NEW Clarion

SAM 1066 Newsletter

Society of Antique Modellers Chapter 1066

Issue Nc102024

October 2024

Affiliated to SAM 1066 Website: www.sam1066.org

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Contents

Editorial

Notifications:

- Midland Gala is now at North Luffenham Saturday 19th October
- Indoors in the Midlands, Peter Thompson has found a venue, see adds.

The end of the outdoor season approaches and indoors we all go, please report on meetings, members like to hear about what's going on.

The BMFA FF Tech Committee have held a conference, Roger Newman highlights the agenda and our Secretary, who attended the meeting reports on content and decisions.

It appears that the conference only concerned itself with contests and contest flyers. The wants of sports fliers, who outnumber contest fliers by hundreds, was not part of the conference's remit.

The slow demise of FF continues, fliers move to other branches of the sport, due to Age, the lack of suitable venues, would be contestants have few places to trim and even fewer suitable contest venues.

To me it seems only a matter of time before FF as we know it will have faded into obscurity with only a few vintage enthusiasts flying replicas of models of the past on handkerchief sized flying sites.
Please someone tell me I've got it all wrong.

Some of the articles in this issue:

- New Zealand's Barrie Russell tells of a restoration project.
- More from the editor on his vintage indoor adventures.
- Pylonius takes a sideways look at decentralisation and The Nationals.
- Ron Marking's piece on his past employment in the last issue has prompted me to write in similar vein about my past work with Dunlop Aviation.
- News Review talks, amongst other things. of by-laws & the Home Office approval of such laws.
- Nick Peppiatt and Tony Shepherd report on the event at RAF Odiham.
- Engine Analysis is the Veco 19.
- Tony Hebb reports on the Indoor Nationals including full results.
- This is followed by a pictorial record of the event from Tom Goodwin.
- Heard at the Hangar Doors describes the airship hangars at Cardington and the Indoor Nationals of 1954.
- One man's modelling life in terms of models made. Mike Turner, he lists them all, 169 models made since 1989
- Wikipedia provides details of the huge so called 'Spruce Goose' and gives a blow by blow account of the development and fate of this monumental achievement.
- Roy Vaughn brings the Southern Coupe League Table up to date.
- There is a 1953 article by Ron Warring on duration improvement.
- Roy tiller picks out some interesting bits from our magazine archives.
- Roger Newman reports from North Wales and comments on the FF tech Committee's conference on FF. He lists the agenda for the conference.
  Roger also has a few pics of compressed air models from his Italian connection.
- Secretary Ray Elliott reports on the FF Conference in his notes for October.
- This issue wraps up with the usual three plans from Roger.

Editor

Heron Gas Buggy - Barrie Russell (New Zealand)

Pictures attached of my latest effort.
We were donated a host of old gear for our club auction
and I rescued a dilapidated 1939 "Heron Gas Buggy"

https://outerzone.co.uk/plan_details.asp?ID=2583

It had been converted to electric RC at some stage.
Test flew it last weekend and it flies well apart from needing another three to four degrees of down thrust and having to cope with a fair Dutch Role under power.
Something to do with the amount of dihedral and fin area I understand.
I need to do a bit of research and experimenting !
Certainly worth rescuing from the trash can!

Barrie Russell (New Zealand)

John Andrews – Goes Indoors – Finale - John Andrews

Extract from the old paperback 'Clarion' June 2003

John Andrews - Goes Indoors - Finale

I think I mentioned last month that I got into foam because I was reluctant to fly my best Mylar covered indoor models in sports halls due to vulnerability, I was getting 'fighter pilots twitch' when other models were fizzing about behind me. The passing shadows on the wall behind the table always raised the hairs on the back of my neck if I was prepping a model for flight.

Having gone berserk with foam models, filling a model box with all sorts; EZB's, Biplanes with V tails, Tandem-wing Triplanes, they are all so quick and easy to make that you can get carried away, however my natural leanings towards longer flight duration lead me up yet another material investigation path, **Wilkinson's Value Food Bags**.

Digression, speaking of model boxes I have probably one of the most expensive you can find if you procure from scratch. It's the box that our DYSON carpet sweeper came in. It's an ace box and comes ready to go, with the hinged lid on the long wide side and three slotted catches to hold it safely closed. All I did was to fit a carrying handle from a wine box in the middle and it was ready. Oh! I also coated it with emulsion and decorated it like an iron bound chest, but that's not mandatory. Close on £200 is a bit much though.

That's better, I always feel refreshed after a digression. Where was I, Ah! Yes Wilco food bags, these are made from quite thin plastic of some sort and I have built an indoor model along normal lightweight lines and used the food bags for covering. I had to use quite a lot of Spray-mount Adhesive to stick it and cutting the excess with the soldering iron is not as easy as proper indoor Mylar but it works. I think Pritt-Stik might be another adhesive option but it's a bit on the heavy side.

I made the fuselage from soft 1/32 sheet, soaked and rolled around a piece of dowel until dry, then slit and stuck with cyno. I used a small length of aluminium tube stuck on the back end of the tube and made a plug-in rear boom from tapered 1/16 sheet. The advantage of the plug-in boom is that tail tilt can be adjusted to alter the model's turn diameter for different size venues.

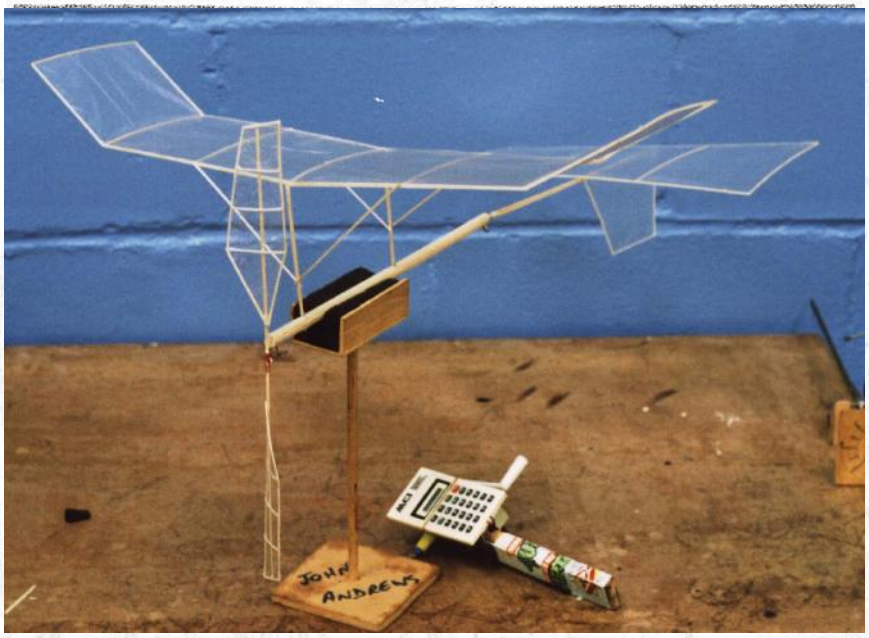
. The structure needs to be a little more robust than a normal flimsy; the tail plane on my prototype gets quite agitated in normal flight and particularly when recovering from a roof bang. If the model hangs up in the roof and then drops away backwards, the convolutions (good word that) of the tail-plane are unbelievable and sometimes twist the boom in the mounting tube.

I had my first go at a built up prop, it was a much misshapen elliptical effort built on a 5-inch diameter metal tube. I held the main spar down with plasticine, stuck on the ribs and then attempted to bend the wet 1/32 outline around the ribs. I got in an awful mess but somehow I managed to finish up with an embarrassing but useable prop. I soon had my second go, as on my first indoor meet with the new model, a styrene scale job got by me at the table and chewed up my first embarrassing effort.

My second attempt depicted in the photo was much easier; I kept the profile in straight lines, no more ellipses like the first time, after all I was still sweating from the first effort. First I built the prop outline on the tube and stuck it on the spar later. The blades were fitted to a rolled paper tube hub so I could set the pitch. I intend to make another similar but with wider blades. I did cover the blades with indoor Mylar but I may try food bag material next time.

I've had 5-minute flights in sports halls already with the prototype and I think longer flights will be possible when I get a bigger prop, that's assuming the model stays out of trouble for a few meetings.

The outdoor season is now upon me and I'm not really ready for that yet, and to cap it all the B.M.F.A. Nationals is now at the start of May and I've already invested again in the bulk entry. You'll be in for another epistle on my attempts this year. I've got me a new Stomper, I'll see if I can lose this one. Hey Ho!.



The Wilkinson Value Food Bag Special

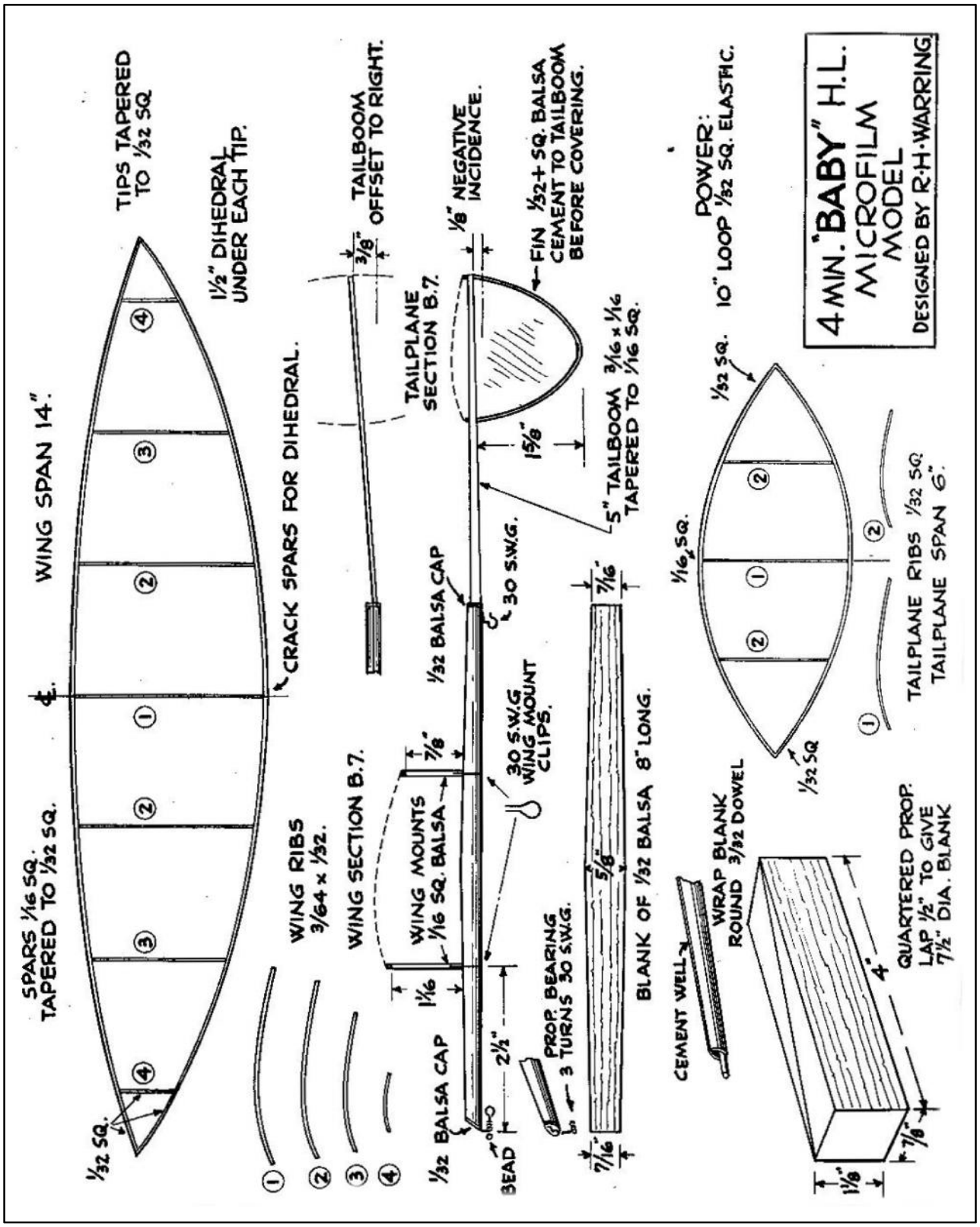
I'd better finish with a little Vintage from Ron Warring's book. I mentioned last month that free-flight indoors was pursued more in the States and around 1926 they were flying tissue covered models having flat aerofoils and kite-like tails. 1928 saw cambered aerofoils; 1929 hollow motor stick, all these models had straight dihedral wings mounted below the fuselage. 1930 to 1933 saw parasol wings; microfilm; hollow booms and polyhedral. Microfilm props and tungsten wire bracing came in about 1935 and by 1939 the models were not far removed from the indoor models of today. In the late 1920's the tissue covered models were managing flights of up to 5 minutes and although 3 microfilm models were entered in the 1932 American National contests they were not outstanding performers but created a great deal of interest. The standard was now set and development over the next few years saw duration's rocket up to the twenty minute mark.

The models of this era were quite large, 30 inches wingspan and 22 inches overall length. They had quite high aspect ratio elliptical wings, about 8 to one and polyhedral. The rubber used is stated as 1/8th strip about a 20-inch loop driving an 18-inch diameter airscrew of 42-inch pitch. One interesting difference from the models of today is that these old models were flown in right hand circles.

Reproduced hereabouts is a Ron Warring BABY indoor design well worth having a go at, I think even I could manage the elliptical wing. I think it would benefit from a simple built-up prop though along the lines of my Wilco special.

Well that's about me written out until I think of some other subject, bye. 29

John Andrews



INDOOR FLYING MODELS 1946

R.H.Warring

TOPICAL TWISTS

by pylonius

Topical Twists

Decentralised

Down South, where the pitiful remnants of the once proud and mighty London clubs make their last gallant stand on the broken sandhills of Chobham Common, the desperate gloom of the flying field situation is relieved only by the heartening prospect of the annual pilgrimage to Cambridge. There is among these dispossessed survivors an almost touching pathos in their eager anticipation of the feel of soft, green grass beneath their calloused feet; grass over which they can light-heartedly skip without fear that the model they chase will turn out to be a circling vulture.

But already inhuman forces are at work; aimed at depriving them of this last frail link with civilised model flying. The movement for the de-Nationalisation of Cambridge is fast gaining ground in the North. Seaham, Cheadle, and the other clubs which gave such magnificent support to last year's Northern Gala, are agitating for a larger share of the S.M.A.E. prize booty. The Nationals must go North—even if there isn't an airfield to fly on.

Of course, the idea of holding a major event without an airfield is not so senseless as it might seem. Airfields have a nasty habit of concealing themselves in virtually unexplored stretches of countryside, are always at least 20 miles from the nearest station, and, as an added safeguard against the intrusion of modellers, are never indicated on maps. This means that the only people who visit rallies are the car-borne and motor cycling varieties; types who are more interested in the " hunt-the-airfield " chase than in model flying. And the few model fliers who do reach the aerodrome spend more time outside it than in it. This is ensured by the organisers who, looking forward to a quiet day in the sun, regard the model fliers as a downright pest, and find the most effective means of disposing of them is to locate the take off areas at the downwind end of the airfield, within favourable distance of some inpenetrable wood.

This suggests that any F/F event could be more efficiently handled from a suburban hockey pitch, where everything would be nicely compact, with plenty of roads to facilitate retrieving. After all, if you did lose your way you could always ask a policeman, which is more than you can do (or dare do) in the middle of a cornfield.

Much the same applies to radio events, which are mainly F/F. Since a radio model either lands near the transmitter, prangs the crowd or flies away, a football field would provide a much cosier setting than an airfield. And the enclosed space would add zest to the sport as the spectator would not have the same freedom of evasive action. Team racing could be held in a school playground, to which it is eminently suited, and Combat fought out on the rectory lawn.

With all events thus held in the heart of a big city, the airfield problem would be effectively bypassed. But there is only one snag—to find a big city where model flying is not yet banned from all its open spaces.

Space Suit

Adding to the list of colourful club names comes the newly formed Spetchley Sky Blazers. The title, we understand, does not refer, as you might suppose, to a club uniform of light blue sports jacket, but modestly hints at the club's pyrotechnic achievements in the lower atmosphere.

Now, while we do not imagine that this comic strip title will blaze its way past the S.M.A.E. censorship on frivolous titles, even on the sports jacket pretext, there might be some hope for any enterprising club adopting the ambiguous name of " Flying Satellites." Apart from the nice topical flavour it should have a flattering appeal to the central body.

10 c.c. and All That

Adding zest to the dreary recitation of birth, marriages and small town gossip, one club is diverting local newspaper readership with the enthralling saga of its glorious history. The idea recommends itself to other publicity-conscious clubs; and so, by way of guidance, we present a gripping instalment from the archives of the Little Prangley Club.

Last week you read of the grand pioneering spirit of N. Bloggs and A. Flopp in introducing the model flying machine to Little Prangley, and how they escaped the wrath of the villagers by seeking sanctuary in the local Kite Club. Now read on . . .

When it became known to the Kite Club members that the Stringfellow monoplane, which our two heroes intended to fly on the village green, was, in fact, one of the new fangled string-less box kites, there was a storm of protest, mainly from the realist element, who indignantly complained that, apart from being misled about the string, the thing didn't even look like a box kite.

Frustrated by the fixed principles of the Kite Club, they were encouraged by the more tolerant attitude of the villagers, who downed pitchforks to enjoy the enviable status of having two village idiots, to form their own club—the Little Prangley & District M.F.C.

The club expanded rapidly, and was at the height of its fame when it was dramatically confronted by its first major crisis. Forty members attended an emergency meeting at the newly-built clubhouse, to discuss a bombshell proposal from Messsrs. N. Bloggs and A. Flopp, which was in effect a demand that the club should acquire the use of a flying ground. After long and careful deliberation, during which it was revealed that the committee of 38 did not include these two honourable gentlemen, the proposal was rejected by 38 votes to 2.

Undismayed, our two heroes then proceeded to form a new club known as the Dampshire Nomads. The club, which achieved considerable success, had no clubroom or committee and only two members. However, a drive was made to recruit new members, and came the momentous occasion when President N. Bloggs proudly announced that the club had no less than 50 members. This figure was immediately disputed by Secretary A. Flopp, who contended that, as the 48 junior members were all six months in arrears with their subsciptions, a truer assessment of the membership figure would be the overall total of 2: President N. Bloggs and Secretary A. Flopp.

Next week you will read how our two heroes effected a reconciliation with the old Prangley Club, and how the present club, The Little Prangley and Dampshire Nomads M.F.C., became established.

We learn from a club report of a junior building a successful model, following suggestions made by the seniors.

He can only be congratulated on his strength of mind in ignoring them.

Pylonius

Dunlop Aviation - John Andrews

Reading Ron Marking's tale of his work on the Concorde wing and the amusing quirk at the end, I thought I would relate an amusing tale from my work at Dunlop Aviation in Coventry.
I'm afraid I must preface the incidents with a long winded description of the work that was done on the huge dynamometer in our test house.
Please bear in mind that I ran the electronics department drawing office where Anti-skid control units for the braking systems were designed. My section's work was designing enclosures, printed circuit boards etc. also wheel speed sensors. I had little or no intimate knowledge of the mechanical design of the aircraft Wheels and Brakes that we manufactured.
An aircraft wheel brake is akin to a motorcycle clutch, a wad of all steel brake discs with alternate discs keyed to the wheel or the axle. That is a very broad description but detail is not relevant.

The brake pack fits inside the wheel and on the outer end is a pressure plate with a number of hydraulic pistons which squash the brake plates together when the brakes are activated. Please note that this was back in the 70's with all steel discs, well before we developed structural carbon brakes.
Our electronics department manufactured units that controlled the pressure to the brake and monitored the wheel speed to prevent skidding, ie anti-skid braking.

Dunlop's test house had a huge dynamometer similar to that above.

Ours had a four feet thick solid steel flywheel, 11 feet in diameter. I believe that the weight could be adjusted with extra discs. There was a fixture to carry a test wheel that would press the wheel against the flywheel with a force equivalent to the wheels share of the weight of the aircraft. All this housed in a metal wire cage.
All sorts of tests on a wheel & brake were done, but the RTO (rejected take-off) was the best of all. This was the last test done as it destroyed the wheel.
The flywheel was spun up until the peripheral speed was equivalent to aircraft take-off speed, then the test wheel was dumped onto the flywheel with a force equivalent to a fully loaded aircraft and brakes applied.
All hell was then let loose, the noise was horrendous, the tyre screaming, smoking and melting, the brake pack glowing red, sparks like a giant Katherine wheel issued from the hub, you could feel the energy being dissipated. Eventually the flywheel would shudder to a halt. I assume that the time taken was converted somehow into an aircraft's stopping distance.
The amusing part was when we had visitors and an RTO was to be done, I would take them into the test house to watch. We all stood in line and when the wheel hit the flywheel, I would looked around and I would be standing alone, all the visitors would have taken two or three steps backwards. It always amused myself and the test house engineers.

A lot of waffle for mild amusement.

John Andrews

NEWS Review

The Local By-laws Situation

Numerous reports have appeared in the daily press and aeronautical press of late relating to the application by certain local government organisations to the Home Office for powers to make by-laws to regulate the flying of power driven model aircraft on grounds under their jurisdiction. As all of these are based on incomplete information and often coloured by sensationalism the Council of the S.M.A.E. thinks it expedient to clarify the present position.

As the Society has pointed out for some time in its journal the whole trouble centres around the flying of control-line models in relatively confined grounds in populated districts where the noise nuisance becomes prominent.

It would be foolish to be blind to the fact that this noise nuisance *does* exist and the matter resolves itself into the best method of reducing it. It is appreciated that in most organised clubs proper precautions are taken to mitigate this nuisance but unfortunately there are many freelance fliers all over the country who are without the benefit of guidance from fellow club members and thus unthinkingly fly under conditions which are not satisfactory.

In order to be able to deal with these unguided, and in a few cases misguided modellists, the local government organisations concerned applied some months ago to the Home Office for powers to apply by-laws restraining the use of power driven model aircraft where the conditions are unsuitable.

The drafting of suitable by-laws naturally presented some difficulty in view of the widely varying conditions which exist and the Home Office naturally consulted with the Ministry of Civil Aviation on the matter and they in turn have worked throughout in close collaboration with the S.M.A.E.

Finality has not yet been reached and until it is achieved it is premature to make any comments one way or the other on the matter.

We would however, assure all aeromodellers that their interests have been and are being closely watched by the S.M.A.E. who have been consulted at every stage of the developments by the Ministry and, largely as the result of the Society's efforts, the proposed by-laws show every sign of being fair and reasonable.

In view of the many wild statements which have appeared, the S.M.A.E. would point out that before any local authority can apply one of the proposed by-laws, or a combination of them, they must not only submit them to the Home Office for ratification but they must give due notification by the display of suitable notices of their intention to do so in order to give those concerned the opportunity to raise any objections.

Some measure of control is inevitable, but the extent of this control depends to a large measure on the co-operation of model fliers themselves and the manner in which they approach the subject. It is for this reason that the S.M.A.E. urges all clubs to get into touch with their local Council, through the Town Clerk, with a view to arranging a demonstration of properly organised model flying so that they can view the matter in the right perspective and apply the minimum of restrictive legislation. In short, your local Councillors cannot be expected to be model aeroplane experts and it is your duty to teach them the fundamentals of model flying as soon as possible if you are to continue to enjoy the widest possible privileges.

Static Exhibitions

A good method of local advertising to obtain members and support is the staging of a model aircraft exhibition and most live clubs arrange one every year.

Highly successful local exhibitions have already been held this year by Chichester, Alton, Basingstoke, Manchester and Tonbridge, which have resulted in increased membership and financial gain to the clubs concerned apart from establishing them as worthy members of their local community.

There is nothing better than exhibitions to show the general public what you can do and impress upon them that model aircraft building and flying is no mere playing with toys but a skilled pastime worthy of a high place amongst national sports, since it combines constructional skill with a fair amount of physical exercise.

The trouble involved in organising an exhibition is well worth while and the S.M.A.E. can help with literature for distribution and large photographs for display showing some of the most important events of the year.

Record-Breaking Models

It does not appear to be generally realised that all models for which record performance are claimed *must conform to F.A.I. regulations* whether the claim is for a British record or a world record.

In quite a number of cases lately claims for British records have been received by the S.M.A.E. in connection with machines which did not comply with F.A.I. regulations and they have had to be turned down.

Odiham - Nick Peppiatt

Southern Area BMFA Free Flight Gala, RAF Odiham
Sunday 18th August 2024

As far as we can tell, model flying events have been taking place at RAF Station, Odiham for 75 years. Peter Carter, who did all the hard work in arranging this event this year, found the following report in the Club News column in the January 1950 edition of AeroModeller: -

The first annual North Hampshire Rally staged by the R.A.F ODIHAM & DMAC on the 9th October (1949), was well supported, modellers competing from all parts of the South of England. Forty clubs in all competed in favourable weather, plenty of thermals being about except for a short period during the afternoon when a sharp shower sent everyone scampering for shelter. The standard of flying was exceptionally high as the results show, several contestants returning flights of over five minutes. Lack of timekeepers was the usual headache, and this is definitely something that has to be tackled at all meetings if the organisation is not to be swamped by the ever increasing entries.

The reported concluded with the first three places for the rubber, power, glider and C/L stunt competitions

Unfortunately, the date offered for this year's event clashed with the Southern Gala being held on the same day on Salisbury Plain, which reduced the numbers likely to attend. The competitions planned were a scale one, run by Mike Smith and a SAM1066 Cagnarata, designed for a mixture of mainly smaller free-flight model classes. The weather was fine, but the wind was rather breezier than expected, and, unfortunately, the scale competition, which was to be judged on flight realism was abandoned. The weather was, however, far better than at the free flight team trials which took place in June 1955, according to the report in the August edition of AeroModeller of that year, and a considerable amount of sport flying did take place.

The Cagnarata competition was held. This is a concept of Italian original which encourages the flying of a wide variety of free flight classes in one event. The specific rules had been published in the June, July and August editions of NC, and the five entries were from five different classes, showing that it was a good format to use.

Cagnarata competition results, RAF Odiham 18th August 2024

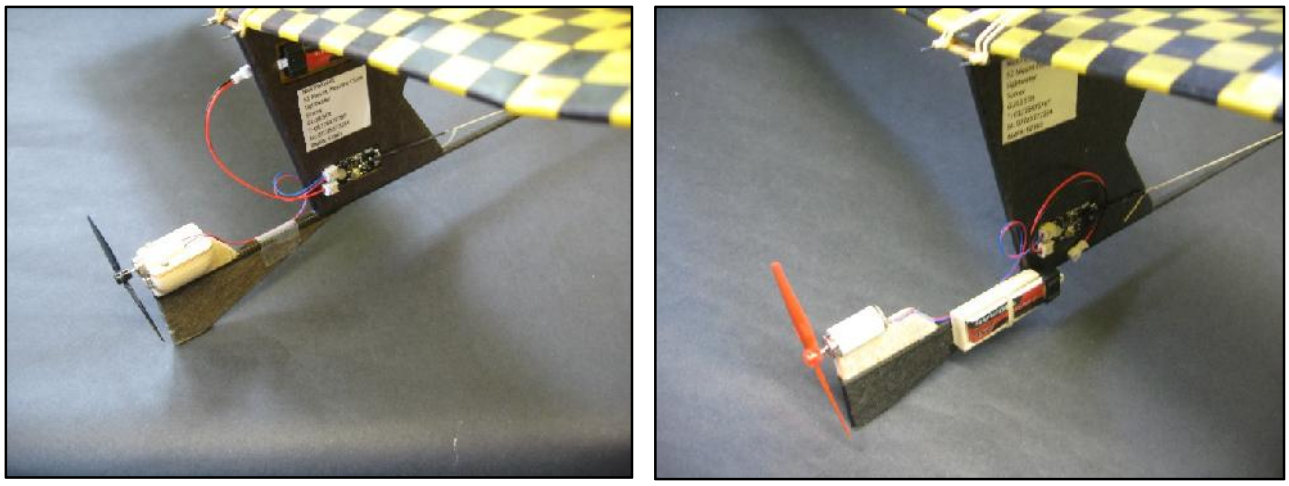
Name	Model	Class	Max/K factor	Flt 1	Flt 2	Flt 3	Flt 4	Total	Total xk	Place
Nick Peppiatt	Ferry 500 (modified)	E20	90s 4/3	62s	90s	90s	70s	312s	416s	1
Ken Taylor	Ding Bat	Vintage CLG	40s 3	33s	40s	17s	31s	121s	363s	2
Dave Etherton	Satu	Vintage Glider	120s 1	120s	86s	70s		276s	276s	3
Ken Taylor	Buckeridge Lightweight	MV Rubber	120s 1	104s				104s	104s	4
Bill Dennis	Les Trumeaux	F1G	120s 1	69s				69s	69	5

Ken Taylor flew a Vintage CLG in the form of Art Lonergan's Ding Bat, originally published in a 1950's edition of the Australian Hobbies Illustrated magazine, as it meant a relatively short walk to retrieve. He also flew a Buckeridge Lightweight mini-vintage rubber model (Model Aircraft, November 1946). Unfortunately, it landed on the main runway at the end of its first flight, causing damage, which rendered it hors de combat.

Dave Etherton began with a fine maximum with his Satu 60" span vintage glider design by J.M.G.Bennett, published in the December 1950 edition of AeroModeller. Unfortunately, on his later flights the model was veering to the right when it was towed up, and he was unable to achieve the height required for further maximums.

In contrast I entered a modern model in the form of an E20, based on the Ferry 500 plan published in the June 2019 AeroModeller. I have talked about this model before (IIFE 70, NC November 2023), and indicated that it was somewhat heavy. Over the winter, having analysed the component weights, I had decided that the flying surfaces were not too bad, but the fuselage was the main problem. With the battery position in the pylon as on the original plan, nose weight was required, despite a relatively heavy adjustable motor mount. So, I made a new fuselage, with a fixed motor mounting and a separate plate to carry the battery, saving about 6 g. I had not really had the chance to check out the model with the new fuselage. I had made a short test flight one afternoon on Chobham Common, when I came to the conclusion that the growth of vegetation there over the years was such that it now made the flying of small free flight models difficult (i.e. easy to lose), and again a short flight at Old Warden on the windy Mayfly Sunday, which showed it would cope in a wind. It was clear, however, that it was achieving nearly the same height on an 8 s motor run that it had previously with a 20 s run.

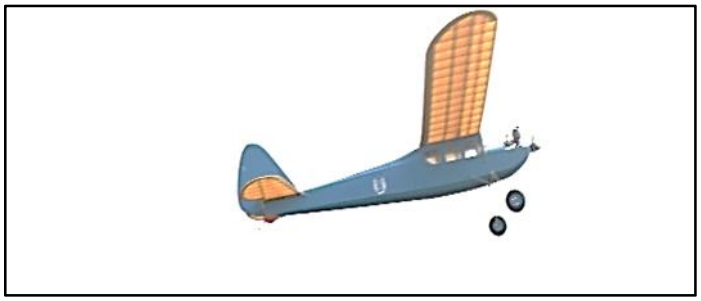
I had a couple of test flights at Odiham, one with an 8 s motor run, the next with 20 s, which indicated that the trim was ok and the transition from climb to glide was good. On the first competition flight, Tony Shepherd, who was time-keeping, observed that it was gliding quite steeply, so for the next I added a shim of card packing under the trailing edge of the tailplane. I must also have picked some good air as the model took at least another half a minute to come down after the 90 sec D/T had operated. The wind direction was mainly down the length of the main runway, which is 6000 ft long. I estimate some of my retrieves were well over ½ mile downwind.
Thanks are due to John Foster, who did some time-keeping and accompanied me on several of the retrieves.



Original Ferry 500 based E20 fuselage front end (left) compared with lightened front end (right)

To complete the proceedings, the prize-giving was conducted by our Chairman, Tony Shepherd, who had spent an enjoyable day sport flying.
Let's hope that this annual event can continue. It is great to have the opportunity to fly on a well maintained airfield in the south of England.
Thanks are due to Peter Carter for his hard work in organising it and the RAFMAA members, who spent their day chaperoning us. I am sure it was appreciated by all who attended.

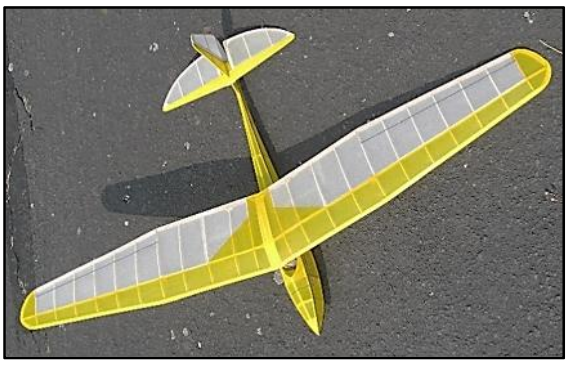
The following photos show a few of the models that made an appearance at Odiham, but were not necessarily flown.



Trevor Jones with his 40" wingspan Miss Arpiem, powered by a Mills .75
This is a reduced size version of the design by Steve Kowalik. (right photo by Peter Carter)

Trevor Jones' Flying Midget, a Thracy Petrides design.

Peter Carter's New Ruler, design by Henry Struck



Peter Smart's Willow Wren 36" wingspan bungee launched glider (left) and his magnificent Blohm & Voss BV222 Viking flying boat, powered by six electric motors (right)

Mike Smith's splendid F/F Scale Nats winning 51" wingspan DH4 Mailplane, powered by a Mills 1.3.

Nick Peppiatt

Odiham Pictorial - Tony Shepherd

Bob Pickernel in his Sunday best is ready to launch Dave Ethertons Satu

Charlie Jeffries with Josh Marshall Tailless
World record Holder - flew well despite the breeze

Event organise Peter Carter holding court
also holding his KP01 powered mini Simplex

Dave Etherton with his ex Tony Thorn Satu vintage glider

Ken Taylors Dingbat vintage chuckie flew well in the Cagnarata contest

LS Widgor Wasp from 1938 Aeromodeller avoided the breezy conditions

Nick Peppiatt waits for good air then away she goes

Peter Smart with his beautiful electric B&V 222

This photo clearly shows why it was not a day for flying scale models

Robin Colborne eventually flew Mike Hayters sport models after a frustrating morning of engine troubles

Two of Peter Carters immaculately built sport models that were grounded because of the wind

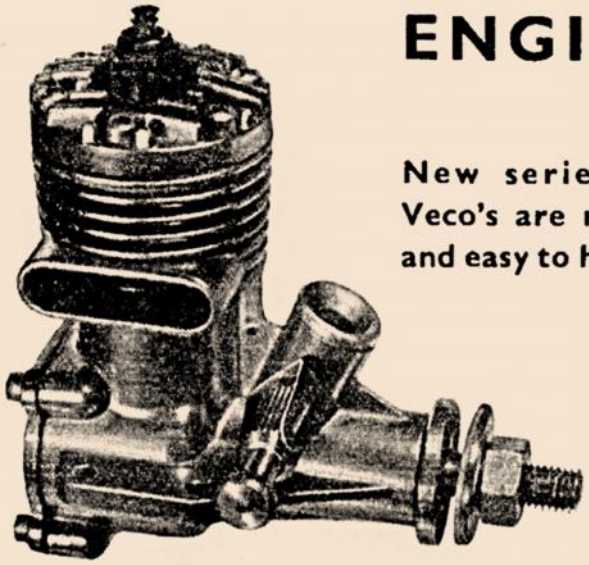
Tony Shepherd

Engine Analysis: Veco 19 - Aeromodeller October 1957

AERO MODELLER 522 October, 1957

ENGINE ANALYSIS

NUMBER 40



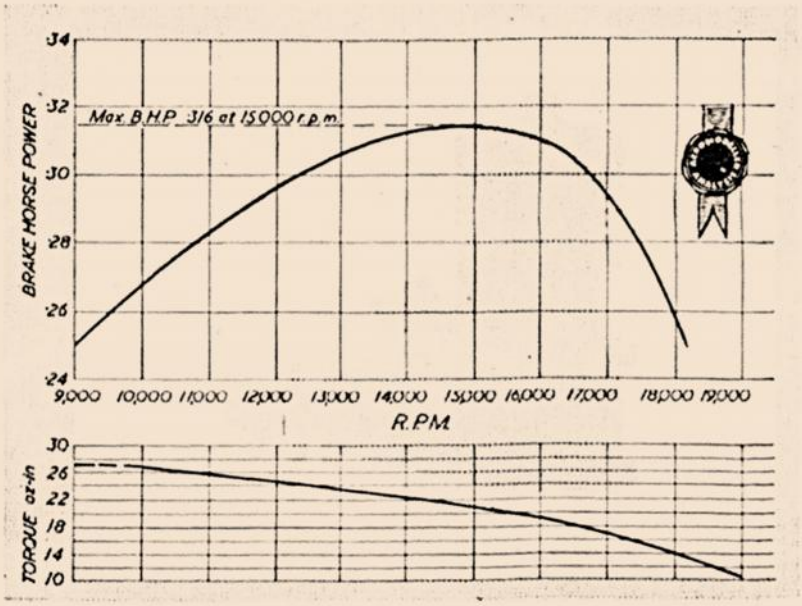
New series 100 Veco's are robust and easy to handle

reviewed by R. H. Warring

THE VECO "19" is an extremely nice engine throughout. It is appreciably heavier and more robust than normal American practice and also better finished as regards running fits. The makers claim for the design "temperature controlled clearances", which presumably implies that the optimum running clearances are maintained irrespective of whether the engine is hot or cold, thus promoting consistent performance. Certainly the running *is* consistent, but this is probably due to the employment of a thicker than usual cylinder liner which is correspondingly freer from distortion, coupled with a good choice of materials for liner and piston.

The engine is supplied by the manufacturers "broken-in", but they recommend a further one hour's running time on a rich mixture before attempting high speed running. The engine as received was quite free and showed no signs of overheating, but was given a total running time of 1½ hours before test data were taken. At this stage the running fits appeared excellent, with good compression in the cylinder and the main bearing remaining quite cool. This bearing is, in any case, quite slack (roughly one thou. clearance).

Starting characteristics were not particularly brilliant from cold. The Veco appears to like a generous prime through the exhaust, but gives little indication whether it is too wet, or too dry, or even when it is on the point of starting. As a con-



SPECIFICATION

Displacement: 3·271 c.c. (·1995 cu. in.).
Bore: ·635 in.
Stroke: ·630 in.
Bore/Stroke ratio: 1:1
Bare weight: 5½ ounces.
Max. power: ·316 B.H.P. at 15,000 r.p.m.
Max. torque: 27 ounce-inches at 10,000 r.p.m.
Power output: ·0965 B.H.P. per c.c.
Power weight ratio: ·0575 B.H.P. per ounce.

Material Specification:
Cylinder Crankcase unit: light alloy pressure die casting, buffed and polished externally.
Cylinder liner: soft steel.
Piston: cast iron.
Con. rod: light alloy (alloy big end bush).
Crankshaft: soft steel (ground and lapped).
Main bearing: iron.
Spraybar unit: brass.

Manufacturers:
Henry Engineering Company, P.O. Box 229, Burbank, California, U.S.A.
(Available in this country through: H. J. Nicholls Ltd., 308 Holloway Road, London, N.7.)

sequence one has to keep flicking until it bursts into life. Once warm, however, the engine starts readily first or second flick after a finger choke (and even this may not be necessary if the fuel line is full and the needle valve opened up about a turn).

Running was consistent at all speeds tested, but the Veco was definitely happiest at the higher speed end—13,000 r.p.m. or more. It remains easy to hand-start right up to 20,000 r.p.m. Adjustment of the mixture by the needle valve is not critical and does not have to be hurried. Reversing the spray bar assembly to bring the needle on the left hand side is to be preferred, since this brings the fingers out of range of the exhaust, which is both hot and oily. It is also one of the first American engines we have run extensively on an American plug which has not burnt out the glow element, despite the fact that fuels containing up to 25 per cent. nitromethane were used.

Design and construction-wise the Veco conforms to sensible modelling requirements. The main unit is a large casting incorporating the crankcase, cylinder jacket and front bearing housing and choke tube. This is an excellent casting which is machined in only two places—to take the liner and the main bearing bush. Externally the casting has been finished by buffing, but the inner surfaces are equally smooth.

The relatively thick cylinder liner is of soft steel, ground on the outside for a tight plug fit in the main casting. Ports are rectangular in shape, diametrically opposed and identical in shape (with appreciable overlap between transfer and exhaust). The bore of the liner is relieved at the bottom end.

The head is a light alloy casting, formed with a groove in the bottom face which locates on top of the liner. A gasket is trapped in this groove, providing a perfect seal, since it cannot extrude sideways. The head is retained by six short Phillips head screws locating in the main casting. The head itself is shaped to conform to the deflector on the piston and the plug is offset to the exhaust side, which is a little unusual (the normal location of an offset plug is towards the transfer side of the cylinder).

The piston is of cast iron, with a properly shaped deflector head. The bottom is relieved a matter of ·001 in. The piston is quite long to ensure that there is no sub-piston induction at the top of the stroke.

The gudgeon pin is 5/32 in. diameter, of the floating type and fitted with hollow brass end pads. Connecting rod is nicely machined from solid stock, with, again an unusual feature, the big end fitted with an alloy bush. Crankpin diameter is relatively small—3/16 in.

The crankcase is of soft steel, ·045 in. diameter stepping down at the front to ¼ N.F. American thread. It runs in an iron bush inserted in the crankcase casting. The shaft has been ground to finish and the bush reamed to size. Final fitting then appears to have been done by lapping in the shaft. The propeller driver locks on to a cam-shaped section of the shaft. Length of shaft thread provided is adequate to take a whole range of propeller pitches—certainly the full range of those which would normally be used.

Propeller test figures

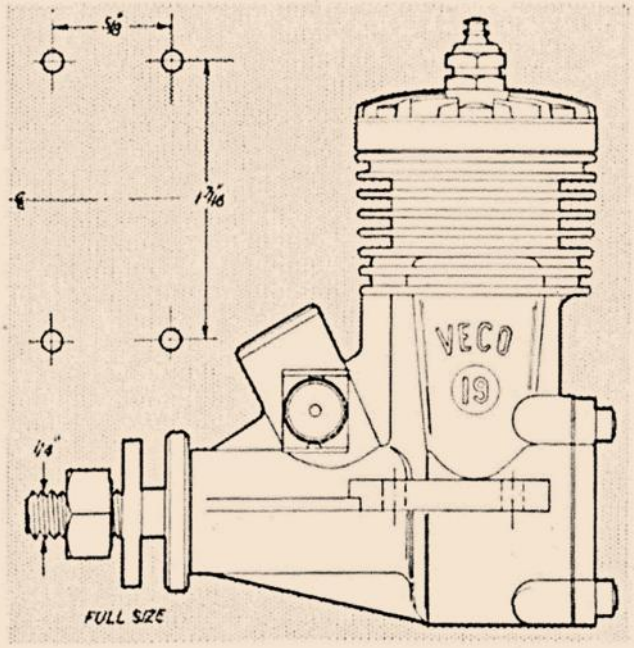
Propeller	r.p.m.
9 x 4 (Stant)	11,600
8 x 4 (Stant)	14,600
7 x 4 (Stant)	16,200
6 x 4 (Stant)	18,200
8 x 8 (Stant TR)	11,800
7 x 6 (Stant)	15,000
9 x 3 (Tiger)	13,000
6 x 9 (Tiger)	15,250

Fuel used: Standard methanol/castor mixture with 20 per cent. nitromethane.

The back cover is again a light alloy casting, with a transfer passage cast in the left side and top (which locates the backplate for re-assembly). This is necessary since the cover would otherwise blank off part of the bottom of the cylinder and restrict the transfer area.

Summarising: a thoroughly likeable engine with lots of power. Performance is consistent on almost any propeller load over the range of speeds 10,000 to 20,000, with peak power developed at 15,000 r.p.m. It is capable of handling high-pitch speed props. as well as the 8 x 4 or 9 x 3 sizes which would appear ideal for free flight. It is a well-designed engine and, above all, well made.

In one way the Veco 100 series are unique (other capacities being ·29 and ·35 American Cu. In. sizes) in that the exhaust has been reversed to the other side of the cylinder at a time when everyone else is producing new cross or loop scavenged engines is placing the exhaust on the left side of the cylinder.



Indoor Nationals - Tony Hebb

Another successful Indoor Duration Nationals was held last weekend at the leisure centre in Daventry. We had a little disturbed air but overall everyone had a good time with some excellent flying done. The Saturday evening meal was a very pleasant occasion and we were well looked after at the local Narrow Boat pub.

This year's National Overall Champion was Mark Benns who flew a number of his older models to amass sufficient points for the title. I should add he also set a new British CAT II Hand Launched Glider record, he's checking on the rest!

David Goodwin managed to get his Tailless model into first place - have to take my hat off to him because I simply couldn't get mine to fly for longer than about 30 seconds - and even that took a bit of luck. Try again next year perhaps.

We had seven people flying F1D models which is something of a record for our recent events and at times quite a sight.

Have a look at the attached results and do think about coming along next year, it's probably not as seriously competitive as you imagine and, though space is restricted, we do by and large manage to keep the ultra-lightweights separated from the faster flying models.

Results

No-Cal

Place	Name	BMFA Number	Model	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Beere Andy	229670	Fike	01:47	02:01	02:22	00:00	00:00	00:00	04:23
2	Thompson Peter	23053	Fike	01:39	01:43	01:43	01:58	01:54	02:08	04:06
3	Goodwin David	194118	Heinkel100	01:42	01:44	00:00	00:00	00:00	00:00	03:26

35cm

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Goodwin Thomas	194117	06:26	05:08	06:36	00:00	00:00	00:00	13:02
2	Evans Meredith	111999	05:47	06:09	05:48	00:00	00:00	00:00	11:57
3	Sellwood Roy	53324	05:15	05:15	05:27	05:45	05:50	00:00	11:35
4	Goodwin David	194118	03:32	05:10	04:47	05:07	05:16	00:00	10:26
5	Wilson David	170600	04:10	03:57	04:16	00:00	00:00	00:00	08:26
6	Thompson Peter	23053	03:40	03:39	03:24	00:00	00:00	00:00	07:19

Catapult

Place	Name	BMFA No	time 1	time 2	time 3	time 4	time 5	time 6	time 7	time 8	time 9	Best Three Flights
1	Adams Terry	82966	0.00	28.49	23.11	24.12	29.87	29.87	30.30	28.56	28.91	90.04
2	Goodwin David	194118	31.00	29.00	26.00	24.00	25.20	27.40	22.20	10.00	9.00	87.40
3	Hebb Tony	35650	18.50	21.45	26.22	27.38	23.38	22.31	19.88	8.53	28.64	82.24
4	Benns Mark	72513	38.29	41.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	79.40
5	Goodwin Thomas	194117	21.50	23.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00	65.50

F1D

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Linardic Vladimir	123456	10:19	11:15	10:52	10:36	11:17	00:00	22:32
2	Benns Mark	72513	08:01	08:20	10:09	10:46	10:59	01:14	21:45
3	Hebb Tony	35650	10:09	10:18	10:41	10:02	10:59	10:45	21:44
4	Staartjes Hans	185400	05:55	10:01	09:54	09:53	09:33	09:58	19:59
5	Adams Terry	82966	09:13	09:21	09:15	08:26	00:00	00:00	18:36
6	Evans Meredith	111999	08:06	08:45	00:00	00:00	00:00	00:00	16:51

F1L

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Hebb Tony	35650	05:31	06:38	07:51	07:06	06:25	00:00	14:57
2	Benns Mark	72513	06:43	05:01	02:16	00:00	00:00	00:00	11:44
3	Goodwin Thomas	194117	05:20	05:19	00:00	00:00	00:00	00:00	10:39

F1M

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Evans Meredith	111999	01:44	05:46	05:39				11:25
2	Benns Mark	72513	03:58	02:02	01:50	05:42	04:53	05:23	11:05

F1N

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Flight time 7	Flight time 8	Flight time 9	Best Three Flights
1	Benns Mark	72513	44.14	37.40	48.02	21.02	20.02	51.63	55.13	46.31	0.00	154.78
2	Goodwin David	194118	21.20	22.10	21.00	22.80	20.80	23.20	23.40	17.90	22.00	69.40
3	Goodwin Thomas	194117	23.80	22.00	19.00	0.00	0.00	0.00	0.00	0.00	0.00	64.80

G/C

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Goodwin Thomas	194117	03:41	04:30	04:29	00:00	00:00	00:00	08:59
2	Goodwin David	194118	01:46	03:12	02:43	03:23	00:00	00:00	06:35

F1R

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Hebb Tony	35650	10:56	07:47	08:04	12:34	00:00	00:00	23:30
2	Evans Meredith	111999	08:05	08:57	00:00	00:00	00:00	00:00	17:02
3	Goodwin Thomas	194117	04:42	04:54	00:00	00:00	00:00	00:00	09:36

LRS

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Goodwin Thomas	194117	05:24	05:40	05:55	05:56	06:11	06:02	12:13
2	Goodwin David	194118	04:37	05:34	02:20	00:00	00:00	00:00	10:11

L Eagle

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Adams Terry	82966	03:29	03:48	03:37	00:00	00:00	00:00	07:25
2	Evans Meredith	111999	03:10	01:02	02:58	00:00	00:00	00:00	06:08
3	Sellwood Roy	53324	02:21	02:00	00:00	00:00	00:00	00:00	04:21
4	Goodwin David	194118	01:41	01:31	01:42	01:59	02:13	00:00	04:12

LPP

Place	Name	BMFA Number	Flight time 1	Flight time 2	Flight time 3	Flight time 4	Flight time 5	Flight time 6	Best Two Flights
1	Benns Mark	72513	02:27	03:24	05:31	04:19	06:22	07:17	13:39
2	Hebb Tony	35650	04:07	02:56	06:31	06:27	00:00	00:00	12:58
3	Goodwin David	194118	05:08	05:40	05:21	05:50	05:27	00:00	11:30
4	Roberts Dylan	212430	05:18	04:58	05:23	05:18	05:44	01:35	11:07
5	Sellwood Roy	53324	04:32	04:53	04:27	00:00	00:00	00:00	09:25
6	Goodwin Thomas	194117	04:34	01:24	04:41	00:00	00:00	00:00	09:15
7	Thompson Peter	23053	03:41	03:09	03:51	00:00	00:00	00:00	07:32
8	Funnell Rob	55579	03:02	03:34	01:17	03:22	00:00	00:00	06:56

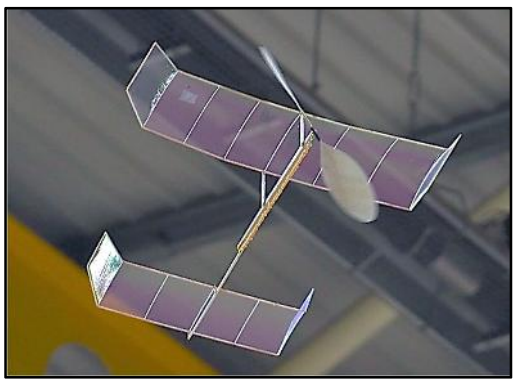
Overall Championships

Place	Name	BMFA Number	No Cal	35cm	Catap	F1D	F1L	F1N	F1M	GC	F1R	LRS	L.E.	LPP	Total Points
1	Benns Mark	72513			2	5	2	4	1					10	24
2	Hebb Tony	35650			3	4	4				4			8	23
3	Goodwin David	194118	1	3	4			2		1		1	1	6	19
4	Goodwin Thomas	194117		7	1		1	1		2	1	2		3	18
5	Adams Terry	82966			6	2							5		13
5	Evans Meredith	111999		5		1			2		2		3		13
7	Sellwood Roy	53324		4									2	4	10
8	Linardic Vladimir	123456				7									7
9	Thompson Peter	23053	2	1										2	5
9	Roberts Dylan	212430												5	5
11	Beere Andy	229670	4												4
12	Staartjes Hans	185400				3									3
13	Wilson David	170600		2											2
14	Funnell Rob	55579												1	1

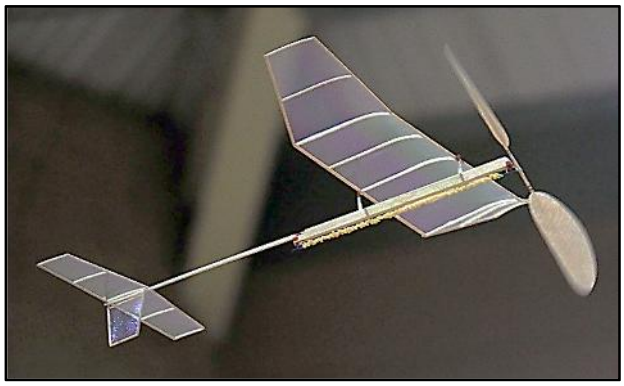
The F1D flyers line-up

Tony Hebb with his F1D

The F1Ds of Vladimir Linardic and Tony Hebb



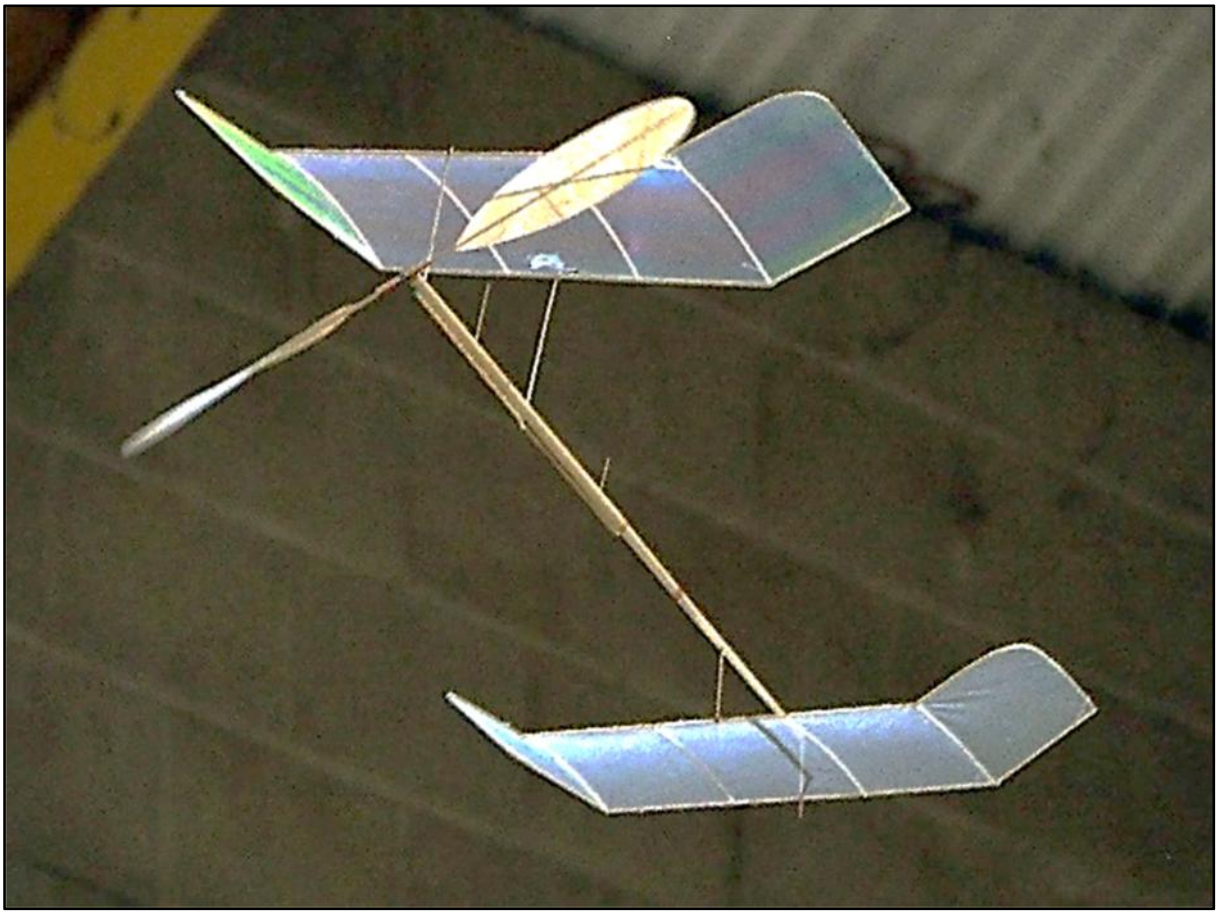
David Goodwin's LPP



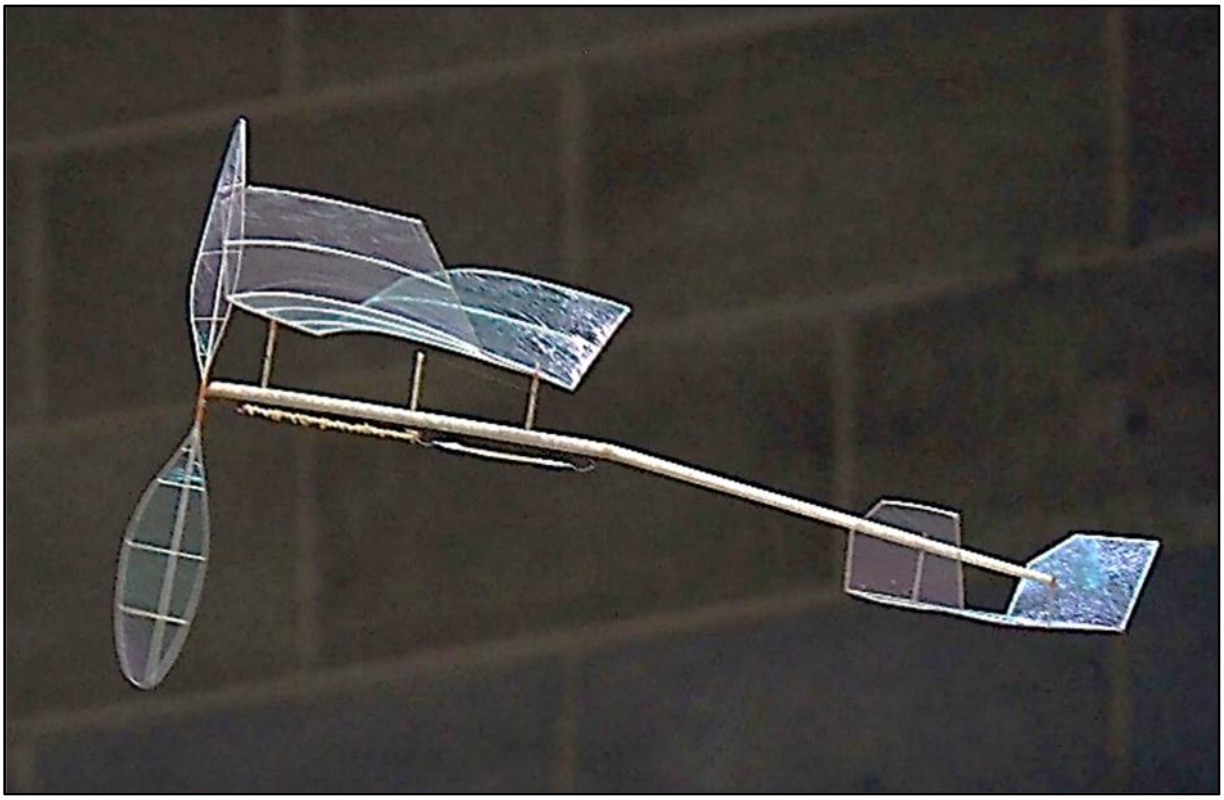
Tom Goodwin's Gyminnie Cricket

Tony Hebb

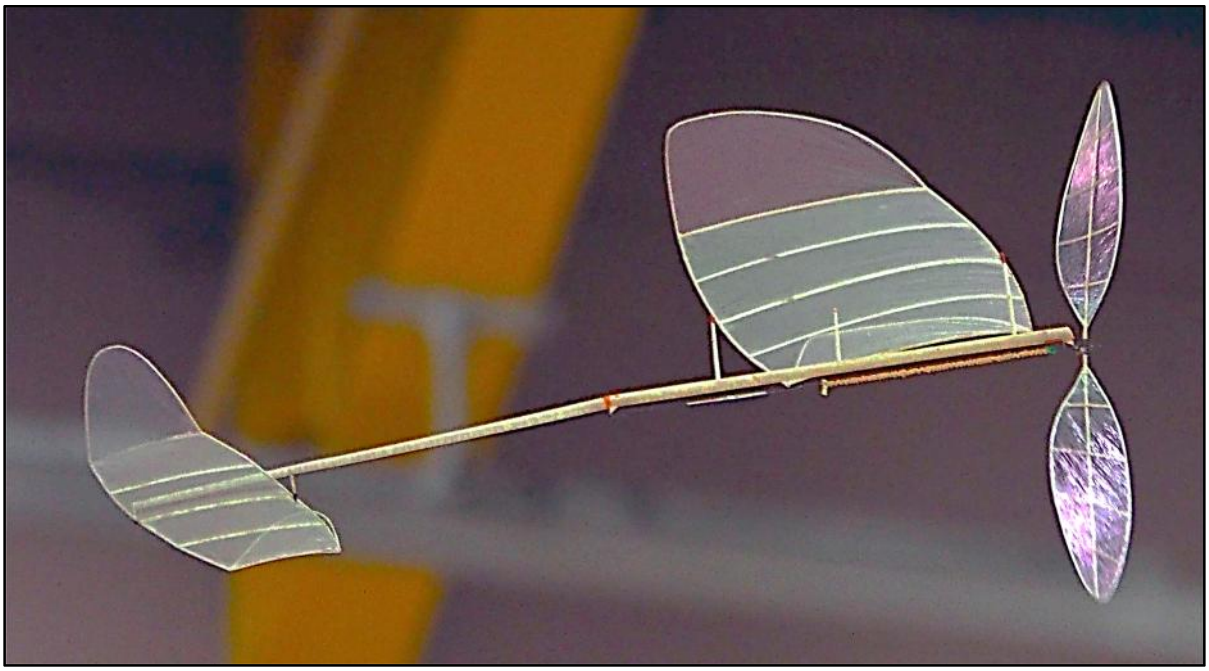
Indoor Nationals Pictorial - Tom Goodwin



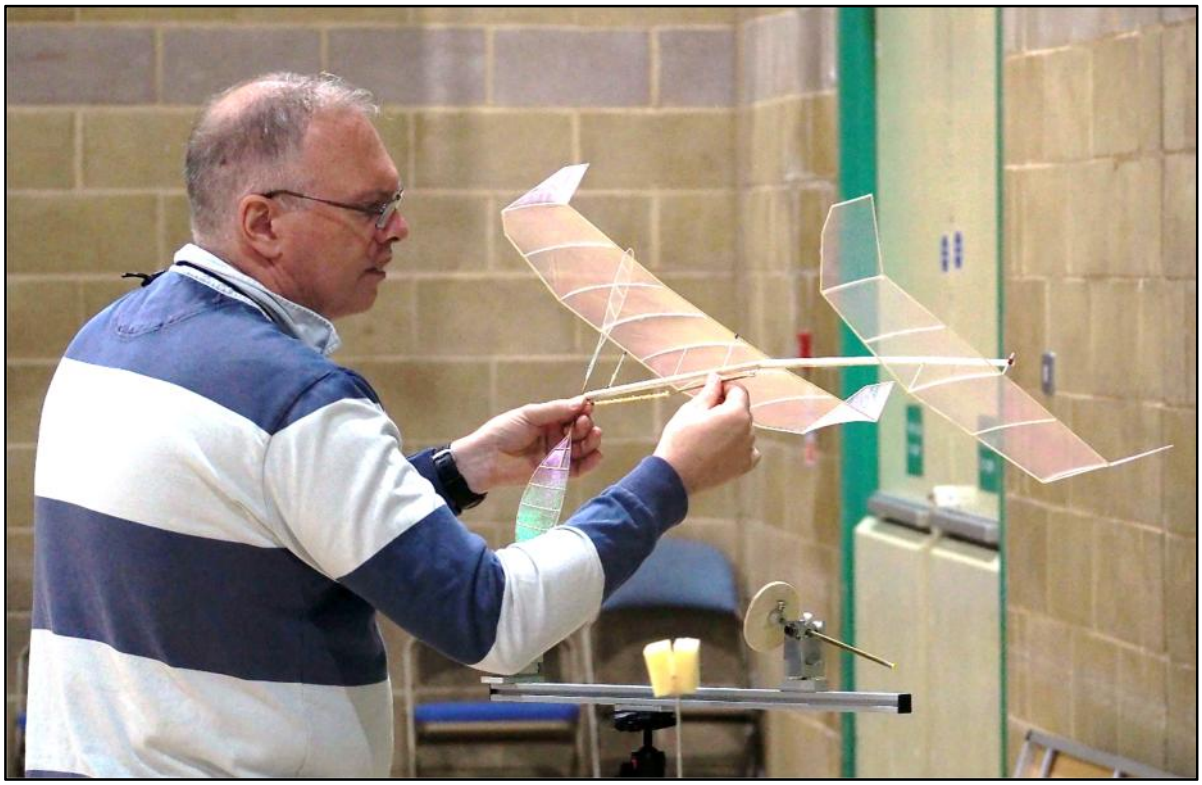
Mark Benns' F1M



Meredith Evans' 35cm Challenge model

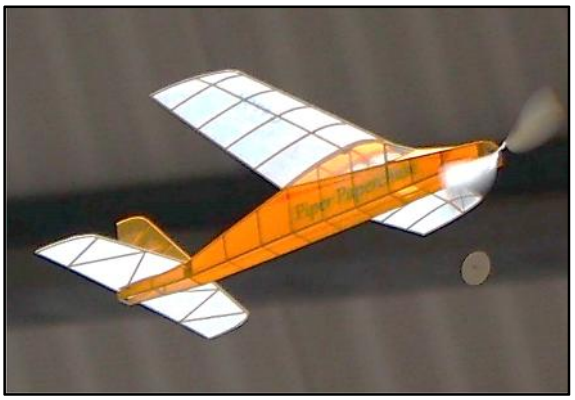


Meredith Evans' F1R

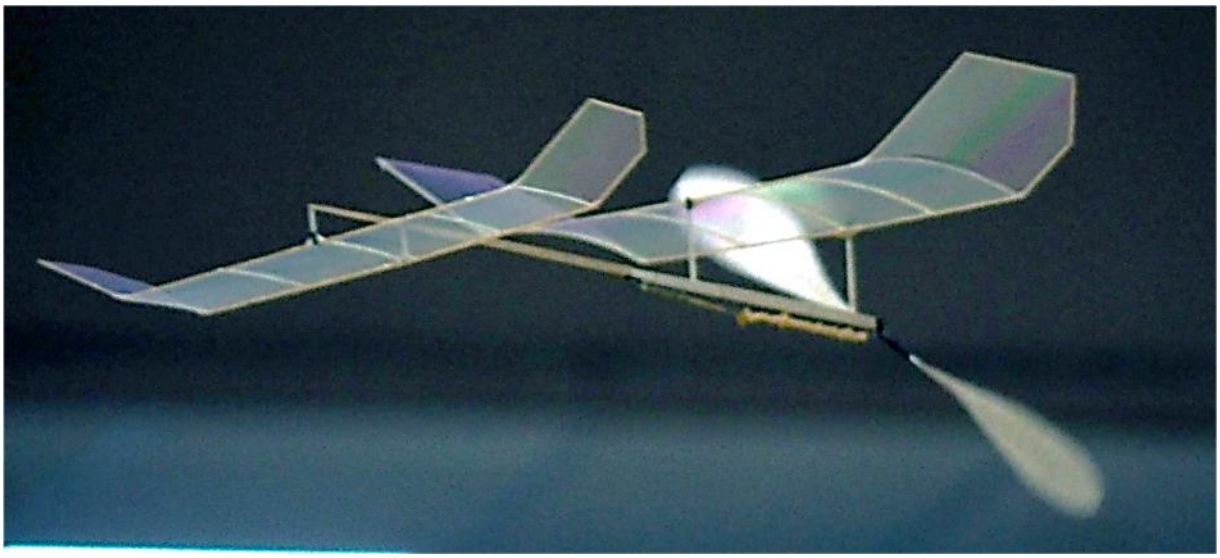


Meredith Evans loads up his F1M

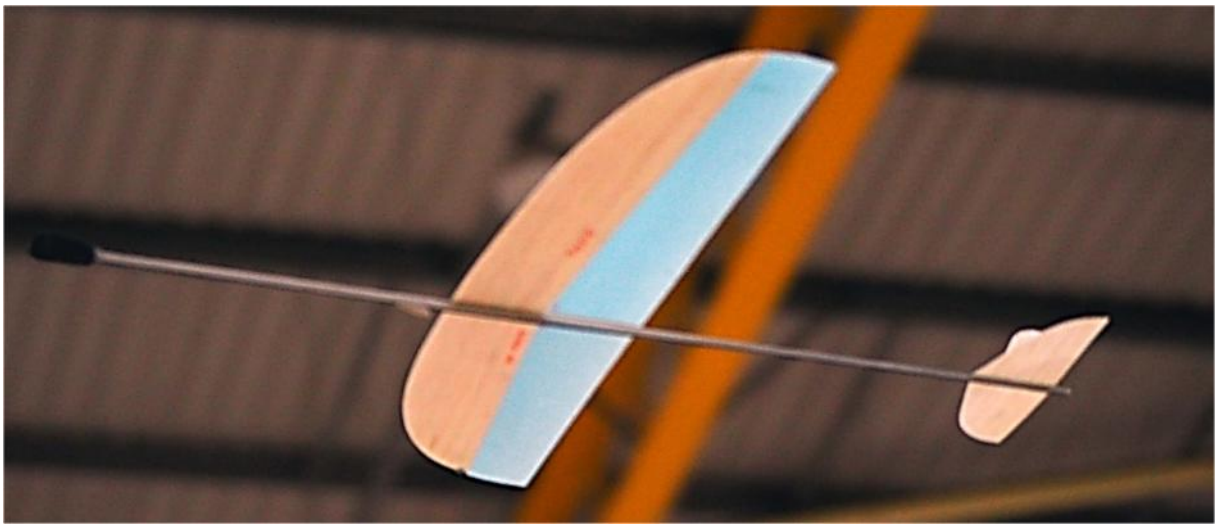
Peter Thompson's No-Cal Fike



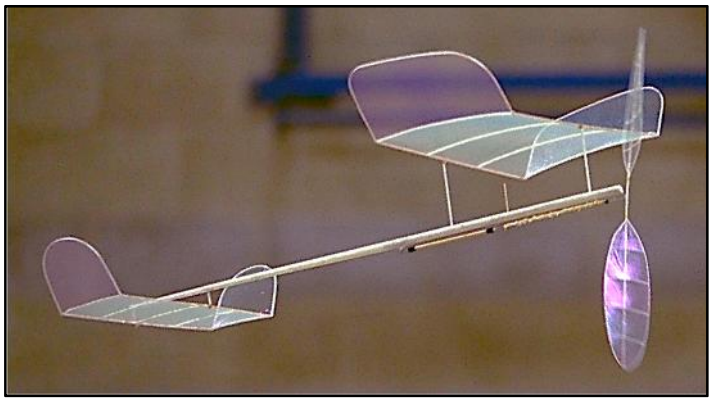
Terry Adams' Legal Eagle



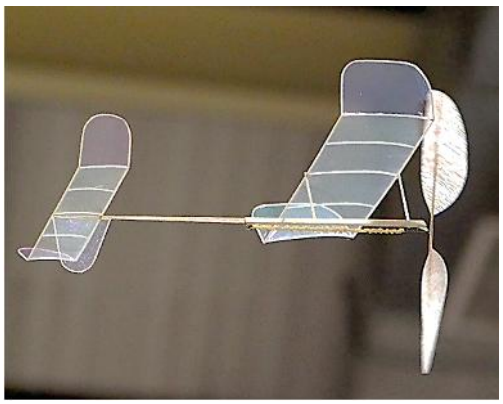
Roy Sellwood's 35cm Challenge model



Terry Adams' catapult glider



Tom Goodwin's 35cm Challenge model

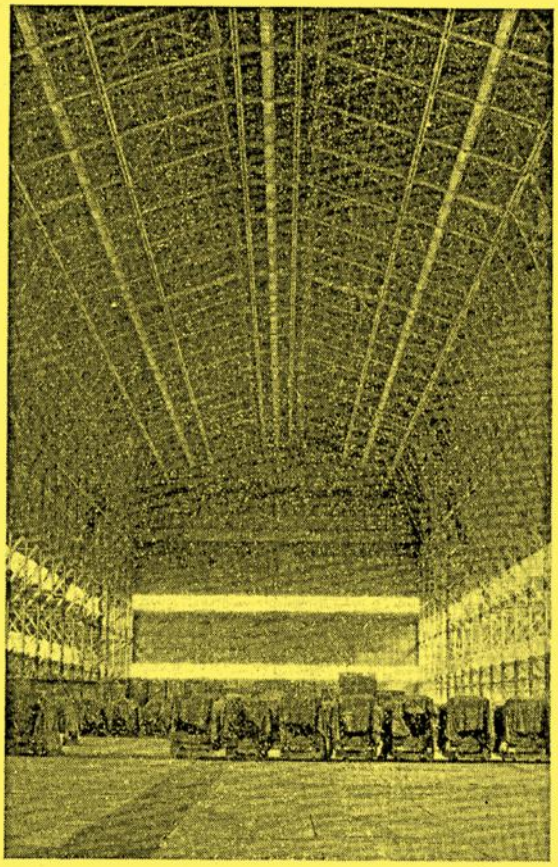


Tom Goodwin's LRS

Tom Goodwin

TVAC meeting dates: Hans has managed to obtain a couple of new TVAC dates – 27th October and 17th November both from 12:30 to 18:00.

AERO MODELLER 516 October, 1954



...heard at the Hangar Doors

Inner Sanctum

To anyone with normal frame of mind, first sight of the interior of the airship hangars at Cardington, Beds, is no less than breathtaking. An almost sanctimonious atmosphere exists within the vast cathedral like volume of the steel building, and one is naturally inclined to whisper conversation as though visiting a famous temple.

Competitors at the Indoor Nats. treated the magnificent opportunity of using the hangar with deserving reverence, and records tumbled quickly through the two-day meeting. In the photo above, three models are actually airborne and wafting their way round the half-way up mark; but such is the immensity of the structure that 1/32nd square wings are soon lost to sight against the girderwork. Using as much as anyone of the possible 180 ft. ceiling height, Bob Copland's model could only be watched at one time by virtue of its slowly rotating balsa prop. Bob set the old R.O.G. record up to 14 : 22 after a series of improving attempts by himself and Ray Monks, but the highlight of the Saturday was a new HL stick time of 21 : 12 by Reg Parham.

The lads speak highly of J. H. Maxwell's efforts to see that high grade wood, rubber and nichrome wire are made available to indoor fans, for there is little doubt that with Cardington available for future meetings, the only hold back on new record times will be on the question of first-rate supplies.

For services rendered

A pleasant occasion in Birmingham recently saw the presentation of a wallet and tankard to our Managing Editor as a mark of appreciation of work carried out for a number of years on behalf of the Midland Area of the S.M.A.E. A suitable inscription on the tankard gives future imbibers all the gen, whilst an inscribed 10s. note inserted in the wallet ensures that he will never be broke!

New Radio Control rules

Constant successes by the few multi-channel stalwarts such as Sid Allen and George Honnest-Redlich, during this year's Radio Control Contests, have made it apparent that revision of the present Rules is a necessity. At present under the S.M.A.E. Radio Control Rules, impecunious rudder-only flyers have a distinct disadvantage when flying against multi-channel outfits, particularly in stunt.

Whilst it is possible to run a contest which places everyone on the same level, irrespective of equipment (witness the Radio Event at the South Midland Area Rally mentioned below), this is by no means the final answer. Advanced equipment must be encouraged, otherwise Radio Control experimentation will stagnate. On the other hand, the rudder-only boys, particularly the younger and more penniless flyers, must be accommodated from the Contest angle. The big problem seems to be where to define the dividing line. Multi-channel and single-channel would, at first sight, appear to equitably divide the two Contest classes. There is, however, the problem of single-channel outfits using compound intergear to give multi-control operation. We invite readers to give their opinions.

Aeromodelling Vandals again

The Organisers of the South Midland Area S.M.A.E. Rally at Cranfield on August 22nd, report a very successful meeting, held under ideal weather conditions. The Radio Control event based on the A.M.A. Precision Pattern Rules proved an experiment worth repeating, and Clubs from as far distant as Scotland scored happy maximums in the free flight events.

All the more regrettable, therefore, that the happy relations which this Area enjoy with the College of Aeronautics should be impaired by the unthinking visitor or visitors who stole a Perspex notice from the entrance to the main aerodrome Control Tower. The mentality of such people is beyond our comprehension. They invite the withdrawal of the excellent aerodrome facilities that this and other S.M.A.E. Areas enjoy, curtailing their own flying facilities as a result.

Our own Editor happens to be the Secretary of this particular Area and would appreciate any information relating to this theft that other visitors can give. This type of vandalism, which was also experienced at the British Nationals, must be stamped out if the Society hopes to hold the few precious aerodromes still at its disposal.

Dynamometers modelled

MESSRS. HEENAN & FROUDE, who provided us with much invaluable advice on the design of Eddy Current Dynamometers for our "Engine Analysis" test equipment, are exhibiting at the Farnborough Air Show this year. Of interest to aeromodellers will be the models on their stand of full scale dynamometer and torque rigs, and we illustrate a model of a torque reaction stand for testing turbo-prop engines. In the outdoor section of the show, Messrs. Heenan & Froude will be demonstrating a "Field-type" jet engine cradle capable of dealing with thrusts up to 14,000 lb. A far cry from the fraction of an ounce produced by the "Bambi"!

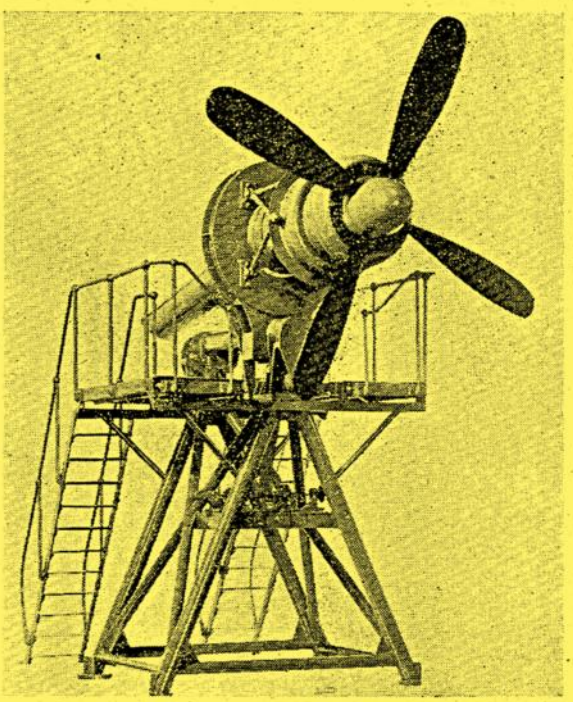
Spot check

From now onwards, organisers of flying meetings must insist on production of S.M.A.E. Membership Cards, thus ensuring that (*a*) the entrant is a duly enrolled member with a current membership, and (*b*) that the correct entry fee is paid.

Non-members of course, should produce evidence that they are currently covered for Third Party claims. Many cases have occurred recently whereby non-members have entered contests at the special fee restricted to members, and the new Membership Card system should obviate recurrence of this trouble.

World C/L Champs

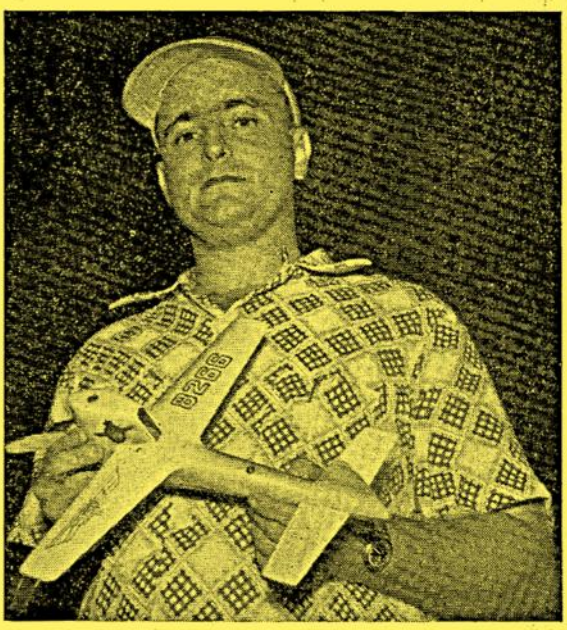
To U.S.A.F.E., the American Air Forces in Europe, goes the honour of holding the 1954 World Speed Championship title, thanks to A/2c Bob Lutker's new record performance in 5 c.c. at The Hague on August 21st. Bob is a Texan, currently posted in Tripoli, and only recently returned from the U.S. Air Forces Nats. at El Paso and the U.S. Nats. at Chicago, where he flew radio and combat. His model is of typical Texas layout, weighing only 16 ounces inclusive of metal underpan and Dooling 29, and recorded three flights of 218, 222 and 222 k.p.h., thus qualifying for the title, though Olle Ericsson of Sweden made 222 k.p.h. once to equal the record speed (138 m.p.h.). Though somewhat outclassed in 5 c.c., the British "Private Enterprise" team of Pete Wright, Pete Smith, Brian Dunn, Dick Edmonds and Arthur Andrews, acquitted themselves well, bringing back no less than six trophies and winning the 2.5 speed and team race by honourable margins, Unfortunately, the much vaunted Italian 2.5 c.c. contingent, including new record claimant, Prati, did not arrive, so there was little on which to speculate for the '55 event where Class 1 will be dominant: but the Dutch meeting was nevertheless



a colourful and exciting affair as will be seen in our photo-report to appear next month.

ADVANCE RESULTS

2.5 c.c.	P. Wright	G. Britain	111.85 m.p.h.
	E. Fresl	Yugoslavia	104.4 m.p.h.
	J. Desloges	France	97.61 m.p.h.
5 c.c.	R. Lutker	U.S.A.	138.02 m.p.h.
	O. Ericsson	Sweden	138.02 m.p.h.
	R. Labarde	France	133.00 m.p.h.
Team Race	P. Smith	G. Britain	6 m. 7.3 sec.
	J. Janssens	Belgium	6 m. 55 sec.
	R. Edmonds	G. Britain	7 m. 00 sec.
Stunt	H. Stouffs	Belgium	1279 pts.
	R. Lutker	U.S.A.	1276 pts.
	P. Smith	G. Britain	1212 pts.



My Models - Mike Turner

My aeromodelling career summed up in this list of models that I have built.

(Editor, this is astounding, how can anyone build this many, can anyone else recall all theirs, I can't.)

1ST. MODEL KEIL CRAFT 'AJAX' BUILT 1989
PEERLESS 'JAVELINE'
ACHILLES BUILT 1997 (2nd) 1998 (3rd) 1998
KEIL CRAFT 'SENATOR'
LAURIE BARR 'PINOCCHIO' 1948 BUILT 1996 (2nd) 1998 (3rd) 1999
'PEEWIT' BUILT 1998 (2nd) 1999 (3rd) 2002
CLOUD TRAMP
MERCURY 'MENTOR' BUILT 2007
LANZO 'BIG STICK' BUILT 2007
LANZO 'DUPLEX D' (1937) BUILT 1993 (NEW FUZ) 1995 LOST M/W 1999 (2nd) 1995 RECOVERED FUZ 2000 (3rd) 2000 (4th) 2005
LANZO 'CLASSIC ' BUILT 2
DICK KORDA 1939 WAKE BUILT 1993 (2nd) 1994 (3rd) 1998 (4th) 2009
CALIFORNIA CHAMP WAKEFIELD
FRED BOWERS WAKEFIELD
'POLLYWOG'
'HUMP 2'
KEITH HORRY WAKE BUILT 1994 (2nd) 1995 (3rd) 1996 (4th) 1996
KORDA STICKLER (1941)
'GOBLIN ABLE' O/R
WALLY SIMMERS 'GOLLYWOCK' (1942) BUILT 1994 (2nd) 1995 (3rd) 1996 (4th) 2001 (5th) 2002
JIM BUCKERIDGE BUILT 1999
RAY SMITH 'MULVEHILL' (1941) BUILT 1995 (2nd) 1996 (3rd) 1999
NORTHERN STAR BUILT ?
FRANK EHLING OUTCLIMBER (1948)
BRYON ABBOTT 'THERMO' WAKE (1943)
JERRY KOLB STICK (1937) BUILT 1996, (2nd) 1998 (3rd) 2008
J. OWEN BLACKPOOL ROCK Mk 3(1949) BUILT 1998 (2ND) 1999 (3RD) 2002 (4th) 2004 (5th) 2009
FRANK HEEB BLUNDERBUS WAKE 1941 BUILT1996 (2nd) 1997 (3rd) 2011 (4th) 2012
MICK FARTHING Mk 2 1946 BUILT 2012
KEANE ACE (JUMBO RUBBER) BUILT 2013
LANZO DUPLEX 4oz WAKE BUILT 2000 (2nd) 2002 (3rd) 2003 (4th) 2005
KORDA VICTORY BUILT 2002
RAY YEABSLEY 'GEE BEE' 1949 BUILT 1996
GORDON LIGHT BUILT 1996
BRIAN FAULKNER 'CHAD 30' 1947 BUILT 2009
JIM CAHILL 'DUCKY' 1938 BUILT 1998
J.O.D. 'BORDERLINE' BUILT 1999
J. B. KNIGHT WAKE 1950 BUILT 1999
J.OWEN 'YORKSHIRE PUDDING'1946 BUILT
JOHN BARKER 'HEPCAT' BUILT 1996
BERT JUDGE 'WAKE' BUILT 1996
BURD KORDA BUILT 1997
THERMALIER BUILT 1996
KORDA 'C' STICK BUILT 1997 (2) 2002
ED LAMBS 'CLIMBER' 1941 BUILT 1997
TED EVANS 'JAGUAR' BUILT
DIG COUPE BUILT 1998
RED SWAN BUILT 1951-1952
ART HORAK 'WANDERER' 1945 BUILT 1999 (2nd) 2000 **= 41**
'REID HULL' 1941 BUILT 2001
TOM SUTER 'RED BUZZARD' BUILT 2002
FELIX BUILT 2002
GEORGE REICH 'DOUBLE FEATURE' BUILT 2003
TOMBOY, ONLY POWER MODEL BUILT 2001
J. G. JOYCE 'NORD 2' BUILT 2001
LULU BUILT 2001
BOB HILDERBRAND 'KITTEN' BUILT 2001
CONDOR CLIPPER BUILT 2001 (2nd) 2010
O/D P30 BUILT 2001 BEAT J.O.D AT WALLOP
LO ZIGOLO COUPE BUILT 2001
R.H.WARRING 'PERCY 4' BUILT 2001
CLOUD TRAMP BUILT 2002
HALFAX COMMANDO BUILT 2002
J. GODDEN P30 BUILT 2003
SCRAM BUILT 2003
O/D P30 (TUBE) BUILT 2007
CHEROKEE BUILT 2003
BURNHAM 'A' FRAME BUILT 2003
MERCURY 'MENTOR' BUILT 2004
JIM BAGULEY 'LAST RESORT BUILT 2005 (2nd) 2006
'SKY ROCKET' BUILT 2007
FRANK HEEBS 'STRATOHAWK' BUILT 2007
NEW 'GOLLYWOCK' (BUILT UP FIN' BUILT 2008
MICHEL ETIENVRE COUPE BUILT 2010
'FLEDGELING' BUILT 2010
'MICRON'
BOB ROMEISTER 'CRUSADER' 1940 BUILT 2010 (2nd) 2011
HERMES BUILT 2012
'DOLPHIN' (BUNGEE GLIDER) BUILT 2013
'RAFF V' BUILT 2009
'HERMES' BUILT 2012 **=3**

TOTAL MODELS BUILT 120 FROM 1989 – 2013 = 24 YEARS

MODELS 2018 on

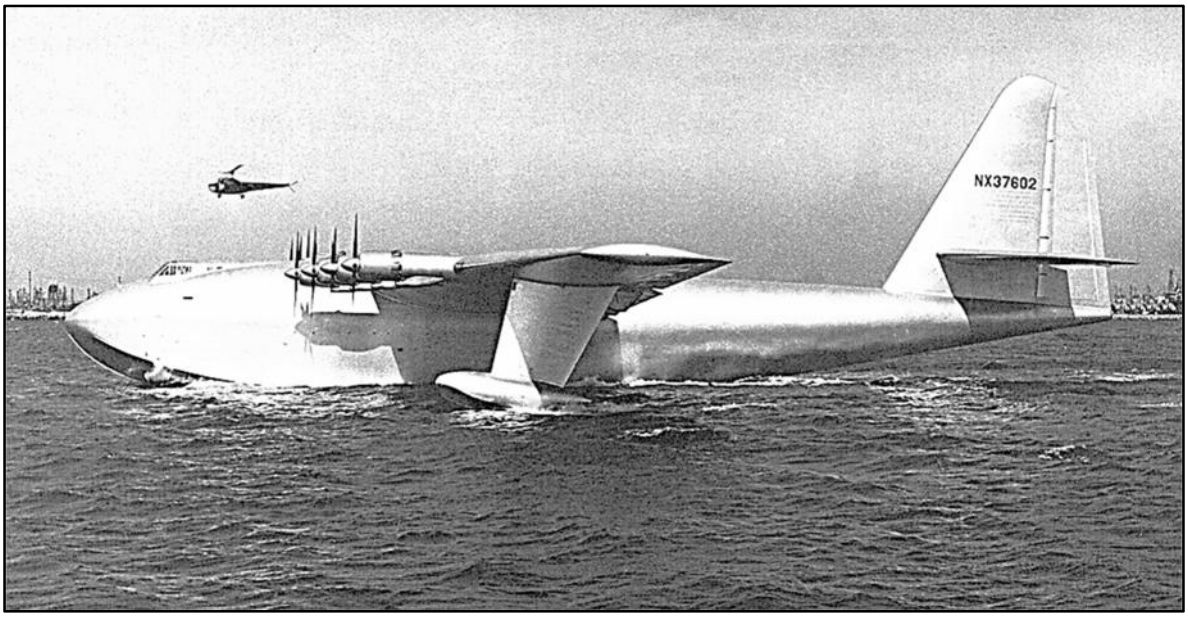
FLEDGLING, MICRON, CONDOR CLIPPER (2)
LAST RESORT (2) STRATOHAWK, RAFF V, CHERROKEE,
SCRAM (2), HEPCAT, PINOCCHIO, CRUSADER, HERMES,
MICHEL ETINVRE COUPE, DUPLEX (2), KORDA, KORDA 'C' (2)
GEORGE REICH, LULU, GORDON LIGH, DIG COUPE O/D
P 30 O/D, JOHN GODDEN P 30, HEEB (2), BURD KORDA,
JAGUAR, ED LAMB'S CLIMBER, PERCY 4, RED BUZARD,
REID HULL, HOOSIER, KOLB STICK, BORDERLINE,
BLACKPOOL ROCK (2), GOLLYWOCK , HORRY (2) SMITH (3),
KEITH'S HORRY, CANARD, PERCY 3.

TOTAL 49 MODELS since 2018

TOTAL MODELS ALL TOGETHER 169

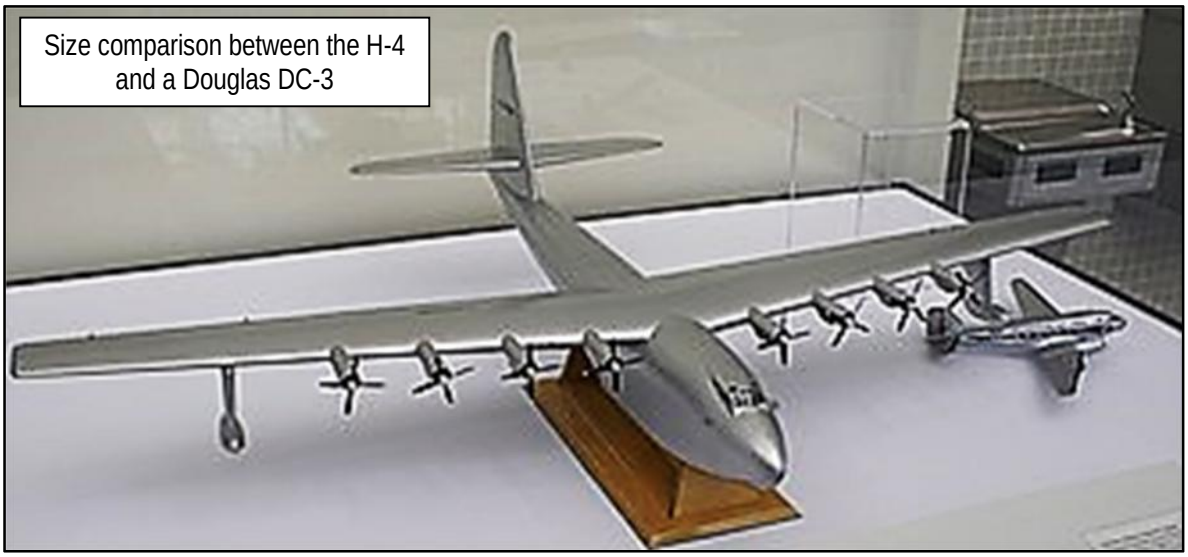
Mike Turner

The Spruce Goose - Wikipedia



The Hughes H-4 Hercules (commonly known as the Spruce Goose; registration NX37602)

A prototype strategic airlift flying boat designed and built by the Hughes Aircraft Company. Intended as a transatlantic flight transport for use during World War II, it was not completed in time to be used in the war. The aircraft made only one brief flight, on November 2, 1947, and the project never advanced beyond the prototype.
Built from wood (Duramold process) because of wartime restrictions on the use of aluminum and concerns about weight, the aircraft was nicknamed the Spruce Goose by critics, although it was made almost entirely of birch. The Birch Bitch was a more accurate but less socially acceptable moniker that was allegedly used by the mechanics who worked on the plane. The Hercules is the largest flying boat ever built, and it had the largest wingspan of any aircraft ever flown until the twin-fuselaged Scaled Composites Stratolaunch first flew on April 13, 2019. The aircraft remains in good condition. After having been displayed to the public in Long Beach, California, from 1980 to 1992, it was moved to display at the Evergreen Aviation & Space Museum in McMinnville, Oregon, United States.



Design and development

In 1942, the U.S. War Department needed to transport war materiel and personnel to Britain. Allied shipping in the Atlantic Ocean was suffering heavy losses to German U-boats, so a requirement was issued for an aircraft that could cross the Atlantic with a large payload. Wartime priorities meant the aircraft could not be made of strategic materials (e.g., aluminum). The aircraft was the brainchild of Henry J. Kaiser, a leading Liberty ship builder and manufacturer. Kaiser teamed with aircraft designer Howard Hughes to create what would become the largest aircraft yet built. It was designed to carry 150,000 pounds (68,000 kg), 750 fully equipped troops or two 30-ton M4 Sherman tanks.
The original designation "HK-1" reflected the Hughes and Kaiser collaboration.

The HK-1 aircraft contract was issued in 1942 as a development contract] and called for three aircraft to be constructed in two years for the war effort. Seven configurations were considered, including twin-hull and single-hull designs with combinations of four, six, and eight wing-mounted engines. The final design chosen was a behemoth, eclipsing any large transport then built. It would be built mostly of wood to conserve metal (its elevators and rudder were fabric-covered), and was nicknamed the Spruce Goose (a name Hughes disliked) or the Flying Lumberyard.
While Kaiser had originated the "flying cargo ship" concept, he did not have an aeronautical background and deferred to Hughes and his designer, Glenn Odekirk. Development dragged on, which frustrated Kaiser, who blamed delays partly on restrictions placed for the acquisition of strategic materials such as aluminum, and partly on Hughes' insistence on "perfection." Construction of the first HK-1 took place 16 months after the receipt of the development contract. Kaiser then withdrew from the project.

Hughes continued the program on his own under the designation H-4 Hercules, signing a new government contract that now limited production to one example. Work proceeded slowly, and the H-4 was not completed until well after the war was over. The plane was built by the Hughes Aircraft Company at Hughes Airport, location of present-day Playa Vista, Los Angeles, California, employing the plywood-and-resin "Duramold" process– a form of composite technology – for the laminated wood construction, which was considered a technological tour de force. The specialized wood veneer was made by Roddis Manufacturing in Marshfield, Wisconsin. Hamilton Roddis had teams of young women ironing the (unusually thin) strong birch wood veneer before shipping to California.
A house moving company transported the airplane on streets to Pier E (now Pier T) in Long Beach, California. They moved it in three large sections: the fuselage, each wing—and a fourth, smaller shipment with tail assembly parts and other smaller assemblies. After Hughes Aircraft completed final assembly, they erected a hangar around the flying boat, with a ramp to launch the H-4 into the harbor.
Howard Hughes was called to testify before the Senate War Investigating Committee in 1947 over the use of government funds for the aircraft. During a Senate hearing on August 6, 1947 (the first of a series of appearances),
Hughes said:
The Hercules was a monumental undertaking. It is the largest aircraft ever built. It is over five stories tall with a wingspan longer than a football field. That's more than a city block. Now, I put the sweat of my life into this thing. I have my reputation all rolled up in it and I have stated several times that if it's a failure, I'll probably leave this country and never come back. And I mean it.
In all, development cost for the plane reached $23 million (equivalent to $246 million in 2023 dollars).

Operational history

Hughes returned to California during a break in the Senate hearings to run taxi tests on the H-4. On November 2, 1947, the taxi tests began with Hughes at the controls. His crew included Dave Grant as copilot, two flight engineers, Don Smith and Joe Petrali, 16 mechanics, and two other flight crew. The H-4 also carried seven invited guests from the press corps and an additional seven industry representatives. In total, thirty-six people were on board.
Four reporters left to file stories after the first two taxi runs while the remaining press stayed for the final test run of the day. After picking up speed on the channel facing Cabrillo Beach, the Hercules lifted off, remaining airborne for 26 seconds at 70 ft (21 m) off the water at a speed of 135 miles per hour (217 km/h) for about one mile (1.6 km). At this altitude, the aircraft still experienced ground effect. To Hughes, these tests demonstrated that the (now-unneeded) plane was flight-worthy, and thus worth the use of government funds.
The H-4 never flew again. Its lifting capacity and ceiling were never tested. Afterwards a full-time crew of 300 workers, all sworn to secrecy, maintained the aircraft in flying condition in a climate-controlled hangar. The company reduced the crew to 50 workers in 1962 and then disbanded it after Hughes' death in 1976.

Display

Ownership of the H-4 was disputed by the U.S. government, which had contracted for its construction. In the mid-1970s, an agreement was reached whereby the Smithsonian Institution's National Air and Space Museum would receive the Hughes H-1 Racer and section of the H-4's wing, the Summa Corporation would pay $700,000 and receive ownership of the H-4, the U.S. government would cede any rights, and the aircraft would be protected "from commercial exploitation."
In 1980, the H-4 was acquired by the Aero Club of Southern California, which later put the aircraft on display in a very large geodesic dome next to the Queen Mary ship exhibit in Long Beach, California. The large dome facility became known as the Spruce Goose Dome. The very large enclosed indoor dome area around the H-4 consisted of meeting and special event space, elaborate audio-visual displays about Howard Hughes and the aircraft itself, and dining areas for tourists. Many convention groups held large dinners, sales meetings, and even concerts under the wings of the aircraft at night when the Spruce Goose Dome was closed to tourists. In 1986, a secondary simulator-style attraction named Time Voyager was constructed next to the H-4, at a cost of $2.5 million (~$5.9 million in 2023). In 1988, The Walt Disney Company acquired both Long Beach attractions and the associated Long Beach real estate by Pier J. In 1991, Disney informed the Aero Club of Southern California that it no longer wished to display the Hercules aircraft after its highly ambitious Port Disney plan was scrapped.
After a long search for a suitable host, the Aero Club of Southern California arranged for the Hughes Hercules flying boat to be given to Evergreen Aviation & Space Museum in exchange for payments and a percentage of the museum's profits.

The aircraft was transported by barge, train, and truck to its current home in McMinnville, Oregon (about 40 miles (64 km) southwest of Portland), where it was reassembled by Contractors Cargo Company and is currently on display. The aircraft arrived in McMinnville on February 27, 1993, after a 138-day, 1,055-mile (1,698 km) trip from Long Beach. The Spruce Goose geodesic dome is now used by Carnival Cruise Lines as its Long Beach terminal.
By the mid-1990s, the former Hughes Aircraft hangars at Hughes Airport, including the one that held the Hercules, were converted into sound stages.
Scenes from movies such as Titanic, What Women Want and End of Days have been filmed in the 315,000-square-foot (29,300 m^2) aircraft hangar where Howard Hughes created the flying boat.
The hangar will be preserved as a structure eligible for listing in the National Register of Historic Places in what is today the large light industry and housing development in the Playa Vista neighborhood of Los Angeles.
It has since been converted to office and event space by Google.

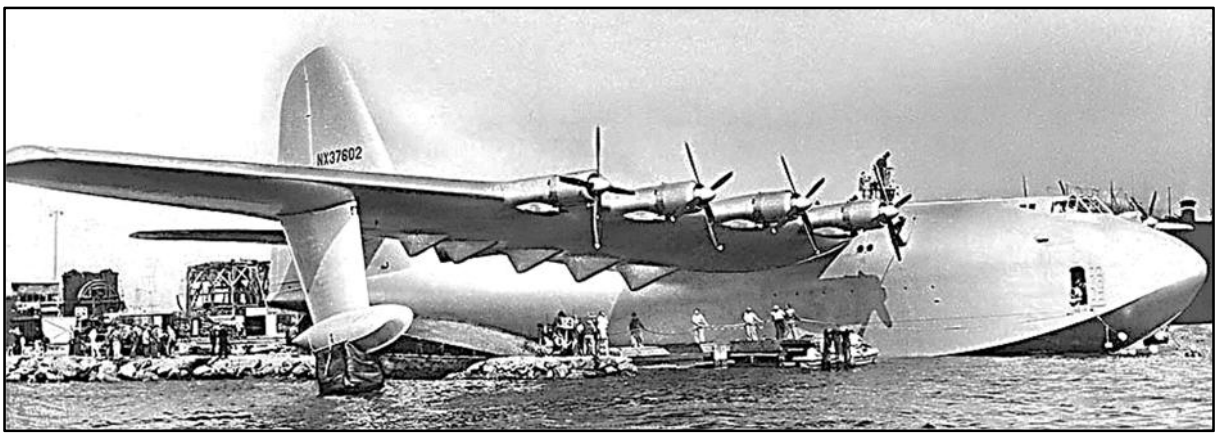
Specifications (H-4)
Performance specifications are projected.

General characteristics

- Crew: 3
- Length: 218 ft 8 in (66.65 m)
- Wingspan: 319 ft 11 in (97.51 m)
- Height: 79 ft 4 in (24.18 m)
- Fuselage height: 30 ft (9.1 m)
- Empty weight: 250,000 lb (113,398 kg)
- Powerplant: 8 × Pratt & Whitney R-4360 Wasp Major 28-cylinder air-cooled radial piston engines, 3,000 hp (2,200 kW) each
- Propellers: 4-bladed Hamilton Standard, 17 ft 2 in (5.23 m) diameter constant-speed propellers

Performance

- Cruise speed: 250 mph (400 km/h, 220 kn)
- Range: 3,000 mi (4,800 km, 2,600 nmi)
- Service ceiling: 20,900 ft (6,400 m)



Wikipedia

Southern Coupe League Table - Roy Vaughn

Benn Hobbs, current league leader, receiving a reward at RAF Colerne in 2022

League Standings after Round 5

	ENTRANT	CLUB	COUPE DE BRUM	LONDON GALA	SECOND AREA	NATIONALS	SOUTHERN GALA	CROOKHAM GALA	COUPE EUROPA	TOTAL
1	B. Hobbs	Oxford		9	7	7	9			32
2	R. Marking	CVA			8	9	12			29
3	P. Woodhouse	Morley	12		12					24
4	A. Brocklehurst	B&W		12						12
=	N. Allen					12				12
6	C. Foster	Morley	9							9
=	S. Fielding	Morley			9					9
8	S. Philpott	Birm'ham	8							8
=	M. Stagg	B&W		8						8
=	J. Paton	Oxford				8				8
=	T. Winter	CVA					8			8
12	I. Taylor	Birm'ham	7							7
13	G. Manion	Birm'ham	6							6
14	B. Whitehead	Peterboro	5							5
15	A. Moorhouse	Vikings	4							4
16	B. Dennis	Oxford	3							3
17	M. Marshall	Impington	2							2
18	S. Darmon	Birm'ham	1							1
19	A. Hewitt									0
=	L. Drennan									0
=	G. Warburton									0
=	R. Vaughn	Crookham								0
=	R. Elliott	Croydon								0
=	P. Carter									0
=	G. Peck	C/M								0

Roy Vaughn

Can we increase Performance ?

asks RON WARRING

FORGET about the talk of duration restrictions for the moment. As far as the hard core of contest enthusiasts are concerned they will always be interested in further *improving* duration. And average durations have certainly continued to improve during the past few years.

If you doubt that the present-day Wakefield, glider or power duration model is very much better than its four- or five-year old counterpart, then just turn back through old issues of MODEL AIRCRAFT and look at some of the contest winning times for, say, 1946 or 1947. In those days there was no five minute maximum rule. Contrary to what some modellers will tell you of how good they were, three minutes was a *good* average for a Wakefield in those days and 2-2½ minutes a good time for a power duration job on a fifteen or twenty second motor run. What chance would those times stand in a present-day contest?

The outward appearance of models has not changed all that much. Power duration owes much to improved motors, better know-how on controlling models which are basically overpowered and to those finishing touches to design proportions which keep a model from spiralling in. Just the slightest bit out of trim, however, and a power duration model is still a lethal object. The margin between "right" and "wrong" as far as trim goes is still small. Even the experts still make mistakes but there is far greater consistency amongst the top men. And while they are putting up consistently high performances anyone else must put up outstanding times to beat them. Never has the top of competition lists been so crowded, in fact, with "known" and "unknown" fliers turning in high times.

The same is true of Wakefields and gliders. In Wakefields, in particular, the consistent standard of the experts has reached a very high level. With gliders the winning times have gone higher still—around the three maximum limit in the majority of contests—although we do not get the same names appearing with such regularity in the first places.

Can we go on improving performance further? There is no reason why we should not. The true "five minute" model is still a myth—in rubber power or glider. Even if a model could be produced to do five minutes consistently under normal conditions there is still the weather element to take into account. To be sure of doing five minutes on each and every contest flight under all conditions, the potential duration of that model would have to be in the neighbourhood of eight to nine minutes—and that just does not seem possible with any of the three main free-flight duration types, under present International specifications. But at least it is a new goal to aim at and once again we are far from finality as regards model design.

What improvements can we try to incorporate in our present designs? In the case of the power model, for example, it is largely a matter of using the most powerful engine available in a particular class, proportioning the areas and weights of the final model to the best advantage and then operating the engine at maximum efficiency, consistent with a safe and efficient trim. The way in which a well-trimmed modern power duration model climbs is a revelation. The height it can reach on a short power run is really fantastic. If we can get more height, so much the better. If we can get a better glide, then once more the overall average duration must be improved. If a matter of consistency is involved, then an airframe which holds its true setting under all conditions may be a better solution to present difficulties than power or glide performance.

According to the reports on the Swiss International power meeting one of the major troubles was the severe change in atmospheric conditions between extreme damp in the cool dawn air, and the warm, dry air later in the morning. Structures were suspected of warping and changing the trim of models. With trim tending to be critical as we have already mentioned this could be disastrous.

Some two years experience with "geodetic" construction has suggested that here is almost the complete answer to structural problems of this nature. Many people have avoided geodetic construction because it *looks* complicated. It *is* more complicated than conventional structures, but not all that more difficult to build. Once you have got the hang of "building geodetic," you find it almost as straightforward as the older methods. Geodetic construction is by no means new. It was used before the war on one or two models. However, the writer has been the first person to adopt it on a wide scale for use in contest models.

The use of geodetic construction does mean an

advance in design since it offers something extra in the way of rigidity at little or no extra weight. By choosing the right grade of materials, in fact, geodetic structures can work out at almost identical weights to their conventional counterparts.

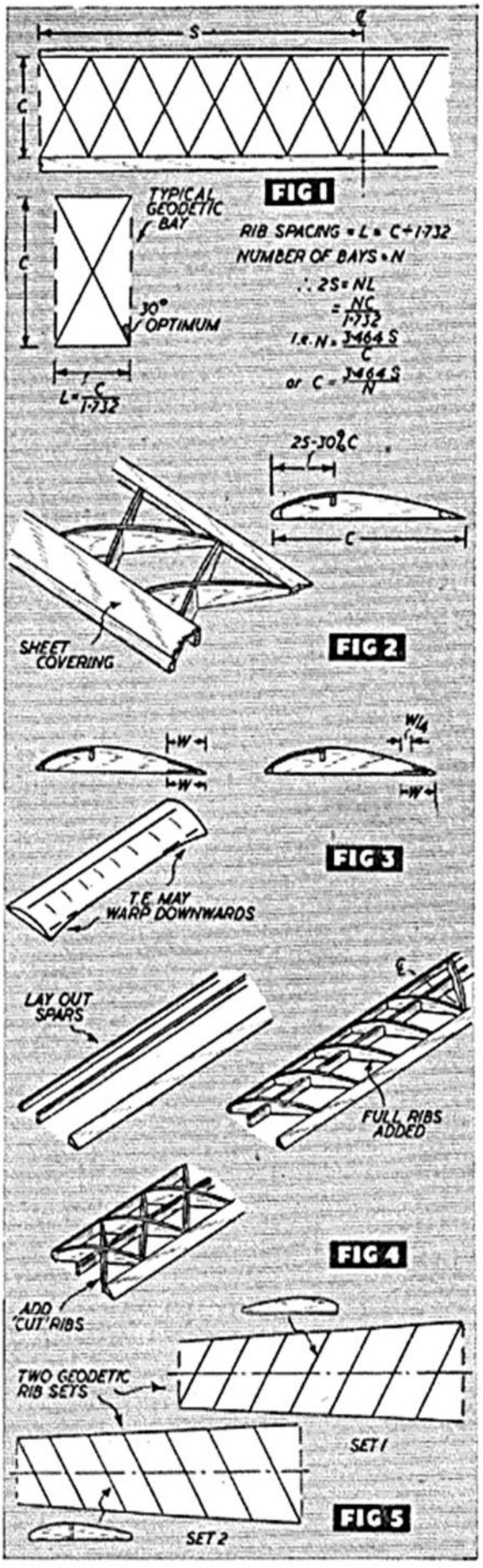
The biggest call for geodetic seems to be in tailplanes for all types of models. This component, more than any other, is likely to affect the trim of the model badly if it warps. Geodetic rib spacing is capable of resisting quite strong loads without deforming. In other words, once the frame or structure itself has been completed, slackening tissue or excessively tautened tissue should have little or no effect on the shape of that frame. This can be proved by the fact that a properly made geodetic tailplane (as light as a conventional framework) can be tissue covered, water-sprayed and then doped without pinning down whilst drying. When dry the frame will still be unwarped. If you *need* warps in such a structure, e.g. washout at the tips, this has to be built in whilst assembling the frame.

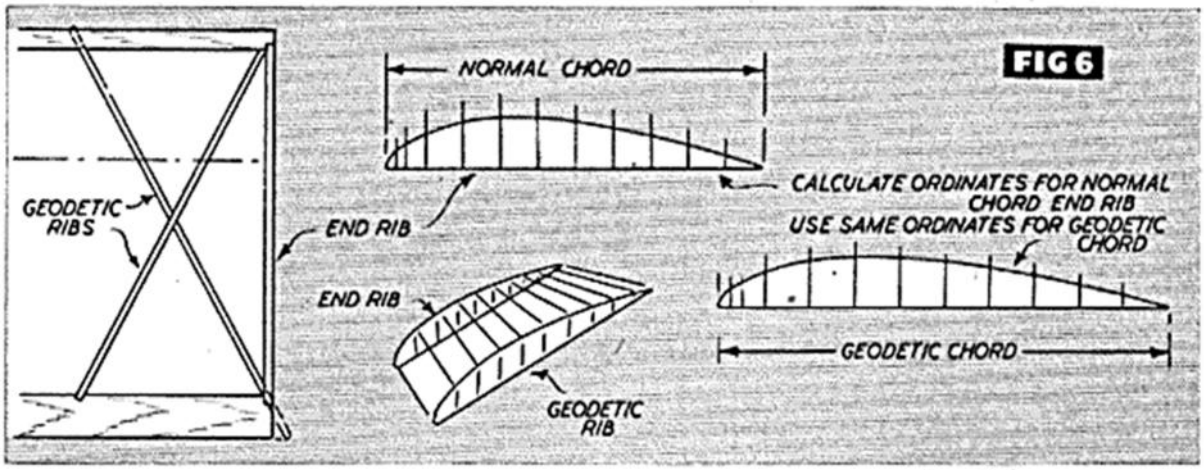
Where geodetic frames are weak is in bending. In other words they need a mainspar or spars to resist bending like any other structure. In view of the fact that geodetic ribs are so rigid in other directions it usually pays to make the final frame extra resistant to bending as well. This is readily accomplished by the use of narrow but deep spars. Cap strips can be used, top and bottom, to prevent these spars buckling, if necessary. Then the thinnest and lightest materials can be used for the spars.

A purely rectangular planform is best suited to geodetic ribs, when the ribs can be laid out with adequate rake as indicated in Fig. 1. The angle between these ribs should approach 45 degrees for maximum stiffness. Too close a spacing of the individual ribs does not result in a structure which is resistant to torsion. The aerofoil section is distorted by the X-form of the ribs, but this is not at all significant on tailplanes. If preserving the aerofoil section is considered important, then sheet leading-edge covering extending back to some 25 to 30 per cent. of the chord will provide the answer to this problem. Most probably the airflow will have separated from the upper surface by this point and so there is no need to worry about a " distorted " section over the rear part of the tailplane aerofoil. The rear edge of the sheet covering also forms a convenient point for the location of a mainspar.

Such a type of geodetic construction (with sheeted leading edge) is well suited to power model tailplanes. Used in conjunction with a built-up trailing edge on a really large tailplane, however, the trailing edge member is a source of possible weakness. With both upper and lower portions of the sheet trailing edge of the same width the structure is unbalanced and the trailing edge may tend to warp downwards slightly (giving wash-in at the tips) if the covering is drawn very taut (e.g. exposed to strong sun). The solution lies in using a slightly wider sheet portion on the bottom of the built-up trailing edge, as shown in the second diagram of Fig. 3.

If anyone has been frightened off geodetic by the apparent complexity of the structure, then Fig. 4

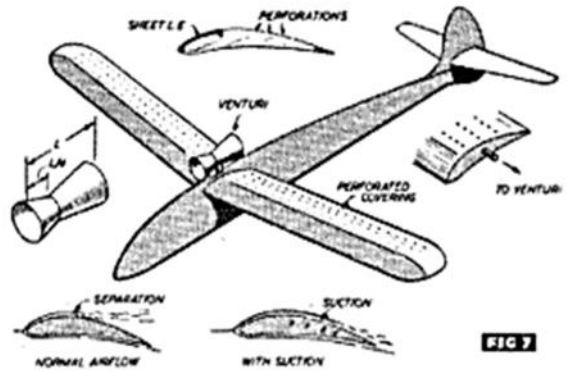




should reassure them on this point. This shows, step-by-step, how the construction of a simple geodetic structure is tackled. Quite the simplest way is to cut a set of "full" ribs and a set of "halved" ribs, butt-jointing the two where they cross and cementing well. The stiffness of the resulting structure relies on these cemented joints, but since we rely on cement joints on so many other parts of the structure, this is no point of weakness. Working with one set of ribs halved is much simpler than trying to half-joint pairs of ribs.

The method is not complicated unduly when the planform is tapered, as might be required for wings. Here it is best to cut the sets of ribs required by the template method, as is normally done when cutting a set of tapered wing ribs anyway. The difference in this case is that each panel requires *two* sets of tapered wing ribs. One complete set only is laid in place initially and securely cemented. The other set of ribs is then added by cutting in half and butt-jointing to the first set of ribs, as with parallel chord construction (see Fig. 5).

One point of confusion with geodetic wings is how to arrive at the aerofoil section required. Again this is simple. The aerofoil section required will be represented by a normal end rib. The geodetic rib is that much longer, but conforms to the same section. If the normal end rib and the required geodetic rib are plotted, therefore, the *ordinates* for each will be the same. Only the lengths of the two ribs will differ, as in Fig. 6. In other words, calculate the ordinates for a normal end rib and then use these *same* ordinates located on the wider spaced stations of the longer geodetic rib to arrive at the geodetic rib section required.



So much for geodetics. What else can we try in our search for better performance, having made our structure as warp-proof as possible to ensure *consistency*?

A short paragraph in a recent issue of MODEL AIRCRAFT may have gone unnoticed by many. It referred to applying suction to the inside of a perforated wing to improve its aerodynamic characteristics. Then the report on the 1952 Nordic contest in Austria made a point of mentioning the very high finish associated with the top models in a contest flown, basically, under "still air" conditions. In Austria, it seems, the best "aerodynamic" models paid off. Suction slots may be a further method of improving aerodynamic efficiency and decreasing sinking speed to figures never before realised on models.

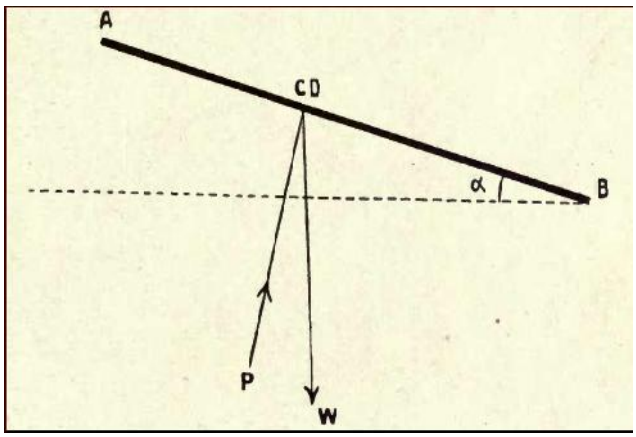
What would such a system entail? Probably nothing more than a small venturi mounted above the fuselage, coupled to the inside of the wings. The upper surface covering would then be perforated with a large number of holes from a line, say, at 25 per cent. of the chord aft. The drag of the venturi may well be negligible in comparison with the reduction in drag and increase in lift brought about by delaying the separation point of the airflow over the upper surface of the wing. After all, it is the upper surface of the wing which produces the majority of the lift. If full scale test figures with suction slots are any guide it might well be possible to halve the sinking speed of a model glider, if a suitable "suction scheme" could be devised. A venturi seems the simplest and the most direct solution at the moment, as in Fig. 7.

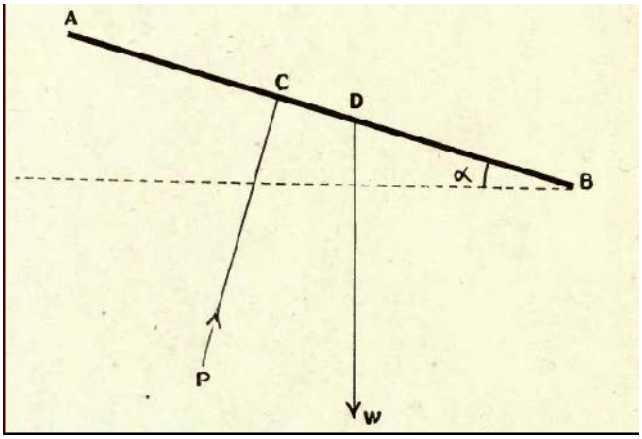
To conclude it is as well to point out to the man who simply flies models for fun, that developments in the duration field can be of vital interest and use to him. What the sports flier may fail to appreciate is that the top class contest modeller is usually a *most consistent flier*. In other words, with the dice loaded against him, as it were, in trying to get the utmost out of his model rather than "flying it safely" he does not very often come to grief.

Report No.164 Our earliest books.

Continuing with "The Theory and Practice of Model Aeroplaning" by V. E. Johnson.

Chapter 6. The Question of Sustentation. The Centre of Pressure.
"Passing on now to the study of an aeroplane actually in the air, there are two forces acting on it, the upward lift due to the air and the force due to the weight acting vertically downwards. We can consider the resultant of all the upward sustaining forces as acting at a single point that is called the "Centre of Pressure." Suppose A B is a section of a flat aerofoil, inclined at a small angle to the horizon, C is the point of application of the resultant upward 'lift' and D the point through which the weight acts vertically downwards. If these two forces balance there will be equilibrium; but to do this they must pass through the same point, but as the angle of inclination varies, so does the centre of pressure, and some means must be employed whereby if C and D coincide at a certain angle the aeroplane will come back to the correct angle of balance if the latter be altered.





"In a model the means must be automatic. Automatic stability depends for its action upon the movement of the centre of pressure when the angle of incidence varies. When the angle of incidence increases the centre of pressure moves backwards towards the rear of the aerofoil, and vice versa.

"Natural automatic stability (the only one possible so far as models are concerned) necessitates permanent or a permanently recurring coincidence (to coin a phrase) of the centre of gravity and the centre of pressure: the former is, of course, totally unaffected by the vagaries of the latter, any shifting of which produces a couple tending to destroy equilibrium.

"Further experiments are much needed."

The author recommended that model aircraft wings should be of a high aspect ratio in order to give a small chord and a resultant small centre of pressure movement, with any lack of wing area being corrected by building the model as a biplane or triplane. No mention was made of the stabilising effect of a tailplane or foreplane.

Chapter 7. Materials for Aeroplane Construction

"The choice of materials for model aeroplane construction is more or less limited, if the best results are to be obtained. The lightness absolutely essential to success necessitates, in addition to skilful building and best disposition of materials, that the materials themselves are, of no undue weight relative to their strength, of great elasticity, and especially of great resilience (capacity to absorb shock without injury)."

The author lists suitable materials together with information on their strength, weight and suitable application under the following headings.

Bamboo, Ash, Spruce, Whitewood, Steel, Umbrella section steel, Steel wire, Silk, Aluminium and Magnalium, Alloys, and Sheet Ebonite.

Chapter 8. Hints on the Building of Model Aeroplanes.

"In constructing a model aeroplane, or, indeed, any piece of aerial apparatus, it is very important not to interrupt the continuity of any rib, tube, spar, etc., by drilling holes or making too thinned down holding places; if such be done, additional strength by binding (with thread, not wire), or by slipping a small piece of slightly larger tube over the other, must be imparted to the apparatus.

"Begin by making a simple monoplane and afterwards, as you gain skill and experience, proceed to construct more elaborate and scientific models.

Do not construct models (intended for actual flight) with a tractor screw (main plane in front and tail behind). Avoid them as you would the plague. Allusion has already been made in the Introduction to the difficulty of getting the centre of gravity sufficiently forward in the case of Blériot models; again with the main aerofoil in front, it is this aerofoil and not the balancing elevator, or tail, that first encounters the upsetting gust, and the effect of such a gust acting first on the larger surface is often more than the balancer can rectify in time to avert disaster. The proper place for the propeller is behind, in the wake of the machine. If the screw be in front the backwash from it strikes the machine and has a decidedly retarding action. It is often contended that it drives the air at an increased velocity under (and over) the main aerofoil, and so gives a greater lifting effect. But for proper lifting effect which it can turn without effort into air columns of proper stream line form what the aerofoil requires is undisturbed air, not propeller backwash."

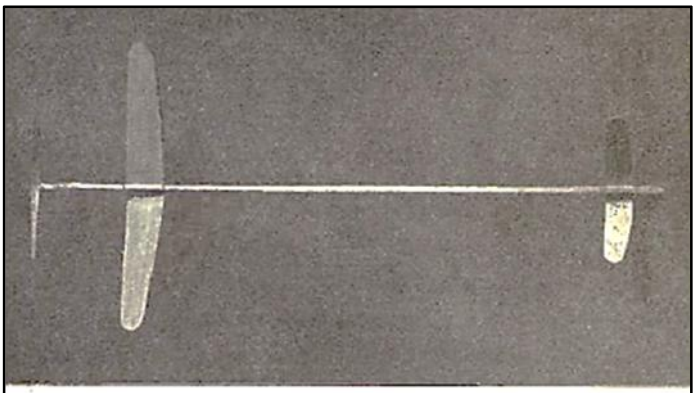


FIG. 49A.—MR. T. W. K. CLARKE'S 1 OZ. MODEL.

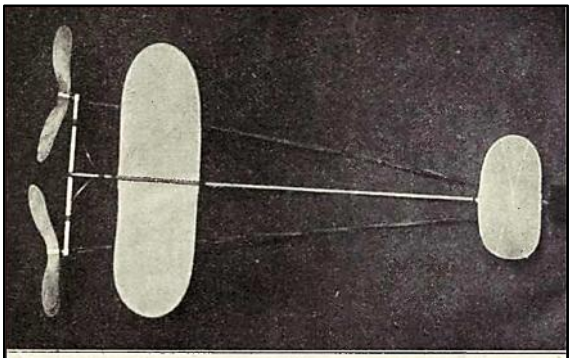


FIG. 49D.—A VERY LIGHT WEIGHT MODEL.
Constructed by the author. Provided with twin propellers of a modified Fleming-Williams type. This machine flew well when provided with an abnormal amount of rubber, owing to the poor dynamic thrust given by the propellers.

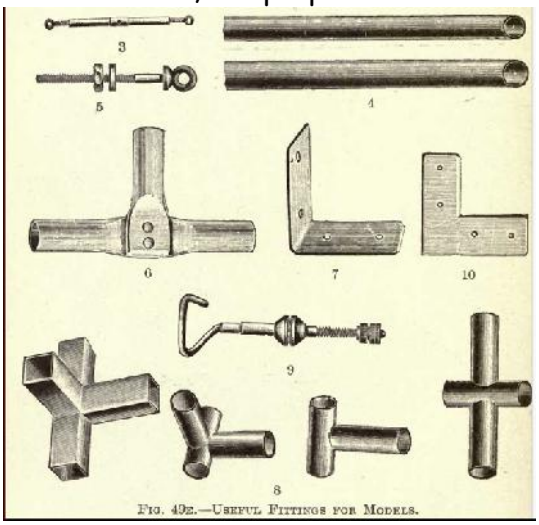


FIG. 49E.—USEFUL FITTINGS FOR MODELS.

Included are photographs of canard models and of useful fittings for models.

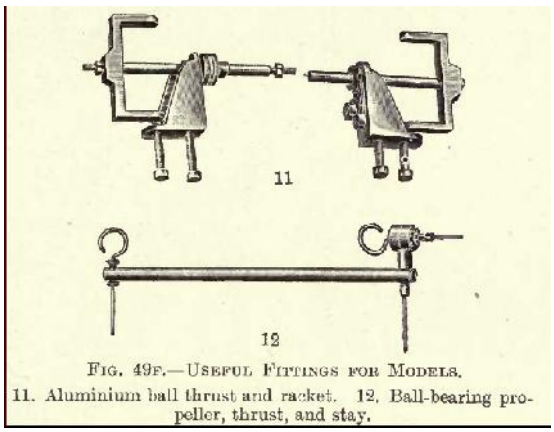


FIG. 49F.—USEFUL FITTINGS FOR MODELS.
11. Aluminium ball thrust and racket. 12. Ball-bearing propeller, thrust, and stay.

Chapter 9. The Steering of the Model.
"Of all the various sections of model aeroplaning that which is the least satisfactory is the above.
"The torque of the propeller naturally exerts a twisting or tilting effect upon the model as a whole, the effect of which is to cause it to fly in (roughly speaking) a circular course, the direction depending on whether the pitch of the screw be a right or left handed one. There are various devices by which the torque may be (approximately) got rid of.
In the case of a monoplane, by not placing the rod carrying the rubber motor in the exact centre of the main aerofoil, but slightly to one side, the exact position to be determined by experiment.
"In a biplane the same result is obtained by keeping the rod in the centre, but placing the bracket carrying the bearing in which the propeller shaft runs at right angles horizontally to the rod to obtain the same effect.
"The most obvious solution of the problem is to use two equal propellers (as in the Wright biplane) of equal and opposite pitch, driven by two rubber motors of equal strength."
Other methods of steering are discussed including the use of fins, ailerons and wing tip weights."

Chapter 10. The Launching of the Model.
"Generally speaking, the model should be launched into the air against the wind.
It should (theoretically) be launched into the air with a velocity equal to that with which it flies. If it is launch with a velocity in excess of that it becomes at once unstable and has to "settle down" before assuming its normal line of flight. If the velocity be insufficient, it may be unable to "pick up" its requisite velocity in time to prevent its falling to the ground. Models with wooden aerofoils and a high aspect ratio designed for swift flying, such as the well-known Clarke flyers, require to be practically "hurled" into the air.
"For large size power-driven models, unless provided with a chassis and wheels to enable them to run along rise from the ground under their own power, the launching is a problem of considerable difficulty.

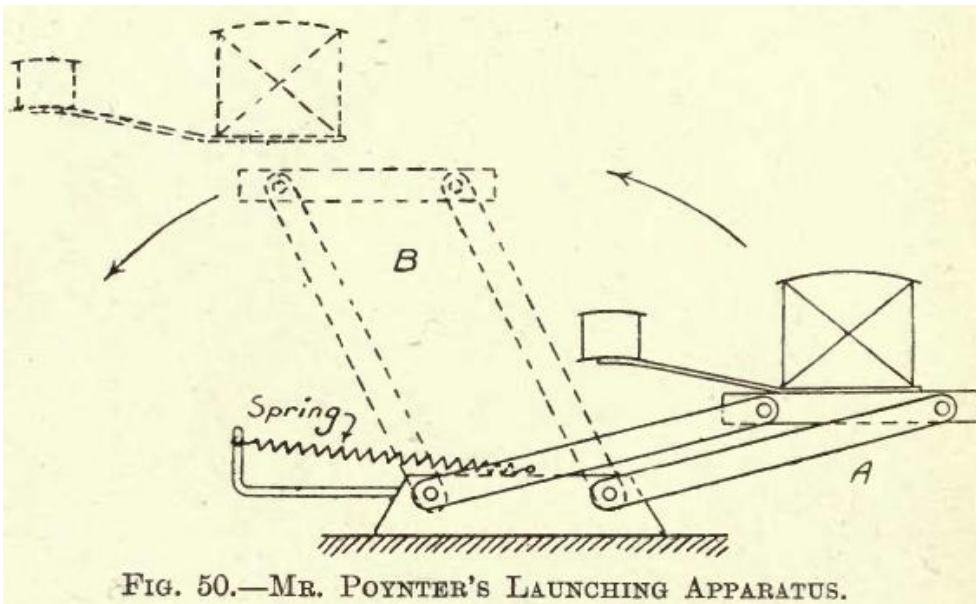


FIG. 50.—MR. POYNTER'S LAUNCHING APPARATUS.

"Many ingenious pieces of apparatus have been designed to mechanically launch the model into the air. Fig. 50 is an illustration of a very simple but effective one."
More on early aeromodelling books next month.

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

Occasional Notes from North Wales - Roger Newman

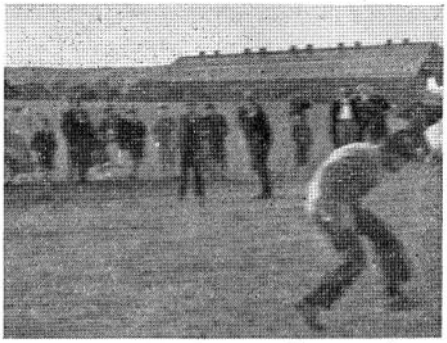
I wonder if our Editor had any response to his opening editorial comments in last month's NC? Interestingly, shortly after publication of the September NC, there was a BMFA announcement of a conference to be hosted by the FFTC at Buckminster regarding free flight contest activity, to be held on 22nd September – for those who may not have seen the announcement, it is synopsised later:

Nostalgia continues – whilst going through yet more stuff that got transported up here last year, I came across the All Britain Model Aircraft Rally Program held at Radlettt from 1954 that was purchased when I went to this event as a junior member of the Wolverton & District MAC. Odd images remain in the brain, for example the remains of (I think) a Halifax bomber parked right at the far end of the main runway plus an enormous number of people. Fortunately I retained the 1950 decade of Aeromodeller mags & a quick peruse from the 1954 Dec issue yielded the pic below.

THE 1954 ALL BRITAIN RALLY

Radlett Aerodrome, Herts, Sun., Sept. 26th

THE impression this mammoth event gives can best be likened to Hampstead Heath on a Bank Holiday, or Epsom Downs on Derby Day. With nearly 18,000 people, 1,700 cars, 50 coaches and some 700 modellers from over 80 clubs, the place was a maelstrom of aeromodelling activity. The weather was fine, but as usual an unkind wind was blowing in the direction of the railway line, with the inevitable problems of retrieving. Accent was definitely on spectator appeal, with many clubs laying out their wares rather on the lines of an eastern bazaar. In fact, price tickets on the array of models would have completed the picture! Due credit must be given to the St. Albans Club for the tremendous effort that the running of this event must entail. It introduces the man in the street to aeromodelling better than any other event we know.



One of many hundred spectators who over-ran the Radio-Control take-off area ducks for cover as Ted Hemsley's winning machine comes in to land. The model was badly damaged through hitting two or three people as it touched down.

RESULTS

Rubber
1. J. Palmer, Croydon, 6.00 & Flyoff.
2. G. Woolls, Bristol, 6.00

Glider
1. Mrs. P. R. King, Belfairs, 4.34

Power
1. A. Brooks, Grange, 5.01

Seaplane, Rubber
1. P. T. Taylor, Croydon, 3.33

Seaplane, Power
1. V. Jays, C.M., 1.21

"Aeromodeller" Trophy—Best Seaplane
1. P. T. Taylor, Croydon, 3.33

Tailless, Rubber
1. G. Woolls, Bristol, 2.55

Tailless Glider
1. F. Smith, Southern Cross, 1.34

Tailless Power
1. O. F. W. Fisher, I.R.C.M.S., 1.01

Concours D'Elegance—Scale
1. A. J. Briggs, Park M.A.L., "Lincoln"

Concours D'Elegance—Non-Scale
1. M. Gaster, C.M., Power

Concours D'Elegance—Outstanding Model
A. J. Briggs, Park M.A.L. C/L "Lincoln"

Clipper Cargo
1. R. Moulton, West Herts, 13¼ oz.

Radio-Control Aerobatics
1. O. E. Hemsley, Bushey Park, 32 pts.

Team Race—Class "A"
1. M. Smith, High Wycombe

Team Race—Class "B"
1. K. Muscutt, West Essex

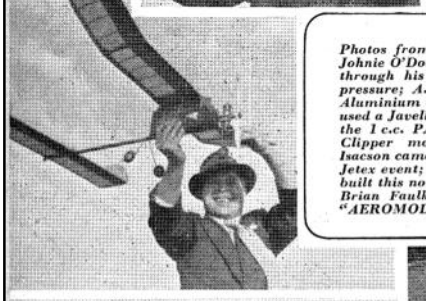
Combat
1. C. Taylor, West Essex

"Model Aircraft" Trophy—Rally Championship
G. Woolls, Bristol

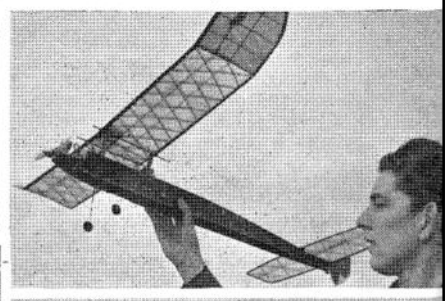
Hertfordshire Championship
A. Weston, West Herts

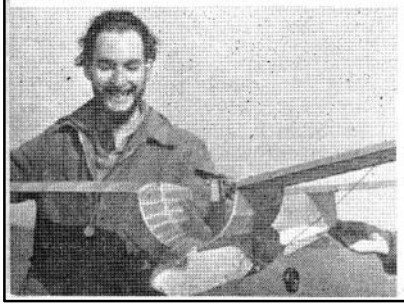
International Jetex Contest
1. J. O'Donnell, English Electric, 14.31

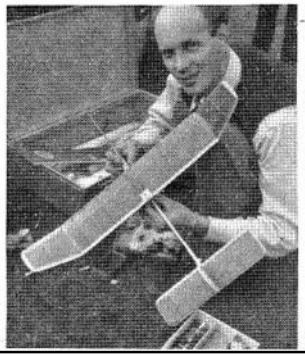
"Aeromodeller" 1 c.c. PAA-Load
1. B. T. Faulkner, Cheadle, 3.38

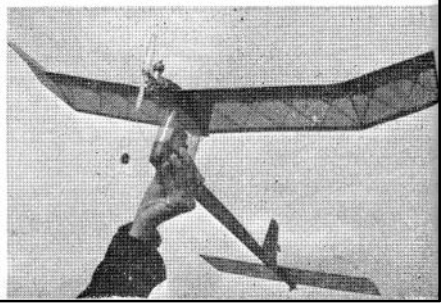


Photos from left to right are as follows:— Johnie O'Donnell watches the clock as he runs through his first Jetex charge to build up pressure; A. Weston of West Herts with his Aluminium boom Cargo Clipper entry which used a Javelin for this event and a Spitfire for the 1 c.c. PAA-Load; Unusual channel wing Clipper model by Pete Holland; Sigurd Isacson came all the way from Sweden for the Jetex event; P. S. Lambert of West Middlesex built this novel Elfin 50 powered PAA-loader; Brian Faulkner with winning Bee powered "AEROMODELLER" 1 c.c. PAA-load entry.









An event with approx. 18,000 people! To a junior it was an amazing sight with models everywhere. I wonder if anyone else has similar memories?

Sort of on the same subject, I mentioned last month that my old Junior 60 was undergoing the process of change to RC assist & powered by electricity. The pic above demonstrates completion by John Taylor & Roy Williams. I understand that it has since flown successfully. To think it hung splendidly in the BMFA Centenary Exhibition, then powered by an ED Comp Special & flew quite regularly at Beaulieu as a proper free flight old timer does bring back some very fond memories. Very nice to see that it still exists, albeit in a slightly different form.

Un bel modello ad aria compressa dei fratelli Tedeschi di Modena
Geo regge il modello e Mirko ha una mano sulla fusoliera

A beautiful compressed-air model by the Tedeschi brothers in Modena
Geo is supporting the model and Mirko has one hand on the fuselage

Compressed air flight from Italy. A couple of then & now pics via Gianni arrived very recently from an 88 year old friend of his in Rome who is still active in making models – don't know about flying them tho'. Just look at what appears to be a 4 cylinder compressed air motor in the then picture above.

Then above was around 1930.

Now is 2024 & a rather different compressed air motor but very impressive all the same.

Looking at the picture above, I'm guessing it's rudder only RC unlike its predecessor? Makes good sense if so. But what a model – in both cases.

Free Flight Conference

Free flight contest activity during 2024 has shown a decline. The FFTC has received considerable correspondence and suggestions from members of the free flight fraternity on how to reverse this decline.

The FFTC have discussed the input and have decided to facilitate an open discussion. A conference has therefore been arranged for Sunday 22nd September at the BMFA Centre at Buckminster. We will start at 11:00 and finish 17:00, with a half time break.

Topics/aspects to be covered.

- *Flying sites*
- *The shape of the contest programme.*
- *Related points regarding management and control.*
- *Rules currently promulgated – particularly the use of RDT, and as part of the day we will present ideas on simple easy to installation of systems.*

Attendees.

- *All are welcome, please attend.*

Expectation/outcomes.

- *The FFTC will take away the ideas that are expressed and agreed and create a programme for 2025.*

I know a few of my old clubmates from Crookham are planning to attend, plus our Hon Sec who will endeavour to summarise any interesting points from the discussions for the NC. But it is not only contest flying that is in tatters. Remember the golden days of Middle Wallop when sport flying **&** contest flying produced magical numbers of attendees. What has changed since those days - not hard to summarise & we all know anyway. However, in no particular order but very relevant: (i) an aged & much reduced population of those who indulge in any form of free flight; (ii) distinct lack of readily accessible, decent size & easy access flying sites; (iii) for those who wish to fly, the increased cost of transportation & the unwillingness to drive longer distances to the few flying sites left; (iv) a much reduced availability of supplies through the demise of local model shops hence a reduction in building models; (v) less than ideal weather that doesn't help older modellers who can no longer do a full days retrieving (vi) where have all the sport fliers gone & who looks after their interests? So what has happened? The above agenda certainly doesn't cater for any form of sports fliers & they used to outnumber contest fliers by a fair margin at MW. Meanwhile Old Warden has its annual gatherings for free flight sports fliers & RC assist & seems to thrive in spite of a small field. Plus there is the SAM35 Gala weekend of 12th/13th October at the BMFA HQ Buckminster which caters for sports fliers – both free flight & RC assist, control line & low key comps & the added attraction of a swap meet on the Sunday, so in that respect so it's not all bad news. Neither site has the space that was provided by Middle Wallop, but in this day & age beggars can't be choosers anymore & both sites are pretty central to the Midlands. I don't know for certain but suspect quite a few old free flighters have turned to radio assist or full radio control, found a local RC Club & happily fly near to home. Those who haven't gone down this route have probably died, packed up aeromodelling and/or found another hobby that is more accommodating.

Probably hard to accept but I fail to see quite how the proposed BMFA conference agenda can influence these factors other than tinker round the edges, perhaps to the benefit of competition fliers? Even harder to accept perhaps but we are the last of a dying breed! Once our generation has pretty well gone, there will be no free flight as we know it. Very gloomy & in our hearts we all acknowledge it but do not wish to accept it, but what else can be concluded? In the meantime, if you have a place to fly & enjoy without any great fuss – enjoy it whilst you are able. All answers on a post card to our Editor.

The end of "summer" draws close on what has probably been a pretty poor season of flying for most people. However we can always look forward to indoor winter meetings & maybe a spot of building?

Roger Newman

Secretary's Notes for October - Ray Elliott

Free Flight Conference

I attended the FFTC conference that Roger Newman has outlined in his notes above. There were about 50 attendees. Unfortunately, I arrived about 30 minutes late due to having to circumvent two major road closures to get to Buckminster from West London. This meant I missed a few of the short presentations.

I should perhaps stress that the conference was aimed at addressing issues facing duration contest flyers with no cognizance taken of the concerns of sport flyers and others, although we all face problems in respect of ageing flyers, fewer flying sites etc, all as graphically set out in Roger's notes.

Whilst there was some discussion on the lack of suitable flying sites the primary focus was on how best to structure contests so that there is meaningful competition with the competitor numbers we have.. Winning a contest where there is only one competitor is rather a hollow victory, and there have been several over the last year.
In this vein it was generally accepted that we need to move towards combining classes to a much greater extent than is done at present. One proposal, for example, was for having three classes; FAI(A ,B,C,Q), Mini(2 min models), Open. There was agreement that all the individual classes we currently have should be retained and included in the combined classes as appropriate. But what about HLG/CLG?

There was a brief discussion on the Cagnarata approach with the use of k factors (handicapping) but this was rejected as being too complicated and a step too far at the present time.

Other points noted:
1) the meeting expressed a preference for retaining the current maxes for area meetings and
2) having three flights for all classes at area meetings.
3) there is a preference for retaining eight area meetings.

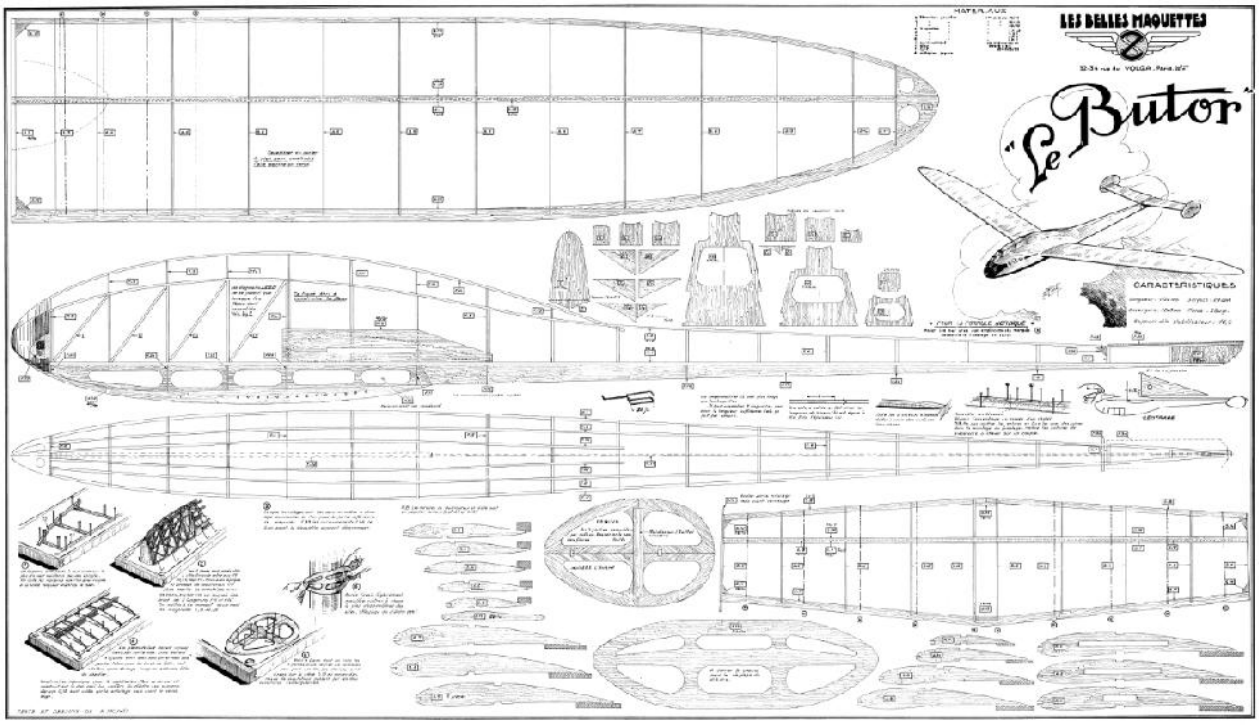
The FF Nationals are likely to be in August at Sculthorpe.
The Committee took note of all the comments and suggestions and will now proceed with producing the contest calendar for 2025.

The final item on the agenda was making the use of radio DT mandatory for models weighing more than 250g. The point was made that this is effectively a legal requirement as it is the only way we can demonstrate that we have sufficient control of our models. This is considered much more of an issue for heavier models which could cause significant damage if one was to hit a car for example. This is likely to be less of problem with lighter models, hence their exemption.
A "straw" poll of those present showed that a, perhaps surprising, number of people already use radio DT.
There was little dissension on this issue

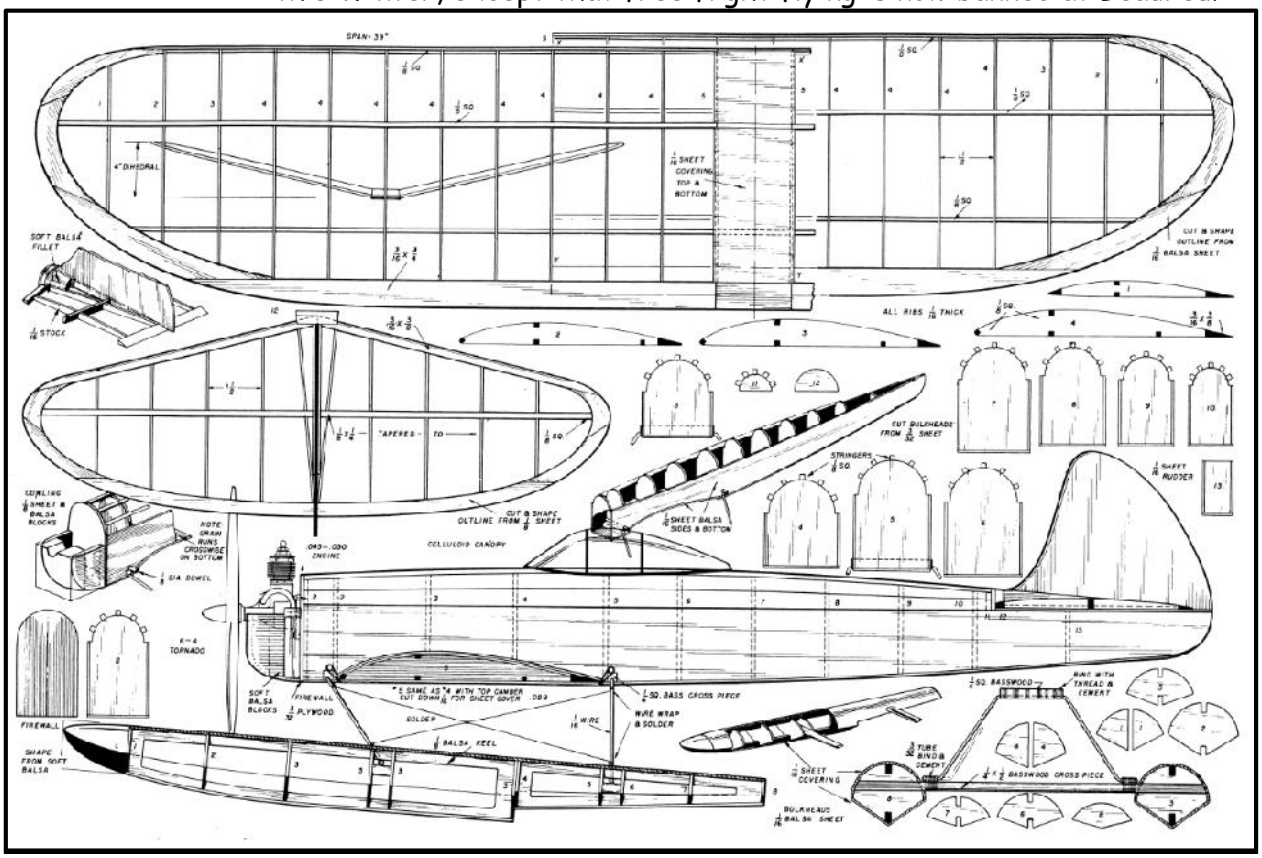
Ray Elliott

Plans for Month - Roger Newman

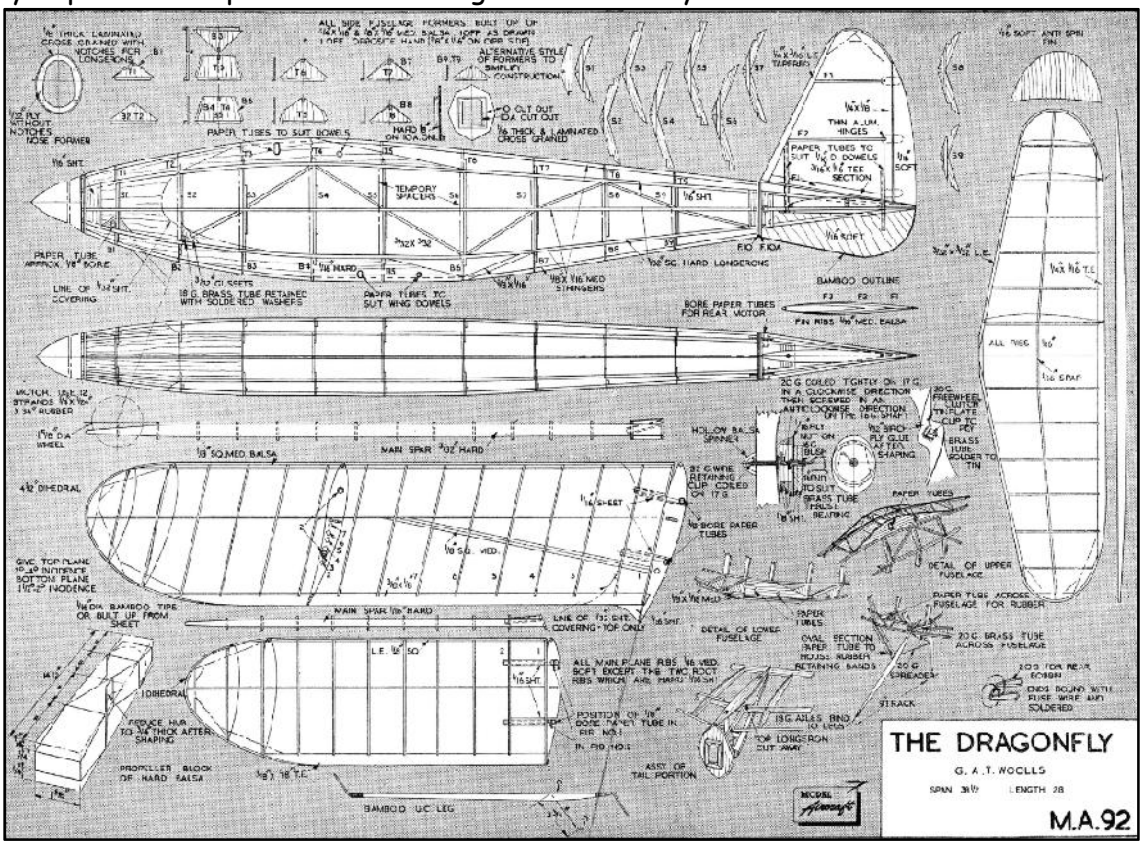
Glider: Le Butor – early mid wing Nordic design from France, looks good build project, not sure about performance?



Power: Cubee – low wing float plane. Ideal project for the flooded runways of Beaulieu this Winter, except that free flight flying is now banned at Beaulieu!



Rubber: The Dragonfly – early Model Aircraft plan by George Woolls. Another coincidence – look who won tailless rubber at Radlett in 1954! & the "Model Aircraft" Rally Championship Trophy! I picked this plan before writing about the rally.



Roger Newman

I have two KP 10:1 indoor winders.

One with counter attached
One together with all the counter parts but not installed.
If anyone would like one you can have it for free.

Also

One unused PYXIS GPS tracking system

consisting of Transmitter, Hand Held Receiver, Transmitter battery, Charger and Battery Extractor.

Reason for sale: too heavy for my smaller models.

Price £175

Contact through my e mail address.
Peter Watt
peterwatt745@btinternet.com

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	

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

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

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.

Rescheduled Petit Classique de Brum

MOD North Luffenham, Sat 26th OR Sun 27th October 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 24th.

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

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 .

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
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 nearby for coffee & snacks

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

Chasetown Indoors

I have secured an indoor flying venue at ;
THE ERASAMUS DARWIN ACADEMY,
POOL ROAD,
CHASETOWN,
BURNTWOOD,
WS73QW

Flying 1pm til 4pm
Saturdays

2024
28th Sept, - 19th Oct,
9th Nov, - 7th Dec,
2025
11th Jan, - 8th Feb,
8th Mar.

The parking is at the far end of the car park & the sports hall is the far end of the car park, the large building.
Costs are the same as previously, £8 for flyers & £2 for spectators, children free.
Can you bring your BMFA + contact details & write them down in the supplied book please.
We need 15 flyers to break even, hopefully see you on Saturdays.
Contact: peter.thompson7406@gmail.com

Waltham Chase Aeromodellers

INDOOR F/F MEETINGS

Waltham Chase Aeromodellers have booked the Main Hall at **Wickham Community Centre, Mill Lane, Wickham, Hants PO17 5AL** for a series of twenty events on the following **Thursday** evenings:

2024:

Sep:19th., Oct:3rd., Oct:17th., Oct:31st.
Nov:14th., Nov:28th.
Dec:12th.

2025:

Jan:2nd., Jan:16th., Jan:30th.
Feb:13th., Feb;27th.,
Mar:13th., Mar:27th.
Apl:10th., Apl:24th.
May:8th., May:22nd.
Jun:5th., Jun:19th.

All meetings will run from 7.00 p.m. to 9.30 p.m. The Main Hall at Wickham Community Centre is particularly suitable for indoor free flight models of all types, with a ceiling free of obstructions. Tables and chairs will be available in the hall, the organisers are always grateful for assistance with moving furniture. A hot drinks machine is available on site.

Admission will be £8 for fliers and £2 for junior fliers, and spectators accompanied junior spectators and parents of junior fliers admitted free.

Fliers will be required to show proof of insurance.

No R/C models may be flown at these events.
Waltham Chase Aeromodellers look forward to welcoming all indoor F/F fliers to these events.

For further details please contact:
Alan Wallington, "Wrenbeck", Bull Lane,
Waltham Chase, Southampton, Hants.
(Tel. 01489 895157) (e-mail: indoor@wcaero.bmfa.club)
or see our web site: https://wcaero.bmfa.club

LONDON AREA INDOOR MEETING

SUNDAY 3RD NOVEMBER

Rookery Lane,

Bromley BR2 8HE - 51.387069°N 0.035389°E

1100 till 1500. Slots for free-flight and lightweight RC flying.
Hall is 70 ft x 120 ft with a 30 ft ceiling
Access from the lower car park via door marked Life Centre.

£10 for flyers (£5 for under 18s) and £2 for spectators.
Cash only please. Open to all BMFA members

Contact Martin Dilly (martindilly20@gmail.com)
or call 02087775533 for more details.

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 ROD BLANKS

My original batch of carbon rod blanks has now sold out but more are expected in early December.
They are 100cm long and 4mm tapering to about 2mm, so long enough for two booms. Weight is around 6gm, but some wet-and-dry can get this a fair bit lower.
As before it will be first come, first served.
Price is likely to be £8.00 + postage and packing.
Contact Martin Dilly on +44 (0)208 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.

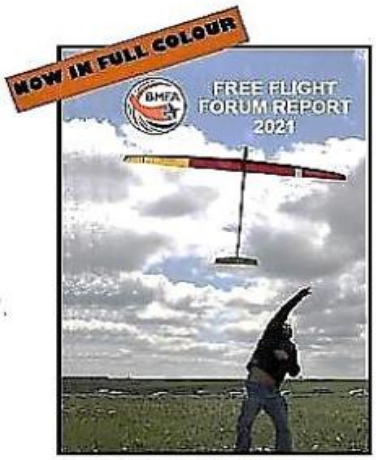
"I am really impressed with how well this tissue performed. Dilly Jap tissue with 2 coats of thinned nitrate dope is around 8% stronger than the old 00 Silkspan with 2 coats of dope, yet Dilly Jap is 0.09 grams per square foot lighter. Here are the test results:

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

FREE FLIGHT FORUM REPORT 2021

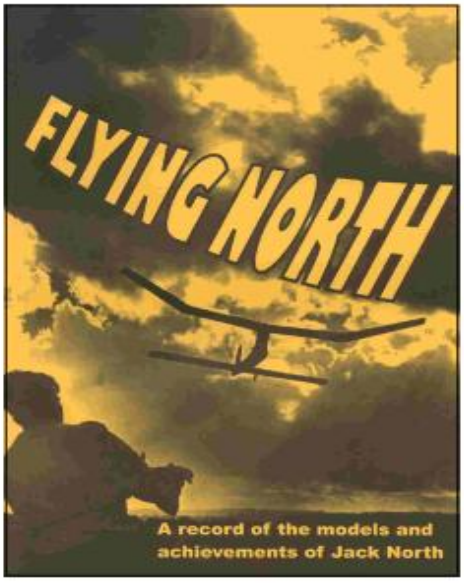
Indoor Duration - A Challenge To Conventional Design • Tony Hebb
Coupe In A Box - Gavin Manion
Building Other People's Mistakes - Stuart Damon
The Models Of Ray Monks - Simon Dixon
Simulated 3d Flight Dynamics - An Approach To Gain Insight For Trimming And Aircraft Development - Peter Martin
Building 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@gmail.com

THIRD RE-PRINT JUST ARRIVED



FLYING NORTH

A goldmine for vintage and nostalgia model flyers -

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

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

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

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

READERS' FEEDBACK

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

"I hope it becomes a classic."

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

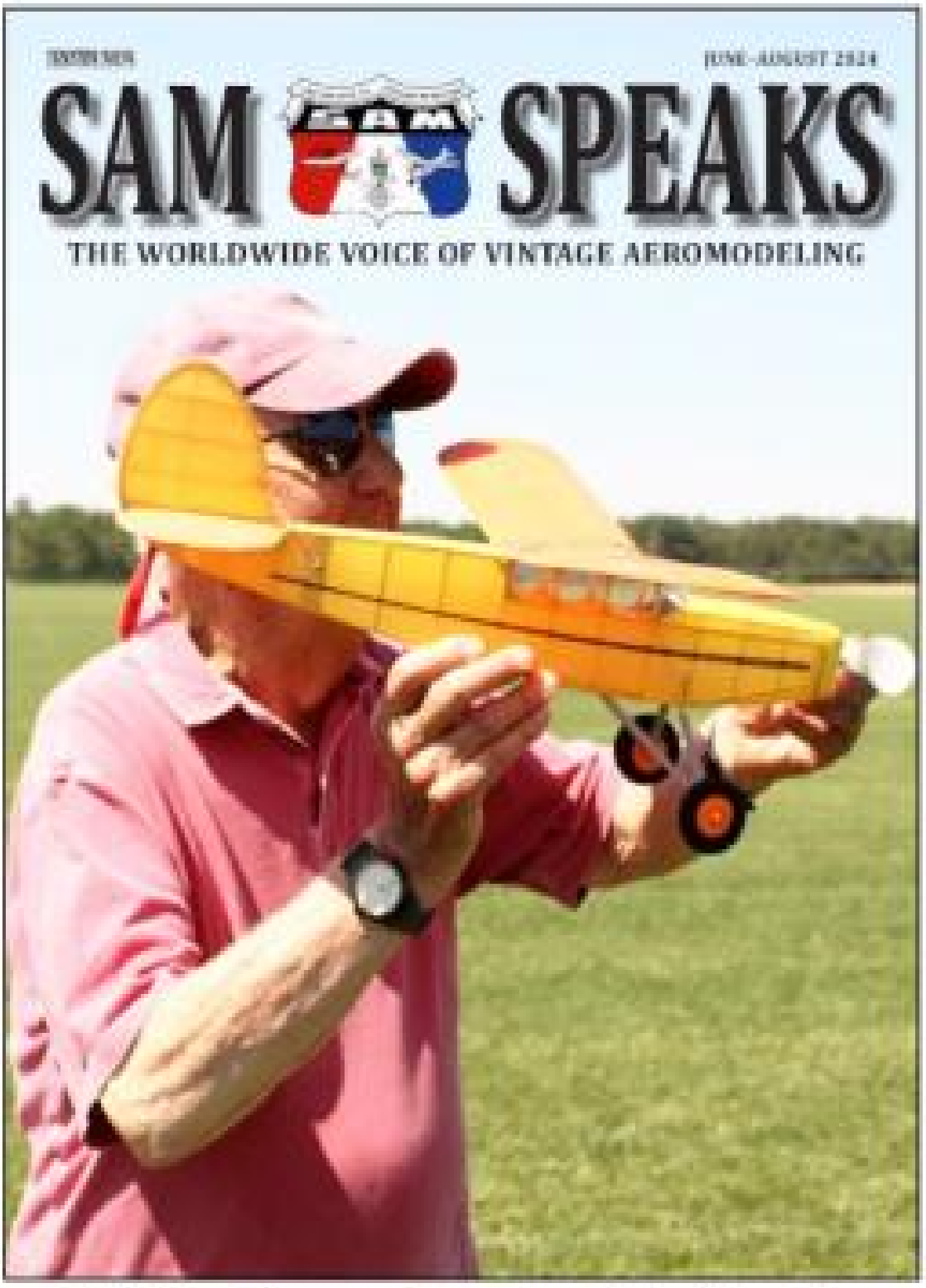
"... am immensely impressed. A splendid effort"

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

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

"The best aeromodelling book since the Zaic Yearbooks"

Price £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



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, Sculthorpe
September 15th	Sunday	Equinox Cup, Sculthorpe
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, North Luffenham
October 26th	Saturday	Petit Classique de Brum, North Luffenham
Or October 27th	Sunday	
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*