarkson; Vintage Lightweights by Andrew Longhurst; Testing Balsa Quality by Bernard Hunt/ John Taylor; Return of an Old Tosser by Chris Edge/ Mike Fantham; Some Rambling Thoughts on Free-Flight Aeromodelling Design Trends by Andrew Crisp; Electronic Timers - An Overview by Chris Edge/Martin Gregorie; Selecting Slippery Stuff by John Barker.

1998 - Computer-Aided F1A Fuselage Layout by Mike Fantham; Fast Track to F1C Flying by John Cuthbert; Micro-Meteorology and Thermals by Mark Gibbs; The Latest Thinking in F1B Trimming by Peter King; F1A Tailplane Structures by Mike Fantham; Is the Weather Better on a Sunday or a Monday? by Phil Ball; A Practical Introduction to Electric Free-Flight by John Godden; Avionics and the Future of Free-Flight by Mike Fantham; GPS - A Global Position Paper by Julian McCormick; Builder of the Model - Where Next? by Mike Fantham

2016 - Indoor Scale Free Flight Gliders by Andy Sephton; Juniors in Free Flight by Mark Gibbs; Carbon Fibre for Aeromodellers by Mick Lester; The Making and Testing of F1B Rubber Motors by Peter Brown; Computations at Low Reynolds Number and a New Aerofoil for F1G (Coupe d'Hiver) Models by Alan Brocklehurst; Carbon Fibre Covered Prop Blades from Simple Tooling by Phil Ball; Weather Forecasts - How Good Are They and How to Interpret Them by Mark Gibbs; Capitalising on Low Drag Aerofoils and All That by Alan Brocklehurst; Basic Propeller Theory by Andy Sephton; Methanol to Lithium by Peter Watson; Some Interesting & Successful Models from 2015 by Phil Ball; Dave Greaves 1942-2016 - An Appreciation

To clear the excess we're offering all three Reports together at a special discount price of £15.00, a saving of £21 on the single copy prices. To Europe the cost is £18 and anywhere else it's £21. Cheques should be payable to 'BMFA F/F Team Support Fund' in pounds sterling, drawn on a bank with a UK branch; you may also order by credit card, which is a lot easier (and cheaper). Copies are available from :

Martin Dilly,20, Links Road, West Wickham, Kent BR4 OQW
or by phone: (44) + (0)20-8777-5533, or by e-mail to martindilly20@gmail.com .

Provisional Events Calendar 2022

With competitions for Vintage and/or Classic models

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

February 27th	Sunday	BMFA 1st Area Competitions
March 27th	Sunday	BMFA 2nd Area Competitions
April 3rd	Sunday	Le Petit Classique de Brum, N Luffenham
April 15th	Good Friday	Northern Gala, Barkston
April 18th	Easter Monday	Croydon Wakefield Day + **SAM1066,** Salisbury Plain
May 1st	Sunday	BMFA 3rd Area Competition
May 7th	Saturday	London Gala, Salisbury Plain
May 8th	Sunday	London Gala, Salisbury Plain
May 29th	Sunday	**FF Nationals, Mini,** N Luffenham
June 4th	Saturday	**FF Nationals,** Salisbury Plain
June 5th	Sunday	**FF Nationals,** Salisbury Plain
June19th	Sunday	BMFA 4th Area Competitions
July 10th	Sunday	BMFA 5th Area Competitions
July 24th	Sunday	SAM1066 Club (BMFA) Centenary event. RAF Colerne
July 30th	Saturday	East Anglian Gala, Sculthorpe
July 31st	Sunday	East Anglian Gala, Sculthorpe
August 6th	Saturday	Southern Area BMFA Gala, RAF Odiham
August 21st	Sunday	Southern Gala, Salisbury Plain
September 3rd	Saturday	Peterborough Flying Aces, Ferry Meadows
September 3rd	Saturday	Stonehenge Cup, Salisbury Plain
September 4th	Sunday	Equinox Cup, Salisbury Plain
September 11th	Sunday	BMFA 6th Area Competitions
September 16th	Friday	Indoor FF Nationals, Daventry Leisure Ctr.
September 17th	Saturday	Indoor FF Nationals, Daventry Leisure Ctr.
September 18th	Sunday	Indoor FF Nationals, Daventry Leisure Ctr.
September 18th	Sunday	Crookham Gala, Salisbury Plain
October 2nd	Sunday	BMFA 7th Area Competitions
October 9th	Sunday	Croydon Coupe Europa + **SAM1066** Salisbury Plain.
October 16th	Sunday	BMFA 8th Area Competitions
October 29th	Saturday	Midland Gala, Venue T.B.C.
November 6th or November 13th	Sunday	Buckminster Gala

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

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

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

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

Useful Websites

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

control/left click to go to sites

Are You Getting Yours? - Membership Secretary

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

P.S.

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

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

Your editor

John Andrews