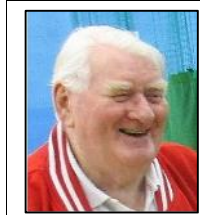


	<h1 style="color: red;">NEW Clarion</h1> <h2 style="color: red;">SAM 1066 Newsletter</h2>	Issue Nc032023
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Editorial

First a reminder from Gavin Manion:

2nd Petit Classique de Brum, Sunday 16th April.

Can I remind potential flyers that they should email me ahead of time so that they can be included in the date confirmation email. Last year there were some welcome new faces in the results and I don't have addresses for everyone, If you even think that you might come please contact me on: gavin.manion84@gmail.com

The add for this event with all the details is in the 'Events and Notices' section of this fine newsletter, see page 43

Gavin Manion

Second:

Stuart Darmon is running 'The classic A1 email International 2023' postal event, details to be found in 'Events and Notices' page 45.

The 2023 competition season is now well underway. Rachel & I had our first day out at Gavin's postponed 'Coupe de Brum'. We motored to Luffenham to find the main gate locked but a radio flier let us in. A happy couple of hours or so spectating and a bit of a wander round and we were off home again, having had a fight with the combination lock on the gate on the way out.

Right, what have we got in this issue?

- J Nick Peppiatt kicks off with a continuation of his last month's article, reporting the Trinity indoor meeting.
- J There follows another Pylonius piece, his general thoughts including a swipe at balsa butchers in general and our raw material itself.
- J Dennis Davitt weighs in with a historical article of his on a propeller for the 'Senator'.
- J There are the usual delves into the past with 'News Review' from 1948, which includes reflection on the 'Model Engineer' exhibition, and 'Heard at the Hangar Doors' from 1956 which reports on various subjects including ATC competition winner and a Czechoslovakian youth festival for aeromodellers.
- J Martin Pike sends a short piece on his indoor meeting at Bethesda in Wales with pictures of one guys experiments with hot air balloons inflated with a hot air gun. There is also a report on a flying Pterosaur bought from Lidl's for £18.
- J Martin Hurda from the Czech Republic features another of his excellent fleet of models, this time the 'Iota', a delightfully simple pylon model for the ED Bee.
- J I continue with extracts from my Zeppelin book, I still find it incredible that they were produced in quantity. I seem to recall that a few years back there were proposals to ship goods by a sort of air train of airships, slow but economical I suppose.
- J Peter Hall has been on the prowl again and buttonholed Malcolm Marshal for another of his Couprofiles. Malcolm was performing at the Luffenham Coupe de Brum on Sunday 19th Feb, I was there.
- J Following on from last month's aircraft review of the oddball 'Blohm & Voss 141 observation plane, I have this month reviewed its rival the Focke-Wulf 189 Uhu which was the preferred aircraft for the role.
- J 1948 saw the 'Banshee' plans, an iconic model of the period and still competitive today.
- J I've re-published an old article of mine from 2003, qualifies as historic I think.
- J The issue wraps up with our secretary's report and Roy Tillers blasts from the past.

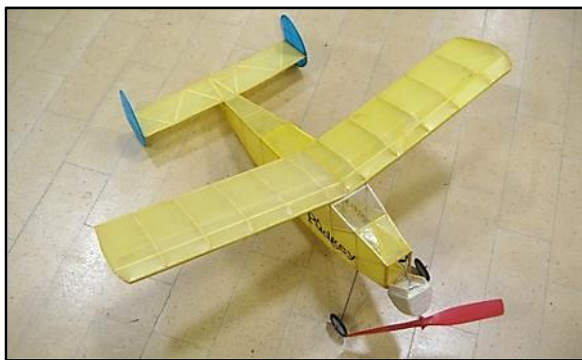
Editor

When I submitted IIFE 61 to OEE, I mentioned that I had been over to a High Wycombe DMAC meeting at Wycombe Leisure Centre to participate in a spot of indoor RC model flying in the large 60m x 34m sports hall. I commented that it was a sign of the times in that I think I was the only person flying balsa based models. His response was to ask me for a few words and pics. I replied that I had not used my camera, but that I was planning to go to the Trinity meeting in Newbury the following weekend, where a Bostonian competition was due to be held. Report as follows.

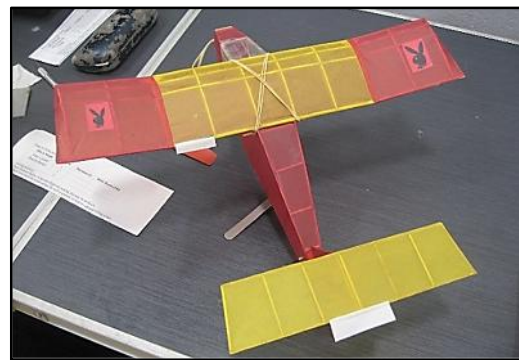
Bostonian Competition at Trinity 14th April 2023

The Trinity sports hall is about one third the size of that at Wycombe, which clearly restricts the size of aircraft that can be flown. However, I am pleased to say that balsa predominates in the construction of the mainly free-flight models present here. A Bostonian is a class of model that can be trimmed to fly well within the confines of the hall and flights of 60s are possible.

As a reminder, here is the essence of the Bostonian rules: -Courtesy of Hip Pocket Aeronautics. A Bostonian model has a 16-inch maximum wingspan and a fuselage length, excluding propeller, of 14 inches. The fuselage must enclose an imaginary box 1.5 x 2.5 x 3.0 inches in size. It must have a landing gear. Flying surfaces must be covered on both sides. The model must weigh at least 14 grams without rubber motor for a monoplane, 20 grams for others. If you get the idea that the designers of this event were trying to force competitors toward models with a scale-like appearance, you are probably right. The net result of the [rules](#) is that most Bostonians are good flyers both indoors and out. The fuselage must be built-up to enclose the imaginary box, and the weight minimums tend to encourage reasonably strong structures.



'Pudgey' was Trinity supremo John Winfield's entry. The design by the then editor, Steve Higginson was published in a 2013 AeroModeller



CD Tony Calvert's entry was 'Boston Bunny'. It is a design by Carl Hedley published in Lew Gitlow's book 'Indoor Flying Models' it's called 'Basic Bostonian'.



The most popular model entered was Mike Stuart's 'Senator' design. 'This is Steve Haines' example

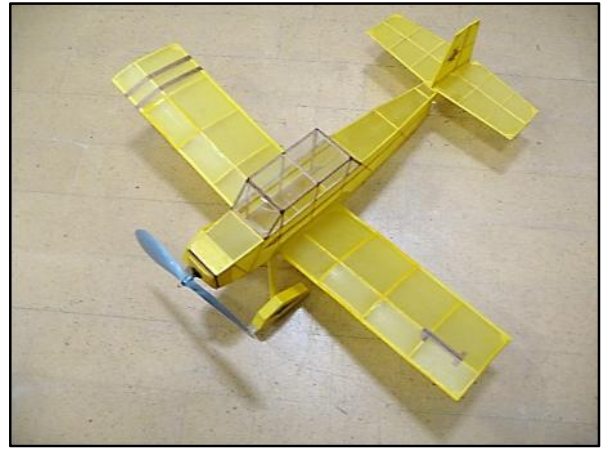


Mike Stuart's second entry in addition to his 'Sorta Senator' was this smart 'Auster B4'.

For this particular competition, a commercial propeller of 6in maximum diameter was required and, unusually, there was a 10sec bonus for ROG. Eight fliers entered with nine models. Examples of many of the entries, illustrating the variety of the designs, are shown in the photos above and below.



John Scates' 'Hyannis Helio'
a Walt Mooney design from Model Builder.



Lionel Haines' 'Bostonian Knight'
a Micro X kit designed by Gerald Skrjanc



Dave King's model took me the longest time to identify. I think it is an example of Perry Peterson's 'Boxcar' published in Flying Models. Dave has made the propeller thrust-line adjustable, to get rid of considerable packing, with an aluminium plate, as can be seen on the right

Competition Results

The first three places were as follows: -

Position	Contestant	Model	Time for best three flights (secs)
1	Nick Peppiatt	Sorta Korda	204
2	Mike Stuart	Sorta Senator	171
3	Steve Haines	Sorta Senator	168

I entered the 'Sorta Korda', a design by Bill Baker, originally published in Model Builder. The model is fitted with a 6" grey Peck propeller and weighs 14.7g without rubber. It was flown ROG with a 0.090in Super Sport motor weighing 2.7g, winding on 1800 turns and backing off 45 or 60 to try and avoid contact with the ceiling furniture, which occurred on a couple of the flights. It was a splendid way to spend a wet winter morning.

Lindsey Smith's effects



Chris Brainwood's Sopwith Camel, recently re-engined with a GM-63BB.



Does anyone recognise this capacitor powered electric unit, presumably from a flying toy?

It was great to see that Chris Brainwood has made good use of Lindsey's Gasparin GM-63BB. He has used it to replace the Telco in his modified KeilKraft Sopwith Camel and it was flying very nicely within the confines of the Trinity hall. The mounting holes of the GM-63s are the same as the earlier Telco, although the motor itself is somewhat longer. In the case of the short nosed Camel, this helped in bringing the CG forward.

I'm still working through some of Lindsey's odd bits and pieces that were donated to SAM1066. There is a small group of electric power items. I was intrigued with the use of capacitor power as shown in the photo above. The capacitor and motor are permanently connected, and there are a couple of U-shaped pieces of wire which must act as charge points. The motor has a gearbox drive to the propeller, which is of 85mm diameter. This was clearly installed in some expanded plastic moulding. There is a red splotch on one side of the capacitor, which I correctly guessed was the positive side. Applying 3V had the propeller rotating correctly, but as to the power output, inability to pull the skin off a rice pudding comes to mind. I assume that it comes from a flying toy, but does any of our learned readership know what?

There is also a collection of compressed air motors, made using plastics and dating from the 1990s and early 2000s. I intend to review these in a future article.

Nick Peppiatt

TOPICAL TWISTS

by pylonius

MARCH 1954

MODEL AIRCRAFT

Topical Twists

Feud for Thought

Nothing is more uplifting, nor gives more delight, to the poor, muddling modeller than the spectacle of a couple of the hobby's learned experts tearing at each others throats. How flattering it is to feel that, beneath all that formidable overlay of intellectual eminence, they are just as human as even the most inarticulate of we humble, clubroom wranglers. And how comforting is the thought that, if both cannot be right, there is still a gleam of hope that the Wakefield with the multiple wing warps and the twisted fuzz might fly in the face of all expert opinion to the contrary.

On the debit side there is the sobering fact that, when the experts get mounted on a particular hobby horse, our models begin to develop some very queer complexes. I well remember a few years ago the backroom boys being smitten with a bad attack of the spiral jitters. Immediately, our models, which up to that time had been behaving in a quite normal, uninhibited manner, developed a marked sense of inferiority about their fins and began to prang in something chronic. Fortunately, the return gear controversy came to the rescue, and the experts suddenly lost their obsession for anti-spin tabs to concentrate their geniuses on proving why a return gear model should not have won the Wakefield. Since then our models have been going about their business with a quite healthy, spin-free outlook.

The latest expert clash is over the question of towline instability; and it behoves the more cautious amongst us to stack away our gliders for the time being. Meanwhile, we can take a closer look at what has been happening in the present dispute.

The trouble began when one of the expert clan—already regarded as something of an outcast among his breed through a curious predilection for flying model aircraft—committed the unforgivable sin of declaring that the problem of towline instability had him baffled. To his credit it can be said that, expert-like, he couched this simple confession in some two thousand words. Even so, his brethren were up in arms immediately; feuding between each other was one thing, but showing the white flag to the rabble was the most gross violation of the family code.

A violent article then appeared, in which a fellow clansman denounced the transgressor for his flabby admission of failure, and proceeded to demonstrate that, although he himself was equally baffled by the vagaries of towline behaviour, the expert can always postulate some sort of theory, even if it is only to suggest sticking a tow hook on each wing tip.

After this preliminary warm up between the contestants we are all eagerly looking forward to the next phase of the battle. And with both reputed to be equally quick-on-the-trig we can hope for some heavy mathematical broadsides, even if we won't understand what the xyz they are talking about.

A writer to a model magazine claims he has virtually grown up with it. I am now asked why I have not done likewise.

Cutting Up Rough

Balsa manufacturers are "cutting up rough" because some rather pernickity customers have been "cutting up rough" in the belief that the balsa manufacturers have been cutting up rough.

Which sentence is about as knotty as some of the wood under criticism and twice as woolly. But just in case we might feel a sense of frustration in the fruitless search for that particular grade of balsa which enables the champions to pack $7\frac{1}{2}$ oz. of rubber into an 8 oz. model, we are again reminded of the difficulty of selecting balsa into grades to suit the edge of the modeller's current razor blade. Some who struggle along with Dad's favourite corn cutter naturally prefer it soft, while those who put off that Sunday shave at the last moment have the means of penetrating the denser stocks of our favourite raw material, which, of course, is nothing like so raw as their faces on the following day.

On the other hand there are those niggling types who are never satisfied, and it is necessary to enlighten them on some of the problems of supplying their razor-blade fodder on an Equador-to-door basis. Indeed, it seems they are most fortunate to have access to the stuff at all; though the way some of them carry on you would imagine it just grows on trees.

• • •
"But what do you consider the essential difference between a competition flier and a non-competition flier?"

"A motor-bike"

Model Craft

Seemingly, in these days of specialisation, being an aircraft designer can be quite a humiliating business. Just imagine being constantly faced with this sort of embarrassing situation:

"An aircraft designer, eh? Turned out any good jets, lately?"

"Only those on the gas stove."

"Well, what aircraft have you designed?"

"I don't exactly design aircraft, only parts of them."

"Well, what parts of what aircraft?"

"Just parts. It's all very hush-hush nowadays, you see. Wouldn't be a top secret designer if I were told what aircraft they were intended for."

"But what sort of parts are they?"

"Well, a bit shaped like this and another bit shaped like that."

"Beats me."

However, to give such frustrated types the opportunity of designing an aircraft in the round it has been suggested that they take up aeromodelling. This is, of course, the possibility that they might object to this idea on the grounds that to be seen mucking about with a toy aeroplane would result in an even further loss of prestige. But on this point we hasten to assure them that, consistent with the policy of our foremost model designers, there would be absolutely no necessity to build or fly the things.



Pylonius

The KK Senator.

Dennis Davitt

When clearing out some old papers, I came across this sketch for the Senator prop, drawn in 1998, which might be of interest.

Having built 2 or 3 Senators up to that time, with mediocre performance, I had a good look at the available information on the model, starting with Keil Kraft, the kit makers. They confirmed theirs was only plan they issued, but no detail for the prop. The only propeller information that is on the plan just shows the outline for a 13" prop. So I did the sketch.

The best theoretical p/d at the time was 1.25, which would give about 16" pitch. I pushed it a bit to 19", and added some tip washout.

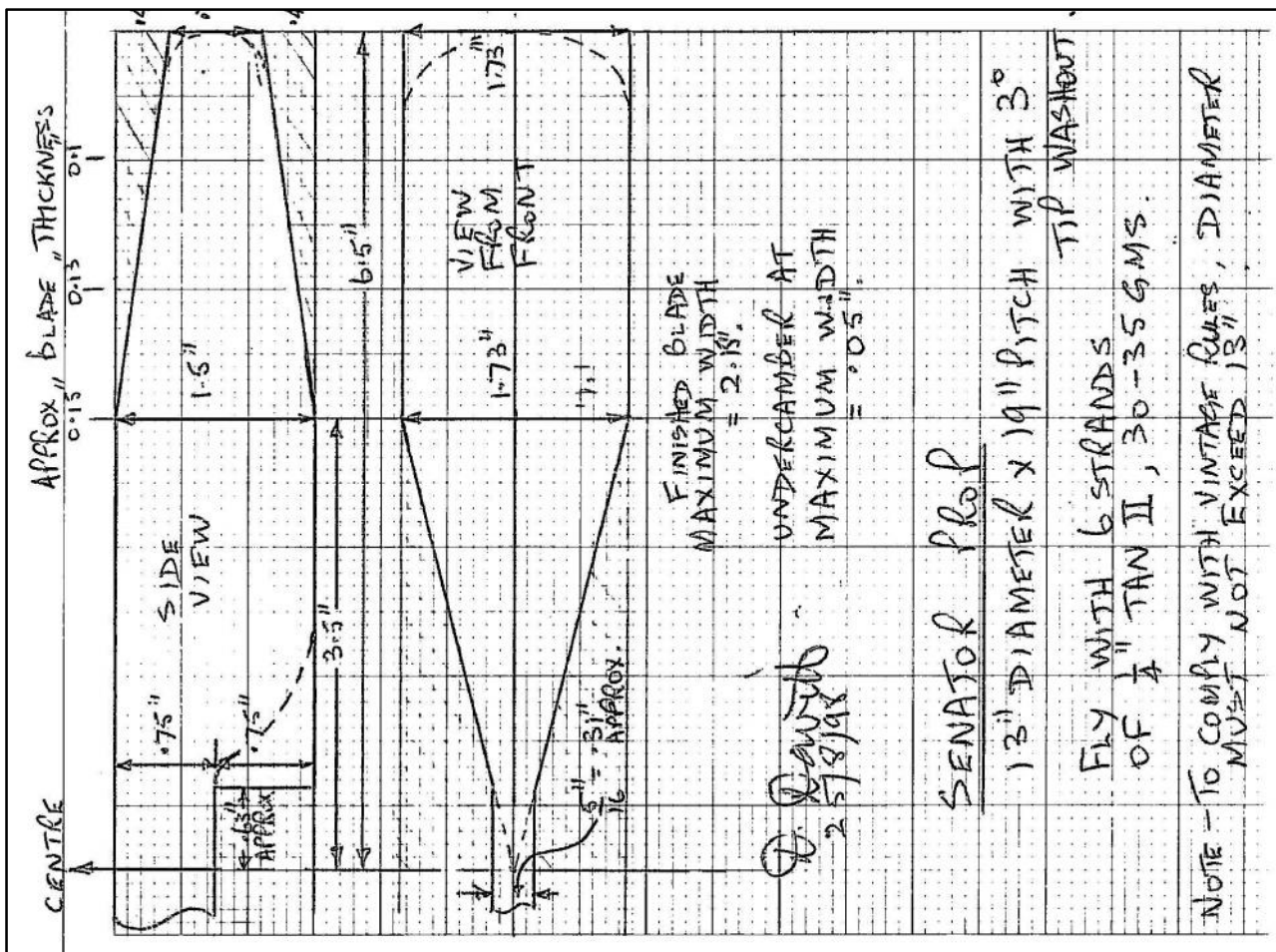
I found it worked very well on the Senator. With good rubber it would do about 3 minutes - beaten by Dave Hipperson at 4 minutes.

Of course there are many other factors to performance, like all- up model weight.

The prop (as in the sketch) I used weighed 14,7 gms, including nose block, shaft, bearings, free wheel etc. To get that weight I used 2 inner laminations of 7" 6 Lb sheet plus 2 outer 1/8" laminations of 8 Lb sheet for the block, all glued with Evostik Resin. W to resist damp. The carved and sanded prop was covered with the lightest grade of glass cloth and doped with non-shrink dope

I covered the rest of the whole model with lightweight mylar. By these means I was able to get close to the weight (minus rubber) for a competitive Senator of about 60 gms.

Fancy a go, (or one more go), at it ?



Dennis Davitt

January 1948

NEWS Review

Reflections on the 1947 "M.E." Exhibition

While the 1947 "Model Engineer" Exhibition was a marked success and considerable improvement was evident in the model aircraft section, both so far as quality of workmanship and number of entries was concerned, one is still left with the impression that it is not being patronised by the average aero-modeller to the extent it should be in view of the benefits which are derived from it.

Admittedly it is held at a time of the year when a large percentage of modellers are busily engaged in flying contests, but it is hard to think that the majority of aero-modellers scrape through the competition season with only one model in their stable and are unable to produce one for exhibition purposes.

Since, apart from its general interest, the Exhibition is a substantial financial asset to the S.M.A.E., it is hoped that aero-modellers will show their appreciation of this fact by coming forward with more exhibits next year, and thus help to build up the model aircraft section into the most interesting and important section of the Exhibition.

Another British Win

We have just received news from Italy that the glider event at the recent Italian model aircraft meeting, held at Florence, was won by the only British representative at the contests, Mr. R. A. G. Van de Velde, who is attached to the British Embassy at Rome.

This win is a very commendable achievement as it was made in a field where the continental entries are formidable and in the teeth of the keenest competition.

Mr. Van de Velde not only won the Glider Category in the "III Coppa Arno," but also succeeded in winning the "X Concorso Nazionale." We extend hearty congratulations to Mr. Van de Velde for his magnificent performance and for so successfully upholding the prestige of British aero-modelling. We look forward to learning of his further successes.

An Important Appointment

The office of President of the Society of Model Aeronautical Engineers has been vacant for some time, as it was the considered opinion of the Society's officers that a President, when elected, should be an outstanding figure in the world of aeronautics and a person whom all aero-modellers could consider with pride.

It is with much pleasure that we are able to announce that the Rt. Hon. The Lord Brabazon of Tara, has consented to become the President of the Society at the request of the Council. This fact was announced at the recent Annual General Meeting of the Society, where his acceptance as President was confirmed with acclamation.

Lord Brabazon could not be improved upon as the head of our national body, as he is the holder of Pilot's Certificate No. 1, the very first one issued by The Royal Aero Club, and has been a prominent figure in the aeroplane world since its very earliest days. At the moment he is not only the President of the Royal Aero Club, but also the President of the F.A.I., quite apart from his many other aviation activities.

The S.M.A.E. is indeed fortunate in having the support of so distinguished a personality.

The Vice-Presidency

Under the new constitution it is proposed to make the post of Vice-President of the S.M.A.E. an active office in the future, and with this in mind the Council of the S.M.A.E. have appointed Sir Robert Bird, Bart., to fill this office for the coming year.

Sir Robert Bird has for many years demonstrated exceptional keenness for model building and flying, and the Society is to be congratulated in having a practical aero-modellist in this important position.

This appointment should further strengthen the Society's position.

Club Propaganda

The advent of the report of the Advisory Committee on Private Flying, which we dealt with in detail last month, affords clubs the golden opportunity of drawing the attention of their local Member of Parliament and public personages of importance, to their existence and to their activities.

It is therefore hoped that all clubs will make full use of the chance which this report gives them of improving their status locally, by bringing the report to the attention of all local authorities, pointing out that the club is affiliated to the S.M.A.E., and that its activities are approved by the Advisory Committee, also that its work is considered by them to be of considerable national importance.

An approach made on the right lines will undoubtedly lead to better recognition of the club and its work.

Here are photos from our last indoor meeting on 8th January.

The next one is 5th February and we have an extra meeting on 19th February, when we have hired a larger hall in Bangor.

Midair Midge in flight- good planes.

Pterosaur model from Lidl brought along by Rich. Around £18, using a rechargeable power pod and fan, it flew very well and consistently.

Jo built a tethered tissue hot air balloon, lifted by the heat of a hot air gun. This one is a larger version, possibly needed more heat. Rory Pike and Jo's son Harri helped.





Heard at the HANGAR DOORS



**A.T.C.
Prizewinner**

Sgt. E. A. Harris, winner of the A.T.C. Aeromodelling contest mentioned last month, was entertained by Messrs. Kelvin Hughes the instrument makers, as part of his prize. The visit he made to their works also included a flight over his own home, and he is shown piloting the Auster aircraft in the picture above. Sgt. Harris also handled some of the latest marine electronic equipment used for locating whales, and other modern instruments such as a periscopic sextant, specially designed to enable star sights to be taken from high speed aircraft at great altitudes. His prize day was rounded off by a visit to Cinerama. All of which only goes to show where a little aeromodelling can get you!

Czechoslovakian Aeromodellers Camp

The British Youth Festival Committee have sent us details of what is described as "a holiday camp for young aeromodellers", to be held at Vrchlabi in North Bohemia by arrangement with the Czechoslovak Union of Youth. Hostel accommodation is provided, and there is a full programme of social, recreational and modelling activity. One day of the holiday, which lasts for approximately 14 days, will be spent in Prague and the cost is approximately £35. On enquiry we established that the definition of a "young aeromodeller" in this case means anyone between the ages of 14 and 30. Immediate application is necessary on the part of any interested British modellers.

Lost . . . and Found

The short paragraph that appeared in last month's "Hangar Doors" referring to a radio control model that had been picked up in the Humber Estuary had a happy ending. Just before the issue was published we had a letter from a

reader at Grimsby asking whether we could help as he had lost a Junior 60 on a flight from Killingholme Aerodrome. Apparently he had made extensive enquiries, including advertisements in the local papers, all to no avail. His description checked accurately with that given by Mr. Chilton whose father retrieved the model from the Humber Estuary. We were pleased to put the gentlemen concerned in touch with one another, thus restoring another aeromodelling stray to the fold. The radio modeller concerned was very fortunate indeed. It was a new model, on its maiden flight, and if we may point a moral for the benefit of others, had no name and address and too much fuel in the tank for its first test flight.

Death of Leading Aerodynamicist

Professor F. W. Schmitz, who was responsible for much of the low speed airfoil theory that we enjoy today, passed away on April 16th in hospital at Bonn. His first book on the subject, "Aerodynamik des Flugmodells", gained him the Ludwig Prandtl Prize in 1941, and has been a reference work for model airfoil theory ever since. The Low Speed Aerodynamics Association co-operated with Professor Schmitz quite extensively, and much of the efforts of their combined research is contained in various L.S.A.R.A. Reports.

The value of low speed aerodynamic research cannot be overestimated, but unfortunately has been neglected in recent years due to the tremendous emphasis placed on high speed experiments. All the more credit to brilliant men such as Schmitz whose researches at the lower end of the speed scale will continue to be of value to the aviation world for years to come.

S.M.A.E. News

At a Council Meeting on Sunday, May 6th, the Society confirmed that, subject to funds being available, it would be sending teams to the Wakefield Contest in Sweden and the A/2 Glider Championships in Italy. With the Italians combining this latter meeting in Florence with the World Speed Championships, the question of a British Speed Team was also considered. It was decided that if the speeds achieved in the 2.5 c.c. class at the Nationals justify it, then consideration will be given to sending a speed team to Florence.

Sid Taylor, S.M.A.E. Competition Secretary, also announced the British team for the King of the Belgians International Radio Control Contest in Antwerp on June 15th-18th. They are as follows: *Team Manager*, G. Honnest-Redlich; *R/C Glider*, H. Boys and W. Airey; *Single Channel*, G. Parkinson and D. Fisher; *Multi-Channel*, R. Higham and E. Hemsley. In addition V. G. Breeze and R. Clarke are going as helpers. All these boys are going at their own expense.

The Top Dozen

Latest all-rounder to join the select band of British holders of the International Merit Certificate is John O'Donnell of Whitefield, who made his final qualifying flights on April 22nd during the Astral Trophy contest.

June, 1956

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There is a sad lack of information regarding the gaining of Merit Certificates, and readers may be interested to know that anyone can qualify for these records of achievement, for which the following rather simple requirements obtain:

Class A.—Three flights of over 2 minutes with either Rubber, Glider, or Power model.

Class B. Three flights of over 3 minutes, ditto.

Class C. Three flights of over 3 minutes with each type of model. To qualify for the *International* class, applicant must be the holder of an F.A.I. Competitor's Licence.

Flights in each category must be made with the same model on the same day. For Class C, flights in the different categories may be made on different days, but within the period of one year. Special application forms are available from the offices of the S.M.A.E., Londonderry House, Park Lane, W.1.

Sidelines

George Cox's revealing detailed drawing of the Hawker Hunter in Service colours on pages 324/5 was the result of much appreciated co-operation on the part of Air Ministry and Officer Commanding 41 Squadron R.A.F. whose aircraft is the one illustrated. Many scale enthusiasts have written to us in the past for detail of this nature, and we fail to see how they could possibly be disappointed by the Hunter V. Comments on this style of drawing would be appreciated.

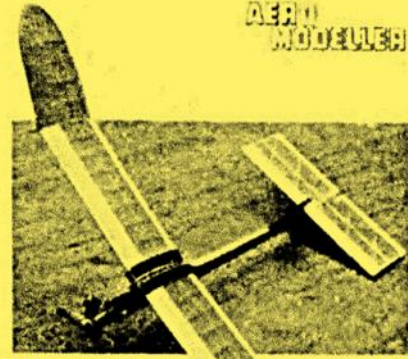
The rather sweeping statement in last month's issue announcing that Peter Buskell's modified E.D. Racer is the most powerful 2.5 for free-flight was not (as some would imagine) made without vindication. On static tests the horse power and quoted prop-r.p.m. figures speak for themselves. Further corroboration comes from a Sunday session at a Common not too distant from London where a group of internationally-famous aeromodellers conducted a spot check on several potent engines, including Pete Buskell's. The modified E.D. was found to be 250 r.p.m. up on the next best, and 750 r.p.m. faster than the rest. Pete estimates a further gain of 2,250 r.p.m. over the static figure when the model is climbing.

Two "Reet Good Do's"

For a number of years now two fine exhibitions of models has been a feature of the Northern calendar, and this year's shows in Manchester and Sheffield were well up to standard.

The Eighth Northern Models Exhibition at the Manchester Corn Exchange did not number perhaps quite as many aircraft as previously, but the general standard of workmanship was high with a number of outstanding models that were a delight to judge. G. J. Hankinson, of the Timperly and D.M.A.C. won the "AERO-MODELLER" Challenge Cup

G. J. Hankinson's "Slick Stick" won the Aeromodeller Trophy at the Northern Models Exhibition



with a fine A.P.S. "Slick Stick", his trade as a painter and decorator being evident in the fine finish he had obtained with an economy of material.

Once again A. Naylor had the best showing at the Sheffield Model Societies' combined exhibition, this fellow getting a better finish on pure flying models than most can achieve with specially prepared exhibition jobs.

We deprecate the attitude that kept entries from the North Sheffield club from public view, for surely it is unequitable for any one group to demand separate space in a show of this kind, and one can only say that the dissentients were the losers. In fact, it was not worth getting Shirty over!

Stosser Markings

Details of German Civilian/Military insignia for B. Barton's popular Focke Wulf Stosser flying scale model published in our January issue, aroused considerable comment among our readers in Germany.

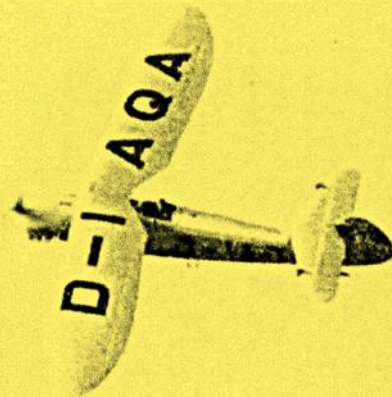
One authority wrote to us to say that such could not be, and so we sent him the photograph of the actual aircraft which we had used as our source of information.

After much research it appears that the Civilian Stossers were used for propaganda and for the purpose of the photograph Military markings were taped or pinned in place simply to boost up the strength of the growing Luftwaffe. This in practice appears to have been used quite extensively to confuse allied spies and it certainly confused us!

The two photos below show Stossers in pure Civilian markings, for those who require a change from the insignia given on the plan.

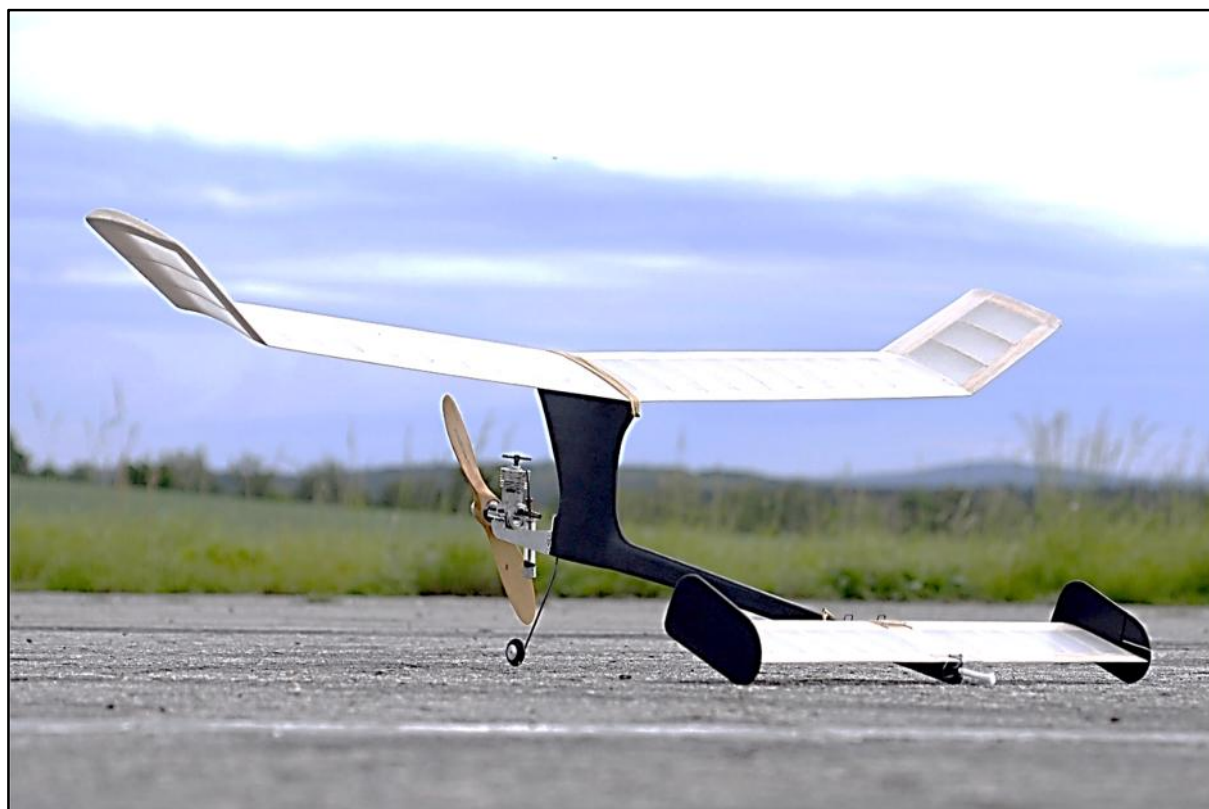


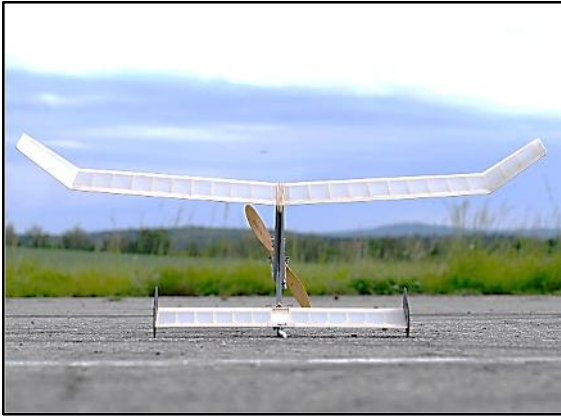
Civilian Stosser as detailed above



Iota:

1951 by E. Brendeng 100% replica
40 inch/101cms Engine E.D. Bee 1cc





Martin Hurda (Czech Republic)

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

ZEPPELINS GO TO WAR

At midnight, the three Zeppelins reached the city of London from different directions. The English could darken the metropolis as much as they liked but they couldn't conceal the Thames. They even placed false streetlights in Hyde Park. .but the airship officers were not deceived: the course of the Thames betrayed the ruse.

Heinrich Mathy, commander of LZ31 during a bombing raid on London, 25 September 1916

Zeppelins were clawed down in flames from the skies over both land and sea by aeroplanes until they dare not come any more. The aeroplane was the means by which the Zeppelin menace was destroyed, and it was virtually the only means, apart from weather and their own weakness, by which Zeppelins were ever destroyed.

Winston S. Churchill, *The World Crisis*

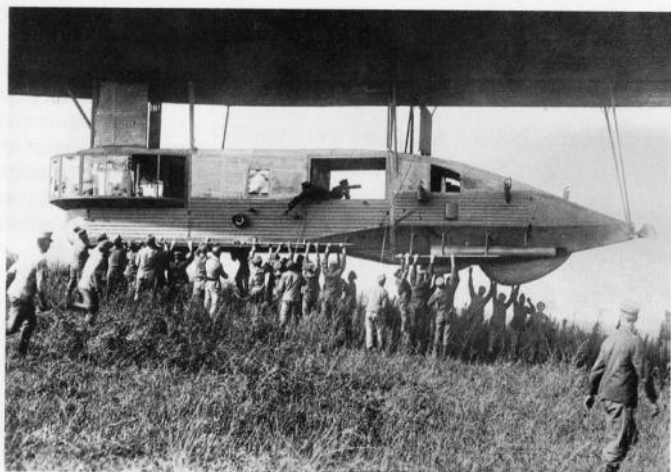
Between 1914 and 1918 the First World War tore through Europe like a ragged scar. This was the conflict that introduced mechanised warfare and slaughter on an unprecedented scale. It was also the first war in which aviation played a significant role and for the inhabitants of London, and several other British towns, it was their introduction to the concept of total war. One in which the enemy would reign death and destruction upon the Home Front.

At the outbreak of hostilities in 1914, the Zeppelin Company was running its commercial airship services between major

Did you know?

Although the *Hindenburg* was slightly less than twice the length of the first Zeppelin, LZ1 it was almost twenty-one times bigger in volume.

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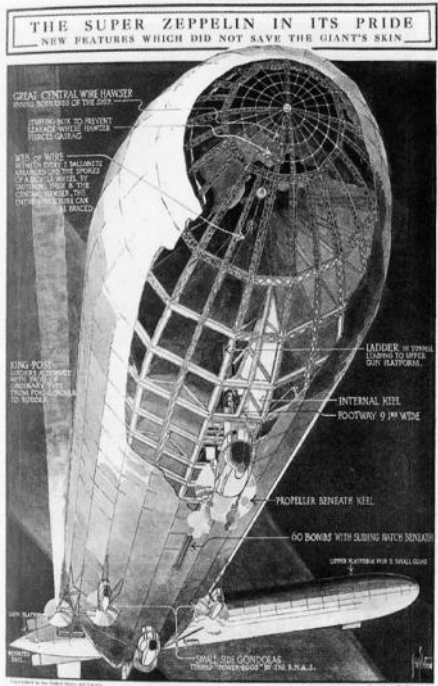
▲ Forward gondola of a German army Zeppelin of the First World War, complete with defensive machine gun positions.

cities within Germany and their DELAG fleet was immediately pressed into military service. The German navy and army had both been operating a handful of airships by this time, built by the Zeppelin Company and their rivals, Schütte-Lanz, but with very mixed results. However, the airship, and the

aeroplane for that matter introduced a new aerial dimension to warfare, and initially the German High Command responded by deploying its airships in support of the army at the front through close-support bombing. This was an ill-conceived approach and four airships were soon lost to ground fire. In the long term the airships would show themselves better suited to the roles of aerial reconnaissance, in particular spying on shipping, and carrying out raids upon England.

Kaiser Wilhelm had opposed bombing England at first, especially London, because of his close blood-ties with the British royal family. But such niceties were not supported by members of his naval staff in particular Commander Peter Strasser the chief of the German Naval Airship Division, who advocated the use of any means to

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bring England to her knees. By early 1915 the Kaiser relented and allowed the air raids to commence.

Providing Strasser with the tools to do the job was a new generation of airships, ordered before the war and now entering service. An improved version of the pre-war L3 type was known as the M-class: 518ft (158m) long, with a volume of 793,518cu ft (22,470cu m) it was powered by up-rated 180hp Maybach engines producing a top speed of around 50mph (80km/h). This was the first airship with any real long-distance capability.

Bad weather caused Strasser to abandon the first raid against England on 13 January 1915, then six days later three naval Zeppelins battled against strong winds in a bid to attack Hull. Driven off course, they ended up dropping their load of

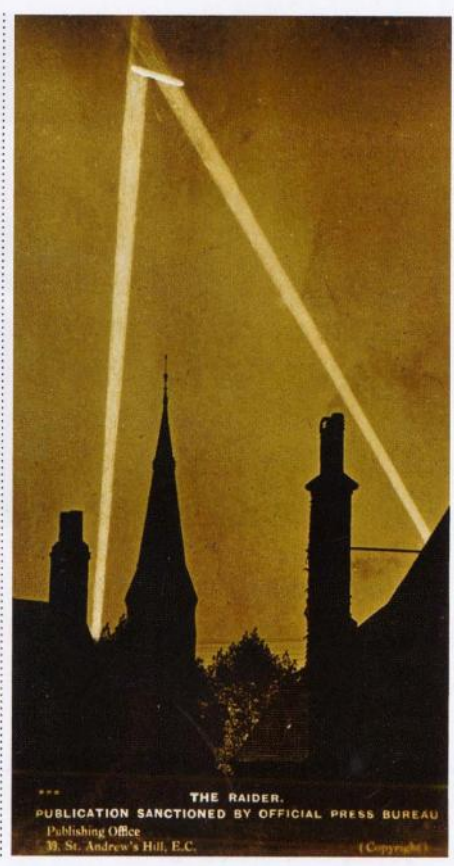
◀ The anatomy of a 'Super Zeppelin' as published by The Graphic magazine in December 1916.

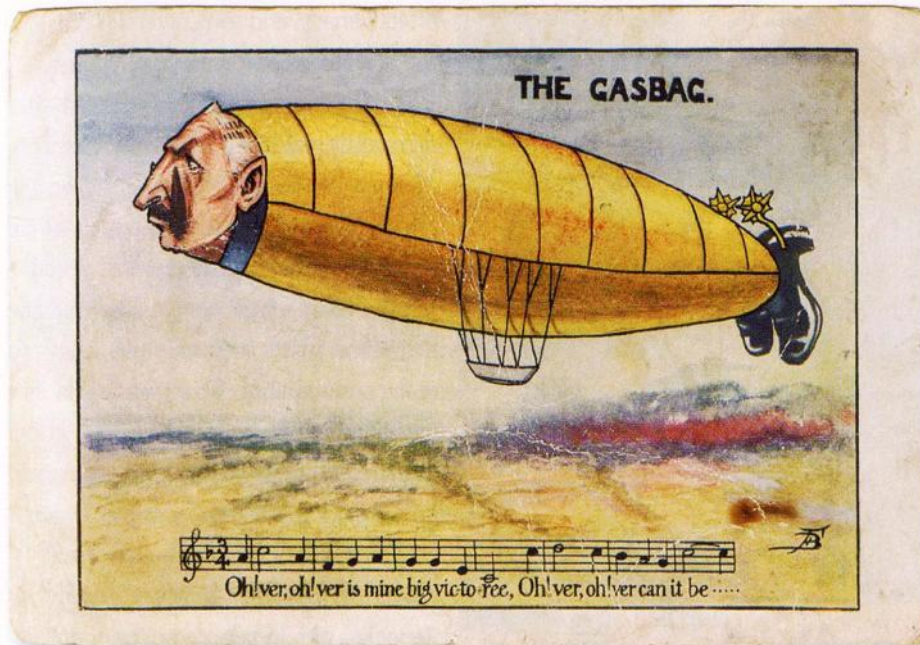
Did you know?

The US Navy's large rigid airships ZRS4 Akron and ZRS5 Macon were fitted with secondary auxiliary control stations located in their lower tail fins.

► 'The Raider' is caught in the searchlights, depicted in a propaganda postcard. Usually this image would be just one in a sequence of photographs culminating with the Zeppelin's fiery destruction.

►► The Zeppelin raids were meant to terrorise the British but instead they provided powerful ammunition for the recruitment posters. (US Library of Congress)



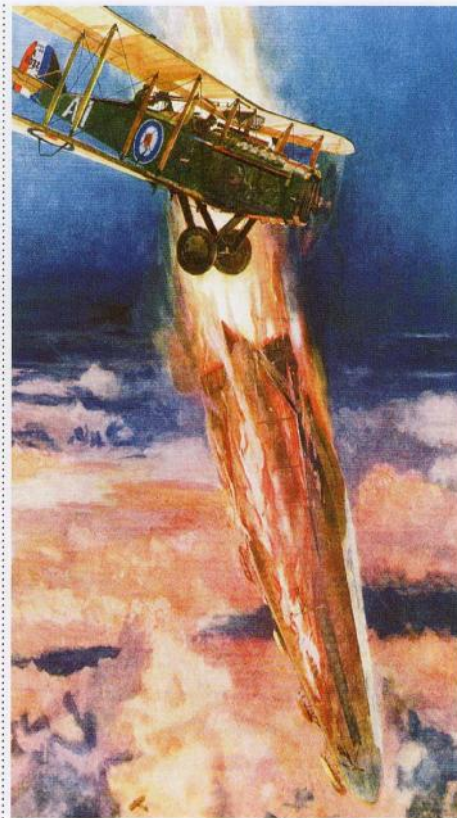


◀ *Ridicule is always the first weapon of the propagandists, and here the Kaiser is depicted as a 'gasbag' Underneath the musical caption reads, 'Oh! Ver, oh! Ver is mine big victo-ree, Oh! Ver, oh! Ver can it be*

twenty-four 110lb (50kg) bombs on Great Yarmouth and the Kings Lynn area of Norfolk. Four civilians died that night and another sixteen were injured. Further raids followed over the ensuing months, but the weather conditions minimised their

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► *By the end of the war the Zeppelins were increasingly succumbing to British defences. The dramatic destruction of a raider is shown here, from The Graphic, October 1918.*



effectiveness and on several occasions the airships were forced back to base.

By the spring of 1915 the Kaiser reluctantly gave the go-ahead for bombing raids on London itself principally on the docks. The bigger P-class Zeppelins had become available and these featured a 531ft (162m) hull constructed for the first time with a duralumin alloy to replace aluminium. This increase in size was combined with greater power from an additional fourth engine, to create an airship that was around 10mph (16km/h) faster and had an operational ceiling of 10,000ft (3,050m). The newer Zeppelins also incorporated the simplified cruciform tail and greater streamlining which had been demonstrated by Professor Schütte on his wooden-framed rigid airships.

Couprofile No.9 Michael Marshall



Michael, you have flown competition Coupe for as long as I can remember - It must have been around 20 years ago when we competed on Salisbury Plain. Can you give us a brief account of your experience and approach to Coupe flying - your design, build and flight pattern preferences and how you pick the air?

Coupe d'hiver models are my first choice and I regret the limited attention this class receives here in the UK. I believe that I enjoy the building just as much as the flying. I started building and flying probably in about 2000 and one of the first models was the Bob White coupe which was a traditional design at that time but was small with a small propeller. (Mike Woodhouse once told me that no one did any good with that model but Bob White)

After that I made a succession of models including a design by John Barker, one time chairman of the free flight Technical Committee. These models were largely of traditional construction with balsa fuselages and tissue covering.

After this I graduated to carbon tube fuselages inspired by articles in the Aeromodeller by Dave Hipperson and Trevor Grey. Perhaps for me, the most significant thing was Dave Hipperson's article Pure Fantasy in the 1991 Aeromodeller. I won the Free Flight Nationals three times with that design which heralded tube fuselages and thin wings with carbon capping.

After that Andrew Moorhouse passed to me an article in Free Flight News by Peter King for a model he called Linda. I built this model at the commencement of the Covid lockdown and have only flown it in two competitions. I read recently in FFN that Andrew Longhurst was commending the Linda propeller design which I use exclusively.

Somewhere between the Pure Fantasy and Peter King's models I built Anselmo Zeri's coupe with the folding wings, but I did not include this feature; too difficult. However it was the most successful model I have ever had for performance, but I could never get it to DT properly. At one stage I downloaded an article from Free Flight Quarterly for a computer programme, to determine the correct CG, which didn't help.

I cannot recommend highly enough the two books produced by Free Flight Quarterly, the Australian magazine, in 2006 entitled Special F1G Edition Coupe d'Hiver.

I really believe that Dave Hipperson and Trevor Grey did a fantastic job in promoting free flight in the Aeromodeller.

For a while my wife and I had an apartment in Saintes in France where there was a local club much like the Vikings at Sculthorpe where it was possible to fly on the local airfield and take part in competitions, coupe only. As well as the local Saintes activity I flew in competitions at Viabon and Moncontour. The competitions at Viabon were started a long time ago by Maurice Bayert one time editor of the French magazine Model Reduit de Avion. Here there is an airfield and club house with full facilities and the competition is well run with a buffet lunch. At Moncontour the coupe contest precedes the larger F1A classes and takes place on harvested fields. Louis Dupuis lived in Moncontour and had a strong influence on modelling in that place, There was something that I had never seen before, a club house/workshop including benches, pillar drills and a lathe. Aero modelling flourished in Moncontour under his leadership.

One distinct difference between flying in England and France is that in France cars are kept well out of the way and competitors carry their equipment, not too onerous, to the flight line. A lunch break is strictly adhered to.

One effect of the separation of models and cars is that winding of models does not take place in cars and this probably led to what has been called "in model" winding.

Dave Hipperson featured some of my fittings/pieces in the Aeromodeller. Through contact in France I became aware of Mr Bukin and purchased his propeller hub assemblies which fit a 20 mm diameter fuselage tube and have a unique connector to the rubber motor. The remote end of the motor is connected to what has been called a Persechio hook. You wind the motor with connectors in a half metal tube, then push this into the model and rotate to secure, then fit the propeller. Easy peasy. There may be some problems now with obtaining these special parts from the Ukraine?

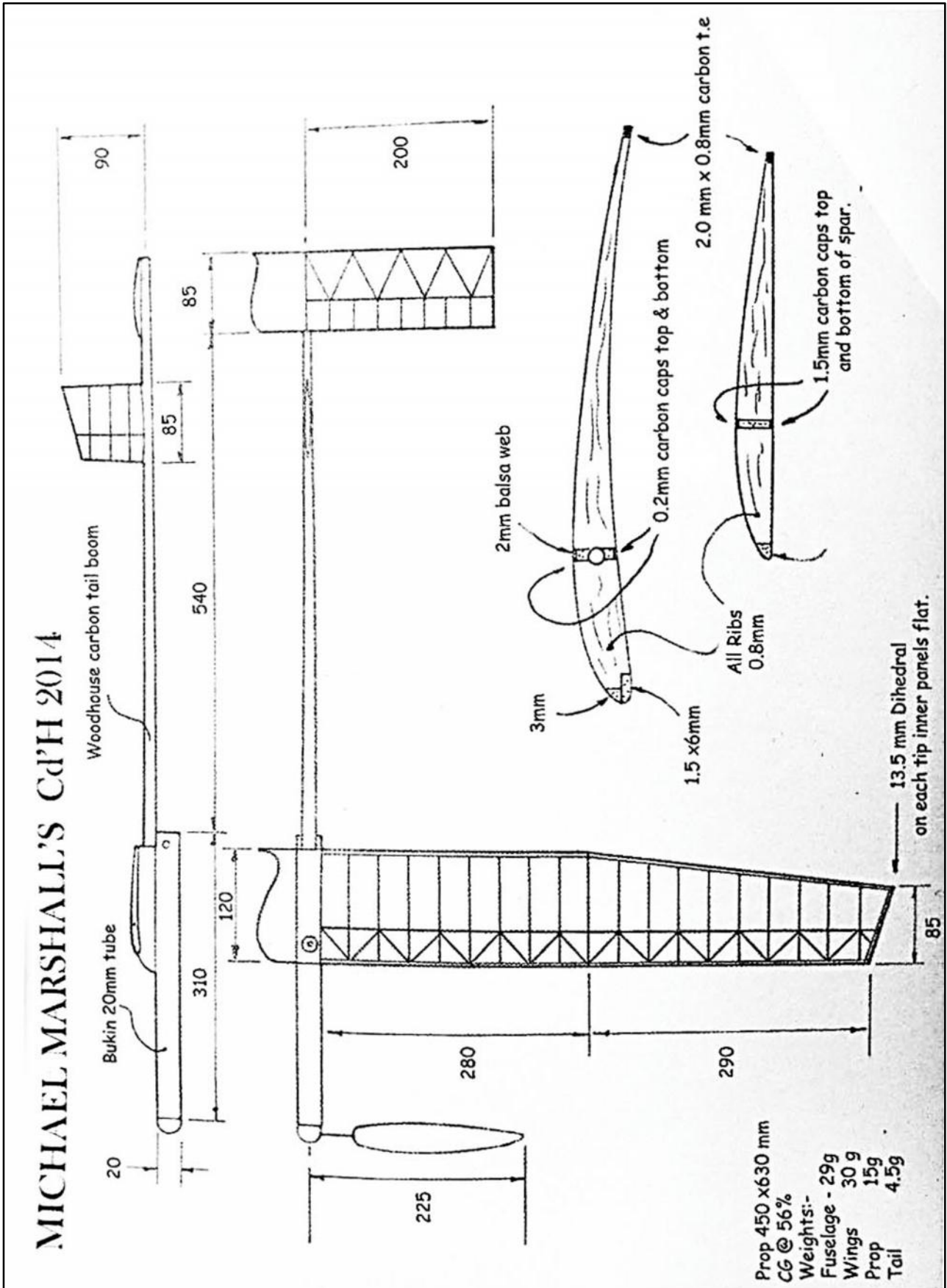
When it comes to actual flying I owe a great deal to Andrew Moorhouse, Chris Strachan and David Greaves, I always fly right left. Wings flat, no warps. I have had models with instant prop start, advocated by Mike Woodhouse, and have also, on some, utilised variable incidence tail planes. The Zeri model for example has this. On current models there are no gadgets. Mylar covered wings, clockwork DT and Pym Ruyter transmitter used in conjunction with a standard VHF portable radio. I use, 1/8th rubber, 12 strands and have also tried 1/16th without finding any real advantage. I currently use Castor oil and I abhor Silicon.

How do you pick air?

I really do not know but wait for a calm warm patch and then launch. I was intrigued by the sophisticated device produced by Roy Vaughan some time ago and for myself built the sophisticated thermometer system designed by Martin Gregorie.

How do I pick the air? Now I do what the books say, wait until the sun shines, the wind falls and watch the streamer, When it billows violently I launch. What of the future? Numbers of competitors are falling. I believe there is a reluctance amongst modellers here in the UK to embrace new materials, they hanker after stick and tissue.

I would certainly like to see more compete in competitions here. If we could emulate the French and arrange for poles and timekeepers so much the better.



Peter Hall/Michael Marshal



The **Focke-Wulf Fw 189 Uhu** ("Eagle Owl") is a German twin-engine, twin-boom, three-seat tactical reconnaissance and army cooperation aircraft. It first flew in 1938 (Fw 189 V1), entered service in 1940 and was produced until mid-1944.

In addition, Focke-Wulf used this airframe in response to a tender request by the RLM for a dedicated ground-attack airplane, and later submitted an armored version for trials. However, the Henschel Hs 129 was selected instead.

Design and development

In 1937, the German Ministry of Aviation issued a specification for a short-range, three-seat reconnaissance aircraft with a good all-round view to support the German army in the field, replacing the Henschel Hs 126, which had just entered service. A power of about 850–900 hp (630–670 kW) was specified. The specification was issued to Arado and Focke-Wulf. Arado's design, the Ar 198, which was initially the preferred option, was a relatively conventional single-engined high-wing monoplane with a glazed gondola under the fuselage. Focke-Wulf's chief designer Kurt Tank's design, the Fw 189, was a twin-boom design, powered by two Argus As 410 engines instead of the expected single engine. As a "twin-boom" design like the earlier Dutch Fokker G.I, the Fw 189 used a central crew gondola for its crew accommodation, which for the Fw 189 would be

Fw 189 Uhu



Role	Tactical reconnaissance and army cooperation aircraft, light bomber
Manufacturer	Focke-Wulf
Designer	Kurt Tank
First flight	July 1938
Introduction	August 1941
Retired	1945
Primary users	<i>Luftwaffe</i> Hungarian Air Force Slovak Air Force
Produced	1940–1944
Number built	864

designed with a heavily glazed and framed "stepless" cockpit forward section, which used no separate windscreen panels for the pilot (as with many German medium bombers from 1938 onwards).

Blohm & Voss proposed as a private venture something even more radical: chief designer Dr. Richard Vogt's unique asymmetric BV 141. Orders were placed for three prototypes each of the Arado and Focke-Wulf designs, in April 1937.^[3]

The Fw 189 had as part of its defensive armament, an innovative rear-gun emplacement designed by the Ikaria-Werke: a rotating conical rear "turret" of sorts, manually rotated with a metal-framed, glazed conical fairing streamlining its shape, with the open section providing the firing aperture for either a single or twin-mount machine gun at the unit's circular-section forward mount. The Fw 189 was produced in large numbers, at the Focke-Wulf factory in Bremen, at the Bordeaux-Merignac aircraft factory (Avions Marcel Bloch's factory, which became Dassault Aviation after the war) in occupied France, then in the Aero Vodochody aircraft factory in Prague, occupied Czechoslovakia. Total production was 864 aircraft of all variants.^[5]

Operational history

Called the *Fliegende Auge* (Flying Eye) of the German Army, the Fw 189 was used extensively on the Eastern Front with great success. It was nicknamed "*Rama*" ("frame" in the Russian, Ukrainian and Polish languages) by Soviet forces, referring to its distinctive tailboom and stabilizer shapes, giving it a quadrangular appearance.

Despite its low speed and fragile looks, the Fw 189's manoeuvrability made it a difficult target for attacking Soviet fighters. The Fw 189 was often able to out-turn attacking fighters by flying in a tight circle into which enemy fighters could not follow.

Nocturnal reconnaissance and night fighter versions

Night Reconnaissance Group 15, attached to the 4th *Panzerarmee* in southern Poland during late 1944, carried out nocturnal reconnaissance and light bombing sorties with a handful of 189A-1s. These planes typically lacked the main model's rear dorsal machine gun. Small numbers of A-1s were used as night fighters in the closing weeks of the war – the aircraft were modified by having their reconnaissance equipment removed and then fitted with FuG 212 AI radar in the nose and a single obliquely-firing 20mm MG FF autocannon in the common *Schräge Musik* upwards/forward-firing offensive fitment also used for heavier-airframed German night fighters, like the Bf 110G. For the Fw 189 the installation was in the crew nacelle in the space where the rear dorsal gun was normally housed. The majority of the *nachtjager* 189s operated by NJG 100, were based at Greifswald.

Chronic fuel shortages and enemy air superiority over the 189 defence area (chiefly Berlin) meant that few aircraft were shot down by these craft.



Focke-Wulf 189a 3 on a Finnish airfield in the summer of 1943

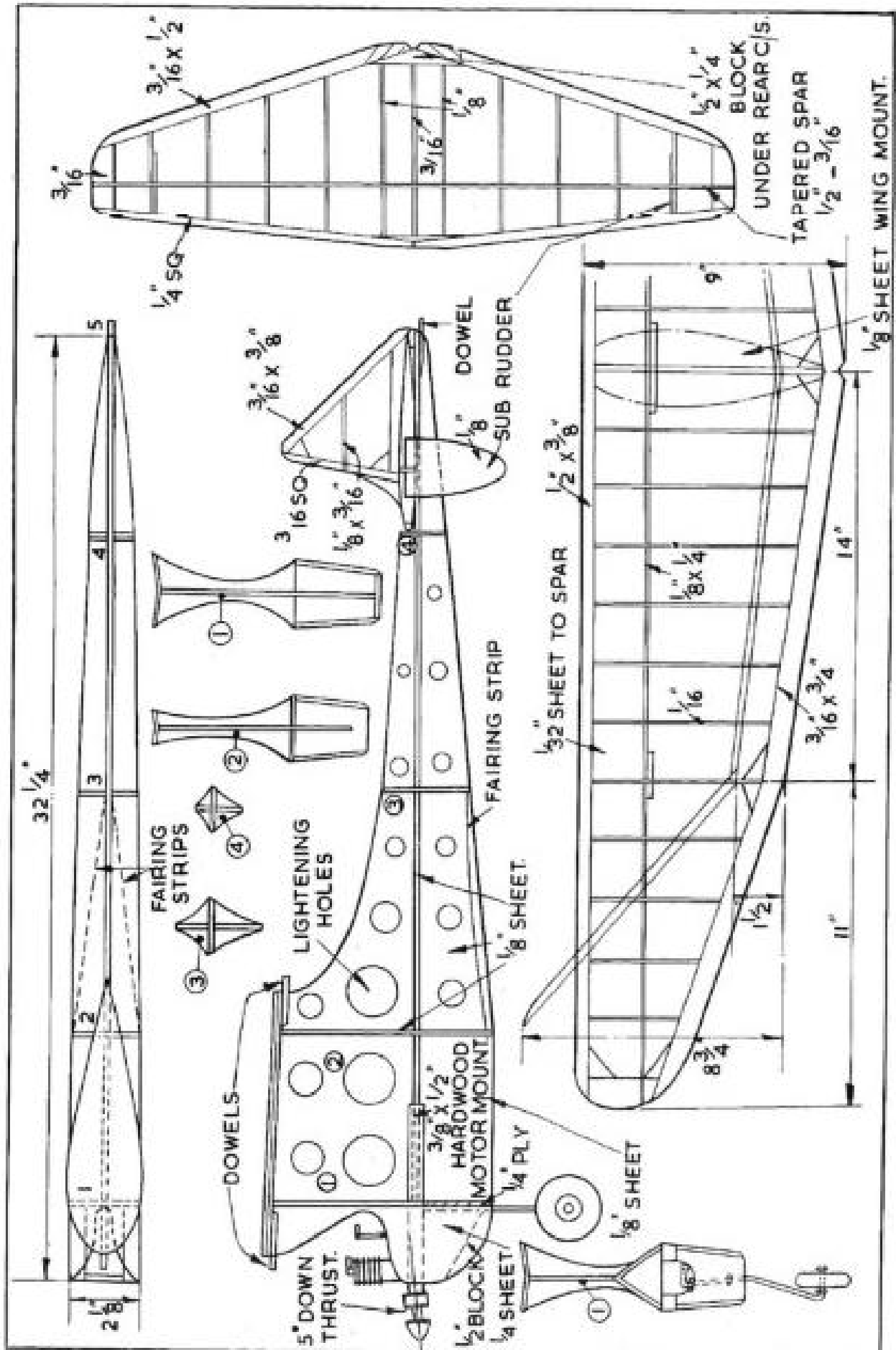
Banshee. American Pylon Power Winner designed by Leon Shulman.



DESCRIPTION.—This model is the second of a series of three: Zombie, Banshee, Zoomer—developed by the designer to give fast spiral climb, low drag and consequently flat glide. Banshee as the middle model of the trio is perhaps the most suitable for the average enthusiast, sporting some of the improvements developed from the Zombie without the trickier trim and streamlining refinements of Zoomer. Constructional methods employed on fuselage of Banshee are particularly interesting. A sheet crutch to plan form is laid down on which sheet pylon and sheet side elevation outlines are erected on the centreline, suitably braced with gussetlike formers, thus producing an X-shaped structure, which, when covered gives a diamond-shaped fuselage of considerable strength for low weight and speedy construction. Wings feature a thinned NACA6409 aerofoil section and embody polyhedral. Braces are stronger than usual owing to overlap of mainspars in addition to usual ply keepers. Symmetrical tailplane has anti-spin sub-rudders depending from its underside, which certainly perform their designed function. Shulman designed Banshee as far back as 1941, but its American popularity was not achieved until after the war. Incidentally, Astrals have just put up Banshee in kit form so that we can look forward to seeing them well to the fore at next season's contests.

PERFORMANCE.—Gussie and Mrs. Gunter's competition successes in 1947 may be said to mark the beginning of the cult of the Banshee in this country. During 1948 they were prominent at the Nationals, while Ron Warring appropriately enough won the Astral trophy with one.

DIMENSIONS.—Span 50 ins. Length 32½ ins. Root chord 9 ins. Tailplane span 22 ins. Root chord 7 ins. Fixed monowheel undercarriage. Polyhedral 1½ in. at break, total 8¾ ins. each wing.



An old article of mine from the paperback hard copy Clarion

John Andrews - Goes Indoors - Part 1

I think I have mentioned before that I get writers block, that's fancy talk for "don't know what to write about". However, after a bit of head scratching, it occurred to me that this time of year I start doing the rounds of the Sports Centre Indoor Meetings so I'll inflict some of my thoughts and experiences of this sphere of aeromodelling onto your goodselves.

I have tried to get to as many different venues as I can, to date I have visited the following Sports Centres: Coventry, Oadby, Nottingham, Bicester, Oxford, Wallingford, Swindon, Oundle, Cradley Heath, Alumwell, Impington and Moulton. They are all excellent facilities, two of the larger ones are Swindon and Alumwell which I think are 10 badminton court size. I fortunately live in Rugby which is close to the M1 and M6 motorways which enables me to get to most of the venues in an hour or so.

Let's get vintage to start with, I think I mentioned in my first attempt at Clarion fodder that the Rugby Model Engineering Society Aeronautical Section (if you want a club name get a good one) had an indoor club night in the local scouts HQ in about 1950. Apart from the suicidal jetex RTP speed model I did not feature with any distinction in the evenings activities. Around that era the club also had a static display at a local hobbies exhibition and during the day we gave RTP demo's using our outdoor rubber jobs with the motors re-stranded to half cross section. We managed flights of around two minutes or so if memory serves correctly, can you picture an eight ounce Wakefield fizzing round on 10ft of cotton thread with a safety pin through the wing tip.

Indoor flying did not feature in my modelling activities again until around 1970. I was well into radio control flying by this time and had been working for the Dunlop Aviation Division for a couple of years when a group of us started messing about during the lunch hour flying indoor models, free flight that is, in empty factory buildings.

Counting up there were at least seven of us as I recall, I seem to have the knack of interesting folk in various activities that I follow. Previously I had run an interdepartmental cricket team and a smallbore rifle team at the AEI Rugby Engineering Works.

Back to Dunlop, there must have been an article and plan in the Aeromodeller for I built an Easy B with condenser tissue covering and eventually managed a 2min. 40sec. flight. This was achieved by the fluke of launching from floor level, climbing up to the roof truss, banging on it and diving back down, recovery at floor level, then back up to roof truss for the second time to complete the flight with a good let down over a clear floor space.

We built one or two odd ball things, I remember a helicopter built by Mick Blunt (he got me into match fishing but that is another story, I did win my first fishing match though' with the Dunlop Angling Club at goose tree corner over towards Ely. I bagged 14lbs of bream).

Digressed again did I not. Mick's copter was a 12" built up square tube fuze with built up rotors top and bottom. He had, I think, one loop of 1/4 for the motor which was no use at all so we doubled it and wound it up. Mick held the two rotors then released, the copter wobbled for a second or so then up she went quite sedately to the roof.. Now the roof was a typical factory zigzag and the copter squared itself up on the slope and began to walk along the ceiling. We waited for its arrival at the roof truss at the end of the bay. No problem for the chopper, the rotor stopped, the chopper dropped down, walked under the truss, up the other side and walked on through the next bay. One more bay and she ran out of steam and down to the floor, Mick was more than pleased, he'd only built one other model before.

I built a rather heavy ornithopter and once again the 1/4 motor required doubling . It startled a welder one lunch hour on its one and only successful flight by fluttering by him whilst he was still welding, he was still under his mask and didn't hear it coming. Next flight it just blew apart when we piled on the turns. We had quite a good run until we ran out of buildings to fly in. In the process I had crossed swords with microfilm, scum round the bath, cellulose smell through the house, and an irate first wife. I did manage to cover a model though' and it was very satisfying to have achieved it using only dope and castor oil. When eventually activities petered out, the remaining models were confined to the loft. The EZB in a cardboard box and the microfilm job in a very old suitcase.

Indoor did not raise its head again until late 1996 or early 1997. I had retired, got fed up with radio, started free-flight again, re-met Peter Martin and was into vintage. Peter was promoting informal vintage meets during the winter months on Warwick Race Course at that time and one afternoon he mentioned that he was going to Coventry Sports Centre on the next Saturday evening to fly indoor. "Great" says I, "I think I have got two up in the loft somewhere."

Up into the loft goes I and emerges with the cardboard box and the old suitcase. This was a miracle in itself, since I had last seen them I had been divorced, remarried and moved house. The EZB emerged intact from the cardboard box complete with a packet of Micro-X rubber. The rubber must have come from Laurie Barr in the seventies, I seem to recall that he supplied bits and bobs in those days. The microfilm job however was a different story, the rolled tube fuselage and balsa prop were the only recognisable bits, the wing and tail were little piles of sticks with little or no evidence of microfilm covering. I re-assembled the framework and covered with pink and blue tissue. It must have looked very pretty because it was photographed on my first visit to Cardington later that year and appeared in the *Aeromodeller*. The effect was spoiled though, it was in black and white.

I had a really good time with the Coventry lads and the indoor bug bit me. I built three or four condenser tissue EZB's and a Penny Plane or two. Coventry ran several meetings through the 96/97 winter and I honed my skills to a level of mediocrity such that I contacted Laurie Barr and extracted details of indoor meetings at the hallowed halls of Cardington. I keep an A4 indoor logbook (don't you just hate people who are organised) and it records that on April 13th.1997 I paid my first visit to No.1 hangar. That first visit was a real eye-opener but I'll keep Cardington exploits for next month.

My indoor interest continued to expand and after I procured some Mylar from Mike Woodhouse things began to look better. Eventually I managed a 5 minute flight with a large Mylar covered job using the old rolled tube fuz from the original Dunlop model, incidentally I am still using that fuselage (waste not want not). In the early days the Coventry lads were flying Hanger Rats and having informal competitions so I badgered Brian Roberts for a plan. I built mine and on Brian's advice added a little more down-thrust than the plan. I also put some under camber on the prop I just could not bring myself to make a flat plate prop .



Author with winning Hanger Rat

I first flew the Rat at Coventry on Dec.5th.98 with conspicuous failure.

My logbook reads as follows:

Comment 'No proper flights, dived in when motor ran down'.

The next outing however was a different story, logbook details as below.

Coventry 9th. Jan 99			
Motor	Turns	Time	Comment
			More down-thrust, Pinned posts
1/8 x 18"	1000	2-14	
"	1200	2-18	With time out for hang up
1/8 x 20"	1600	-	Hung up
1/8 x 20"	1600	2-46	Banger

I had increased the down-thrust, I don't remember what the 'pinned posts' means, I assume that as I had made the wing removable with tissue tubes they may have been a little slack. John boy had made the winning flight and went home a happy bunny.

I don't fly at Coventry any more as around 1999 indoor radio was beginning to become popular and as more and more people were flying it and it became unrealistic to mix free flight and radio. My last visit to Coventry resulted in my Polystyrene Hanger Rat being chopped into pieces by a tethered electric helicopter. The radio boys now have sufficient support to run their own meetings so its free flight only meetings for me now.

For anyone who is contemplating indoor free flight for the first time I would strongly recommend starting with the Hanger Rat. Its big enough to make trimming reasonably easy and strong enough to take more than a little abuse. It can be flown on 1/8 rubber strip which makes motors easy to get. John Hook can supply Kits and ready builds and he attends a lot of indoor events so visit one and get going. The best results from a Rat will always come from a scratch built one to plan.

The plan was re-published in the Aeromodeller Vol.63 No.757 Nov./Dec. 1998.

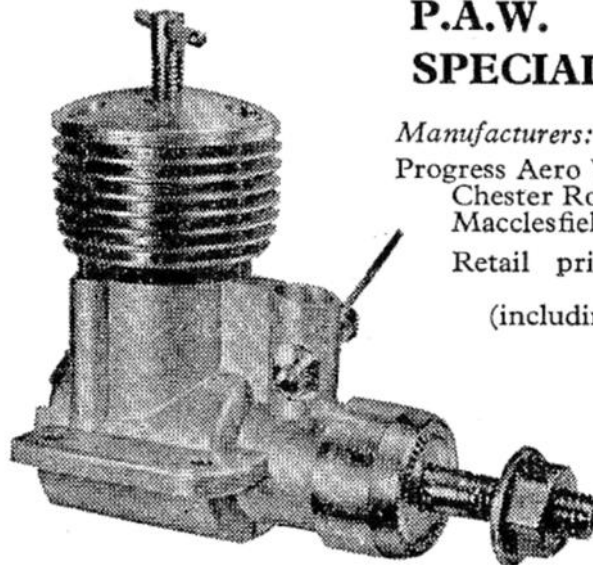
Advice I would give on Hanger Rat construction is :-

- a. Build in at least 5 degrees of downthrust
- b. Make wings plug-in using tissue or flattened alloy tubes.
- c. Fly in R/H circles with about 20 degrees of rudder.
- d. Have obvious wash-in on R/H wing, say 1/4' down at T/E.
- e. Don't forget the pilot (I've got John Hook piloting my Poly Rat, I fitted him for John's Birthday Bash at Swindon last year)

If you want maximum performance then build as light as you dare, leave out the wing braces and use single cabane struts in the centre.

I think that is as much as you lads can take in one dose, I'll quit now and next month I'll put you to sleep with my exploits in the Cardington Airship Sheds, the Mecca of indoor flying.

John Andrews



P.A.W. SPECIAL

Manufacturers:

Progress Aero Works,
Chester Road,
Macclesfield.

Retail price:

£6/10/0
(including P.T.)

Specification

Displacement: 2.456 c.c. (.1498 cu. in.).
Bore: .597 in.
Stroke: .535 in.
Bore/stroke ratio: 1 : 1.09.
Bare weight: 4 $\frac{7}{8}$ ounces.
Max. B.H.P.: .249 at 14,000 r.p.m.
Max. torque: 22 oz.-in. at 7,000 r.p.m.
Power output: .101 B.H.P. per c.c.
Power rating: .051 B.H.P. per ounce.

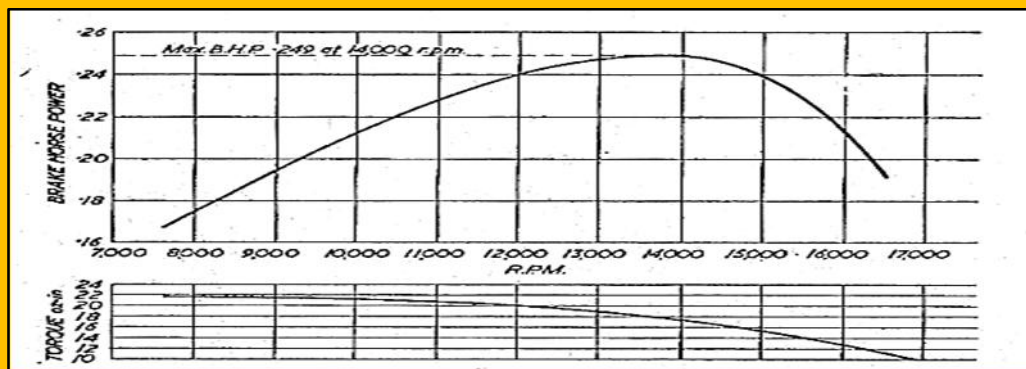
Material Specification

Crankcase: gravity die-casting in light alloy.
Cylinder (liner): Silver steel, ground and lapped.
Piston: Brico cast iron, ground and lapped.
Contra-piston: Brico cast iron, ground and lapped.
Crankshaft: high tensile steel.
Connecting rod: Hiduminium RR.56.
Bearings: rear, Ransom & Marles $\frac{3}{8}$ in. ball race front, press-fitted Brico cast iron sleeve.
Cylinder jacket: turned dural.
Back cover: turned dural.
Propeller driver: turned dural.

PROPELLER—R.P.M. FIGURES

Propeller dia. × pitch	r.p.m.
9 × 3 (Tiger)	11,500
8 × 4 (Tiger)	14,200
8 × 3 $\frac{1}{2}$ (Tiger)	15,000
6 × 9 (Tiger)	14,500
9 × 4 (Stant)	10,300
8 × 6 (Stant)	10,900
8 × 5 (Stant)	12,400
7 × 6 (Stant)	13,600
7 × 4 (Stant)	15,000
7 × 3 (Trucut)	16,400
7 × 4 (Trucut)	15,400
7 × 9 (Trucut)	10,400
8 × 4 (Trucut)	13,500
8 × 6 (Trucut)	10,200
8 × 8 (Trucut)	8,200
8 × 10 (Trucut)	7,700
9 × 4 (Trucut)	10,900
10 × 4 (Trucut)	7,900

Fuel used: Mercury No. 8.



Some beautifully benign days during February with little or no wind, perfect for local park flying & very small models - probably OK on Area 8 of SP but I can't recall whether weekends were included in this good weather! If so, I hope a few stalwarts got there & enjoyed excellent conditions. Some of the Crookham guys certainly went to Chobham Common for trimming sessions. Now the Area meetings loom on the near horizon, note that Storm Otto is wreaking havoc in the north of the country & no doubt after effects will ripple all the way south? Such is life.

Failed dismally to conquer the BMFA Competition entry website when attempting to put the Indoor details on for Totton meetings so I gave up & can only conclude at some stage the wrong key was pressed. Fortunately Ray Elliott is made of sterner material & has posted details of the Croydon Club/SAM1066 days on the site. For completeness there is a short ad at the back of this month's NC for the Easter meeting. Colerne remains undetermined, with no decision forthcoming yet. Worst case, if permission is not granted to the South Bristol Club, I guess we have the fallback option of making Area 8 the venue - has anyone any views on this?

Other than that, very little activity other than bringing a Robin Kimber Sunnavind back to life. All that needs doing is to decide whether to stick with the installed Tomy timer or put something else on board - e.g. a Dens Models little electronic timer. Whatever - it will be fine for bungee launch fun & will join the two scaled down Corsairs.

A brief whinge.

No doubt you all have diligently read the three page article in the most recent BMFA News on the latest drone rules & fully understood it. There is naturally zero mention of free flight. Of course you could have alternatively pulled down the 145 page updated CAP722 (December 2022) & read that instead & got really confused! Just consider the CAA definition of a model aircraft within this tome:

"The CAA has adopted the following two definitions:

Model Aircraft - *An UA (unmanned air vehicle) used for sporting & recreational purposes, flown by direct control inputs made by the RP (remote pilot?) without any autonomous capability other than for flight stabilisation purposes.*

Large Model Aircraft - *A model aircraft with a maximum take-off mass greater than 25 kg."*

That's it! These definitions - to my mind - do not cover a free flight model? Furthermore, as an example direct control devices (e.g. a radio transmitter) have no intermediary; the movement of the body equals the input to the machine e.g. push the throttle stick control.

Pity the poor young teenager who has just purchased a clever drone or an expensive ready to fly RC model via his parents & has now to assimilate all the information contained in CAP 722, then pass a test that he never knew existed, before he can take to the air. Will it ever happen? Will he be informed that rules do exist & have to be obeyed? Fortunately if he is told about the BMFA website, it does have a most concise & helpful section of information on all this stuff & indeed includes coverage of free flight - for clarity of our membership that specific section is repeated here:

A free flight model aircraft cannot be remotely piloted and does not have software or systems for autonomous control of the flight path. A flight termination device may be fitted. The aircraft trim is adjusted prior to flight. The aircraft is trimmed (and fuelled if applicable) with the intent that it will follow a substantially circular path relative to the air and ultimately glide to a low velocity landing.

A free-flight unmanned aircraft will drift relative to the user depending upon the speed and direction of the wind.

The person in charge of the free-flight unmanned aircraft is deemed to be the remote pilot for the purposes of this authorisation.

Some specific requirements for free flight have been included within our Authorisation. Most of these requirements are not new and generally reflect the requirements of the existing law (and how it should have been being applied already):

Prior to launching their aircraft, the remote pilot should take into account the expected performance of the aircraft, the weather conditions and the availability of any flight termination device and must be reasonably satisfied that the expected flight path will not infringe an FRZ (unless prior permission has been obtained) or other airspace restriction.

The operation of a free flight model aircraft must only be carried out within the limits of our Authorisation (or alternatively within the requirements of the Open Category, especially for those aircraft with an MTOM of less than 250g).

A free flight model should not be deliberately flown beyond visual line of sight.

A free flight model aircraft must only be launched:

From an area free from uninvolved persons (*Uninvolved persons are those who are not participating in the UAS operation or who are not aware of the instructions and safety precautions given by the UAS operator*).

When the remote pilot has identified an area (the 'flight volume') within which they believe the aircraft will remain.

When the remote pilot is reasonably satisfied that the aircraft will remain within the flight volume.

When the remote pilot is reasonably satisfied at the point of launch that no uninvolved persons will enter the flight volume and be endangered.

Within the terms of our Authorisation, the Operator/Remote Pilot of any free flight aircraft with an MTOM of less than 250g which is likely to operate at a height above 400ft, must be registered as an Operator and have evidence of Competency (such as passing the BMFA online test)."

For those of you who fly models of under 250 grams competitively & thought you were exempt from registering as an Operator, the sting is potentially in the last para (highlighted) with the height limitation statement & the word "likely" - think about it very carefully. You can choose to fly under the BMFA negotiated Article 16 protection as defined i.e. take the test & register or opt for the Open category of CAP722 if you can understand it & ignore the test & registration! On the plus side, there is unlikely to be an unfriendly policeman who knows the law backwards lurking where we generally fly!

Why do I carp on about a this - as you are well aware we are a diminishing bunch & generally get ignored as we make up a significantly small percentage of the BMFA membership. However, it is worth remembering that free flight & the SMAE were synonymous with the growth of the hobby in early days & reminding people of that simple fact from time to time. Without us & our forefathers there would not have been a BMFA. And it's worthwhile also reminding you all that these regulations - like it or not, now unfortunately set out the rules on what, where & how we can or cannot be legally allowed to fly free flight. Nuff said.

On to a more interesting topic.

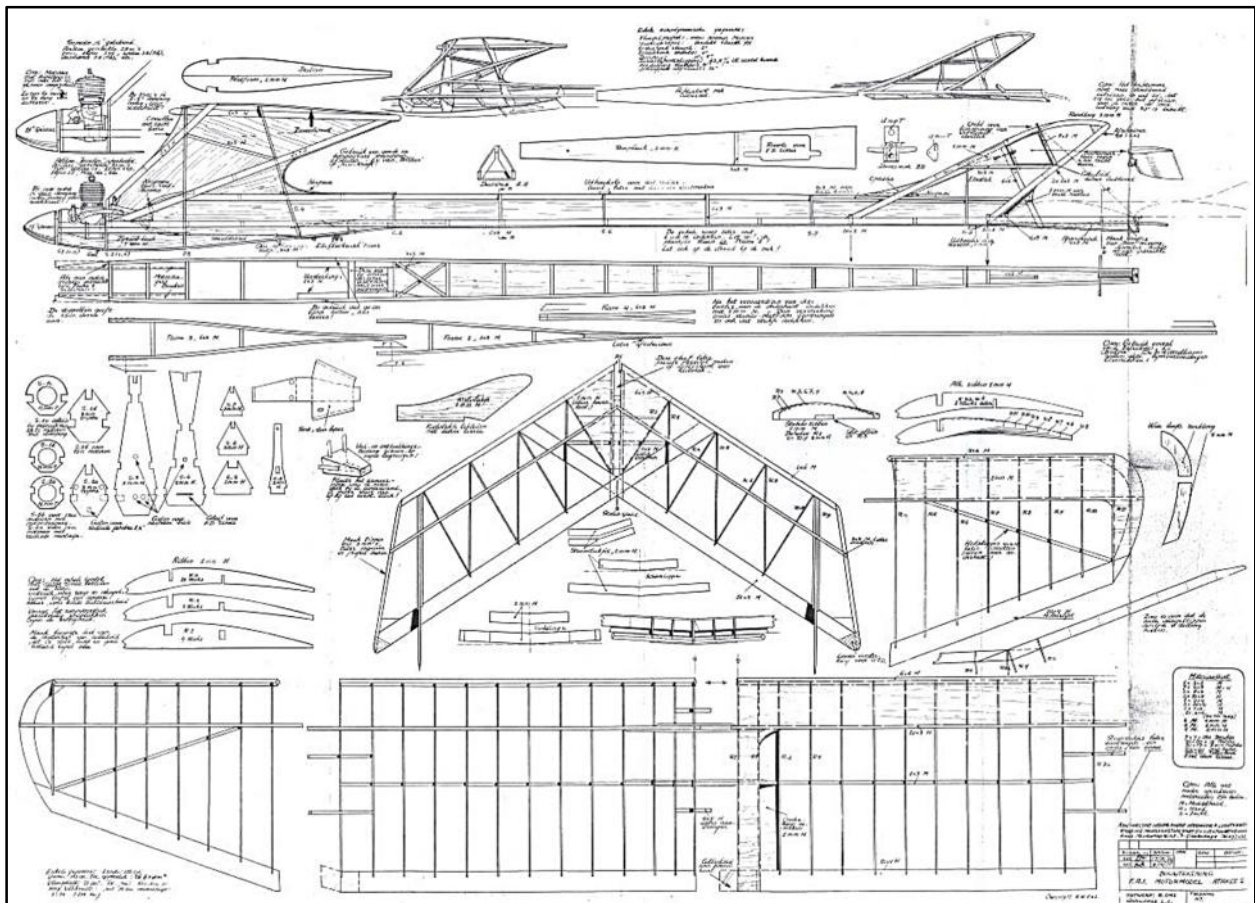
Whilst giving the car its annual going over, I came across a CD marked "Dutch". From where it came, I haven't a clue but being venturesome it got stuck in the PC & duly opened. So if anyone gave it to me or deposited it in the car at any of our meetings, my apologies for not mentioning it before now. There are lots of files with suffixes that I do not understand & could not open but there was one set of jpg files which did open. They revealed indeed it was of Dutch origin & held numerous pictures & plans of models from Holland in the 20's to the 50's.

This month's plan choice is therefore picked off the CD, along with a few pictures that may be of interest.

The power model selected - Atakee - I remembered. It was published in the Feb 1955 *Aeromodeller* & I vaguely recalled a photo that had multiple models shown. So it was unearthed & here it is.

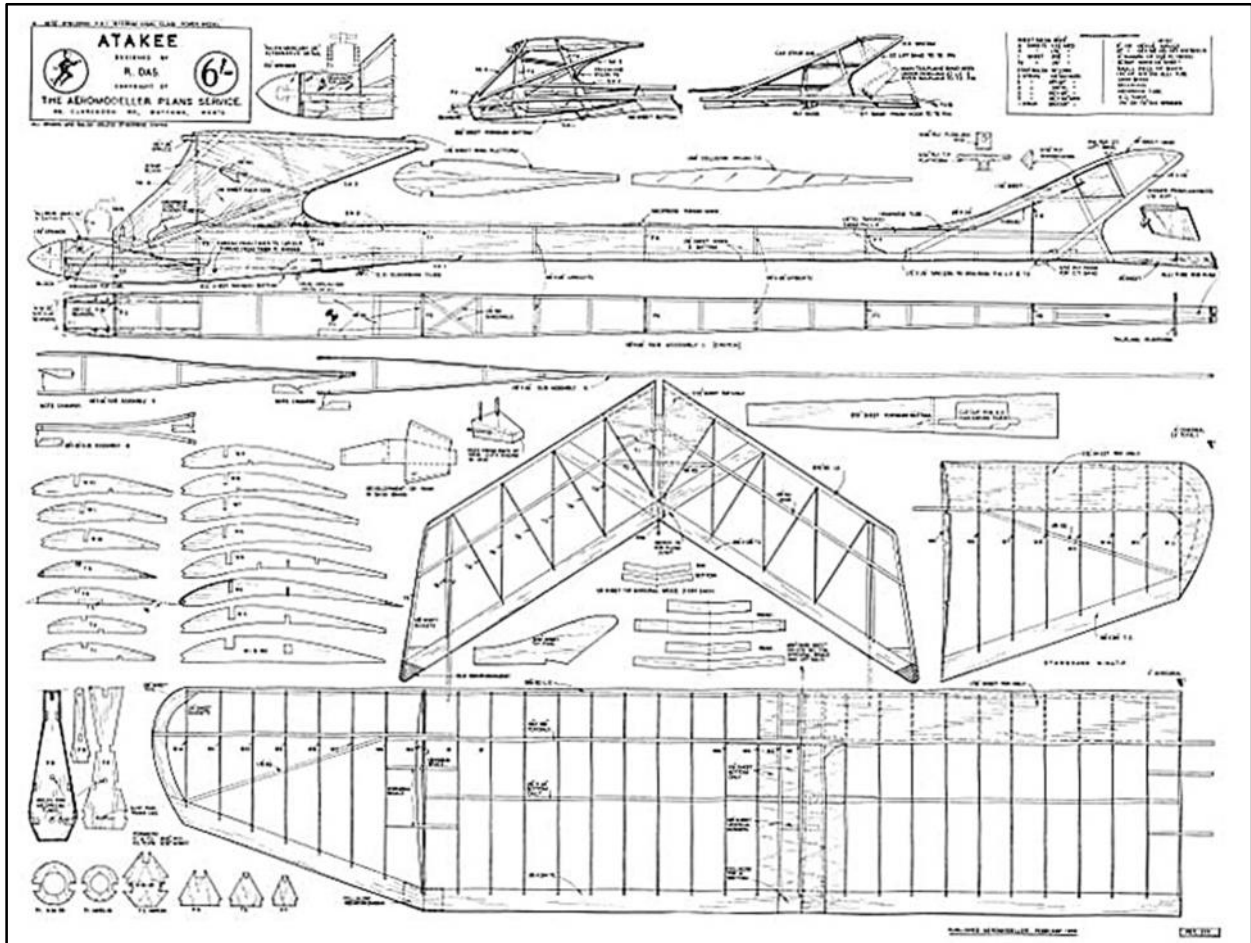


The interesting bit is that the plan on the CD looks to have been the basis of the *Aeromodeller* plan in that it predates the *Aeromodeller* publication date but is called Atakee-2 - different layout & detail & choices of power.



The original Atakee-2

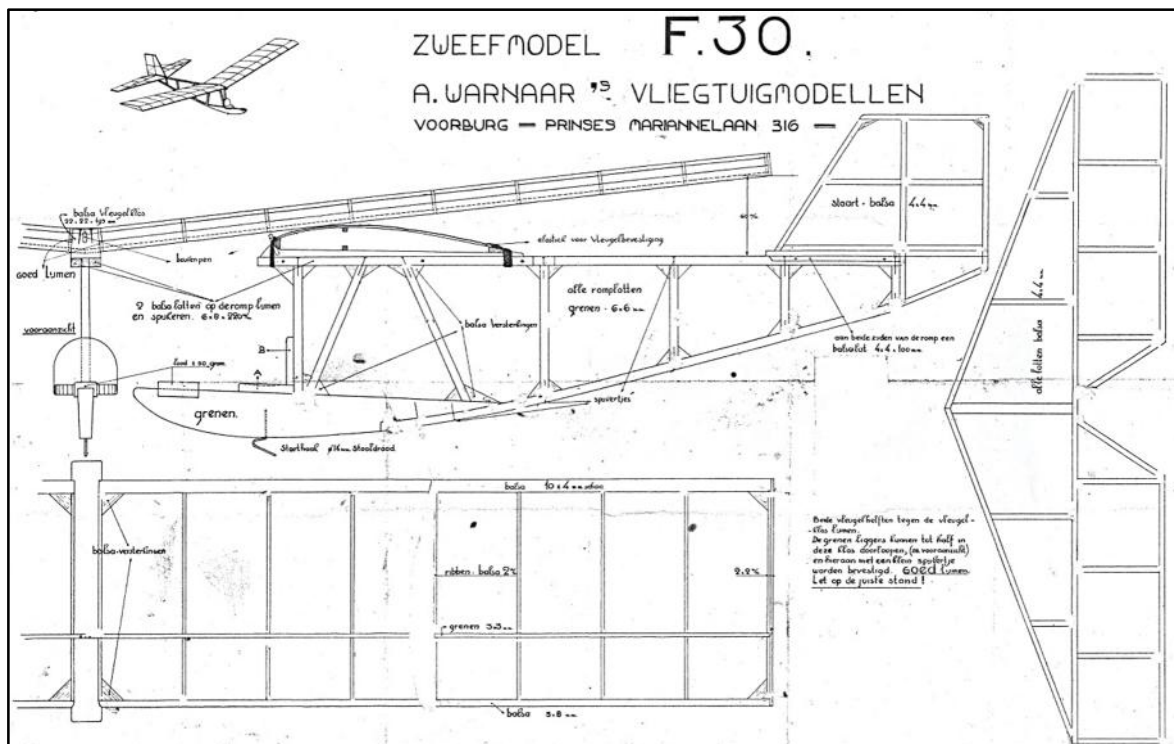
The Dutch one shows two alternatives - one set based on 1.5cc motors with an Albon Javelin pictured & the other on 2.5cc motors including a K&B Torpedo 15, or an Elfin 2.49 or a Webra Mach 1 2.5!



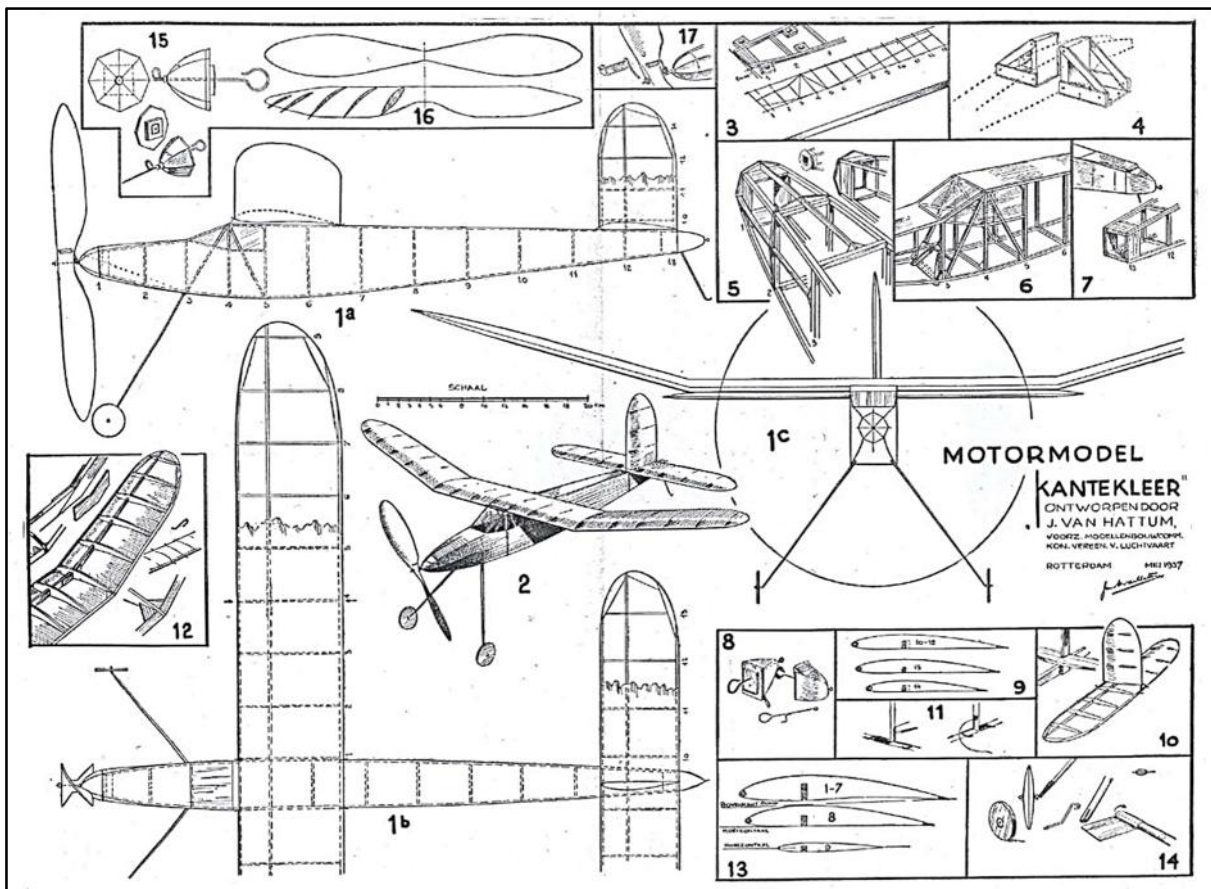
Aeromodeller Atakee

The Aeromodeller version shows the diesel version of the Javelin & an AM 25 as an alternative. Now the span is only $45\frac{1}{2}$ " so with a 2.5 cc whatever, the model would have been pretty hairy in those days!

Did anyone ever see an Atakee in flight I wonder & if so, how did it perform? Both versions are shown.



The glider is a potential for bungee - scaling it to size would result in something like 40" span model. Named as "Zweefmodel" which (according to Google translate) is "Floating Model" or "Gliding model" as an alternative. It has some appeal (to me) & could well result being placed on the never diminishing build list of future models. But no date.



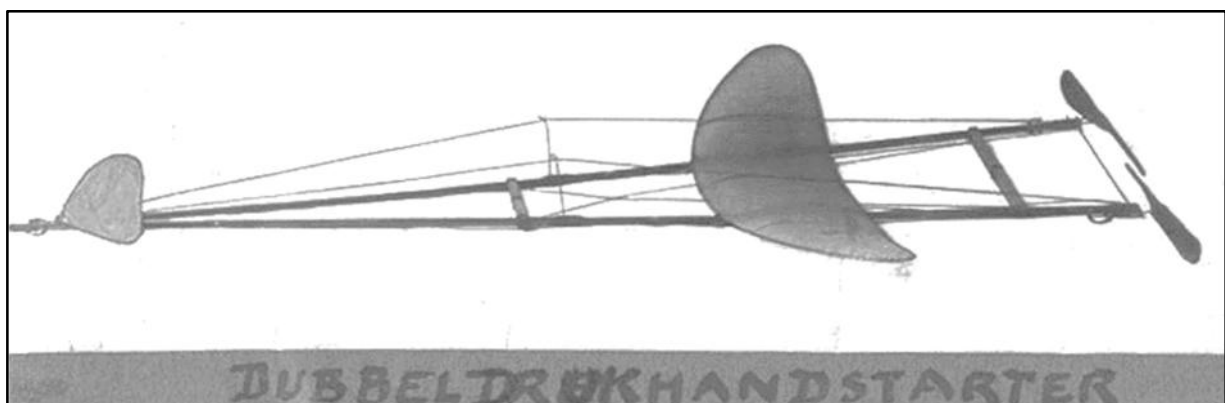
Kantekleer

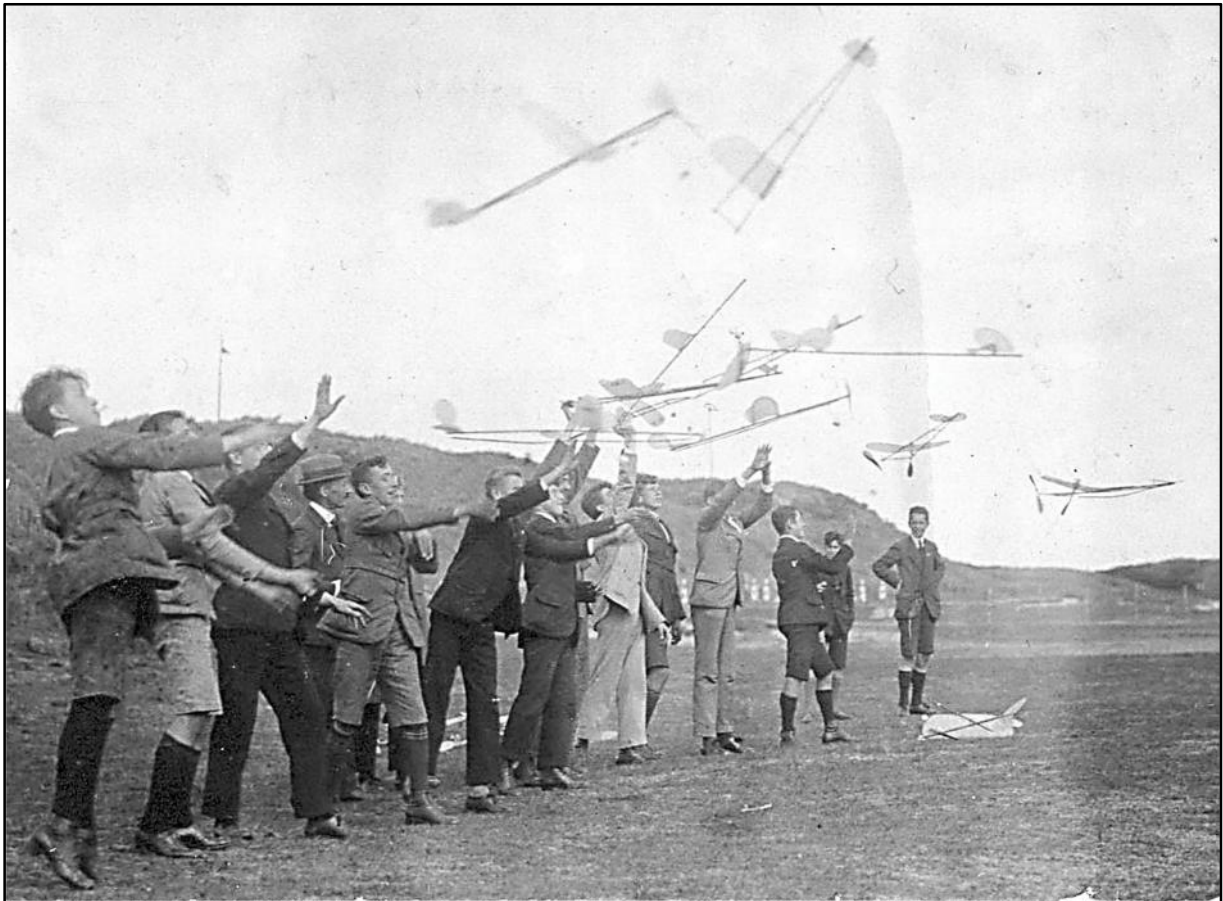
The rubber powered model is a 1937 design by Juste van Hattum - Kantekleer & looks very representative of that era. Van Hattum was a member of the SMAE & very active in aeromodelling circles in both Holland & the UK. No doubt there are others far more knowledgeable than me who can provide further information, I think he wrote several articles for the *Aeromodeller*.

When (if?) I get the time & inclination, the files should be listed & copies made as there are over 200 separate images of models/plans & a further 100+ photos - problem is as with lots of photos, annotations are few & far between.

Note: that of these plans only the Atakee (*Aeromodeller* version) is in our plan library.

A few of the pictures





WEDSTRISD HPVC 1921



DEM: HPVC 1915





That's all for this month.

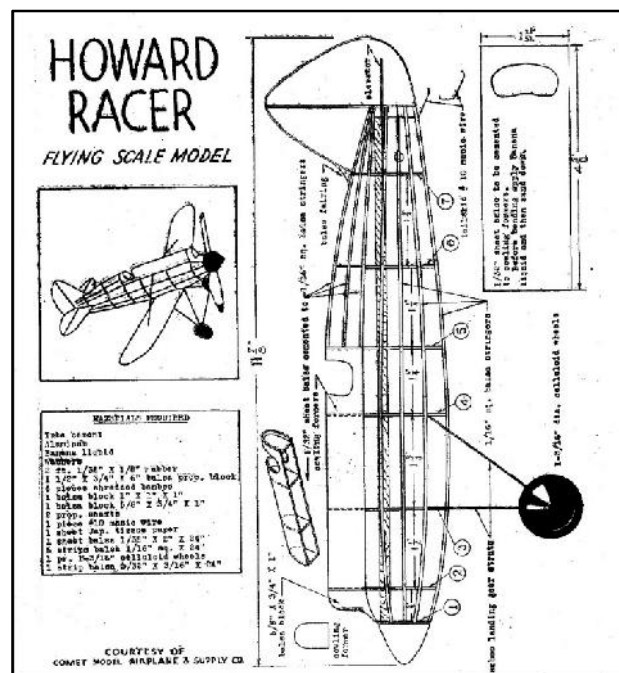
Roger Newman

The DBHLibrary (Magazines)

Roy Tiller

Report No. 145 Our earliest magazines, continued.

Still in the U.S.A. we come next to *Flying Aces*, first published in October 1928 and according to legend that first issue was identified as "VOL. 1, No. 2". This magazine continued in publication until April 1944, unfortunately we have paper copies of only about 50 of the 150 plus issues, and I have not found any source for digital copies. Our last copy is that of January 1944 which is identified as "VOL. 46, No. 2"! Just concurrent with *Flying Aces* was the 1943 to 1944 magazine *Air Age* which changed its name to *Aircraft Age* and then in 1945 to *Air World with Aircraft Age* and finally *Air World, Americas Magazine of Model Aviation*. Next came *Flying Models* magazine, launched in 1947 and by the end of 1948 had absorbed all the previously mentioned covers.

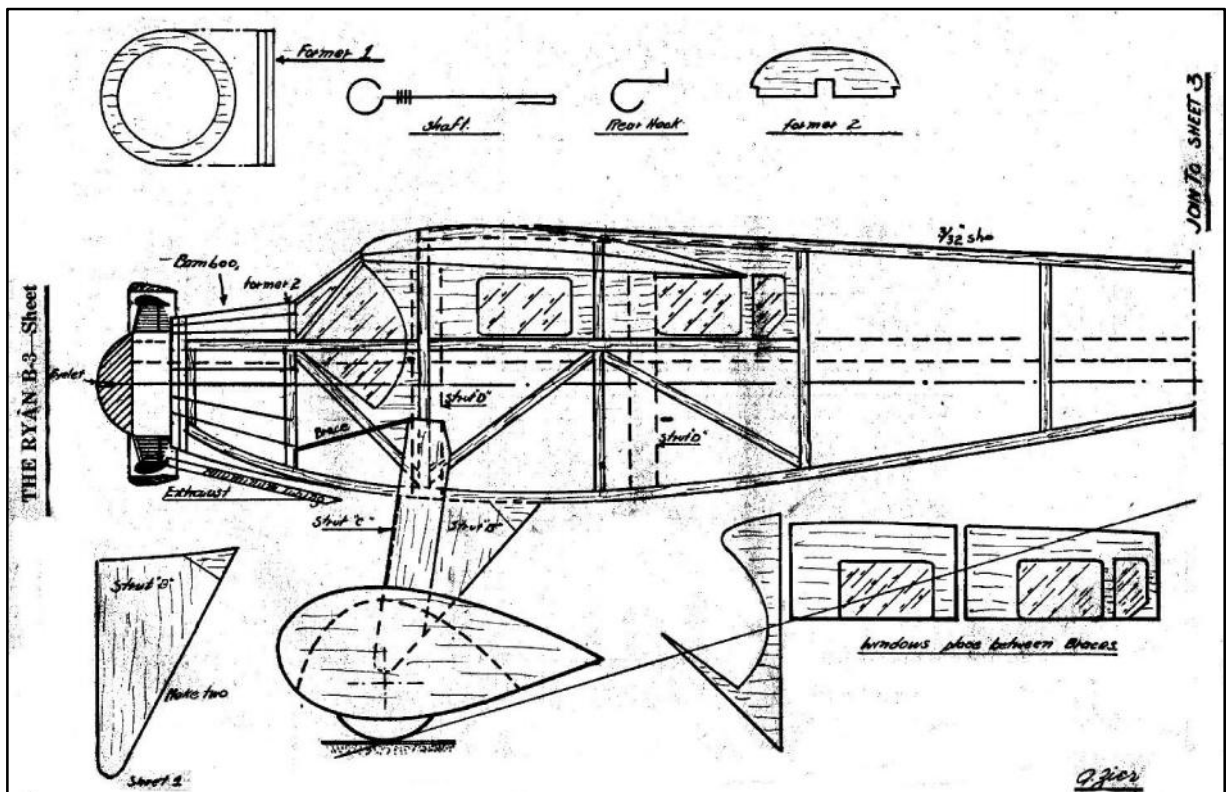


The earliest items that we have from *Flying Aces* are a plan removed from the March 1933 issue and another from a 1933 issue with no clues as to the month. These were sent to David Baker in 1987 with a covering letter explaining that they came from the writer's scrap book. The page size of the magazine at this time was approximately 6" by 10" and the drawings, "Courtesy of Comet Model Airplane & Supply Co," were printed at less than half size. The plans complete with parts list and building instructions were spread over three pages and offered as "Flying Scale Model Plans". The featured models were the "Curtiss Robin" at 17 1/2" span and the "Howard Racer "at 14" span.



The earliest near-complete *Flying Aces* magazine in the library is the issue of January 1934 "VOLUME XVI, NUMBER 3." Near-complete because the covers and possibly a few more pages are missing. The page size has now increased to 8 1/2" by 11 1/2". Two thirds of the content is reports on full size aircraft and tales of derring-do with the remainder devoted to model aircraft. It was upon flicking through the first 50 plus pages that I came across a full colour insert which looks as though it was cut from the front cover, as the reverse carries part of an advertisement for model airplane kits. The page size makes full-size plans possible and in this issue are to be found two detailed plans each spread over four pages plus building and flying instructions.

The "Ryan R3" 19" wingspan rubber powered scale model by Avrum Zier is said to represent "the latest version of Lindberg's "Spirit of Saint Louis"--with the addition of pants and an anti-drag ring."



Both features can be seen on the drawing above, the pants smoothing the airflow around the landing wheels rather than the pilot's legs and the anti-drag ring doing the same job around the engine cylinder heads despite the confusion the term seemed to cause for "Spelling & Grammar" which perhaps thinks that we are referring to a drug ring.

The 23" wing span rubber powered "Flying Aces Navy Pursuit" by Julius Unrath was designed not as a scale or even semi-scale model as it does not have a pilot's cockpit and Flying Aces did not have a Navy, no, this was designed for flying performance, just read the words below the pictures.

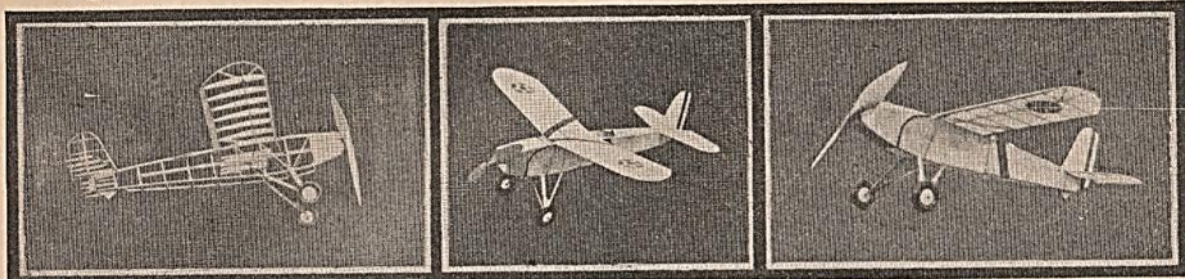
Our earliest issue with a complete cover is that of June 1935, VOLUME XX, NUMBER 3 which claims to be "Three Magazines in One, Fiction, Fact, Model Building". The potential purchaser may have been tempted by the two model plans mentioned on the cover, but "buyer beware!"

The Curtiss XF13C-1 plan is spread over six pages plus a page of instructions. At a first glance at the fuselage side-view I wondered if it was a square box section of 1/16" sheet balsa. It certainly is not, it is carved from two blocks of balsa, each 1 1/4" X 3" X 13" tack glued together. The outside is carved to the shape of the side view, the top view and the cross-section templates. The halves are then split apart and hollowed out to 1/32" thickness at the rear and 1/16" at the front. The thickness is to be

judged by holding the fuselage up to the light.



Fly the Flying Aces Navy Pursuit!

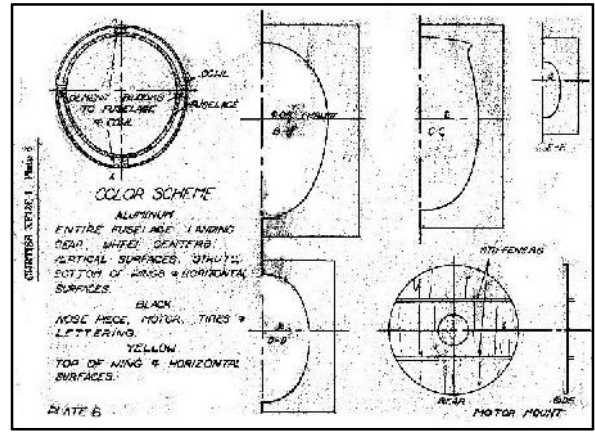
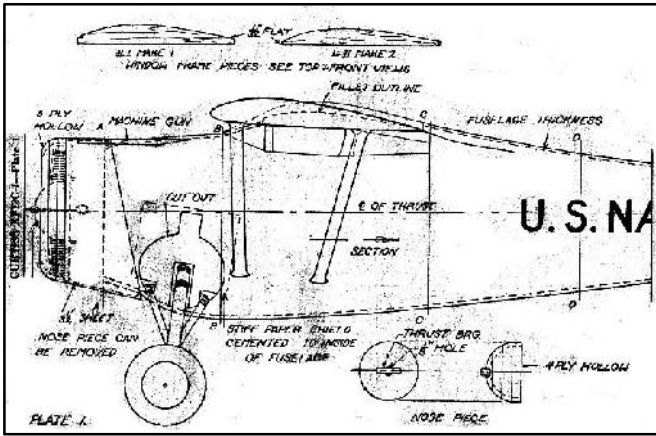


"Look at that model climb!" If you model enthusiasts want to hear those words, take a look at the plans and instructions printed here for the Flying Aces Navy Pursuit, build the ship—and then watch it fly! It's a real pursuit plane, and takes off in from six to eight inches, by actual test.

o o o

By Julius Unrath

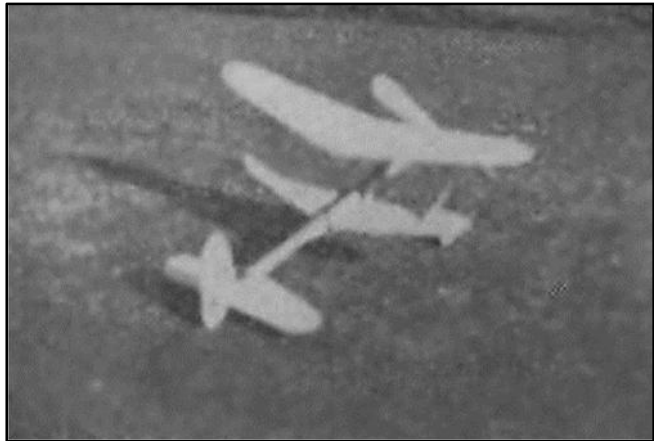
A display model should be painted but a model intended for flying should not. Even with that advice it seems unlikely that much flying performance would be achieved by powering the 6 1/2" dia. propeller with the recommended two loops of 1/16" square rubber.



The "Douglas O-38" plan is for an 8" span display model, but there is a third plan which, with one days effort, should produce a satisfactory flying model, the "All-Balsa Biplane R.O.G." by Julius Unrath.

**Attention,
Model Builders!**

FLYING ACES wants plans and directions for building flying scale models of the latest modern planes. In order to be printed in this magazine, drawings must be done in India ink, and must fit a 7 x 10-inch page. Plans should not exceed six pages. Photographs of completed models must accompany plans. Send in your work, model builders, and get it printed!

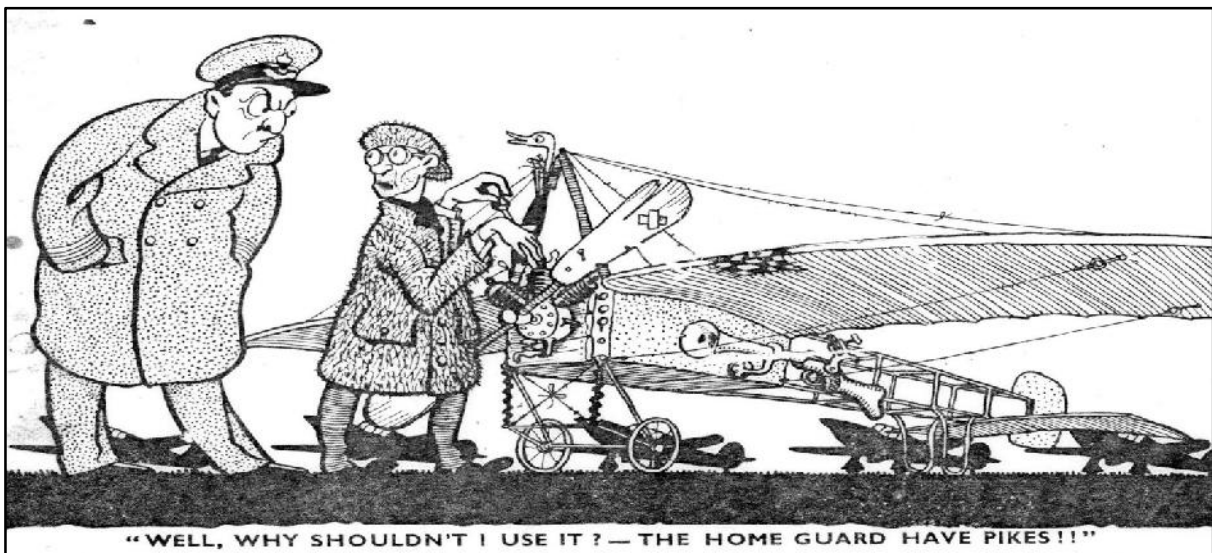


A rear view of this unusual biplane R.O.G. You'll find it a good flyer!

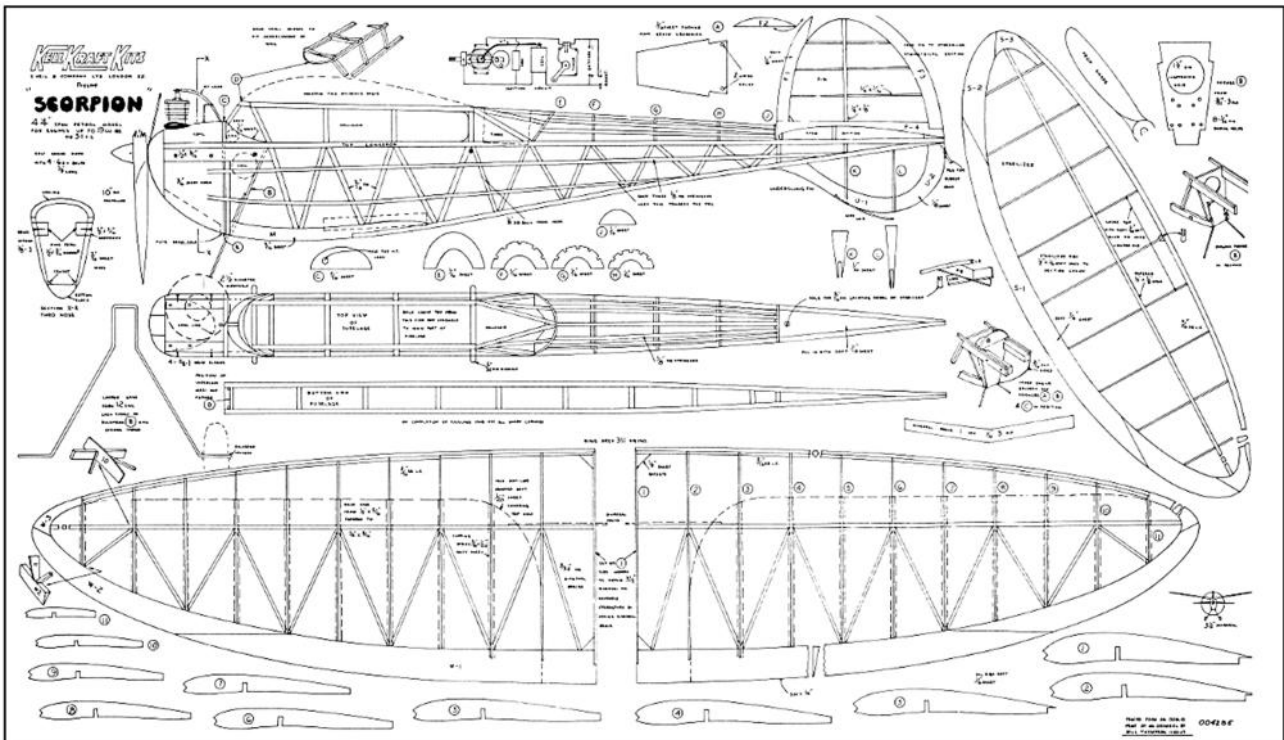
The appeal for plans merely offered the honour of seeing one's plan "printed", perhaps a few \$\$\$ would have proved more effective.

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

Roy Tiller



"WELL, WHY SHOULDN'T I USE IT? — THE HOME GUARD HAVE PIKES!!"



This is the plan of the 44" version

I have had a change of mind and would like to sell a plan of the Keil Kraft Scorpion 66 which I have had enlarged to 72".

I had planned on using an OS 25 but realised on seeing the plan it would need a 40 size engine. I also realised that the model would be a little too large a project for this aging modeller.

You can view the plan of the 66" version > www.rcgroup.com kk scorpion66 rc.

The plan measured 76" long x 44" wide and was posted in a large brown tube as one huge single drawing.

Costs which included.

Plan £18.50

P/P £ 10.00

Total £28.50

If any member would like to build the model I would like £25.00 for the plan.

Please call me for more information.

Email barry.mourant@btinternet.com

Tel : 01483 574765

Barry Mourant

L'AQUILONE SAM 2001

TOMBOY RALLY INTERNATIONAL POSTAL CONTEST

01/07/2022 - 30/06/2023

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

Model

- The 36" or 44" wing span (as per plan Aeromodeller) and 48" (as per Boddington plan or 36" scaled-up) models are admitted;
- Models may be fitted with floats as per plan (scaled-up for 48" version);
- no minimum weight;
- reinforcement or lightening of the structure with respect of the basic outline of the original model are admitted;
- materials to be used are those found on the plan;
- plastic covering in place of tissue, silk or other is admitted.
- More than one person can use same model;
- Same model can flight in L.G. or float version;
- Lone fliers can self launch and time

Engine/motors

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

36"-44" WINGSPAN

I.C. Engines:

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

Electric Motors:

- Any electric motor is admitted with direct drive
- The engine cannot be stopped and started again: the motor must run continually without interruptions till the end of the battery charge or competitor's decision;
- no folding prop is admitted; if a folding prop is used the blades must be held open with a rubber band;
- freely assembled admitted batteries:
- -450 Mah 2 cell LiPo
- separated batteries pack for Rx alimentation is allowed

48" WINGSPAN

I.C. Engines:

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

Electric Motors:

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

Flights and results

- Each competitor may fly as many flights as wished during the admitted period but only the best flight will be considered for the final result.

- Hand launches are admitted.

- The flight time start when the model is released or takes off. The flight time ends when the model lands or hits a fixed obstacle. In case the model flies out of sight the timekeeper will time for 10 seconds after losing sight of the model. Timing will continue if model is seen again or stopped after 10" deducting this time from the total time of the flight.

Awards :

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

Results

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

SPECIAL PRIZE VIC SMEED

SAM 2001 have scheduled an extra Diploma that will be awarded to the best flight in Tomboy floatplane version (36", 44" or 48") taking off from water. The Editor will send to the winner a Diploma signed By SAM 2001 President and a bottle of special Italian Wine to drink to Vic Smeed!

Good ROW and flight

SPECIAL PRIZE DAVID BAKER

The 2012 was the 5th edition of SAM 2001 Tomboy Rally and we have scheduled a special prize for the three best

flights obtained with 36" Tomboy F/F. Only engines diesel max 0.75 c.c. shall be used. The other rules are the same for 36" or 44" wingspan type. It is possible to use a R/C Tomboy, however, being this a free-flight contest, the time must be stopped when transmitter is used, since the aircraft model should fly freely from any control

from the ground.

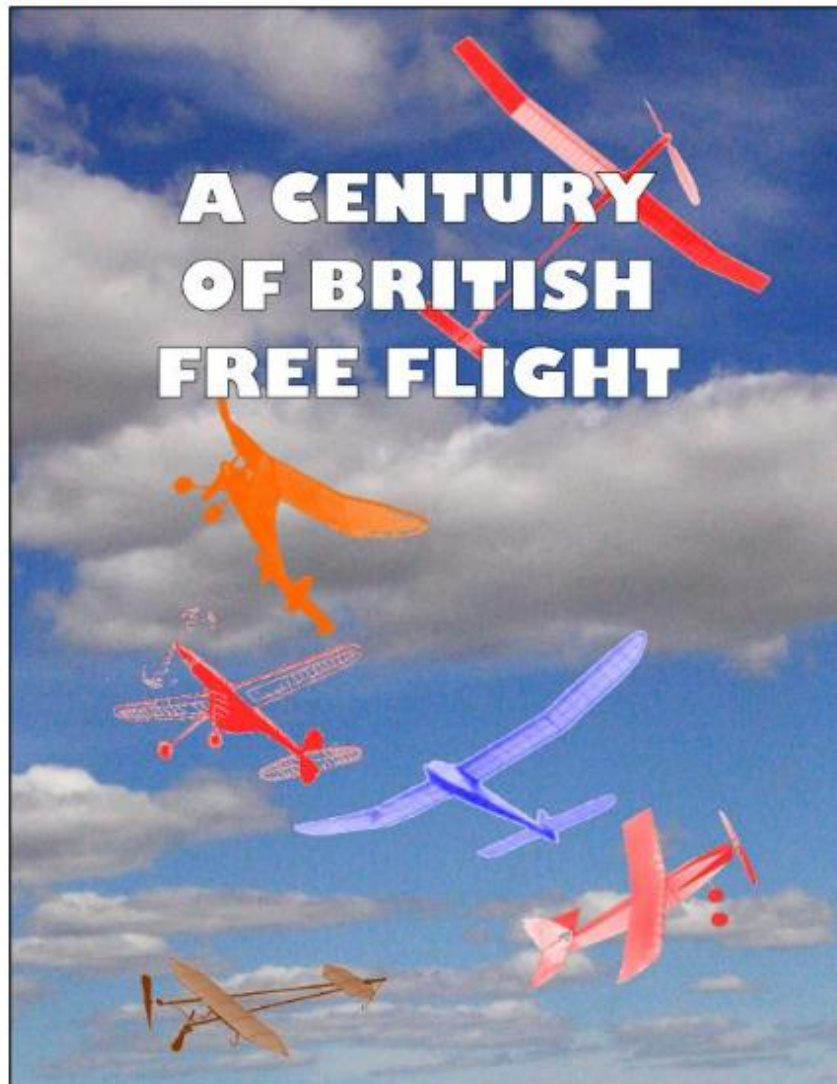
Good thermals

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 0QW
or by phone: (44) + (0)20-8777-5533,
or by e-mail to martindilly20@gmail.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

Southern Coupe League

Programme for 2023

The country may be on its knees but the S.C.L. is in rude health and will stride boldly into the new season offering a rich and challenging programme. These are the confirmed events so far and we intend to include all the season's Coupe events in the League. You may wonder then why we do not change the name to the 'National Coupe League'. It is a peculiarly British trait to retain and celebrate the obsolete and look with suspicion on the new-fangled. The first event will be La Grande Coupe de Birmingham on either the 18th or 19th February depending on the weather. at North Luffenham. The date will be publicized as soon as a reliable weather forecast is available. Assuming ten events, your five best scores will count.

18 or 19 February	Coupe de Brum	North Luffenham
12 March	2nd Area	Area venues
30 April	London Gala	Salisbury Plain
7 May	Crookham Gala	Salisbury Plain
29 May	Nationals Small Classes	North Luffenham
9 July	5th Area	Area venues
20 August	Southern Gala	Salisbury Plain
8 October	Coupe Europa	Salisbury Plain

Petit Classique de Brum

MOD North Luffenham, 16th April 2023

A relaxed day out – or will we be April Fools?

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: -

April is traditionally a bit showery, so much so that they write songs about it.

If the forecast is for VERY INCLEMENT weather, then WE WILL POSTPONE the event to the alternate date of 23rd April.

To avoid an unnecessary journey if you think you'll be there PLEASE TELL GAVIN MANION BY EMAIL. The decision whether we go ahead will be notified by email by the evening of Thursday 13th April.

Gavin Manion - gavin.manion84@gmail.com
Stu Darmon - stuardarmonf1a@yahoo.com
tel 01858 882057

THE CROOKHAM GALA 2023

will be held on Sunday 7th May
on Salisbury Plain Area 8

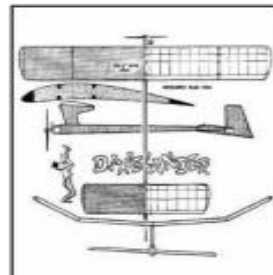
EVENTS

Modern And Vintage Coupe combined
(3 flights only. Prize for best vintage score)

Combined Glider: Mini Vintage: E36:

COMBINED POWER

(Including George Fuller Trophy
for best placed Dixielander)



PRIZES FOR ALL CLASSES

Comps Start: 10.00am Finish 5.00pm

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

Croydon Wakefield Day *+SAM 1066 Day*

Monday 10th April 2023



Area 8 of Salisbury Plain
10.00am – 5.00pm

Croydon Club Competitions
4oz Wake
8oz Wake
F1B (in rounds)
Marcus Lightweights
P30

SAM 1066 Club Competitions
Vintage / Classic Glider
Mini-Vintage

Classic A1 Email International 2023

The second 'official' postal contest for Classic A1 gliders will run from June 1st to December 31st 2023. Top three individuals plus top team of up to three flyers will be awarded engraved glass trophies, and thanks to the generosity of Peter Brown, once again the winner receives a complete stand-alone RDT system.

Eligible models

A Classic A1 is any towline glider of total area not exceeding 18 sq. DM (279 sq. in.), built to a design published or kitted between January 1951 and January 1961.

N.B the 'Ghost', 'Top Kick' and 'Lil' Dip' will be considered eligible for this year's event.

There is no minimum weight requirement. Any form of dethermaliser may be fitted.

Towline

50 metres (164 ft.) maximum. Alternatively launching may be via a 'bungee' containing no more than 20m. of rubber and not exceeding 50 m. relaxed length, anchored to the ground (provided the whole flight is over substantially level ground).

Scoring

All flights for each entry must be made on the same day, using the same model. An individual may make up to three entries, so long as a different model is used for each. Flights must be timed by a person other than the entrant.

The max for the first flight is 30 seconds. If this is achieved, the entrant may make a second flight, of max 60 seconds and so on, the max increasing by 30 seconds each time until a max is not achieved (or flying cannot continue, e.g. because the model is lost or damaged). The total score for each entry is the sum of all flights, including the last sub-max. This should be submitted in the form of an addition, e.g.

$30+60+90+112 = 292$

Entry

Entry is free of charge. Score should be submitted to

stuardarmonf1a@yahoo.com

or by post to **Stuart Darmon, 1 Post Office Cottages, Main Street, Theddingworth, Leicestershire LE176QP, United Kingdom**

to arrive no later than January 10 2024. Please include your name, the name of your timekeeper, the design you flew, and the location of your flights. Additional information and photos would be most welcome.

SWAPMEET

Derby Aero Models Flying Club

Sunday 16 April 2023

at

**West Hallam Community centre, Station Rd,
West Hallam, Ilkeston DE7 6HP**

**Doors Open: 8.00 Traders, 9.00 Public
Finish @ 16.00**

Indoor Fly-In (micro RC & FF) 16.00 to 20.00

Entry:	Table	£5 (Booking Required)
	Own Table	£3
	Public	£2 (Partners and children Free)
	Fly-In	£2.00

Refreshments available

Contact Mick Lawson

Email: dickybird1@hotmail.com, Tel 07739584913

Waltham Chase Indoor FF

at

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

Waltham Chase Aeromodellers are pleased to announce the dates for indoor for 2023 up to the summer break are as follows:

2023

**05/01, 19/01, - 02/02, 16/02, - 02/03, 16/03, 30/03,
13/04, 27/04, - 11/05, 25/05, - 08/06, 22/06.**

Should we be required to cancel an event due to unforeseen circumstances, an extra event will be added to the end of the season.

All events will be held in the Main Hall, Wickham Community Centre, from 7 p.m. to 9.30 p.m. There is no need to book a slot for these events, and there will be no attendance limits.

Admission to events will be **£5** for adult fliers and **£1** for junior fliers (parents of junior fliers will be admitted free) and adult spectators

Fliers at these events must have proof of insurance for 2023 (BMFA membership or equivalent).

All indoor F/F fliers are welcome to attend these events.

Contact: Alan Wallington indoor@wcaero.bmfa.club

Bloxwich Indoor Flyers

**Free Flight & lightweight RC
Sneyd Community School**

Vernon Way, Sneyd Lane,

Bloxwich, WS3 2PA

Saturdays 1pm until 4pm

Flyers - £8 Spectators £2

2023 dates

Jan 21st - Feb 25th - Mar 25th

Apl 15th - May 20th

Contact:-

Peter Thompson: peter.thompson7408@gmail.com

The success and costs of these fixtures will be dependant on attendances.

If a regular group of flyers can be established we can move forward

If not then they will have to be cancelled.

Indoors in Wales

At

**Canolfan Hamdden Plas Leisure Centre
Coetmore New Road, Bethesda LL57 3DT**

Free Flight rubber and Small electric RC, Scale,
small helis and small quads etc.

Sundays 1.00pm til 4.00pm

2022

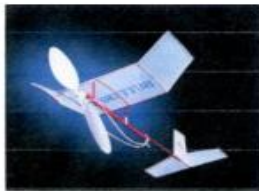
Oct 2nd - Nov 6th - Dec 4th

2023

Jan 8th - Feb 5th - Mar 5th

Contact:

Martin Pike: martin.pike.xray@btinternet.com



**Flitehook
Indoor
Free Flight**



West Totton Community Centre SO40 8WU

2023 Winter/Spring Dates:

Weds: 18th Jan; 15th Feb; 15th Mar; 19th Apr;

12.00 noon - 4.00 pm

BMFA Membership mandatory

£8 per session

Spectators & Juniors are free of charge

Easy access; Cafe; Toilets; Parking

Flitehook Sales Table

Any queries

email rogerknewman@yahoo.com or phone 02392 550809

Supported by Southern Area BMFA



Peterborough Model Flying Club

Free Flight Indoor Flying

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

Car Park on site.

Contacts Brian Waterland 07717461000
or Martin Skinner 07774863008.

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

Dates

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

FREE FLIGHT SUPPLIES

MICHAEL J. WOODHOUSE

12 MARSTON LANE, EATON, NORWICH
NORFOLK, NR4 6LZ, U.K.

Tel/Fax: (01603) 457754 International Tel +44-1603-457754

e-mail: mike@freeflightsupplies.co.uk.

Web site: <http://www.freeflightsupplies.co.uk>.

Face book <https://www.facebook.com/groups/266212470107073/>

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

ORDERS and PAYMENT

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

WESTERN UNION, PAYPAL

AVAILABLE

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

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

Dennis Davitt

I am downsizing my stock of model plans
They include all the KK Jet Fighter Series,
all for Jetex, and all quite small scale.

Included are

FiatG80, DH110, Panther, and Venom.

These I think are all quite rare now.

They are free except for an A4 size SAE.

dendavitt@gmail.com

E30/RDT/BMK/E20 Batteries

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

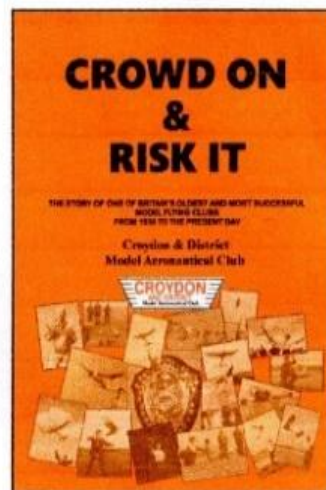
CROWD ON & RISK IT

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

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

Just £8 by PayPal or cheque.

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



DILLY JAP IS BACK

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

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

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

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

INDEPENDENT REVIEW OF DILLY JAPANESE TISSUE

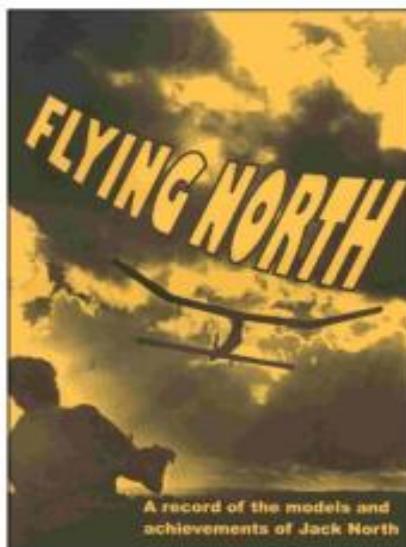
The following appeared on the Hip Pocket Aeronautics Builders' Forum. Nine different tissues were tested, doped and un-doped.

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

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

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

THIRD RE-PRINT JUST ARRIVED



FLYING NORTH

A goldmine for vintage and nostalgia model flyers -

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

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

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

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

Price £20.00 in the UK, £24 airmail to Europe and £30 elsewhere.

Contact Martin Dilly on +44 (0)208-7775533 or e-mail martindilly20@gmail.com



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

FREE FLIGHT FORUM REPORT 2021

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

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



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

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

FREE FLIGHT FORUM REPORTS OVERSTOCK SALE

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

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

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

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

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

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

Provisional Events Calendar 2023

With competitions for Vintage and/or Classic models

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

February 26 th	Sunday	BMFA 1st Area Competitions
March 12 th	Sunday	BMFA 2nd Area Competitions
March 26 th	Sunday	BMFA 3 rd Area Competitions
April 7 th	Good Friday	Northern Gala, Barkston
April 10 th	Easter Monday	Croydon Wakefield Day + SAM1066 , Salisbury Plain
April 29 th	Saturday	London Gala, Salisbury Plain
April 16 th	Sunday	Le Petit Classique de Brum, N Luffenham
April 30 th	Sunday	London Gala, Salisbury Plain
May 7 th	Sunday	Crookham Gala, Salisbury Plain
May 29 th	Sunday	FF Nationals, Mini , N Luffenham
June 3 rd	Saturday	FF Nationals , Salisbury Plain
June 4 th	Sunday	FF Nationals , Salisbury Plain
June 18 th	Sunday	BMFA 4 th Area Competitions
July 9 th	Sunday	BMFA 5 th Area Competitions
July 23 rd	Sunday	SAM1066 Cagnarata Day, RAF Colerne
July 29 th	Saturday	East Anglian Gala, Sculthorpe
July 30 th	Sunday	East Anglian Gala, Sculthorpe
August 20 th	Sunday	Southern Gala, Salisbury Plain
September 2 nd	Saturday	Stonehenge Cup, Salisbury Plain
September 3 rd	Sunday	Equinox Cup, Salisbury Plain
September 17 th	Sunday	BMFA 6 th Area Competitions
October 1 st	Sunday	BMFA 7 th Area Competitions
October 8 th	Sunday	Croydon Coupe Day + SAM1066 Salisbury Plain
October 15 th	Sunday	BMFA 8th Area Competitions
October 28 th	Saturday	Midland Gala, Venue, Barkston
November 5 th or 12 th	Sunday	Buckminster Gala, BMFA Centre

Dates for events are confirmed as: Croydon Wakefield Day 10th April; Crookham Gala 7th May; SAM 1066 Cagnarata Day RAF Colerne (provisional - subject to grant of licence) 23rd July; Croydon Coupe Day 8th Oct; There will be a couple of SAM 1066 events on both Croydon days. All on Area 8 of SP.

Please check before travelling to any of these events.

Access to MOD property can be withdrawn at very short notice!

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

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

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

Useful Websites

SAM 1066	-	www.sam1066.org
Mike Woodhouse	-	www.freeflightsupplies.co.uk
BMFA	-	www.bmfa.org
SAM 35	-	www.sam35.org
National Free Flight Society (USA)	-	www.freeflight.org
Ray Alban	-	www.vintagemodelairplane.com
Belair Kits	-	www.belairkits.com
Wessex Aeromodellers	-	www.wessexaml.co.uk
US SAM website	-	www.antiquemodeler.org
Peterborough MFC	-	www.peterboroughmfc.org
Outerzone -free plans	-	www.outerzone.co.uk
Vintage Radio Control	-	www.norcim-rc.club
Model Flying New Zealand	-	www.modelflyingnz.org
Raynes Park MAC	-	www.raynesparkmac.c1.biz
Sweden, Patrik Gertsson	-	www.modellvanner.se
Magazine downloads	-	www.rclibrary.co.uk
South Bristol MAC	-	www.southbristolmac.co.uk
Vintage Model Co.	-	www.vintagemodelcompany.com
John Andrews	-	www.johnandrewsaeromodeller.webs.com
Switzerland	-	www.gummimotor.ch

control/left click to go to sites

Are You Getting Yours? - Membership Secretary

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

P.S.

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

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

Your editor
John Andrews