NEW Clarion

SAM 1066 Newsletter

Society of Antique Modellers Chapter 1066

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Contents

Editorial

East Anglian Gala:
For the benefit of any readers who are contemplating a trip to **Sculthorpe**, I am pleased to advise that at the time of writing, the airfield is free of any livestock and electric fences. This situation is unlikely to change in the foreseeable future. Large areas of the grass have been cut and hopefully this work will continue. Kind regards, Stephen Bowles.

I'm a bit short of home grown content this issue, please make an effort to write something, be it indoor meet reports, contest participation or general interest topics, otherwise the newsletter becomes just history.

What's in this issue?

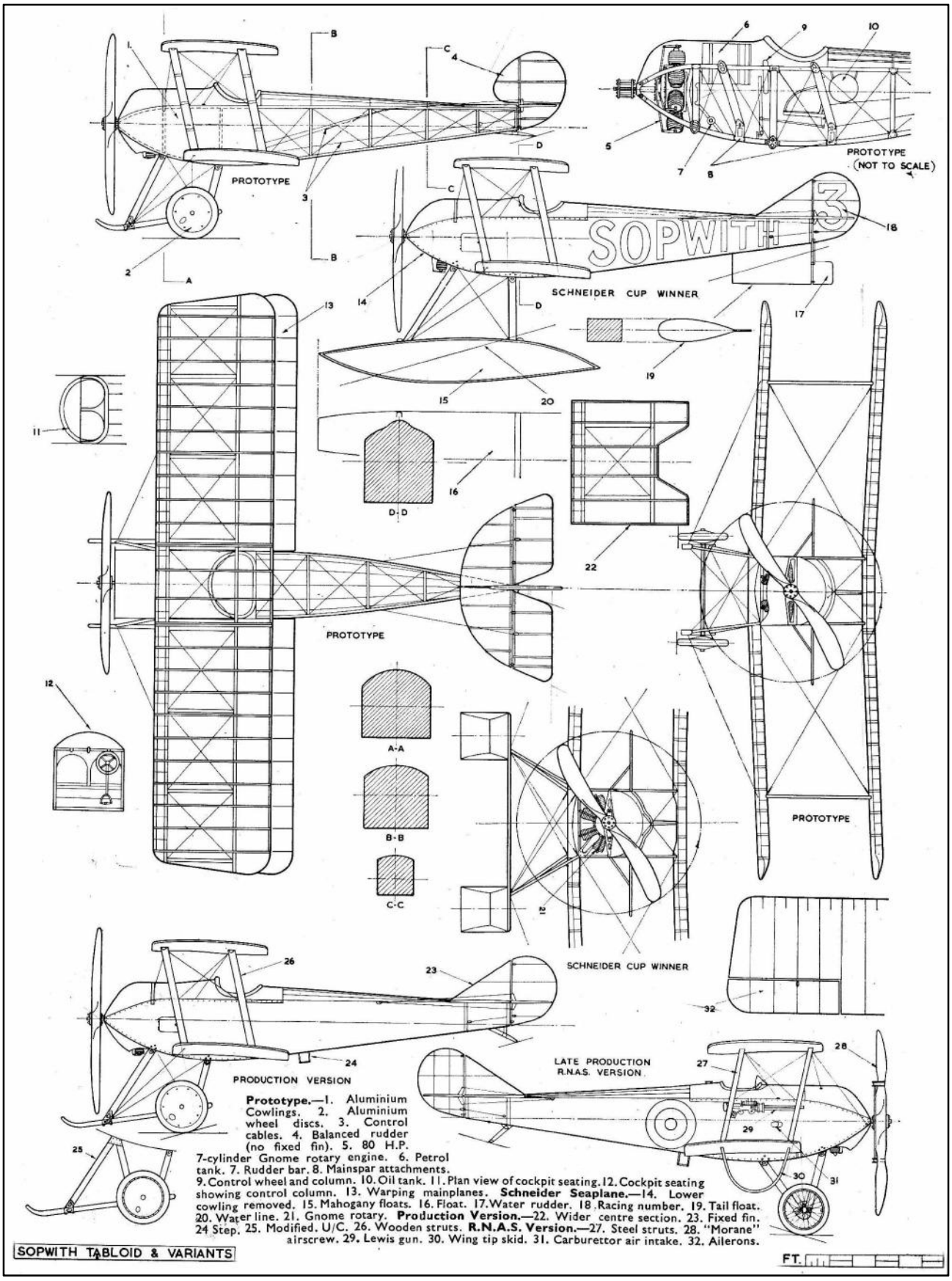
- Nick Peppiatt starts us off with more details on the Schneider Trophy aircraft featured in the July issue.
- Pylonius has a real dig at someone who takes his comments too seriously. He also ventures an opinion on R/C flying and has a final swipe at Jim Walker's three models at once Control-line flying.
- My desperate search for copy results in another dip into my photo files, this time the 2010 Nationals.
- Engine Analysis is the Barbini 40, a 2.5cc diesel, not a .40 as might be thought.
- The 'News Review' from 1949 leads off with advice on approaching local authorities before using parks for model flying. The donation of a larger trophy for the Pilcher Cup competition is reported. The adherence to official contest finishing times is highlighted. The thoughtlessness of modellers test flying in and around contest launching areas is commented upon.
- I reproduce Pt3 of my 2003 articles on my own indoor flying, with details of models using decorating wall-foam sheet for wing construction.
- Martin Pike asks for the name of a glider he has from the late John Wingate's collection, Pictures for perusal.
- Heard at the Hangar Doors appeals for help in contest organisation. A letter from the K&B engine manufacturers applauds the use of the new Dynamometer for Engine Analysis.
- I report with regret the passing of another well-known aeromodeller Ralph Sparrow.
- More on Zeppelins, will I ever get to the end of the book?
- Roy Tiller reports on more of archive of old magazines, French this issue.
- I reproduce the Wikipedia description of the 'Kings Cup' air-race. I was at the Coventry Air-show at Bagington in 1957 and saw the end of the 'Kings Cup' handicap air-race. The event was won by Fred Dunkerley flying the one off Miles M77 Sparrowjet. The handicappers made a pigs ear of their calculations as the Sparrowjet streaked across the finish long before expected and must have been miles in front of the rest.
- Chris Redrup sends in a couple of overwound rubber model pics.
- Roger Newman pens a few notes from North Wales, not much doing though.
- The Secretary sends in his Notes for the Month.
- We wrap up with the usual three plans from Roger:
  Blim Blam, pretty floatplane.
  Changi, Sport power model also pretty.
  Kling, a very large skinny flying wing glider.

Editor

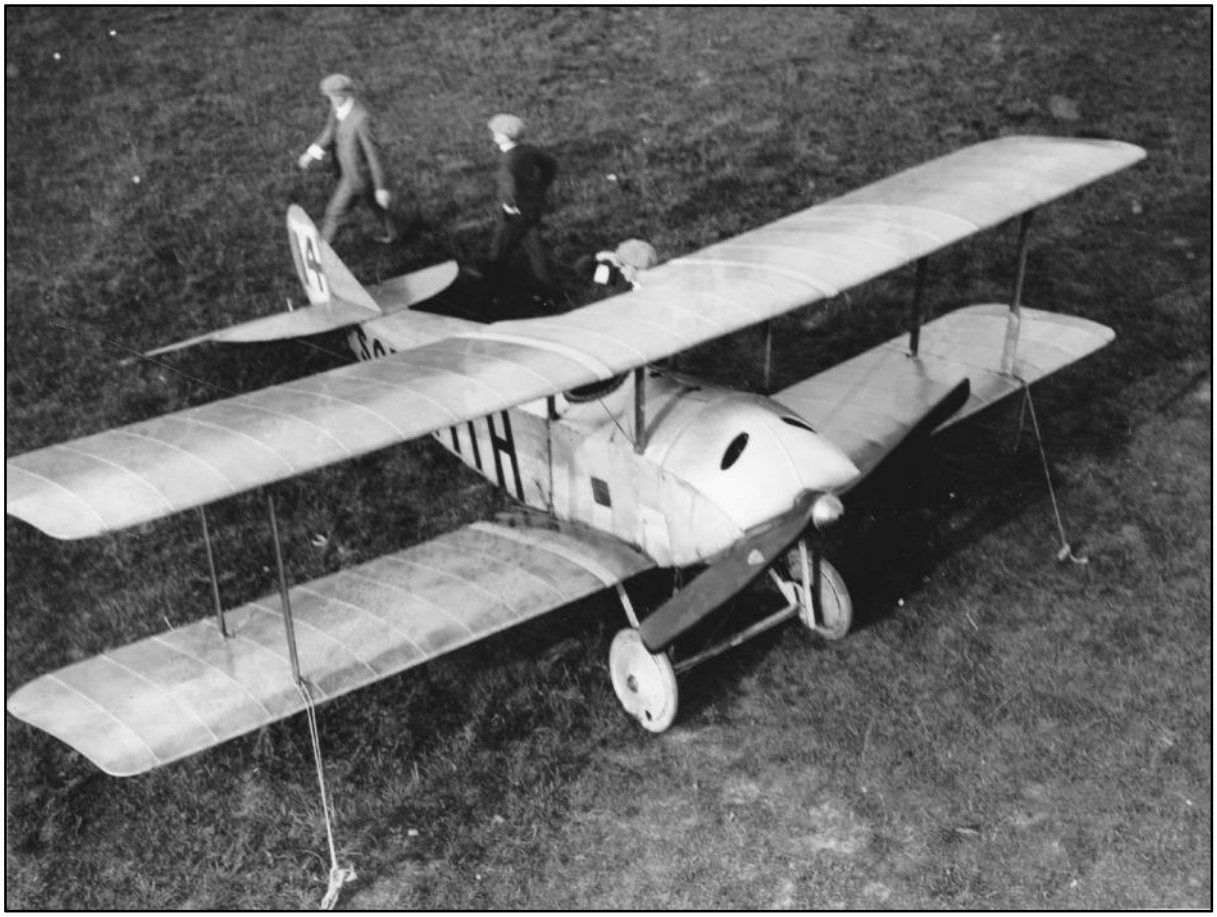
Indoor isn't for Everyone 79 - Nick Peppiatt

The Sopwith Tabloid

Our Esteemed Editor's article last month on the 1914 Schneider Trophy winning Sopwith reminded me that many years ago I built a CO_2 powered flying scale replica of this aircraft when it had been fitted with a land plane undercarriage.



I based my model on Ken McDonough's detailed drawings, which were published in the December 1961 edition of AeroModeller. This issue also featured Ken's painting of the Schneider Trophy winning aircraft on the magazine cover and his plans for a 1/12 scale small diesel powered flying scale version. Incidentally, the serial number, 1256, on the fin of Ken's military Tabloid model, appears spurious. This number was allocated to a Bristol Scout C. His Aircraft Described article also included a photograph of the landplane conversion of the Schneider Trophy winner.

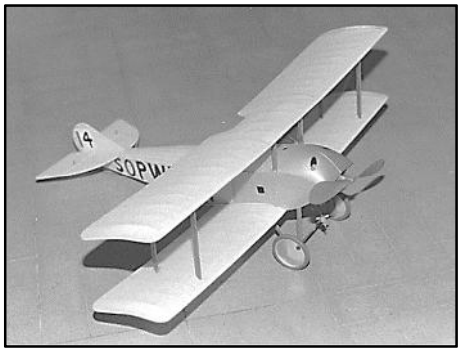


Landplane conversion of 1914 Schneider Trophy winning Sopwith in June, 1914.

According to Bruce Robertson's 'Sopwith – The Man and his Aircraft' the 100 h.p. Gnôme-engined Schneider Trophy winner was converted to have a 'landscape chassis' making it into a Tabloid in May 1914, with a view to retaining it as a Sopwith demonstration aircraft. It was entered into the *Daily Mail* sponsored 'First Race from London to Manchester and Back' on Saturday, June 20th with the race number 14, piloted by Harry Hawker. The race started from Hendon and he was made scratch man. Last to take-off he was the first back. Unfortunately, at some point fairly early in the race, he became ill and landed at Coventry, before returning to the start. This was not the first time that Hawker had become unwell in a long distance race.

The following Saturday evening he went up again in the 100 h.p. Tabloid from Brooklands (the following extract is from 'Sopwith – The Man and his Aircraft') "and at just above 1,000 feet, over the Byfleet Road, did a dead engine loop, by diving steeply, shutting off the engine and pulling back on the stick. He completed the loop perfectly, but immediately following this manoeuvre the machine spun down. Disappearing from the view of the Sopwith sheds crew, behind the trees on St. George's Hill, it spun into the top of a tall tree, and then fell vertically, bringing down several large boughs, folding back the wings which closed like a lid on the fuselage and telescoping the landing gear into the fuselage. Hawker got out completely unhurt and rode back on the pillion of a motor cycle. Sunday morning he was up on an 80 h.p. Tabloid! In those days Hawker suffered more from long straight flying than aerobatics and crashes!

However, the machine was smashed and could not be repaired in time for the London-Paris-London Race – as C.G.Grey (the editor of *The Aeroplane*) put it 'The Sopwith entry was scratched, owing to Mr. Hawker's failure to alight successfully on a tree-top'".
So, in case you wondered, that is what happened to the first British Schneider Trophy winning aircraft.
But, the design, of course, led to a long line of successful Sopwith aircraft.



Nick Peppiatt's 21" span, 5/72 scale, Sopwith Tabloid, powered by a Brown MJ-140 CO_2 motor

To make my model the AeroModeller 1/72 drawings were scaled up five times.
The construction was basically conventional balsa stick and tissue. The longerons were 3/32" sq, with the cabane and interplane struts from 1/16" spruce.
The wing tips and tail outlines were laminated bass wood.
The wing ribs were sliced, with the spars glued between the lower and upper parts of the ribs.
The lower wings were located to the fuselage with 20 s.w.g. aluminium tubes and short lengths of piano wire.
The upper engine cowl was vac-formed, as I had access to a suitable machine at my place of work at the time.
The model was covered in Early Bird tissue, which was lightly doped and then air-brushed with a thin white, yellow and a dash of black colour dope mix to represent the natural linen finish.
The aluminium panels at the nose and forward fuselage were simulated using Liqua-Plate, which was then sealed with a lacquer.
The lettering on the sides was created with a mask from Frisk film and air brushing with black dope.
The wheels were made by laminating two 1/32" thick balsa discs with a 1/64" ply core. The tyres were added by wrapping a well-soaked piece of $\frac{1}{4}$" by $\frac{1}{4}$" across grain soft balsa around laminated part of the wheel and gluing well. A piece of 20 s.w.g. aluminium tube was glued to the centre of the wheel, initially leaving a longer piece on one side so that the wheel could be spun with an electric drill, allowing the tyre to be shaped with garnet paper. The cones were formed from paper. This method produces a very strong, but light wheel. I picked up the cross grain balsa tyre technique from the article accompanying Doc. John Martin's Dornier Komet plan published in the August 1978 edition of Model Airplane News.

The completed Sopwith Tabloid weighed 68 g. fitted with a Brown MJ-140 CO_2 motor and was much flown in the 1980s, both indoors and outside on very calm days. It first won the CO_2/Electric class at the Indoor Scale Nationals in Derby in 1981, and repeated that achievement in several subsequent years. I later replaced the Brown motor with a KP01 electric unit, which increased the weight to 80 g. It met its demise by flying into one of the posts holding the netting separating the pits from the flying area at a meeting held in the sports hall at Nottingham University in 1994.

Nick Peppiatt

Topical Twists

Sand-Storm

The most crushing way to insult this column is to take it seriously. When someone does I dolefully exchange my corn-flake cut-out Jester's outfit for the conical, but no less comical, headgear, inscribed with a large D, and retire into a dark corner.

The latest sober-sided criticism to bring about this quick-change act comes from a northern bod, styling himself "Sand-grounder." Now, not being an expert in the more obscure occupations of the northern natives, I don't pretend to know what sort of dismal operation a "Sandgrounder" must perform for his daily crust, but I will be charitable enough to put his peevish attitude down to a particularly rough session with Gilbert Harding in "What's my Line?" and leave it at that.

Anyway, he takes me to task over a slight geographical inaccuracy in the number of damp miles which separate Southport from Manchester. He also takes pains to remind me that Southport is near Blackpool, where he can remember countless thousands of human fritters being grilled to a turn.

Well, I can only assume that he has a long and ancient memory, in which case he may have found the Wilfred Pickles programme more to his book. Or, perhaps, he has been delving into old municipal records. If so, he possibly came across a reference to the appearance over the city of a large, glowing body, sometime towards the end of the last century. The town councillors, uncertain of the nature of the phenomenon, but boldly enterprising as always, erected a large steel tower, from which it was hoped to capture the mysterious orb for the purpose of using it as a centrepiece in the illumination scheme. The ruse proved unsuccessful, but the elusive sphere did make one or two return journeys to hover tantalisingly over the Tower, until eventually it was frightened away for ever by the organ music.

This explains why, on the crowded beaches, the atmosphere is warmed not by thermonuclear energy but by the thermo-human element in dense concentration, and why the nearest thing the younger generation have seen to the sun is the almost white hot radiance of Uncle Fred's nose as he dips an exploratory toe into the ice-cold briny.

Flying on the Brain

Back in the old days R/C was simply a matter of flipping a fin about in order to execute a number of realistic aerial maneouvres which can be found in any aircraft manual under the heading "When to Bale Out." All rather crude, but good clean family fun, with crack-ups, fly-aways, and disaster enough to satisfy the most primitive urges of the ghoulish onlookers.

But that's all old history. We have moved into a new electronic era of multi channel control, with the simple receiving set replaced by a sort of electronic brain that can fly the model through a series of inverted bunts and work out the Election results at the same time. The archaic bleep button has given way to a jolly little joystick, and the happy, carefree operator can enjoy his fun without his oral cavity being encumbered by the presence of his cardiac organ.

At this point I put away the model books and went out to face the stark reality of a modern radio event. The first noticeable improvement in flying technique was the smooth nature of the r.o.g. attempts; each model running straight and true across the tarmac and embedding itself cleanly in the grass verge. Only occasionally was a model smitten with the more flippant delights of the pre-electronic age. expressing its unfettered gaiety in a series of frolicking ground loops. The crowd-pranging maneouvre was also of a more polished order, with greatly increased range. The dive-in scramble, which at one time was the exclusive delight of the more adventurous spectator at the take-off area, now provided athletic fun for even the most distant onlooker.

Otherwise everything seemed to be in the good old bang-bang rudder tradition, with the crowd clapping respectfully when a model made a safe return to earth, and cheering wildly when one didn't. But perhaps on this occasion the electronic brains were suffering from clots, although possibly it would be unfair to attach too much blame to the operators.

Letters on metal wallpaper have been so numerous of late that, by now, the subject should be more fully covered than a one armed paperhanger.

Spirit of Youth

Aerodromes are getting in pretty short supply; at least as far as model flying is concerned. This state of affairs is attributed to the juvenile antics of the type of youth who is usually referred to as air-minded, although it is generally recommended that brain is a more effective head-filling agent. When unleashed on to an airfield they immediately set up a highly organised fuel bottle dispersal system, through which the empties are dumped in all the strategic positions of greatest nuisance value. Other activities include the establishment of new airfield access points ("See that we bring a decent pair of wire clippers next time") and general arson and skulduggery on a grand scale. What intrigues me, though, is this fuel bottle business. Judging by the prodigious number of empties they leave behind, that ½ c.c. engine (never been flown) which is their only slight connection with model flying, must have a fuel consumption comparable with that of an airline fleet.

"Let's ask them if they've seen our cross-Channel R/C job."

Timers, Gentlemen, Please!

We hear that Jim Walker, noted C/L expert, who made the headlines, as it were, by a nifty spot of cranial control, is still going just as strong as his equally famous namesake, Johnny. Which makes us wonder if, after one of his three-model gyratory sessions, he suffers the same dizzy after effects as is produced by that gentleman's beverage.

Speaking of hangovers, we are pleased to usher into the fold the newly affiliated Freemasons Arms Model Club; a club which obviously believes in combining model business with pleasure. The members, we are told, although filled with the right spirit, have no connection with those tap-room aeronauts, known as barflys; nor is it likely that model operations will be hampered by too many strong down-draughts. However, it is interesting to conjecture on some of the remarks that might be overheard on any convivial evening:

"Ur-r-r. Moighty strong dropee cider this. . . ."

"Has anyone seen my glowplug fuel?"

". . . Took one look at George's pylon job and signed the pledge. . . ."

"Lifted any good pots, lately?"

Pylonius

Nationals 2010 - John Andrews

The never ending search for content brings me back, as last month, to my picture files.
This lot is from my RAF Barkston Heath Nationals 2010 collection.

Back in the good old days before old age overtook us.

John & Kath Wingate - Rachel & John Andrews - Jean & Reg Biddlecome
Evening meal at the Plough Inn at Wilsford

Martin Pike, our membership secretary these days, winding a KK Ajax.
Several times he operated and recovered with son Rory in the pack-pack.

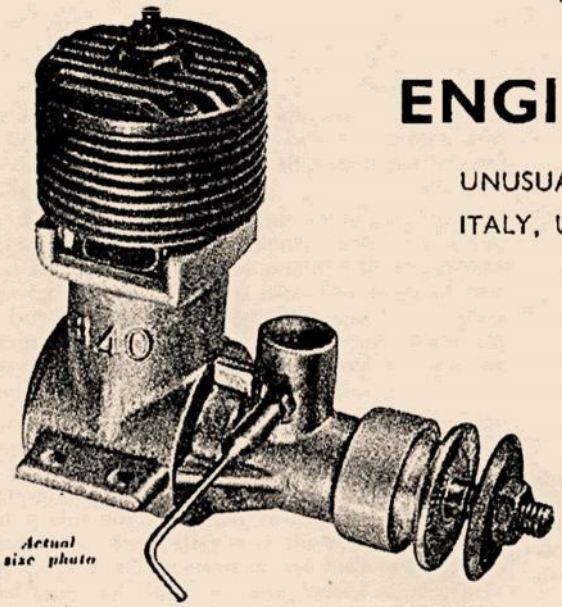
Martin gets the Ajax away, free from Rory.

Old smoothie Ron Moulton keeps the ladies amused

That's Vintage

John Andrews

Engine Analysis: BARBINI B. 40. T.N. Aeromodeller August 1957



Actual size photo

ENGINE ANALYSIS NUMBER 38

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

BARBINI
B. 40. T.N.

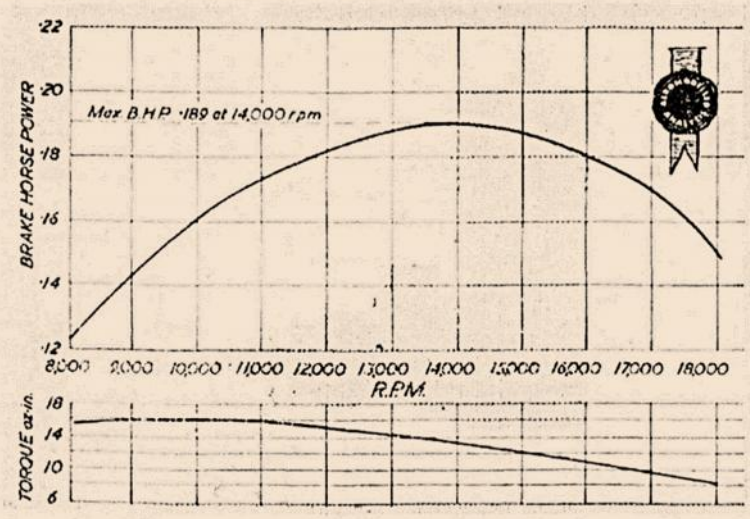
reviewed by R. H. Warring

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: 4¾ 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 34 (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.

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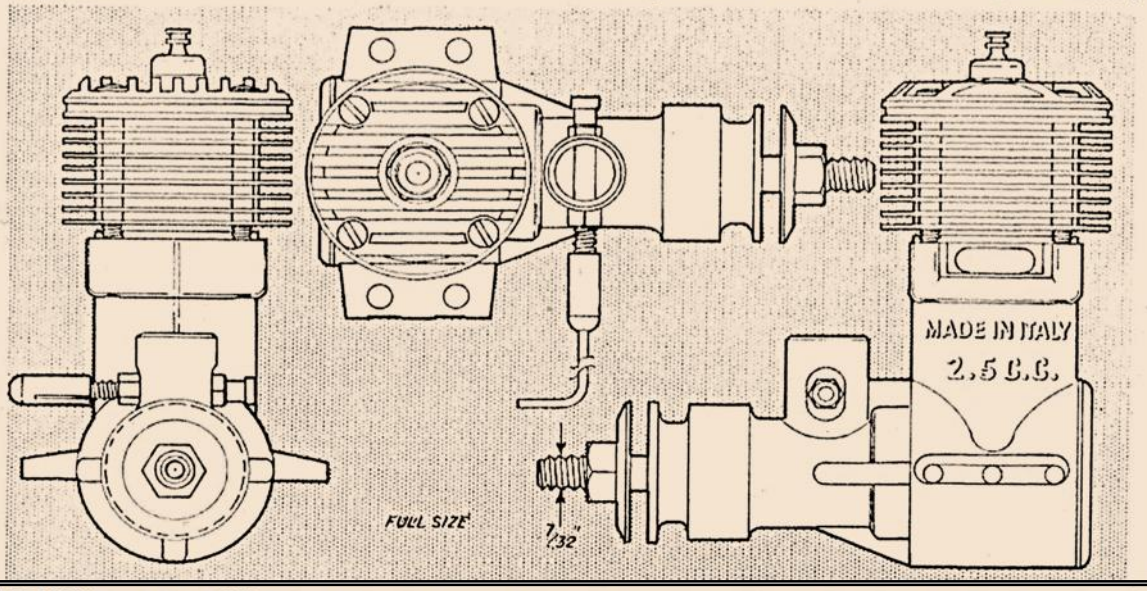


ENGINE ANALYSIS. Vibration caused by an unbalanced propeller can become a problem above 15,000 r.p.m., requiring trial-and-error positioning of the prop. to achieve satisfactory results. The cylinder gets extremely hot after a short running time and the engine normally runs quite "dirty".

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.

NEWS Review

Parks and Open Spaces

The flying of models in public parks and open spaces continues to give local authorities much concern, and a good deal of this is due to the lack of proper consideration given to this matter by most club and individual modellers, and the assumption made by many that they have a right to fly where and when they like without permission.

This fatal mistake is generally the primary cause of the trouble and is aggravated in many cases by the fact that the local authorities have little personal knowledge of model flying.

In view of recent developments it has become imperative for all clubs to make closer contact with their local authority with a view to giving them "practical" demonstrations of what aeromodelling really is and showing them that, properly conducted and controlled by the clubs, the pastime has no dangers and is no nuisance. All clubs should make a determined drive in this direction or they may find their activities seriously curtailed.

Above all, aeromodellers should refrain from flying late in the evening close to built-up areas.

Changes of Secretaryship

Much time and correspondence is wasted each year owing to the large number of changes of secretaryship amongst clubs throughout the country and the failure of clubs to notify the Society of such changes.

Obviously, the Society cannot know of such changes unless it is advised of the fact and it will continue to send its correspondence to the retired Secretary unless informed of the change.

Any club changing its Secretary should, therefore, make a point of advising the Secretary of the S.M.A.E. to make sure that the new officer receives all vital correspondence and avoid its pigeon-holing, or worse, by the past secretary.

This is a very vital matter to all clubs but one which is overlooked all too often.

A New Cup

The Pilcher Cup was presented to the Society in its early days by Mr. D. H. Pilcher, to stimulate interest in gliders in memory of the activities of his illustrious ancestor who carried out such intrepid experiments with gliders on the dawn of aviation in this country.

The contest for this cup has grown steadily in popularity until it is now one of the premier National Contests. The original object of the cup has, therefore, been fulfilled and the donor in appreciation of this has just replaced the original trophy by a new and larger one, which he considers more fitting to the present status of the contest.

In presenting the S.M.A.E. with the new cup, Mr. D. H. Pilcher expresses the hope that it will continue to inspire aeromodellers to take an active interest in gliders and sailplanes and that the contest will grow in popularity and usefulness.

The Society and all aeromodellers are extremely grateful to Mr. D. H. Pilcher for his generous gesture in providing such a handsome trophy for the contest and for his continued interest and support.

Contest Finishing Times

There still appears to be some laxity on the part of clubs in regard to the finishing time for S.M.A.E. decentralised and area-centralised contests judging by reports which we have received.

The finishing time stipulated by the S.M.A.E. is 7 p.m. and clubs should adhere strictly to this and thus prevent the contests from lagging indefinitely.

There are always one or two competitors who *will* hold back unless they are forced to take their flights and this rule was established to prevent this type of competitor from embarrassing the contest officials and to give them a chance to collate their results without having to work into the early hours of the morning. It was also instituted to prevent competitors delaying their flights to the evening in the hopes of obtaining finer weather on unfavourable days, and if decentralised contests are permitted to continue beyond 7 o'clock, some competitors may have an unfair advantage over others.

The rule does not prevent contest officials extending the time in extenuating circumstances, where a competitor has lost a machine or is repairing a damaged one, for instance.

World's Record for Gt. Britain

It is with considerable satisfaction that we are able to register that another world's record has been homologated by the F.A.I. in favour of a British claim. This is the record for motor-driven tailless models of 1 min. 50.8 sec., recently achieved by J. Marshall. Hearty congratulations.

Contest Sense

There still remains too large a proportion of aero-modellers who lack the elements of contest sense, and far too great a number of these were in evidence at the Nationals.

One such case which came to our notice on the first day of the meeting was an entrant in the power contest (not due till the second day) who turned up right in the middle of the MODEL AIRCRAFT Trophy contest to make a trial flight, in spite of the fact that close by were many hundreds of yards of tarmac from which he could make his trial flights without hindrance to the competitors and officials and much less inconvenience to himself.

There were, of course, the usual number of non-competitors who *will* fly their models on the windward side of the contest area so that their models traverse the contest take-off point, thus helping to confuse timekeepers who are trying to follow a model which is fast getting out of sight.

There was also the usual percentage of modellers who were too lazy to walk a short distance to a suitable take-off point for their trial flights, and who released their models with the greatest nonchalance right in the middle of groups of cars or persons.

A new menace which appeared on the second day was the "jet" enthusiasts who, with complete lack of consideration, set their machines going close to the roped off area, while the power contests were in progress, thus making it practically impossible for the timekeepers to hear when the motors of the competing machines cut-out. A bad show!

It is time that club officials took the trouble to educate their members regarding the elementary features of correct conduct at major contests and rallies, and we would suggest that this is a suitable subject to arrange as a lecture during the winter months.

We have no doubt that there are a number of S.M.A.E. officials who would be only too pleased to expound on this subject from first hand experience.

Radio Control Contests

The radio contest at the Nationals proved to be most interesting and well supported.

One point, however, which will have to be given close attention, both by the organisers and the competitors at future contests, is proper control over the transmitters during the contest period to avoid interference with competitors who are making contest flights.

It is only natural that competitors who encounter trouble should want to try out their apparatus but it is disastrous for this to be done while a competitor is airborne. There was decided evidence of unauthorised transmission taking place during the contest and at least one competitor lost control of his machine through this cause.

Impounding all the receivers on the field, and only issuing them to competitors individually immediately it is their turn to fly, is one possible solution. Another is to have a single *official* transmitter and to forbid the use of any other transmitters during the time of the contest.

The best way, of course, is for competitors to realise that they are jeopardising other competitors chances and for them to studiously refrain from transmitting during the contest except when they are actually taking their flight under the authority of the contest organisers.

M.A.T.A. Dinner

The Model Aircraft Trade Association are holding their first annual dinner and dance on October 13th, 1949, at the Paviors Arms, Westminster, London, S.W.1. A cordial invitation is extended to all aero-modellers, whether members of the Trade or not. Price of the tickets and other details will be announced later by the Social Secretary, C. Stevenson of 239-241, High Street, Lewisham, London, S.E.13, to whom all enquiries concerning this function should be addressed.

Taplin Trophy

The Council of the S.M.A.E. have decided to allocate this Trophy for a Radio Control Contest to be held on September 25th, 1949, on a North/South Area basis. The Northern Area Contest will be held at Sealand Aerodrome and the Southern at Fairlop Aerodrome. The results from the two areas will be collated to decide the winner of the Trophy. A Sub-committee consisting of Messrs. H. J. Nicholls, C. A. Rippon, G. Honnest-Redlich and S/Ldr. Peter Hunt, has been set up by the S.M.A.E. under the Secretaryship of E. F. H. Cosh to frame the rules for this contest and to advise the Council on radio control matters in general.

BOOK REVIEW

The Model Aeroplane Handbook. By F. J. Camm, has just joined the growing list of literature on the subject of model aeroplane building and flying. Model aircraft design, building, and flying presents such an extensive problem that it is not now possible to cover all these aspects of the hobby in one volume. Since the volume under review has attempted to cover the historical side of model aviation as well as administration by the F.A.I. and S.M.A.E., design, construction, and flying of models, steam plants, petrol engines, compressed air plants, diesel engines, rubber motors, formation of clubs, and lists of records, etc., it will be realised that it has only been able to deal with each aspect in a very brief manner. Those who are new to the hobby will probably find much of interest in the historical sections but it is a pity that the general usefulness of the book has been considerably restricted by the almost complete omission of information on engines and components available at the present time and details of modern theory and design. Published by George Newnes Ltd., at 12s. 6d.

John Andrews Goes Indoors Pt3 - John Andrews

Extract from old paper-back Clarion April 2003

John Andrews - Goes Indoors - Part 3

Following on from last month's ramblings, my efforts over a couple of years at Cardington resulted in a few reasonable indoor models and it soon became apparent, as I continued to visit the sports hall indoor meetings, that the flimsies were more than a little vulnerable. The penny finally dropped at Wallingford where I left two of my Penny Planes on their stands whilst I went off to eat some lunch.

On my return I found the back ends of the two models had been removed and the guy next to me explained that some high-speed polystyrene wonder had fizzed across my table, chopped off the rear ends and flew on without breaking step.

If you can't beat 'em join 'em. I had seen an article in one of the magazines about making a small indoor job, something like a Wot 4, from 2mm wall-foam insulation so off goes I to the DIY store and procures a roll of said material. Adhesive was the next problem; even I knew that showing expanded polystyrene any cellulose caused rapid disappearance of the foam around the area of contact followed by a creeping expansion over the next few minutes. Bison Clear Adhesive was the recommendation in the article and by coincidence I found some in the same store, Homebase or what ever name it went under in those days. It does not matter as the only place I can get it now is from 'the good old boys' at Flight-Hook.

Speaking of coincidences I must digress. I have one I must relate. I was at the BMFA Winter Open at Wymeswold in February flying Open Rubber and I set up alongside Ray Alban. Ray asked me to time his last flight and proceeded to wind. His model is worthy of comment, a large vintage rubber job with a single bladed wind shovel on the front that was more akin to a canoe paddle than a propeller. Double digression, back to Ray winding, he was nearly through when BANG. The motor had broken at the rear peg and the motor together with the winding tube made a quick exit out through the front former. Ray set about replacing the motor and called me again for his next attempt. All was OK, the model was launched and the flight timed down at 2-49.

I then collared Peter Martin to make a flight of my own. I was nearly through winding when BANG. The motor had broken at the rear peg and the motor together with the winding tube made a quick exit out through the front former. I replaced the motor and wound for my next attempt. All was OK, the model was launched and the flight timed down at 2-49 coincidence or what.

Digressions over, back to the polystyrene. Armed with the material and the glue I wondered what to build and settled on the good old Hanger-Rat. It was a good choice as it turned out as I think the Rat is about the largest size you can go with expanded polystyrene wings without spars.

I built the fuselage as normal and the tail-plane and fin were just cut from the sheet polystyrene and stuck in place with no support. The sheet was marked out with felt pen and cut with scissors. I tried cutting with a scalpel but even with a brand new blade I still got some tears at the edges so I always use scissors now. The aircraft surfaces are cut with the natural curve of the rolled sheet chord wise

to give the aerofoil section. The fin is curved to give the right turn. Each wing has one 1/32 balsa rib about 1/16 deep at the centre and a 1/16 x 1/4 deep rib at the dihedral joint joins the two halves. The method that I use for assembly is to take each wing half and mark the centre rib position then run a bead of the Bison Adhesive along the line. I then put the rib into place and hold for a minute or so until it stays put. The sticktion of the adhesive is quite good and it does not take long. I have yet to decide the best method for the centre section and I don't remember which method I used first time. My Poly-Rat is on its third wing at the moment. An electric helicopter chewed the first one up and the second got past its sell-by date. The problem with these spar-less wings is after a year or so of enthusiastic rafter bashing you begin to notice severe distortion of the wing when the model dives after a meeting with the ceiling. Eventually you lose so much altitude before recovery its best to make another wing, it does not take long.
Where was I. Ah! Yes, joining wing halves.

Method one is to shape the joint area, put a thin smear of Bison on one half and bring the two halves together with the tips propped up at the dihedral angle. You need pins to ensure you don't lose the wing section curve. When dry, add the centre rib. This helps the rib to be kept square but uses more adhesive and takes a little longer.

Method two is to use a thicker coat of Bison on each of the wing halves and bring together onto the centre rib and do the job in one go. The danger is that you can get the rib out of square to the dihedral.

The next bit is the tricky bit, the cabane and wing struts. The construction itself is not difficult, the cabane from 1/16th x 3/16th and the wing struts from about 1/32nd.x 3/32nd. The wing strut material size depends on the hardness of the balsa.
The difficulty is attaching wing struts to the wing ribs whilst keeping cyno away from the foam. The vertical cabane struts plug into flattened alloy tube cyno'ed to the fuselage and must be hard balsa for longevity. As I said earlier, foam and cellulose or cyno don't mix, my bumble-fisted approach in the early days lead to much melting foam. It's not only keeping the glue away from the foam in the jointing area but also keeping it off your fingers. You think you have got away with a joint somewhere when a few second later the spot where your sticky fingers picked up the wing starts to dissolve. You can spit on it, spray water it but it just grows as you look at it and eventually you have to start again.

Since I first got into polystyrene wings with the Rat I've built quite a few, EZB's, biplanes, triplanes, I do tend to get carried away when I get something new to actually work. There seems to be a limit to wing chord as I have not made a polystyrene Penny Plane that will fly consistently, they seem to be flying OK and then they just seem to stop, forward motion disappears and they just flop down. It maybe that the wing chord arc needs to be shallower but if you do that you lose the stiffness when no spars are used. As I am interested in simplicity I make my wings Hanger-Rat chord maximum and no spars.

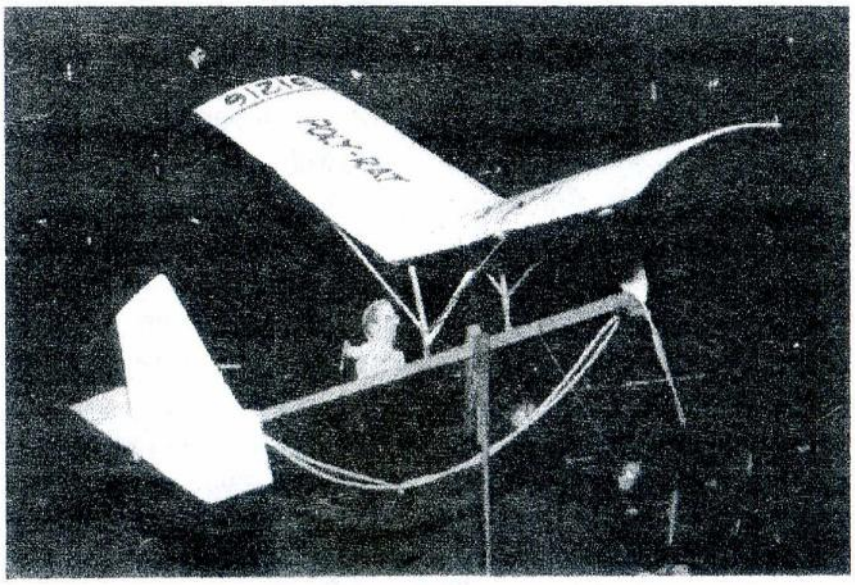
My grasshopper mind strikes again. Let's get back to making wing strut to wing rib joints. The method I have evolved is to use thick cyno (preferably the old stuff in the bottom of the bottle you never finish) and accelerator. I carefully put a

spot of the cyno on the rib edge, spray the end of the stay with accelerator and then bring the two together, Bang! job done. Practice bringing the two parts together before you do it for real however as there is no repositioning possibility. Warning, watch where you point the accelerator spray, I've destroyed a part built wing on the bench before now with fallout.

Propellers, you can use commercial plastic props if you like but keep the diameter down to six inches and use thin rubber with lots of turns. It's more satisfying to make your own props though and it's easy.

The quickest method (that's for me) is to use about 3mm white plastic tube from the hobby shop material rack for the centre, a piece about 3" long. For the blades use a thin plastic yoghurt pot and cut out some blade shape you fancy at an angle of between 10 & 15 degrees sloping left to right from root to tip. The reason for the angular spread advised is the width of the blade shape you fancy. The wider the blade the smaller the angle. The reason for this is that the twist on a wide blade may cause the tip to wash right out. The blades are then stuck to the tubing at an angle of 45 degrees at the blade root. You can do this quite easily by eye. Be sparing with the cyno as it can still melt the plastic if you get too enthusiastic.

I think I'll pack up constructional details, it was not my intention to write a blow by blow how to do it article but I just sit here at the old computer and I never really know where I'm going. I like to write light-hearted offerings but I think they must be getting a little heavy of late and I fear I may be responsible in part for the last issue of the CLARION going overweight. I got away with it myself however but from reports a lot of you 1066'ers got whacked for postage due charges. David picked the right time to go Stateside did he not?



12 The Authors Poly-Rat (Note: -John Hook is at the controls)

My Rat pictured is one of the most reliable indoor jobs I have ever built. Please note the pilot, it's John Hook himself, could be his piloting skills that keeps the Rat so stable. I fitted John as the pilot for his 60th birthday bash at Swindon the other year; it created a little amusement here and there.

Performance wise my Poly-Rat has flown with rubber motors from .070" strip up to .110" but it's had a few different propellers, as ceiling bashing is another one of my habits. The logbook records the best flight as 2-41 made at Oundle in December 2001. The motor was a 22" loop of .080" rubber with 2,300 turns.

I was intending to dig up something on vintage indoor and to that end I looked in the Aeromodellers for 1947 and all I could find was an article by Bob Copland in which he stated that although indoor free flight in America was popular it had not yet become popular in Britain. He went on to say that round the pole flying however had become very popular, but bear in mind that this article of his was in support of his RTP Thistledown plan published in the same issue.

The RTP record up to that time was about 3 minutes with tissue covered jobs but the change to microfilm covered flying surfaces immediately pushed the record to 4 minutes and development brought about by friendly rivalry between the Northern Heights M.F.C and Streatham M.A.C. eventually brought the record to nearly six minutes. There was a photograph with the article showing Bob's own model and with it was a photograph of a free-flight model so they were flown.

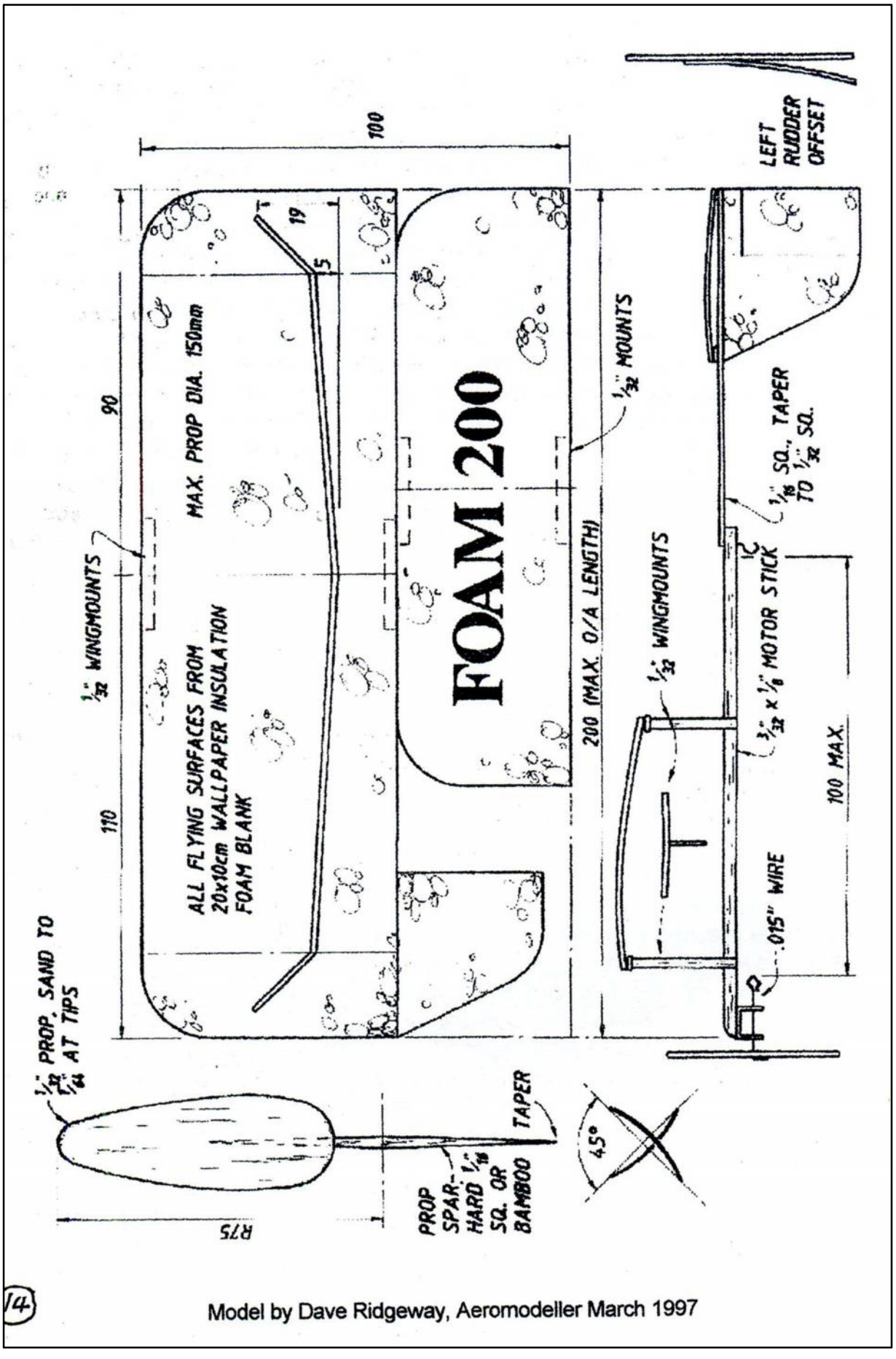
Seeing the reference to records I sent for the B.M.F.A. Records book. When I received it I was initially baffled by the contents. There are over 60 indoor record categories with various ceiling heights; 8mtr, 15mtr, 30mtr and over 30mtr. The main surprise was that only 11 records had been claimed and I have seen flights greater than the times recorded. Even I have beaten the 7-minute Pennyplane record on numerous occasions. This lack of records required a little investigation but the answer was soon found in the record book. The first difficulty is the requirement for two timekeepers, not the competition norm these days so if you want a record it is going to be a special attempt. Next problem, two certified stopwatches with an accuracy of better than 0.02% that is a 4 seconds error over a 6-hour period. It appears that records flown during the normal course of national competition would not qualify and I assume people cannot be bothered to make special attempts. I think I should pick one and have a go myself.

Whilst I was doing a bit of bedside reading I came across the Foam 200 plan, which is reproduced herewith. I have no idea how good it is for I have not built one but I have used the propeller construction method in the article accompanying the plan. The material for the prop is good old 2mm wall foam.

The method is to take four layers of foam and wrap them around a 5-inch diameter can, sandwiched between two layers of non-stick material such as self-adhesive label backing or the good ladies non-stick baking sheet. You then take a Solar-film iron set to maximum smoke and apply to the sandwich which will fuse the layers together to form a curved material from which blades can be cut as with the yoghurt pot prop. Propellers made this way are really light and will stand up to some punishment.

One point about the Foam 200 is that the wing has no structural support and this interests me no end. I am in the process of seeing how big I can go with this method. The tip dihedral joints will supply some support and preserve the aerofoil. Currently I have a 12-inch version drying in the workshop. We shall see how we go.

I'd better quit for this month or we'll be overweight again. Part 4 vintage? (13)



Model by Dave Ridgeway, Aeromodeller March 1997

John Andrews

Name the Plane - Martin Pike

I received a number of airframes from John Wingate's widow, Kath. He was best known for outdoor rubber duration models, but built other models too. I am covering an Earl Stahl P-51 of his at present, for the next Old Warden event. A legacy entry, it seems a shame not to complete the model.

Looking through the loft I re-found this towline glider, that will need recovering.
Does anyone know what it is?
My son did a reverse image search (I was impressed),
it turns out to be similar to a Kane (on Outerzone), but the fuselage is different.

It has a projected span of 34", chord of 5" and the fuselage length is 26".

Any ideas, email: martin.pike.xray@btinternet.com

Martin Pike

AERO MODELLER 402 August, 1954

Heard at the Hangar Doors

Titled Gentry

Reference to our title page indicates a number of Editorial staff changes that bring a number of long-service members into positions in keeping with their present responsibilities. C. S. Rushbrooke—probably more widely known as "Rushy" to most aeromodellers—now assumes the title of Managing Editor, having held the post of Editor since joining the magazine in the early months of 1940. Diverted from his pre-war enthusiasm for contest work, his main interests these days are administrative and a keen desire to further the aeromodelling movement generally, particularly through his work as Records Officer of the S.M.A.E., a post he has held for a number of years.

Harry G. Hundleby, for many years Assistant Editor, now fills the Editorial chair—a task to which he is eminently suited by virtue of his long association with the production and editorial side of the magazine. Interested in all aspects of the hobby, his main interest is radio-control, a subject to which he has contributed many useful articles gained from practical experience. Currently engaged on writing a book devoted to the beginner's requirements in this sphere.

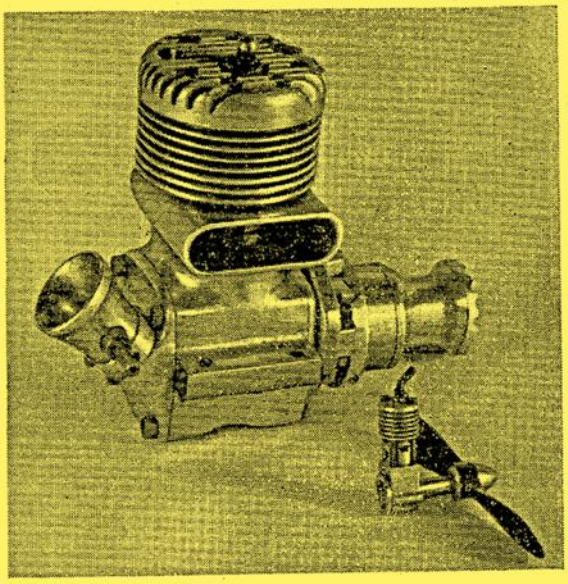
The duties of Assistant Editor are now undertaken by Ron Moulton, who joined the staff in 1950 as a production assistant. Spent some time in South Africa, and was probably the first exponent of control-line flying in this country. Currently having many successes in the free flight Power field, securing a place in the 1954 British Power Team which will compete—alas by proxy—in America this month.

Help !

Clubs and individuals are urgently required to organise events at the forthcoming Northern Gala, due to take place at Croft Aerodrome, Darlington, during the August Bank Holiday period. As is pointed out, a Committee can only do so much, and it is impossible for a small band of workers to cope with all the personnel requirements at a multi-contest meeting, and an appeal is therefore being made to anyone who is in a position to assist at this important function.

Remember, you can help yourself by helping others, and it is quite possible to fly as well as undertake an official position at such a meeting. All offers of assistance should be addressed to the Northern Area Comp. Sec., Mrs. F. Shirt, 13 Patmore Road, Sheffield 5.

Special awards are being made to the winners at this meeting, in addition to the usual Society prizes, and we look forward to generous support.



Readers will remember our reference to the engines made by Mr. Bibby of Wavertree last month. Above we show his 10 c.c. Racing Glo-engine with the amazing .05 c.c. diesel alongside. This fantastically small engine is 9/64ths bore and 5/32nd inch stroke, and was constructed on a 2 inch centre, homemade lathe.

Royal Support

H.R.H. Prince Bernhard of the Netherlands will open the 1954 *Model Engineer* Exhibition, to be held at the New Horticultural Hall from August 18 to 28. He will be flying to London especially for this function, and we welcome this further instance of Royal interest in the world of modelling.

A new trophy will be awarded this year in the form of the "Duke of Edinburgh Trophy," commemorating the opening of the 1952 Exhibition by His Royal Highness. This important award will be competed for by winners of previous competitions, who are barred from competing in the general sections, and should prove an interesting task for the panel of judges headed by Professor Low, and including our Managing Editor as representative of the aeromodelling fraternity.

Yugoslav International Teams

We hear from Yugoslavia that the following are the results of the eliminators held at Lisicji Jarak Airport, near Belgrade.

Power.—1. Vilim Kmoch 774; 2. Ljuba Nesic 729, Marko Vujic 729; 4. Vladimir Novta.

Wakefield.—1. Emil Fresl 846; 2. Joze Prhavc 839; 3. Vilim Kmoch 764; 4. Tomislav Prukner 746.

Glider.—1. Pelikan Zvonko 822; 2. Bora Gunic 815; 3. Ljuba Nesic 716; 4. Maringer Milan 710.

There is no hope of sending teams to the States, but the A/2 boys will be flying in Denmark and, judging from the above times, will offer pretty formidable opposition. Glider fans in particular will be interested to see a few short notes on various Yugoslav ideas in "Reduce that Drag" on P.413.

K. & B. TORPEDO
"THE CHOICE OF CONTEST WINNERS"

CABLE COMM. KABCO

K. & B. MANUFACTURING CO.
224 EAST PALMER ST., COMPTON, CALIF. • NEVADA 6-6161

May 28, 1954

Aeromodeller
38 Clarendon Road,
Watford - Herts
England

Dear Sirs:

It was with the greatest of interest that I read the letter that you directed to our Mr. Mahieu, concerning the Torpedo .15 horse power quotation, as extracted from the eddy-current dynamometer.

To put it mildly "Three cheers" for your organization. You have "stuck your neck out", as the old saying goes, but definitely in the right direction.

For some ten years now, I have been on record as stating that published horse power figures on the various model engines were not only erroneous but highly exaggerated. Of course we, like all the other companies, used the figures submitted to us by the various concerns that made the tests. This at least kept us on par with the other brands.

I too concur that it is high time that figures more related to the truth were published, and am exceptionally happy that the Torpedo .15 was the subject of your first Engine Analysis by the eddy-current dynamometer.

Yours sincerely,

K & B MANUFACTURING COMPANY

R. E. Brodbeck

Engine Analysis Figures

Following publication of the "Engine Analysis" tests no the K & B Torpedo and Oliver Tiger Cub we have received considerable correspondence both from manufacturers and readers alike.

We reproduce above a letter from Mr. Brodbeck of the K & B Manufacturing Company which needs no comment.

A few readers find it difficult to accept the "new" figures, but so far no one has offered valid rebuttal. Obviously it will take some time for this new standard of B.H.P. to become the generally accepted medium of comparison, but we would confidently challenge any reader to obtain the old figures using any normally accepted test equipment.

In this issue we include in addition to the full test on the "Bambi," revised figures for all the "Point Fives." Similar revised figures will be provided for all production engines.

International Handicrafts Exhibition

The Second International Handicrafts, Homecrafts and Hobbies Exhibition will be held at the Empire Hall, Olympia, from September 9th–23rd. Every type of handicraft and hobby will be demonstrated and a novel indicator will enable visitors to read off at a glance the time and place of each demonstration. The exhibition will be open from 11 a.m. to 9 p.m.

A/2 RESULTS

1 R. LINDNER, Germany
2 I. RECHENBERG, Germany
3 N. K. LUTHERSSON, Sweden

TOP TEAM:—Germany
WHEATLEY: G. Britain 12th
HANNAY: G. Britain 15th
British Team 7th

"AEROMODELLER"

1 c.c. PAA-LOAD CONTEST

By arrangement with the organisers of the 1954 *All Britain Rally, this special contest will take place at Radlett Aerodrome, Herts, on the 26th September.*

— Model Specification —

1. The model shall be free-flight category, employing an internal combustion (piston) engine(s) of a total piston displacement not exceeding 1.00 cubic centimetres.
2. All models shall Rise Off Ground, and have a freely turning wheel or wheels permanently affixed. When a single wheel is used, skids or similar devices shall be installed so that while at rest the model is in a normal attitude with no part other than the take-off gear touching the runway. Take-off gear may be retractable.
3. The model shall carry in flight one occupant having a body at least 1½ inches wide × 2¼ inches high × ¾ inches thick, surmounted by a head at least ¾ × ¾ × ¾ inches, constructed of any material but weighing at least four (4) ounces. Occupant shall not influence the operation of the model, except for weight and balance purposes.
4. The occupant must be carried in an upright position relative to level flight, facing forward and within an enclosed compartment providing visibility through transparent areas at least ¾ inch in height to the front and both sides of the head. The occupant must be readily removable from the compartment *with the model assembled*, for checking of weight and measurements.
5. Minimum model weight (less payload) shall be 6½ ounces per cubic centimetre of piston displacement.

— Contest Rules —

1. All models shall conform to the above Model Specification in all respects, and the judges reserve the right to exclude any entry that does not comply.
2. Models must RISE OFF GROUND, and maximum engine run shall not exceed 15 (fifteen) seconds.
3. Maximum score for any one official flight shall not exceed 3 (three) minutes.
4. Two attempts will be allowed for each official flight. Engine run of more than 15 seconds or a flight of less than 20 seconds shall be be declared an attempt.
5. Each competitor is entitled to 3 (three) official flights, aggregate score deciding the winner(s).
6. Prizes will be awarded as follows:—

   1st, 2nd and 3rd, Bulova Gold Watches (kindly donated by Pan American World Airways Inc.).

Special awards will be made to the owners of published Aeromodeller Plans Service designs that place in the top twelve positions.

NO ENTRY FEE. Send now for a special pre-entry form, which will save your time on the field.

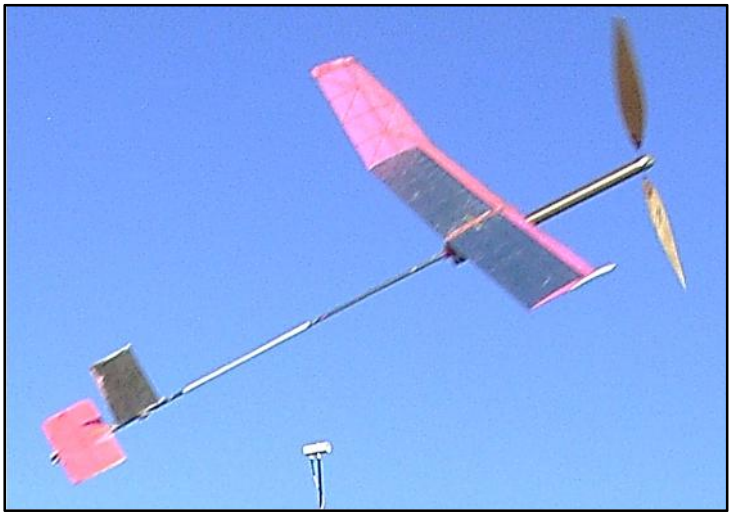
Aeromodeller Departed: Ralph Sparrow - Editor

Ralph Sparrow: R.I.P.

I received, from Glyn Sutcliffe, the sad news that one of my Timperley club-mates Ralph Sparrow had passed away. Ralph was a superb modeller and competition rubber flyer, I recall flying with him and Gerry Ferer in a team rubber event somewhere and myself being the weak link. Ralph kept an eye on me, encouraging me and in the interim getting in his three three minute maxes. I failed by three seconds on my final flight and when I reported to Ralph he said not to worry as Gerry had pranged his model and he was busy sticking bits if strip up and down his shattered fuselage to make his final flight.

Below is Glyn's record of Ralphs passing.

Hello Mr Andrews,
I thought it a good idea to contact you to make sure that you were aware of the passing of one of your members Ralph Sparrow last Wednesday the 10th of July.
I had known Ralph for about forty years as a member of BATS and often flew with him, but never in contests.
He became ill several months ago, then rallied and re-started aeromodelling again and visiting the BATS club again particularly for indoor flying.
At one such meeting he offered me his Col. Bowden 'Hummingbird' model for restoration, the one featured in the May 2021 New Clarion!
Although the model had bearers installed for I/c power it had last flown with an electric motor which he had since removed. After a few weeks he was once more confined to bed with the original illness but to a more serious condition.
I quickly added a new motor and laminated the collapsing fuselage sides with 16th balsa and dope trying hard to maintain the original 2 channel appearance.
Having sent the restoration shots to Ralph's home I received an email from his son-in-law Robin saying that Ralph was very pleased with my efforts.
Then this weekend came the sad news. Glyn Sutcliffe.



Editor

Zeppelin: continued - John Christopher

Extracts from the book 'The Zeppelin Story' by John Christopher.

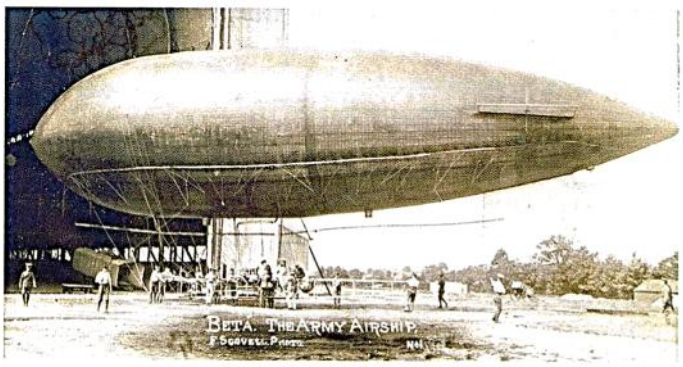
BACK TO THE BLIMP

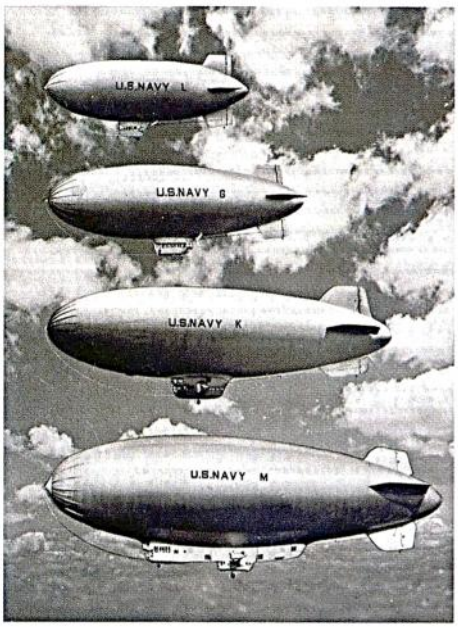
The reason for the airship's great efficiency against submarines is obvious. Unlike the aeroplane, it can accommodate its speed to that of the slowest freighter, giving it constant protection if required. At this slow rate of travel airship crews have detected a submarine lurking as deep as 90ft below the surface of the water.

'Trail Blazing in the Skies', Goodyear Tire & Rubber Company, 1943

Beta 1 was one of the first non-rigid or pressure airships evaluated by the British Army. She had begun life as Baby in 1909, but was enlarged to 33,307cu ft the following year.

After the fall of the giant rigids it was left to the lowly pressure airship or blimp to maintain a lighter-than-air presence. The most obvious characteristic of the pressure airship is that it has no rigid framework, and instead the shape of its envelope is achieved by maintaining the internal pressure at levels slightly above the ambient outside air pressure. Because air pressure fluctuates according to a number of factors, most notably reducing with height, and the internal gas pressure will also vary depending on the effects of heating and so on, a mechanism is required to keep the envelope from either sagging or bursting. The solution is the 'ballonet' – the word comes from the French for a small balloon. All pressure airships contain one or two air-filled ballonets which can be depleted when the gas pressure increases, or filled with air when it decreases. Most designs, but by no means all, have one ballonet towards the front of the envelope and one aft, and by adjusting the balance between the two it is possible to adjust the trim of the airship. It is not the case that the ballonets are used to make the airship climb or to point the nose up or down, as that function is accomplished using the elevators on the tail.

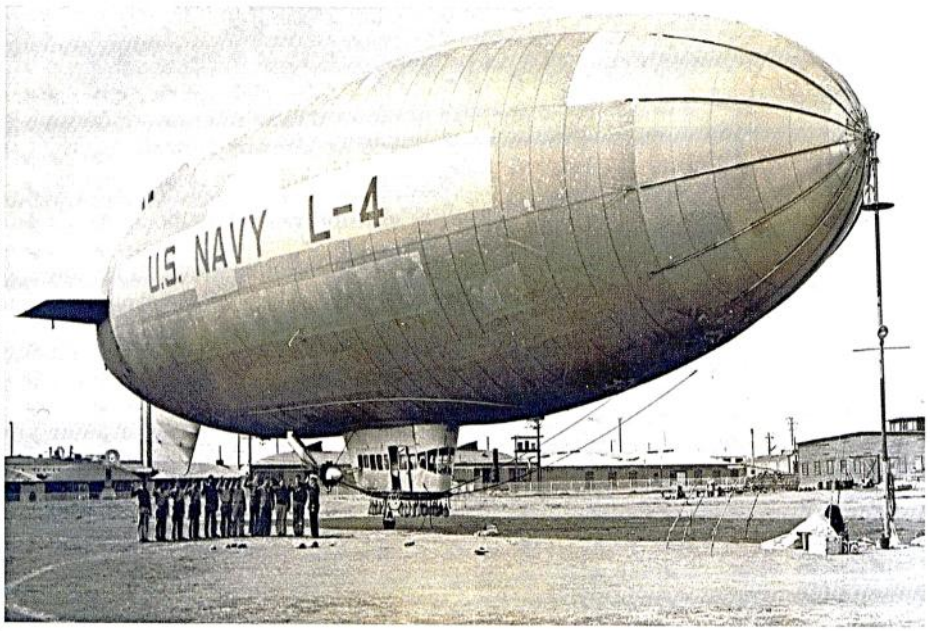




A photographic montage showing the main classes of airship operated by the US Navy during the Second World War. The L-ships were based on Goodyear's pre-war advertising blimps.

As mentioned in the introduction, blimps were flying before Count Zeppelin's progeny became airborne and they also attracted the interest of the military for aerial reconnaissance duties. Given their apparent vulnerability the blimp might seem an unlikely recruit, and yet these gas-bags provided robust and reliable service throughout both world wars. In the First World War it was the British in particular who deployed blimps on convoy escort and

➤ *'You're in the Navy now!' Its advertising blanked out, Goodyear's Resolute was rebranded in US Navy colours in 1942.*



anti-submarine patrols, most notably over the Channel and the North Sea. In total, 213 were built for the Royal Naval Air Service (RNAS), the majority being the SS-class and the bigger Coastals, C Stars and North Sea classes which featured a distinctive tri-lobe envelope developed by the Astra-Torres Company. The specifications for

these varied throughout the course of the war. For example, the early SS airships had a relatively small envelope volume of 70,000cu ft (19,810cu m) and a basic open gondola adapted from an aircraft fuselage, while the final North Sea craft were 36,000cu ft (10,190cu m) and had a larger enclosed gondola.

During the Second World War it was the Americans who played the lead role. Shocked into action by Japan's attack on Pearl Harbor on 7 December 1941, the US Congress approved the '10,000 Plane Program' which included the procurement of airships for the US Navy. The Goodyear Company conducted the lion's share of

➤ *By the early 1960s the non-rigid had reached its ultimate expression in the form of the massive ZPG-3W which carried internal radar dishes for Airborne Early Warning (AEW) duties.*

the manufacturing work, and a large-scale training programme also swung into action. Several of Goodyear's advertising airships were immediately pressed into service, mainly of the L-ship class, and they served as training ships or on maritime patrols until the bigger and purpose-built K-ships came on line.

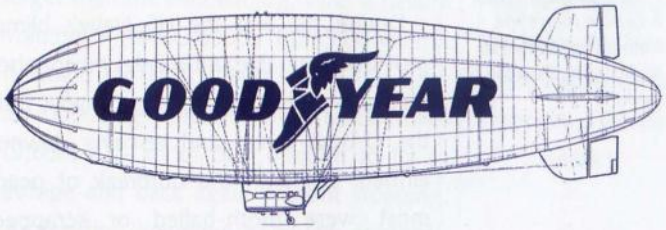
The K-ships were without doubt the stalwarts of the US Navy's wartime airship force. Their specifications varied slightly and saw the envelope size reach 425,000cu ft (12,028cu m) by the end of the war. Powered by two air-cooled engines, mostly Pratt & Whitney 425hp radials mounted on outriggers, they had a range of over 2,000 miles (3,200km), an endurance of thirty-eight hours and a cruising speed of around 58mph (93km/h). The crew of ten consisted of pilots, navigator, ordnance-man, mechanics and two radiomen. As well as escorting shipping, the K-ships had teeth with which to attack enemy submarines, including four Mk 47 depth charges and a Browning machine gun. Goodyear built 135 of the K-class airships and they were deployed over the Atlantic and Pacific Oceans and at several locations further afield. In 1944 the first of eight K-ships were flown across the Atlantic to operate from Port-Lyauty, in French Morocco, in order to carry out anti-submarine patrols in the Gibraltar Straits and, later on, to assist in mine spotting and clearing in the Mediterranean.

During the war the US Navy's blimps provided a valuable and largely unrecognised service in protecting shipping convoys from the U-boat threat and rescuing downed airmen. But with the outbreak of peace most were moth-balled or scrapped, although a few were sold off to become advertising blimps. An ever diminishing band of airship supporters within the Navy continued to fight their corner and development of the pressure airship peaked with the massive 1,516,300cu ft (42,911cu m) ZPG-3W Airborne Early Warning (AEW) airships. However, the arrival of all-seeing satellites meant that the writing was on the wall for the airships and the US Navy decommissioned its last ones in 1962.

Throughout the 1960s and 1970s the Goodyear Company famously operated its own small fleet of promotional blimps, making appearances above countless sports stadiums in the USA. In 1972 they were joined by the *Europa* which was assembled at Cardington, in the UK, and, based in Italy, she served as the company's European 'aerial ambassador'.

◀◀ *In the decades following the Second World War, Goodyear's fleet of promotional blimps, including the Mayflower shown here, became familiar to thousands of American sports fans. (Goodyear)*

▼ *Elevation of a Goodyear blimp showing the internal arrangement of the ballonets, fore and aft, and the catenary curtain which supports the gondola from the top of the envelope.*



▲ *Goodyear's Europa N2A in her prime. Photographed at Bristol Airport in June 1984. Note the rows of small Nightsign bulbs along her flanks.*

John Christopher

Report No.162 Our earliest books.

Continuing in 1910, we next come to "Modeles d'Aeroplanes -Historique- La maniere de les construire" edited by Adrien Fieux and complete with a sticker declaring it to be the property of the Libraiie des Sciences Aeronaitiques, Paris. Fortunately, we are not holding a book with hundreds of French Francs and Euros outstanding in fines, we just have a digital copy.

As you might have concluded from the title, this book covers the history of aeromodelling up to 1910, as seen from a French point of view. The story is well supported with sketches and photographs. Below are some extracts which have been subject to Google Translate, following which I offer a rewording, before finally reducing to a precis.

"Launoy and Bienvenu's helicopter

The Mongolfler brothers had barely discovered balloons when in 1774, a year later, Launoy and Bienvenu presented to the Academy of Sciences a device heavier than air rising by its own means.

Le Journal de Paris n° 19, published this letter from the two inventors:

"Our small machine worked perfectly for us. This successful attempt has determined us to carry out a larger one which can put the public within reach of judging the reality of our means. We propose, to experience it on a grand scale and to climb into this vessel ourselves. We have no other goal than to set a date. Signed: Launoy, naturalist. Bienvenu, machinist-physicist."

The Academy then appointed a commission who submitted the following report:

"This machine imagined by Lannoy and Bienvenu is a kind of bow that is stretched by making its rope make a few revolutions around the arrow which is at the same time the axis of the device. The upper part of this axis carries two wings which move quickly when, after having drawn the bow, we hold it towards its middle. The lower part of the machine is furnished with two similar wings which move at the same time as the bow and which turn in the opposite direction to the upper wings.

The effect of this machine is very simple: when after having drawn the bow and placed the axis in the vertical situation we have let go, the action of the bow causes it to rotate quickly, the two upper wings in one direction and the two lower ones in the opposite direction.

These wings being arranged in such a way that the vertical forces conspire to raise the engine, it rises, in fact, and then falls by its own weight."

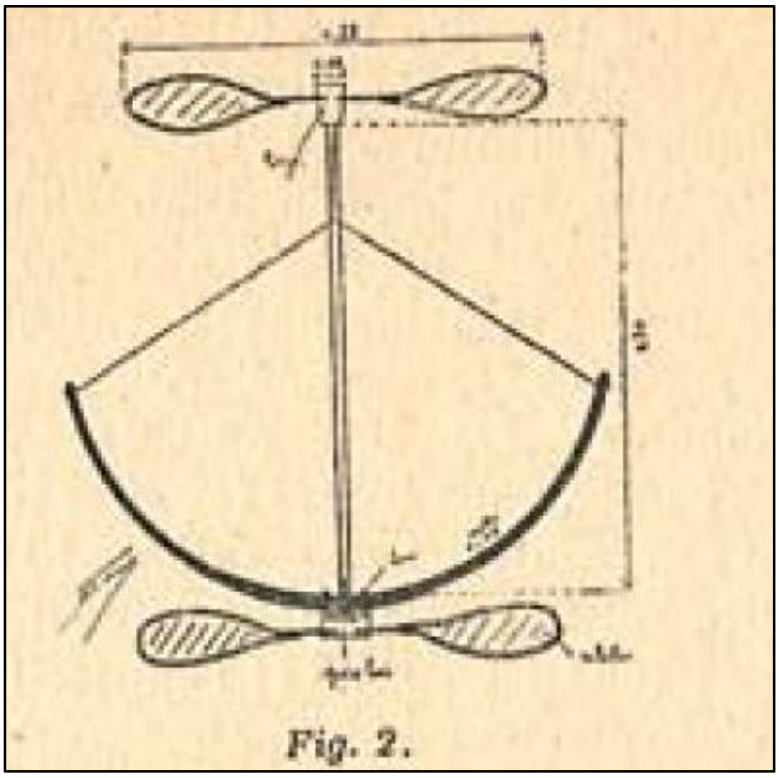


Fig. 2.

"Here is the little machine completed, all that remains is to wind it up and experiment with it.

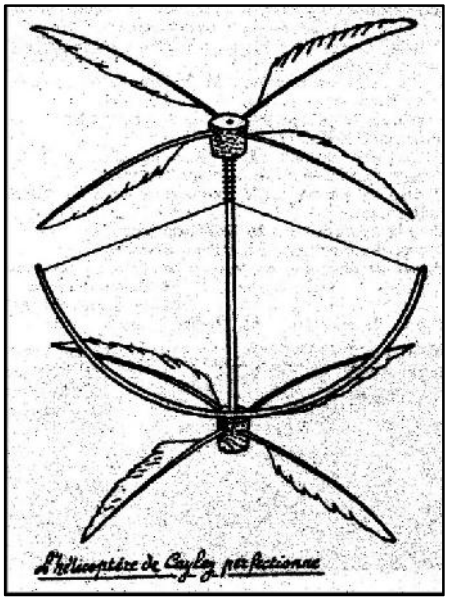
To wind-up the device, take the upper wings in one hand, the lower wings in the other and turn in the opposite direction so as to bend the bow.

To fly the device, hold it vertically with the bow at the bottom then straighten everything, the device will rise vertically from 5 to 10 m high and will travel a small distance if the wind carries it horizontally and thus contributes to its propulsion."

"The Cayley Helicopter

The Cayley helicopter, similar to that of Launoy and Bienvenu, was invented in 1796, in England, by Sir George Cayley. This device, as we can see, is roughly similar to that of Launoy and Bienvenu, so we refer the reader for its construction to the previous article.

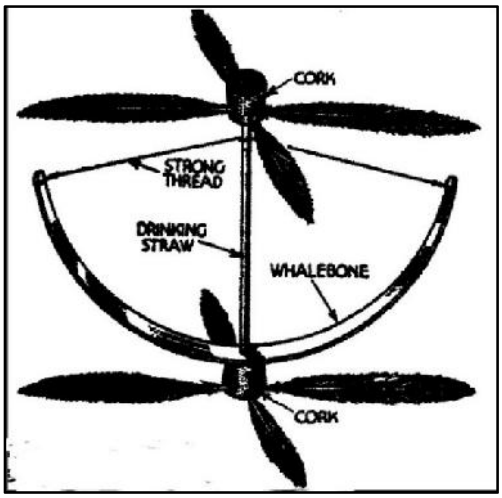
Note, however, that this small, very light machine flies very easily and rises with the greatest ease to heights varying from 10 to 18 meters and travels distances of 30 meters in a light wind."


L'hélicoptère de Cayley perfectionné

Whilst the above extract includes the words "as we can see", I found no drawing or photograph of the Cayley machine anywhere in the book.

Included on the right is a sketch from Le Modele Reduit D'Avion of July 1941 together with their comments.

"Let us add that the English recognised Cayley for a long time as the inventor of a similar device, but built in 1796. No confusion exists today regarding the priority of Launoy and Bienvenu, whose device, in their time, was very well known in many capitals. Subsequently, this type of model was made by toy dealers."



The sketch on the left, taken from SAM 35 Speaks July 2007, is of Cayley's Helicopter as it appeared in Hobbies New Annual of Easy to Make Working Models. The book is undated but some say it was published in 1934, The SAM article does not quote any accompanying article that may have appeared in the book. Please have a look at any 1930's Hobbies Annuals that you may be holding and should you find Cayley's helicopter I would most appreciate scans of those pages, the "Contents" page and the book cover.

"The Demoiselle of Pénaud

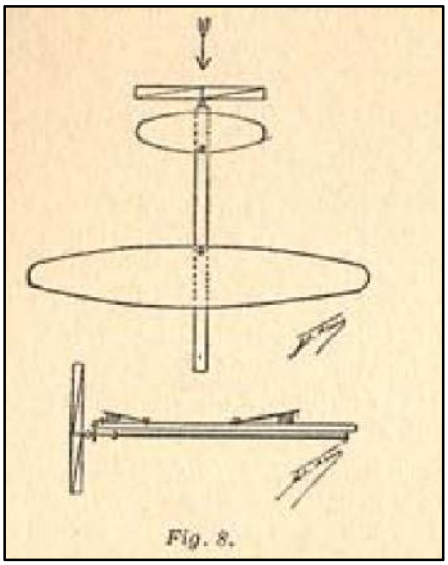
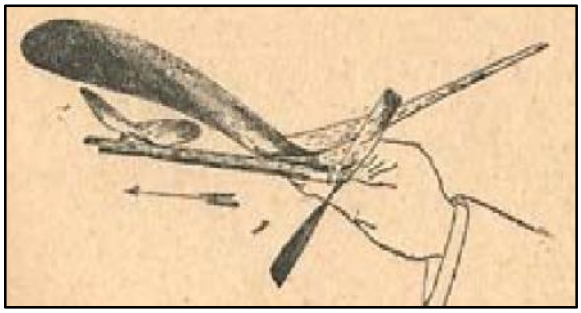
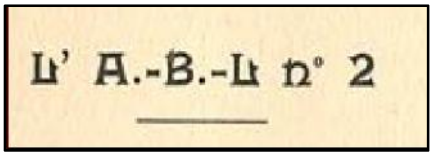


Fig. 8.

It was in 1871 that Pénaud built the small device that he called the "Demoiselle" planophore.
It was the first airplane type device that managed to achieve free and stable flight.
This little device was built very simply: two cardboard wings; one three times smaller than the other; were attached to a flat wooden rod, the propeller, located at the rear, was cut from a simple strip of wood.
The engine frame will be made of a flat piece of beech or ash wood measuring 30cm long, 8mm wide and approximately 3 mm thick. At one end of this wooden rod will be fixed a simple nail driven perpendicularly, at the other end a piece of aluminum with a hole through which the propeller shaft will pass.
The propeller will be made up of a rectangular and flat wooden slab 15 cm long and 1 cm wide. We will easily twist this by taking one extremity in each hand and turning in the opposite direction after placing it under a jet of steam.
The axis of the propeller will be made of steel wire folded two or three times around the middle of the propeller and fixed firmly to it, this axis will be passed through the aluminum plate of the chassis then curved into a hook to hold the rubber which will be fixed to the nail located at the opposite end.
The rubber motor formed by six strands measuring a total of 1.25m, will advantageously consist of English No. 18 which is the best rubber existing at present.
The wings will be made either of hard cardboard (graphic drawing paper) or of thin 2/10° aluminum sheet, or even of light sheet of wood.
The small oblong-shaped wing of 15 cm. long by 4 or 5 wide will be fixed near the propeller and will be raised slightly behind by a block of wood or glued cork as shown.
The large wing will be fixed so that its rear edge corresponds to the middle of the chassis, it will measure 35 to 40 cm. long by 6 to 7 cm wide. It will be slightly raised towards the front, to do this, its rear edge will be screwed onto the wood of the frame and its front edge will be raised by a wooden or cork wedge.
We will fix on the chassis a movable weight made of a thin lead plate 1 cm wide, this plate will be folded on itself around the chassis, we will also leave it a certain amount of play so that it can allow it to slide easily on the wooden rod.
We will wind-up the device by turning the propeller approximately 160 turns, we will take it with our right hand by the propeller and the wooden rod and we will let it go by giving it a slight forward movement.
If the aircraft pitches down, we will move the weight backwards; if the aircraft pitches up, we will move the weight forwards.
We can also vary the V of the wings, tilt the ends of the wings more or less to obtain the final adjustment. The device in this way will not take long to make small flights of 5 to 15 meters which will become larger if the maker has built his device well and especially if he knows how to experiment with it."



The last chapter of the book offers a supply of parts and kits .The kit for the Demoiselle may be built as Penaud's original or as a canard as shown in the sketch on the left, which also shows the hold for launching.



On the left is the chapter heading and name of the next model. Google declined to offer a translation.
The author offers this as a simple-to-build model and gives building instructions in five sections. Below is a precis of the translation from the introduction and the first section on the building of the wings.

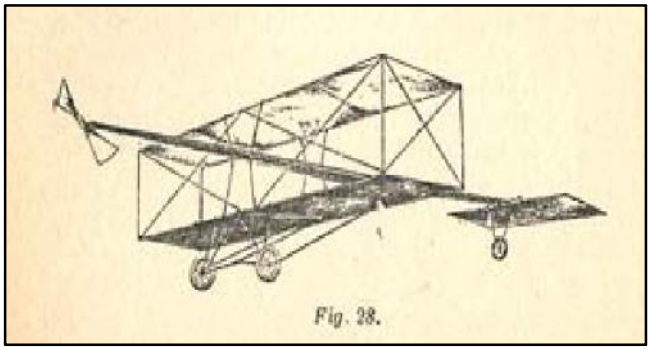


Fig. 28.

"This extremely simple and easy-to-build model entails extremely little expense, requires no skill, and no special knowledge.
Supporting planes.
Each of the two rectangular planes constituting the front cell is formed of a rigid steel frame, over which the covering is stretched. Cut from the fabric two rectangles of 1m by 30cm.
Have a hand sewn or machine stitched seam of 8 mm on each of the four sides, taking care to turn the fabric several times to give more strength to the hem. Insert a 1 meter steel rod into each hem of the long sides. Then sew small rings at points 1, 2, 3, 4, 5, 6 of each plan.

Ribs - So that the sail is perfectly taut, it is essential to place ribs which keep the two long rods strictly parallel. These ribs, five in number, are made of 20/10 aluminum wire. Cut five pieces of wire. Insert two into the small hems; then attach them to each rod as indicated in the sketch by a sort of hook. For the other three ribs, repeat the same operation, piercing the fabric and maintaining a distance of 25cm between each rib.

Fixation of the eight uprights in aluminum wire. The assembly of an upright and a spar is carried out in the same way as the ribs. The wires will be cut to 27cm for the four corner posts and at 30cm for the four central ones which will have to carry, halfway up, a small loop, intended to support the engine frame made of aluminum tubes.

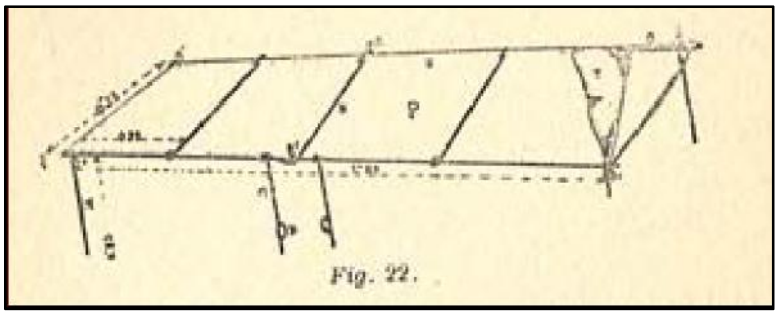


Fig. 22.

The eight uprights are fixed on one of the planes, place it flat on a table and place the second plane on the aluminum wires, pierce the sail at the same points, and turn the end of the wires forward. Ensure that the spacing of the planes is the same everywhere.

Fixing the diagonal tension. Cut eight lengths of cord 60cm for the two big sides of the cell and four of 35 cm for the other two. Form a small ordinary hook to one of their ends. Staple the hooks of the long wires to rings 1, 3, 4, 6 of the eight corners. Attach the other end to rings 2 and 5 placed in the centre of the planes. The hooks of the short wires will attach to rings 3 and 4 of the interior plane. Setting. It is essential that these threads be slightly taut without being too tight. To adjust this tension more easily, it is preferable to leave the threads long enough and tie knots to gradually reduce their length to the exact dimension.
The front cell is therefore finished and its whole thus constitutes a small lattice beam of remarkable lightness and solidity.
Designing an aviation device is nothing, the building is something, experiencing it is everything."
Full chapter available by email should you wish to make this "easy-to-build model".

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

Roy Tiller

The 'Kings Cup' Air Race - Wikipedia

The **King's Cup** air race is a British handicapped cross-country event, which has taken place annually since 1922. It is run by the Royal Aero Club Records Racing and Rally Association.

The King's Cup is one of the most prestigious prizes of the British air racing season. The entrants are divided into classes, and each is evaluated and given a time handicap for the start of the race. They all take off at varying times according to their handicap, with the handicappers' aim being that they should all cross the finishing line at the same moment. The art of winning the race outright is therefore to beat the handicappers, rather than to make the fastest flight as such. The aircraft are also divided into classes, with a winner for each class as well as the outright winner.

The King's Cup

Airco DH.4A (G-EAMU), after winning the first King's Cup air race, 1922

Awarded for	Handicapped air race for light aircraft, and British or Commonwealth pilots
Country	International
Presented by	His Majesty King George V
First awarded	1922
Last awarded	2017
Website	Royal Aero Club Records Racing and Rally Association

History

Sir Philip Sassoon presents the King's Cup to the winner Winifred Brown in July 1930

The King's Cup air race was established by King George V as an incentive to the development of light aircraft and engine design. Initially, it was open to Commonwealth pilots only.

The first King's Cup air race took place on 8th-September 1922. It covered a distance of 810 miles from Croydon Aerodrome, south of London, to Glasgow, Scotland and back again after an overnight stop. The winner of this first race was Frank L. Barnard, chief pilot of the Instone Air Line, in a passenger-carrying Airco DH.4A.

The 1939 race was cancelled due to the outbreak of World War II, and the contest did not resume until 1949. The 1951 race was abandoned due to bad weather. In 1953, there was a fatal mid-air collision at the King's Cup Air Race meeting at Southend Airport, in which John Crowther, a hotelier from the Marine Hotel, Tankerton, Kent, was killed.

In 1961, for the first time, aircraft designed outside Great Britain and the Commonwealth of Nations were allowed to enter, after the 1960 race was won by a French designed but British built Druine Turbulent. Aircraft all-up-weight was limited to 12,500 lb, and the aircraft required to be British registered.

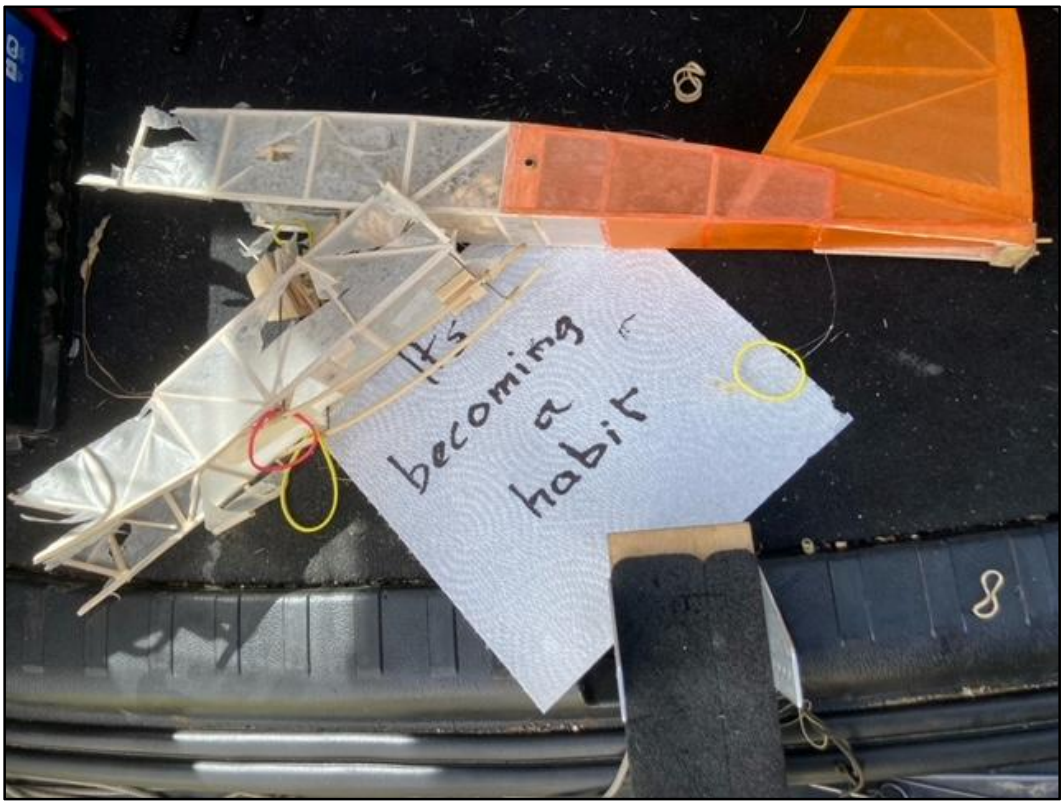
Along with the former Schneider Trophy, and the current British Air Racing Championship, the King's Cup is one of the most sought-after prizes of the air racing season.

Wikipedia

You Never Learn - Chris Redrup

Pictures taken a few weeks apart. Both are of Paul Masterman's Bazooka.

Model on stooge - "One turn too many. We have all done it!"



Model in back of car after a rebuild - "Some of us keep doing it!"

Chris Redrup

Occasional Notes from North Wales - Roger Newman

Only modelling activity is at present talking to & receiving pictures from Gianni in Rome, where he continues to build – but not quite complete, a variety of small control line models, having virtually given up on free flight as almost all of his friends who indulged in the hobby have passed away.

Noted that the F1A/B/C European championships are being held this month (July), in Romania. The UK team has 3 entries in F1A & B but 2 only in F1C. 21 countries are participating with 71 entries in F1A, 65 in F1B but only 32 in F1C. Does this infer that the latter class is now diminishing even more in popularity? France & Germany have the largest teams. The Asian-Oceanic championships for the same classes are taking place in Ulaanbaatar, Mongolia at the same time. Anyway, good luck to all who fly.

Reality appears to have hit the roost regarding eVTOL progress, just a few marketing hyped press releases, including some from the Farnborough Air Show, without very much substance or marked progress. The Olympics have virtually arrived without the much vaunted use of Volocopter activities. Maybe Paris is a hurdle too far. A very perceptive paper was released during the month, quite long but informative & down to earth in its assessment of the state of play – find it by googling "White Paper: "Demystifying Advanced Air Mobility (AAM)".

Roger Newman

Secretary's Notes for August - Ray Elliott

The BMFA Free Flight Technical Committee has agreed that, from 2025, it shall be mandatory for all free flight models weighing 250g or more flown in competition to be fitted with radio DT. They also agreed that if such a model's competition flight was likely be lost from visual line of sight that model should be DT'd assuming it is safe to do so.
The FFTC will be encouraging all those who fly free flight models, not just competition models weighing 250g or more, to use radio DT although this will not be mandatory.
The committee state that this rule is being brought in to help our methods and practices align with CAA regulations.
For more information see FFTC News issue 130.
A couple of comments;

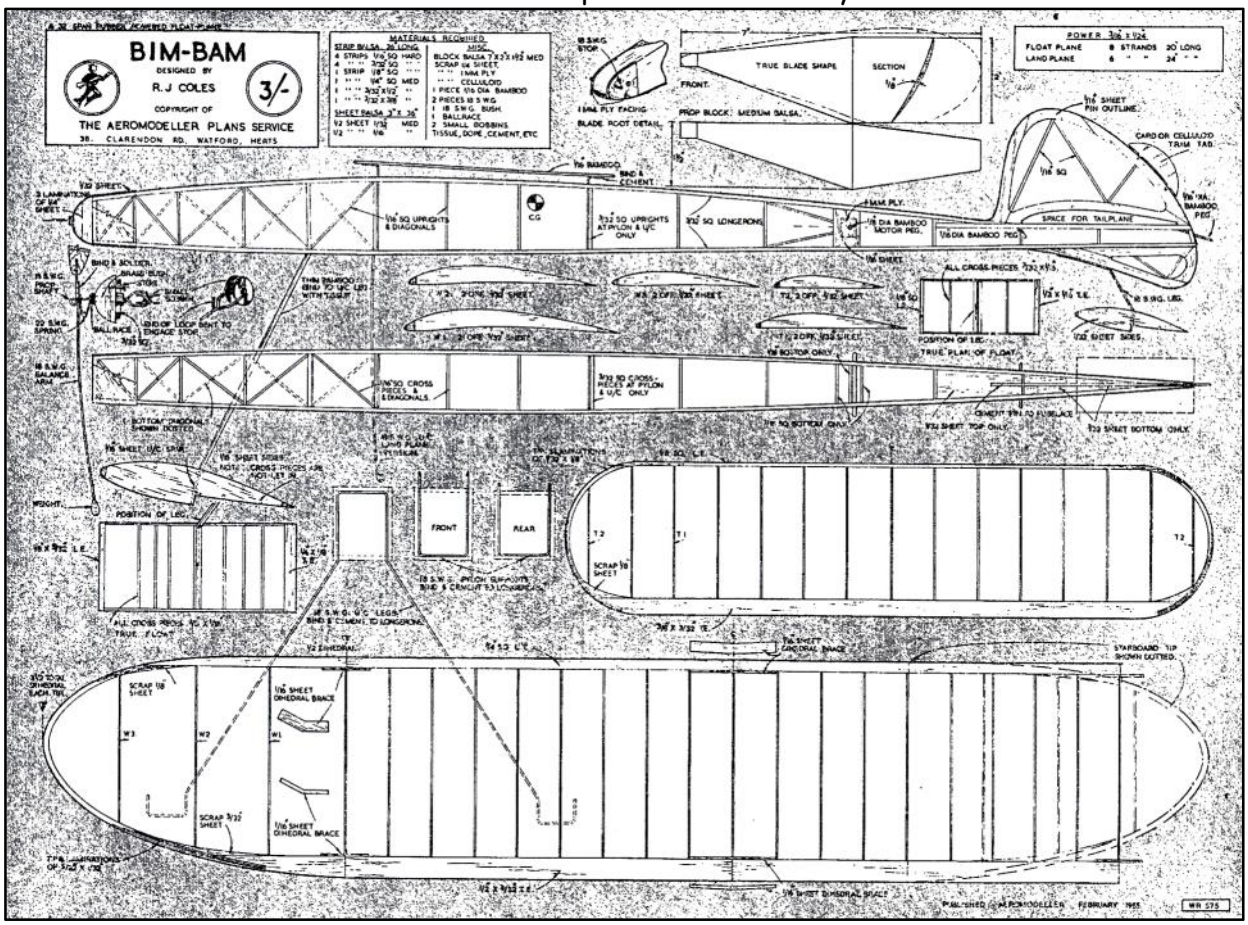
- There are very few suppliers / manufacturers of radio DT systems and components (I can only think of one in the UK and he sells worldwide). Will they be able to cope with demand, particularly if this becomes a worldwide requirement?
- There is increasing interest in and use of altimeters to determine the actual flight time of a model, particularly when it goes out of sight. I recognise that this technology is aimed primarily at major contests such as World and European Championships and World Cup events but it does illustrate a conflict with the termination of flights as set out in the rule outlined above.

Chris Redrup has announced that the rearranged Crookham Gala will now take place on either the 28th or 29th of September. A decision on which date will depend on the weather forecast a few days before the contest. Details are included in this issue.

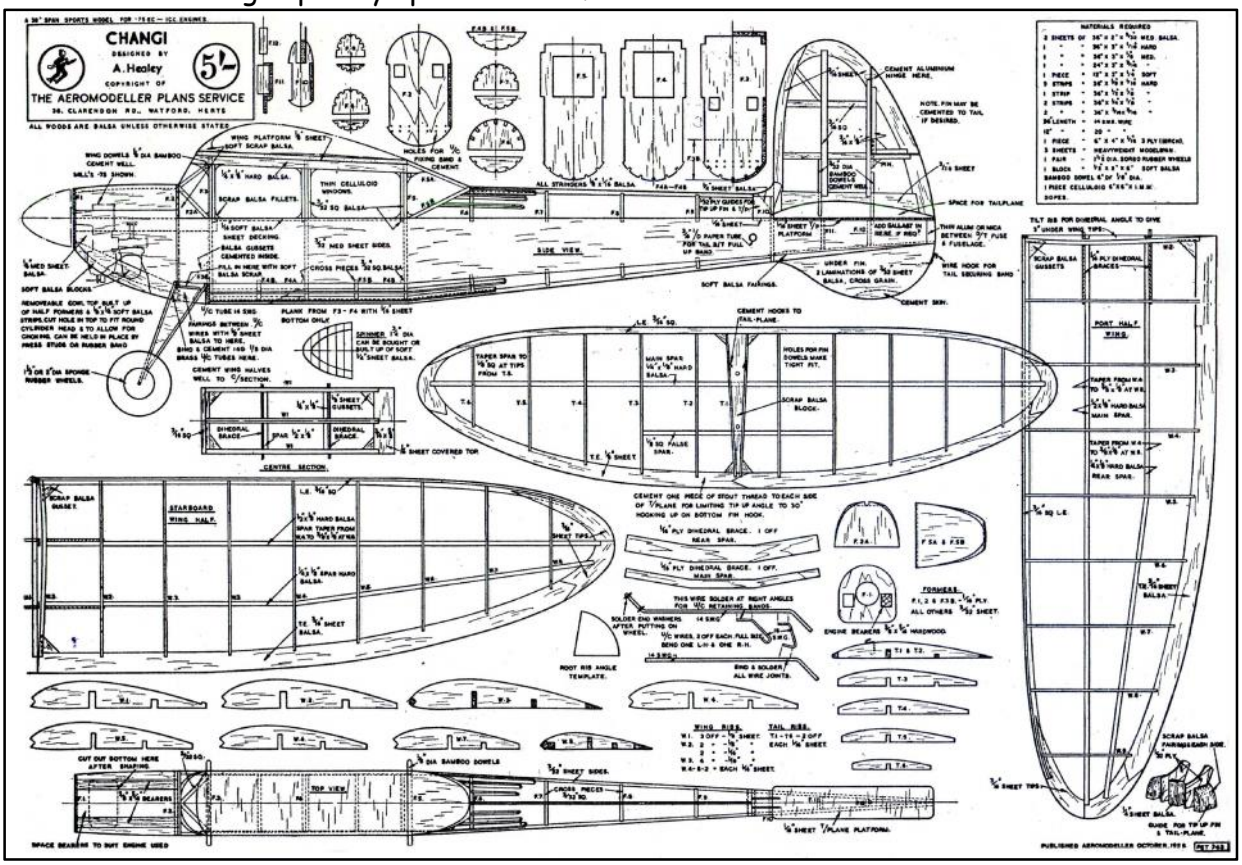
Ray Elliott

Plans for the Month - Roger Newman

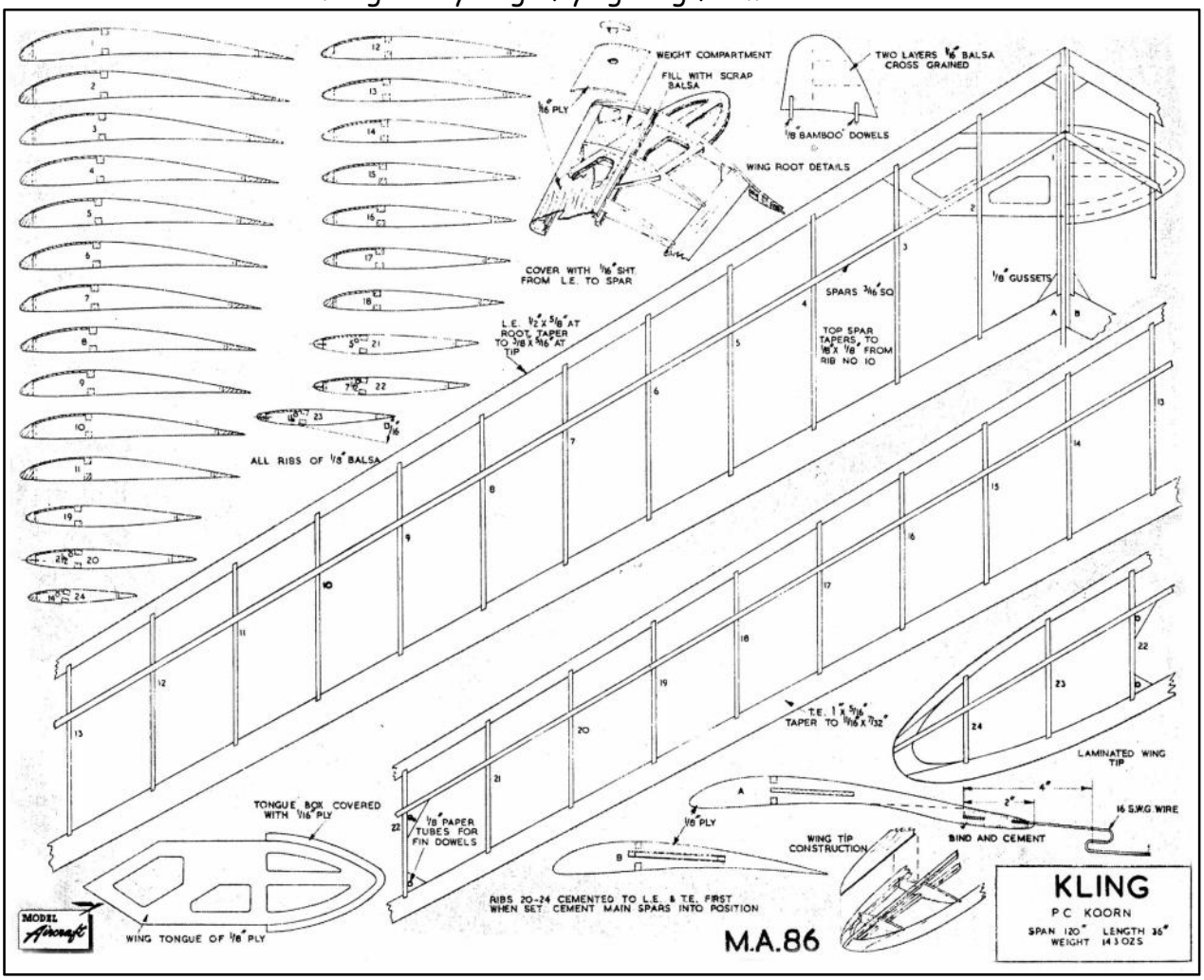
Rubber: Bim Bam - Float plane from February 1955 Aeromodeller, remember the "pond" from MW days?



Power: Changi – pretty sports model for Mills .75 – Aeromodeller October 1959



Glider: Kling – very large flying wing from Holland '50s era



Roger Newman

Events and Notices

Southern Area BMFA Free Flight Gala

Sunday 18th August 0900-1800 hrs

RAF Station ODIHAM, Hants

CAGNARATA Comp. CD Nick Peppiatt. nickpeppiatt@hotmail.com

SCALE Comps. CD Mike Smith. michaeldocsmith@gmail.com

& SPORT Flying

For security reasons all attendees are required to pre- register.
Those wishing to attend **must** send the following details to:

Peter Carter
74 Buckland Avenue
Basingstoke
Hants, RG22 6JA

Phone 01256 352922 - p.carter34@btinternet.com

Name, - Car: make, model and registration no.; BMFA number, together with Contact details.

including entrance fee of £10 with cheques made payable to Southern Area BMFA;

Arrive at Station main gate from 0800-0945hrs.

Please note those attendees that paid the entry fee for last year's cancelled event are exempt from payment this year.

SAM 1066 'Cagnarata' Contest

To be held at the Southern Area BMFA Free Flight Gala
on Sunday 18th August 2024 at RAF Odiham

This contest format is popular in Italy and is basically an all-in event where models of different classes are flown against each other.
Differences in performance of the various classes are taken into account using a handicap system (K factors) with different maxes depending on the K factors. The classes to be flown with associated K factors and maxes are set out below. The total flight time score is calculated by taking the sum of the actual flight times and multiplying it by the appropriate K factor.

Class	K Factor	Max (secs)
E36 (motor run 8 secs)	1	120
Mini Vintage Power (motor run 10 secs)	1	120
F1G/Vintage Coupe	1	120
F1H/A1	1	120
Mini Vintage Rubber	1	120
Open Vintage/Classic Glider	1	120
Tailless	1	120
E30 (motor run 40 secs)	1	120
P30	4/3	90
CO_2	4/3	90
E20 (NFFS Rules – motor run 20 secs)	4/3	90
Under 25in Vintage Rubber	3/2	80
Hi-Start Glider	3/2	80
CLG/HLG (modern)	2.5	48
CLG/HLG (classic/vintage)	3	40

Note 1: All fliers must be BMFA members – pre-entry is required via Peter Carter – see separate ad
Note 2: Four flights for comp, no rounds
Note 3: Competitors may enter more than one class
Note 4: DT fly-offs may be used as appropriate, fly-off time as per max in class.
Note 5: Free competition entry, prizes for the first four places.
Note 6: Competition will begin at 10.00 and end at 16.00, followed by any fly-off.

Provisional Southern Coupe League Calendar 2024

The calendar this year is a little different to normal with the delayed Coupe de Birmingham within calendar year, dates of some host events shuffled round, only one Coupe event in the Areas rather than the usual two and Coupe (F1G) absorbed into the new "Combined Mini" class at the London Gala. Combined Mini should be won by an F1J so League points will be awarded in accordance with the scores of Coupe entrants in isolation. Scoring will remain as now with nine league points for first place on the day then six down to one point for the following places with five highest score to count toward final placings. The League trophy will be presented at Coupe Europa. Here's hoping for better weather.

Round	Competition	Date	Location	Notes
1	Coupe de Brum	24 or 25 February	N.Luffenham	Ask organiser for notification of selected date
2	London Gala	14 April	Salisbury Plain	Coupe scores in Combined Mini to count
3	2nd Area	28 April	Area venues	
4	Nationals	27 May	Salisbury Plain	
5	Crookham Gala	23 June t.b.c.	Salisbury Plain	
6	Southern Gala	18 August	Salisbury Plain	
7	Coupe Europa	13 October	Salisbury Plain	

Rescheduled Petit Classique de Brum

MOD North Luffenham, Sat 21st OR Sun 22nd September 2024

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

Classes will be:

pre 1970 Coupe (incl. Vintage Coupe), Classic A1,
Combined E36 + 1/2A power (both 8 second run), Classic Glider (50m line)
and Mini Vintage.

Competitors may enter two models, separately, in each event.
Highest placed entry to count, NO SUBSTITUTION of parts nor model permitted.
Entry £10 for the day, prizes for 1,2&3 in each class.

NOTE TO POTENTIAL FLIERS: -
If the forecast is for VERY INCLEMENT weather on both days,
then WE WILL POSTPONE.
The decision whether we go ahead will be notified by email
by the evening of Thursday 19th.

If you received a personal email from me late on 16th March
cancelling the previously scheduled event then you're on "the list".
If you didn't then you need to contact me by email
if you think you might attend so I can add you to it

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

CROOKHAM GALA 2024

Replacement Date Announcement
28th or 29 September

Following the disappointment of the site not being available in June, the Crookham Gala will now be held on EITHER the 28th or 29th September on Area 8, Salisbury Plain. An announcement will be made on the Thursday evening prior to the weekend to confirm the chosen date, dependent on the weather forecast.

There will be the usual mix of classes, offering something for everyone, plus trophies and prizes galore.

Classes

Modern and Vintage Coupe combined (3 flights only.)
(Additional prize for the best Vintage Coupe score).
Combined Glider (Additional prize for the best Classic A1 score).
Combined Power (Including George Fuller Trophy)
(for best placed Dixielander).
Mini Vintage - E36 - E20

As always there is an additional prize and trophy for the best score achieved by a Dixielander flown in the Combined Power class, so if you have a "Dixie" please bring it along and compete and get your name on the Trophy.
This year we have added an event for E20 models, to be flown to the NFFS E20 rules.

Competitions start at 10.00 and end at 17.00.
Entry is £10 only

Croydon / SAM 1066 Contests 2024

1st April (Easter Monday); Croydon Wakefield Day / SAM1066

Salisbury Plain Area 8. Start 10.00
Croydon Classes:
F1B (in rounds), 4oz and 8oz Wakefield (combined),
Marcus Lightweights, P30

SAM1066 Classes:
Mini Vintage to BMFA rules,
Vintage / Classic Glider (combined)
Vintage / Classic Power (combined) to SAM1066 rules.

Contact; Ray Elliott tel 07513 549734, email ray.elliott8@btinternet.com

13th October: Croydon Coupe Europa / SAM1066

Salisbury Plain Area 8. Start 10.00

Croydon Classes:
F1G (in rounds), Vintage Coupe

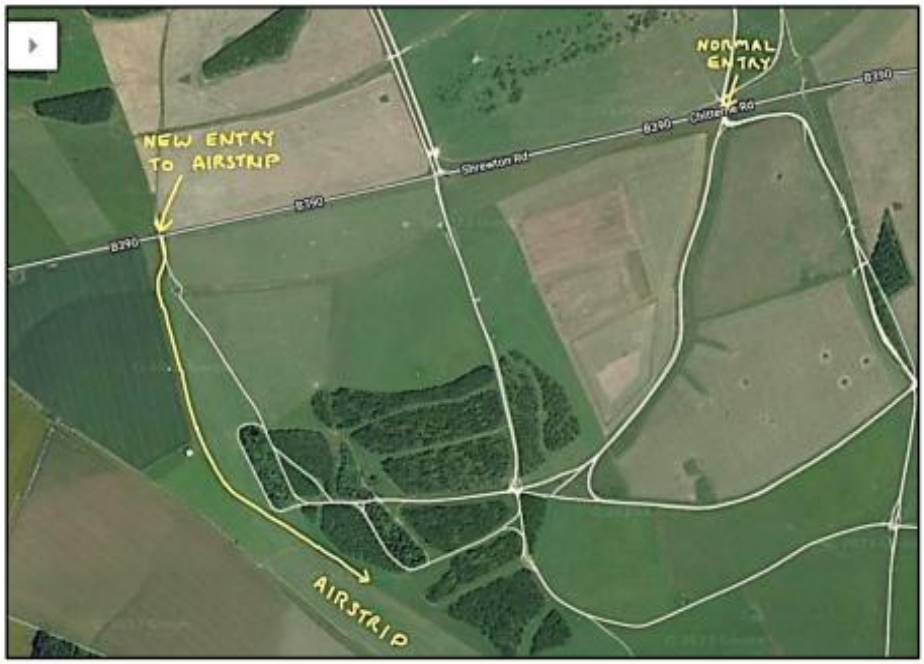
SAM1066 Classes:
Mini Vintage to BMFA rules,
Vintage / Classic Glider (combined) Vintage / Classic Power (combined) to SAM1066 rules.

Contact; Ray Elliott tel 07513 649734, email ray.elliott8@btinternet.com

Options for Flying on Salisbury Plain, Area 8

The flying of competitive events on Salisbury Plain occasionally requires the launch site to be changed from the usual trimming field to the north east side of the airstrip. This is often problematic as in the past access has proved difficult but a new route has now been found which has proved to be much easier, even after wet weather. The image below shows the route.

It is hoped that on competition days organisers will place their entrance marker flags in whichever entry to Area 8 is appropriate to the location of the day's launch point.



Permits for Salisbury Plain & North Luffenham

There is a tab on the free Flight Technical Committee website
Where you can apply and buy the permit that you require on line

The costs are:
£20 for Salisbury Plain - £35 for North Luffenham

The details of the Conditions of Issue
And Code of Conduct are included with the application
And must be strictly followed

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

Sundays

14th July, 18th August, 22 September.

Signposted from Aldsworth Glos.
on the B4425 between Cirencester/Burford
and off the A40 between Northleach and Burford
[follow SAM 35 signs].
What 3 Words: positives arrival calculate

All types of R/C up to 1975
sport flying no competitions.
BMFA insurance essential.

Contact:
Tony Tomlin Tel.02086413505 Mob. 07767394578
pjt2.alt2@btinternet.com.

TWIFF

(Totton West Indoor Free Flyers)

Please bring all your toys (Free flight only)

Sundays, from 13:00-17:00

Admission for flyers £15.00
Free for spectators and helpers

2024
15th Sept - 20th Oct - 17th Nov - 15th Dec

2025
19th Jan - 16th Feb - 16th Mar
27th Apr - 25th May

The West Totton Centre has plenty of parking, although there are a lot of people coming and going at Vaccination times.
There is a Tesco Local on site and the world's best Card shop (no commission!).
Café inside the centre with hot drinks and meals.

Location
www.google.com/maps/place/West+Totton+Centre/@50.9103094,-1.5097122,15.5

Or, if you like, car park entrance at ///playroom.pump.dorm

Contact Ken Brown email: brown53hh@gmail.com
Tel: 02380578866 or 07913814492

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 Ron Marking, Pros Kairon, Pennance Road, Lanner, Redruth TR16 5TF. Alternatively, use PayPal but e-mail me your address. ron.marking@btinternet.com

CARBON HLG AND E-20 BOOMS

I expect to have by mid-July a small number of carbon booms suitable for E-20s and HLG/CLGs, in fact probably long enough to make one of each. They'll be 80cm, 4mm tapering to 2mm.
Price uncertain at present, but please let me know if you might be interested as it will have to be first come, first served.
I'm on 0208-7775533 or martindilly20@gmail.com.

DILLY JAP IS BACK –AGAIN

Well, that seventh roll of tissue went pretty fast, 300 yards in a bit under three years. I've just received a new roll; almost inevitably there's a slight price rise but it's still only £15 for a five yard roll a yard wide, or £17 by mail to the UK, folded. I normally sell it in rolls at contests, but if you want yours mailed in a roll let me know and I'll sort out a length of plastic pipe and find a courier price. Doing the sums, there's now well 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.

I'm on 0208-7775533 or e-mail: martindilly20@gmail.com

INDEPENDENT REVIEW OF DILLY JAPANESE TISSUE

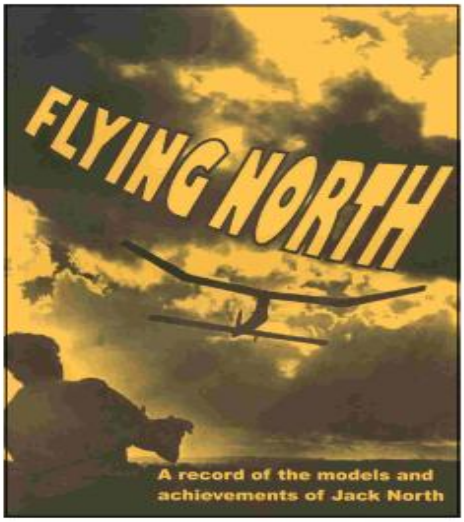
The following appeared on the Hip Pocket Aeronautics Builders' Forum. Nine different tissues were tested, doped and un-doped.

"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"

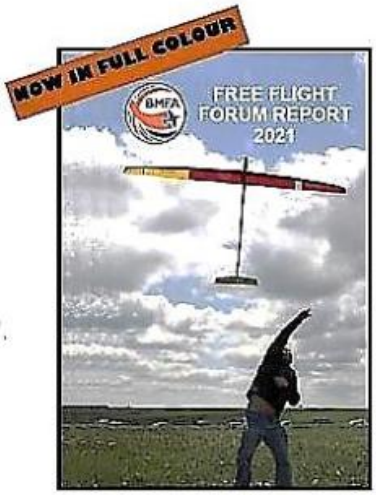
"A very balanced record of Jack's modelling and professional activities"

"The best aeromodelling book since the Zaic Yearbooks"

Price £22.00 in the UK, £26 airmail to Europe and £32 elsewhere.
Contact Martin Dilly on +44 (0)208-7775533 or e-mail martindilly20@gmail.com

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 Damon
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 Tor A Lady Flyer - Sue Johnson
F3 Res • Rc For The Aging Free Flighter – Andy Sephton
From Wichita To Robin Iii – Mike Fantham
Further Thoutghs On Carbon-Skinned Wings Tor F1a - Stuart Darmon
Geo Fencing And Electronic Stability - John Emmett



The UK price is £13 including postage; to the rest of Europe its £16 and everywhere else its £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 UMFA 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, **WestWickham,** Kent BR4 OQW
Or by phone: +44(0)2087775533 Or e-mail: martindiHy20@gmait.com

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

Provisional Events Calendar 2024

With competitions for Vintage and/or Classic models

All competitions are provisional. **Check websites before attending**

February 24th	Saturday	Coupe De Brum, Luffenham
or February 25th	Sunday	
March 10th	Sunday	BMFA 1st Area
March 29th	Good Friday	Northern Gala, Barkston
April 1st	Monday	Croydon Wakefield day + SAM1066 - SP
April 13th	Saturday	London Gala, Salisbury Plain
April 14th	Sunday	London Gala, Salisbury Plain
April 28th	Sunday	BMFA 2nd Area
May 19th	Sunday	BMFA 3rd Area
May 25th	Saturday	**FF Nationals,** Salisbury Plain
May 26th	Sunday	**FF Nationals,** Salisbury Plain
May 27th	Monday	**FF Nationals,** Salisbury Plain
June16th	Sunday	BMFA 4th Area
July 7th	Sunday	BMFA 5th Area
July 21st	Sunday	BMFA 6th Area
August 3rd	Saturday	East Anglian Gala, Sculthorpe
August 4th	Sunday	East Anglian Gala, Sculthorpe
August 18th	Sunday	Southern Gala, Salisbury Plain
August 18th	Sunday	Southern Area BMFA Gala, Odiham
September 1st	Sunday	BMFA 7th Area
September 14th	Saturday	Stonehenge Cup, Salisbury Plain
September 15th	Sunday	Equinox Cup, Salisbury Plain
September 21st	Saturday	Petit Classique de Brum, North Luffenham
or September 22nd	Sunday	
September 28th	Saturday	Crookham Gala, Salisbury Plain
or September 29th	Sunday	
October 6th	Sunday	BMFA 8th Area
October 13th	Sunday	Croydon Coupe Europa + SAM1066 - SP
October19th	Saturday	Midland Gala, Venue, Barkston
November 5rd	Sunday	Buckminster Gala, BMFA Centre
or November 17th	Sunday	

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 website
www.SAM35.org

Useful Websites

SAM 1066	-	www.sam1066.org
Mike Woodhouse	-	www.freeflightsupplies.co.uk
BMFA	-	www.bmfa.org
SAM 35	-	www.sam35.org
National Free Flight Society (USA)	-	www.freeflight.org
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
South Bristol MAC	-	www.southbristolmac.co.uk
Vintage Model Co.		www.vintagemodelcompany.com

control/left click to go to sites

Are You Getting Yours? - Membership Secretary

As most of you know, we send out an email each month letting you know about the posting of the latest edition of the *New Clarion* on the website. Invariably, a few emails get bounced back, so if you're suddenly not hearing from us, could it be you've changed your email address and not told us?
To get back on track, email members@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*