

# **NEW Clarion** SAM 1066 Newsletter

Issue nc052023	
May 2023	

The Society of Antique Modellers Chapter 1066

## Affiliated to SAM 1066 Website:



# Club No. 2548

www.sam1066.org



Editor:- John Andrews 12 Reynolds Close Rugby CV21 4DD Tel: 01788 562632 Mobile 07929263602 e-mail johnhandrews@tiscali.co.uk

I Pad users: If you are having trouble opening the New Clarion, hold your finger on it to display a menu, then select "open in new tab". You will find the new tab to the right of the SAM1066 tab.

## Contents

## Page

Editorial	-	02
Sneyd Indoors	John Andrews	03
Topical Twists	Pylonius	05
My Models No.5	Martin Hurda (Czech Rebublic)	06
News Review	Model Aircraft March 1948	08
Indoor Isn't for Everyone No.64	Nick Peppiatt	09
Engine Analysis AM 15	Aeromodeller Annual 1958-59	12
Couprofile No.11: Roger Wilkes	Peter Hall	13
Heard at the Hangar Doors	Aeromodeller August 1956	19
The Wainfan FMX-4 Facetmobile	Wikipedia	21
Petit Classique de Brum	John Andrews	24
Model Dirigible	Joe Northrop	27
Petit Classique de Brum, CD's repoi	rt Gavin Manion	32
The DBHLibrary (Magazines)	Roy Tiller	34
Indoor Scale Nationals	John Andrews	36
Secretary's Notes for May 2023	Roger Newman	38
Plans for the Month	Roger Newman	42
Fronte on IN Alterna		

Events and Notices	- 4	14
Provisional Events Calendar	- 5	53
Useful Websites	- 5	54

## Editorial

## The Bowden Contest:

This year it is intended to run the Bowden at North Luffenham on Sunday June 4<sup>th</sup> in conjunction with the Free Flight Mini Nationals.

Further to the New Zealand Awatoto flying field disaster I reported last issue, here is a letter from the 'Propwash' editor Barrie Russell.

## Hello John,

Thank you for the contact and kind wishes. Yes it has been an unbelievable occasion. but we will prevail, you live in a drain and you deal with the consequences. I drove through the area yesterday for the first time and seeing the damage, and the piles of mud and forestry slash was mind numbing. Our field in the distance looked emerald green and mostly clear but the fences are loaded and most of our infra-structure is damaged. If we can get the access road restored to useable then at least we'll be able to fly but there won't be much in the way of facilities for a while. Amazingly our long drop toilet shed survived even though the rail bridge 800 meters downstream got taken out ! Sadly our clubroom/tractor shed was totally under water so I suspect all inside including our tractor will be toast ! BUT we will survive, it will be at least a couple of weeks before we can get access !

Barrie

Right, what have you got to read this issue?

- ) I set things off with a report on the revived indoor meetings at the Sneyd sports all in Bloxwich. It's good to have some indoor back in the Midlands.
- ) Our follower from the Czech Republic, Martin Hurda, features another of his models. This time an R/C Minotaur. There is more to come from Martin as he has sent a pictorial report on a vintage meeting which will kick off the June issue.
- ) Peter Hall has badgered another Coupe flyer into revealing his approach to coupe flying. This time it's non-other than Roger Wilkes who was one of the prime movers in setting up the Southern Coupe League back in 2006.
- ) I've been digging into Wikipedia for weird aircraft and have come up with a real beauty, The Wainfan FMX-4 Facetmobile. Must take a brave or barmy man to fly it.
- ) I have penned a report on the 'Petit Classique de Brum' which was flown at North Luffenham. My report is mainly pictorial but the event CD Gavin Manion has also provided a detailed report on the event.
- ) Joe Northrop has provided an extract from a 1937 Hobbies Annual, edited by FJ Camm, which describes the making of a 'Dirigible'. It is a horrendous project and I cannot believe anyone could make it.
- ) Rachel and I visited the Scale Indoor Nationals held in the Wolverhampton University Sports Hall and once again I report primarily in pictures.
- ) Interspersed throughout are the usual extracts from vintage aeromodelling magazines giving a flavour of our hobby in the past.
- ) There are the usual regular features from the faithful contributors:

Nick Peppiatt with his look at indoor means of propulsion together with the latest on the commercial compressed air front.

Roy Tiller continues to dive into his archive stock of vintage magazines.

Roger Newman, although still away from home, manages to provide his Monthly notes and the usual three plans.

Editor

Sneyd Indoors	-	John Andrews

The Midlands now has Indoor meetings again in the Sneyd sports hall Bloxwich, thanks to Peter Thompson who has taken up the reins from Allen Price.

I paid a visit to their third meeting on Saturday 25<sup>th</sup>.March.

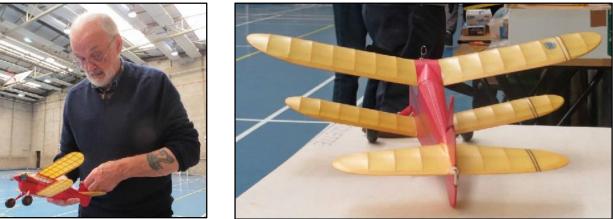


Attendance was good so it bodes well for future meetings

Our daughter lives in Bloxwich, so I deposit Rachel with her for the afternoon and then off to Sneyd, which is only about a mile or so from our daughter Rebecca's home.

I felt I was a little too unfit, with dodgy knees and general old age afflictions, to fly anything, so it was spectator/photographer mode for me. Having said that I think next meeting I may try to fly my old Legal Eagle which I first flew at the Boulby Indoor Nationals in 2013.

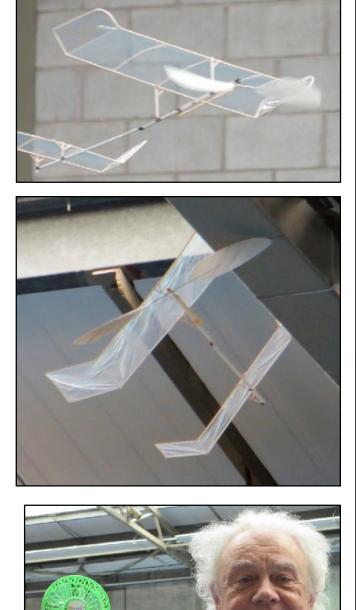
A few pictures of the afternoon

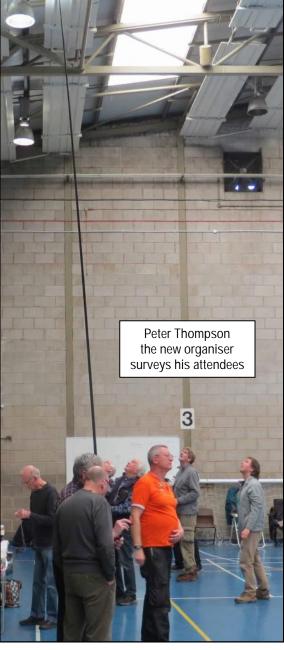


Colin Shepherd was flying his CO2 powered scaled down version of the Vic Smeed 'Coquette'



There were one or two lightweights flown, This is a Pete Thompson's design called 'The 5 minuter'





There were a few hang-ups but Allan Price had a secret weapon. He had fixed a battery powered fan to the end of his roach pole and the formidable blast of air made short work of hang-up recoveries.

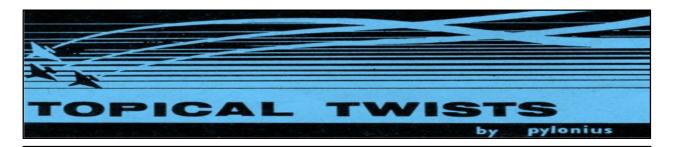
> On the next table to my seat was this delightful scale model, I do not know the aircraft nor the modeller but the model flew superbly.

> At close of play I returned to my daughters for tea and later a glass of wine and a Chinese takeaway.

> After a quick flit down the M6 we were home and dry after a good day out.

John Andrews





#### **MAY 1954**

opical Twists

#### The Name's the Same

One kit designer has been accused of producing designs under assumed names. He, in his turn, flatly denies resorting to any such subterfuge, and we can well believe him, since kit designers are a notably courageous group of individuals—they even attend rallies. And still do, in spite of the cautionary experience of one of their kind, who was pursued by an angry crowd, after a playful gust of wind had dislodged his false beard.

However, to jump from kit designing to the more difficult subject of designing model aircraft, I often wonder how people set about this gruelling task. Perhaps like me, many of them have to overcome the crucial problem upon which the whole success of the project hinges-finding enough room on the kitchen table to draw up

the plan. Methods vary, of course. I find that my own have changed considerably over the years. My earlier efforts involved far too much paper work—or so the teacher thought when she found that her stock of exercise books had been converted into model aeroplanes. Latterly, though, I have come to rely more and more upon rule of thumb methods. Trouble is that my thumb is such an awkward shape. All right for prop blades, but perhaps next time I should use that finger I am always being told to take out.

#### No Future In It

For the benefit of all the budding H. G. Wells's in this hobby, we are informed that the Society of Arts is offer-ing prizes for futuristic impressions of life in the year A.D. 2000. Whether this means that the aspiring prize winners will have to wait 46 years to see which of them was nearest the truth, we are not told, but, doubtless, those of you gifted with a particularly imaginative flair -club reporters, for instance—are even now mugging up on your back issues of Dan Dare, whilst the more scienti-fically minded are cogitating in their kitchens on the possible shape of the airborne crockery of the future.

Personally, I feel that the modeller should tackle the subject within his own particular field (if he has one left by the year 2000) and, just to be morbid, take a long



#### MODEL AIRCRAFT

range glimpse into the modelling world of the future. This is what I have been trying to do, but, unlike many tame timekeepers I know, I am not gifted with second sight; so the obvious thing was to borrow from our friend, Mr. Dean, the secondhand crystal ball he keeps as a memento of his Romany days.

When eventually the mists had cleared (the weather in the year 2000 is just as foul) I was in time to see the 50,000,000th kit come off the assembly line. A clear indication that the model trade was enjoying another boom season, due, no doubt, to the closing of the last flying field the previous year. And it says much for the advance of man's inventive genius that he had at last devised a sufficient pretext for throwing the few remaining model fliers off Chobham Common.

The trade boom also had its effect on the S.M.A.E., which duly changed its title to the Unity of Model Engineer when the membership dropped to the round figure of 1.

A noticeable difference between the kits of A.D. 2000 and the 1954 vintage is that the material they contain can be cut with a razor blade. The claim that this is a new and wonderful discovery has met with some scepticism by a number of old modellers who insist they have been using balsawood for years. A quite futile argument, really, since razor blades, like model builders, have been extinct for ages.

It goes without saying that all models of the year are either radio or TV controlled, but notwithstanding the great progress made in radio technology, the last radio jobs to have flown were the same 1948 veteran, bang-bang rudder jobs which were winning all the contests in 1954. The model journal of the year 2000 consists almost entirely of adverts and trade reviews, as there is nothing at all to write about. But for that good reason, you will all be pleased to learn this column, written by Pylonius III, remains entirely unaffected.

#### **Pyl-odious**

At this point I exchange the traditional cap and bells for the less frolicsome attire of sackcloth and ashes; a ceremony I perform each time someone takes this column seriously.

The reason for this month's quick-change act is that some spoilsport has taken umbrage over a few quite normally offensive remarks I had made about speed flying. Lighting my gloom, however, comes the discovery that the aggrieved speed devotee rejoices in the paradoxical name of Dally, which proves that there's still some humour in the world, even if it is so patently lacking in this column.

Anyway, after administering a sharp rap on my cement caked knuckles our speed-conscious friend goes on to accuse the S.M.A.E., of neglecting those energetic types who find relaxation in whipping an engine round on the end of a piece of wire.

Let me assure him, however, that the S.M.A.E. officials are not wholly inefficient, nor incapable of organising the occasional speed circus. Many of them are reputed to have extremely good heads on their illustrious shoulders—its just that they prefer to keep them that way.

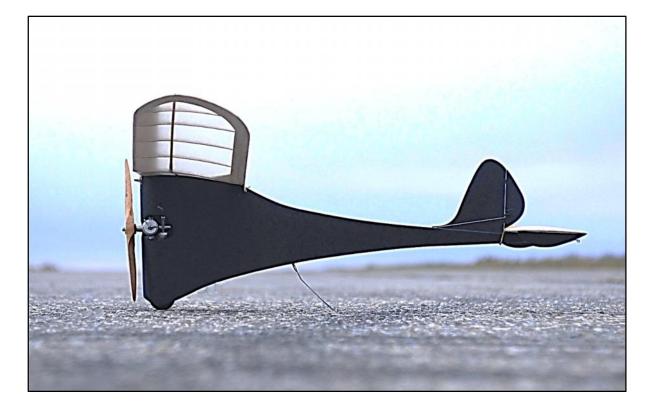
. " I just can't understand why you still want to go to the States this year now that Marilyn Monroe is married."

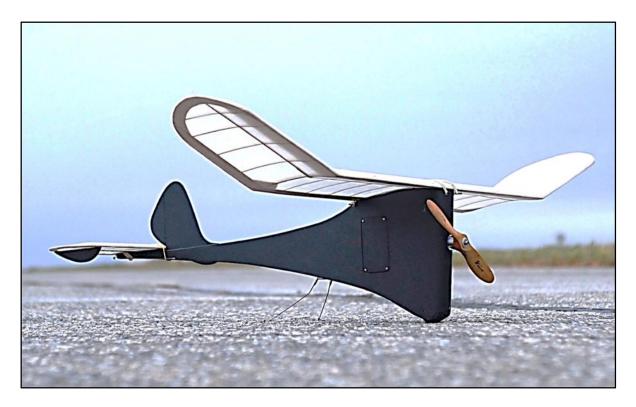
.



My Models No.5

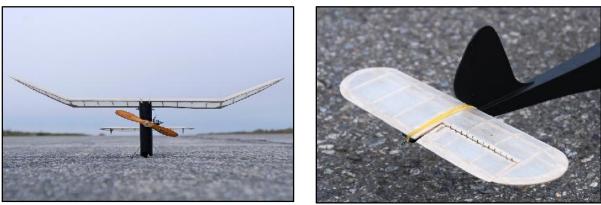
Minotaur 1951 (RC) by <u>Dick Twomey</u> <u>40in</u>ch / 101mm Engine: Classic diesel MP Jet 040

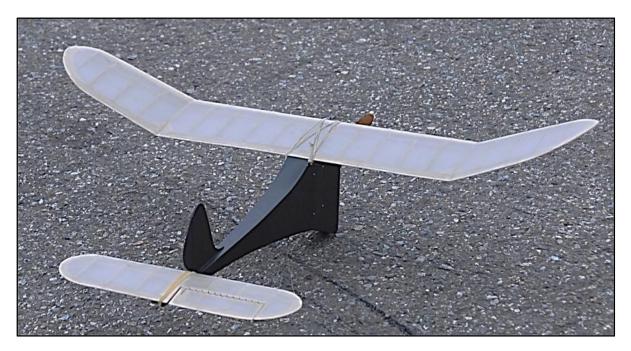




\_







Martin Hurda (Czech Republic)

### Model Aircraft March 1948

## News Review

#### March 1948

# Record

A British World We have pleasure in informing our readers that an S.M.A.E. member's

name again appears on the list of World Records, as the result of the homologation by the F.A.I. of a record claimed on behalf of B. V. Haisman, of Liverpool, for a flight of 29.4 km. achieved on July 6th, 1947, during the North-Western Area Rally, held at Hawarden airfield.

The model was lost sight of during the rally when it disappeared in a cloud base after being in the air approximately 5 min. and was reported found at Whitegate, Cheshire, by a Mr. Hudson some time afterwards.

While the flight is by no means the longest achieved in this country, Mr. Haisman is to be highly congratulated in having successfully put forward his claim, and for having fulfilled all the requirements for an international record.

It is pleasing to see a British name again appearing on the list of world model records, and the thanks of all British aeromodellers are extended to Mr. Haisman for again placing this country on the world record map.

We hope this will be an incentive to other modellers to take the necessary simple precautions required to ensure that any exceptional flights they achieve can be put forward for recognition by the F.A.I. as a world record.

Readers will be interested to learn that the machine used by Mr. Haisman was of the Wakefield type, designed and built as far back as 1940. It has been used regularly in S.M.A.E. decentralised contestssince that date.

Arrangements have been made for plans of this machine to be published in an early issue of MODEL AIRCRAFT.

The S.M.A.E. Handbook

Everyone has been anxiously awaiting the S. M. A. E. Handbook for 1948, so as to familiar-

55

ise themselves with the conterts for this year and their conditions.

Unfortunately the Handbook appears to be fated, as it has again encountered a little bit of trouble in the printing trade, which has caused some delay in its production. It is hoped, nevertheless, that it will be available by the time you are able to read these pages.

The new Handbook will be as comprehensive as the previous issue, and will supply the answers to most of the queries raised by acromodellers from time to time.

Affiliated clubs are requested\_to order in bulk sufficient numbers of copies of the Handbook to meet their members' requirements, thus saving . considerable work at the Society's headquarters.

The price of the Handbook is 1s. od., and orders, accompanied by the appropriate remittance, including postage, should be sent to the Hon. Secretary: S.M.A.E., Londonderry House, 19, Park Lane, London, W.1.

be run as an Area Semi-centralised event, it is important that all Areas should get this contest well organised, and make an early decision where they are going to hold it, so that ample notice can be given to all clubs and country members in each Area. All Area secretaries should inform the Secretary

of the S.M.A.E. of the venue of the contest in their area immediately it is decided upon, so that this information can be given the widest publicity and included in the following issue of the S.M.A.E. News Sheet.

There is no time to be lost!

## Control-line Contests

The Sutteridge

Irophy

To meet the require-ments of control-line enthusiasts, three control-line contests have been inclu-

view

Since the Gutteridge Trophy Contest will, this

year, be a Wakefield elim-

inating contest, and is to

ded in the S.M.A.E: Contest programme for 1948. These are all of the aerobatic type, and the Control-Line Sub-committee of the S.M.A.E. has defined a series of standard manoeuvres and a scale of marking to cover them.

The details are too lengthy to provide here, but full details appear in the S.M.A.E. Handbook.

No speed contests are scheduled for the 1948 season.

The Handbook also contains a simple set of rules which have been drawn up by the Sub-committee to guide enthusiasts regarding the essential precautions which should be taken when controlline flying.

The Address of the L.J.A.R.A.

The Low-Speed Aerodynamics Research Association, have asked us to point out that a large per-

centage of communications which they receive at the moment are readdressed from their old address. Will everyone communicating with this Association, please address their letters to the Director of Re-search, Mr. N. K. Walker, "Park Hill," Salisbury Road, Farnborough, Hants.

## Model Aircraft March 1948

## Indoor Isn't for Everyone No.64 - Nick Peppiatt



Capacitor powered electric motor set up with charger

### Supercapacitor Power



Air Hogs 'Cheetah' with similar charger

In IIFE 62 (NC March 2023), I published a photo of an integral capacitor and motor unit that was amongst the late Lindsey Smith's effects.

## Simon Rogers recognised this and wrote: -

'I see in the latest New Clarion newsletter you have a picture of a motor and condenser that you are trying to identify - you are right that it's from a ready to fly toy. I bought one about 20 years ago from a shop called the Gadget Shop [now long gone] it was about 12inch span and made of a brightly coloured foam, mine was a purple fuselage with yellow wings and cost £5, they flew well but lacked any duration because as soon as you removed the charging unit from the model the motor started to run down, I'm sure with a bigger/better condenser you could get a decent long run. I'm not sure who made them but the charger unit is very similar to the ones you got with the Air-Hogs range of models so maybe they made them for the Gadget Shop.'

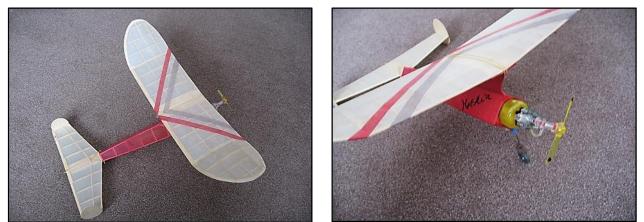
Simon's flying toy is now long gone, but he very kindly offered to send me the charger. This uses four AA size batteries (6V), and after cleaning up some of the battery contacts, the motor unit was soon running satisfactorily. The charger unit has the name 'Lanard' engraved on it - this appears to be a supplier of toys from Hong Kong. An internet search also soon found some examples of similar Air Hogs E-Chargers flying toys, an example of which is shown above. According to the instructions on the back of the box, the capacitor is fully charged in 10 s.

## Air Hogs Compressed Air Motors

Talking of Air Hogs, brings me to Lindsey Smith's motley collection of compressed air motors. I am quite familiar with  $CO_2$  motors, having acquired my first one nearly 50 y ago, but I have had very little experience of compressed air motors. I briefly covered the Italian made Z Model MM3 in Shed Times 6 (NC December 2021) and IIFE 50 (NC March 2022). Lindsey had a number of these motors in various states, but no tank bottles.

Equally interesting are his Air Hogs motors. There are a couple of models fitted with a small motor set up, which I have identified as coming from the Blue Sky ready to fly model.

In my view, the better of the two is the Hot Air, which I assume must be of Lindsey's own design. Last summer, I assembled it and gave it a test glide in the garden (not very wise!). It seemed to be in a good state of trim, although I had to anchor the single leg U/C with some epoxy and hold the compressed air tank in position in the fuselage with UHU POR. It was essentially a friction fit in the nose former, increasing as it was pumped up.



Lindsey Smith's 24" wingspan Hot Air with Air Hogs Blue Sky compressed air power unit.

On a calm day I took it to the local rec. with a stirrup pump and showed it flies very nicely as a sports model, although my charger fitting to the motor is rather crude and detaches itself at around 40p.s.i. air pressure. I understand that these units can take up to 80p.s.i. There appears to be a safety valve fitted to the motor.

## Hot Air specifications

Span 24", wing chord 5.25", weight 65g, compressed air power unit weight 28g

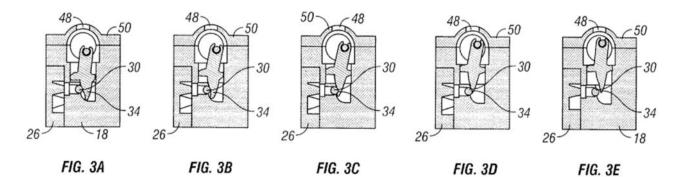


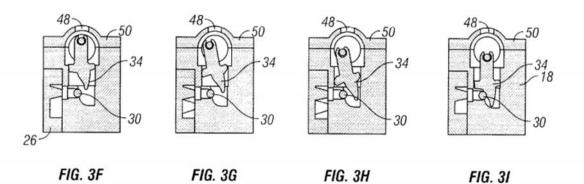


Air Hogs Blue Sky foam plastic RTF, of 12" span, with separate power unit on left.

Various Air Hogs units, Blue Sky bottom. The top two larger units appear to have similar motors and similar sized tanks.

There is some printing on the 95mm dia. propellers supplied with the Blue Sky units: - '2003 SPIN MASTER LTD. ALL RIGHTS RESERVED. MADE IN CHINA. PATENT NO. 6,626,079' My assumption that this was a U.S. patent number proved to be correct. This is fortunate because U.S. patents are freely available on the internet. The cylinder bore of this little motor is around 5mm dia., stroke about 4mm and the unit is made of clear plastic. I had noticed that the connecting rod and piston were made in one piece, but not much else. The patent specification by inventors Geoffrey Rehkemper and Charles Hartlaub, both of Illinois, revealed some clever features.





The above is a copy of Figure 3 from Rehkemper and Hartlaub's patent.

In the drawing, the crankshaft is at the top and the cylinder points down.

The drawings show various positions of the combined conrod and piston as the crankshaft rotates.

There is a ball valve, 30, which lets in the compressed air when it is displaced to the left.

There is a cam, 34, which is part of the top of the piston that moves the ball.

In the working stroke, Figs 3A to 3D the ball is displaced to allow air in.

As the crankshaft reaches BDC, Fig 3E, contact with the ball is lost.

On the return stroke, Figs 3F to 3H, the geometry of the piston means that it loses full sealing contact with the cylinder wall and the air trapped in the cylinder can bypass.

As the piston approaches TDC, the piston rotates and sealing contact is regained. In the actual motor there appears to be a black rubber O-ring fitted onto the piston to provide the seal.

There is a plethora of patents referred to as prior art in US 6,626,079 B1, but, as yet, I have not had the chance to investigate these.

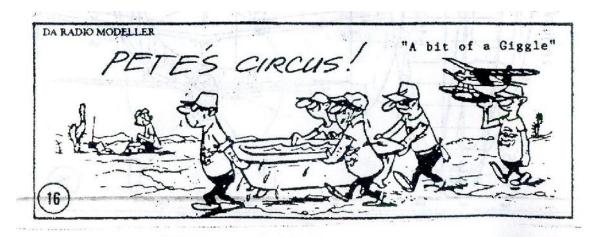
This appears to be a remarkably clever and effective unit. I don't know how long it was on the market for, but it is a shame that it no longer appears to be produced. The photo of the various Air Hogs units shows the Blue Sky compressed air system alongside some larger units. The motors in these have floating pistons similar to the Z Model MM3, rather than the tilting piston.

If any reader has further information on these plastic compressed air motors or is interested in taking over part or all of this collection I would be delighted to hear from you at nickpeppiatt@hotmail.co.uk

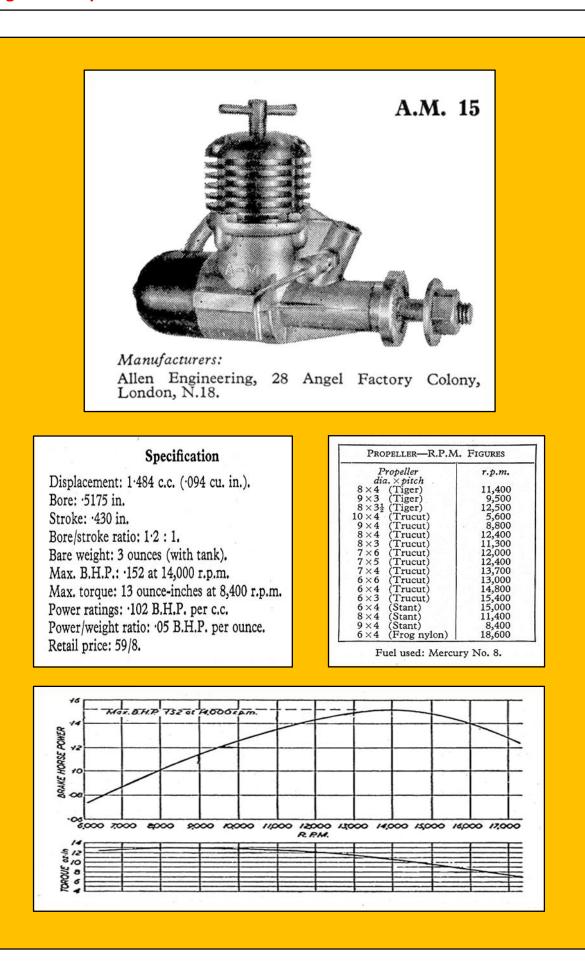
## Burgess Hill Indoor Date

The date for the SE Area Competition & Funfly has been moved to Sunday 28<sup>th</sup> January 2024.

Nick Peppiatt



## Engine Analysis AM15



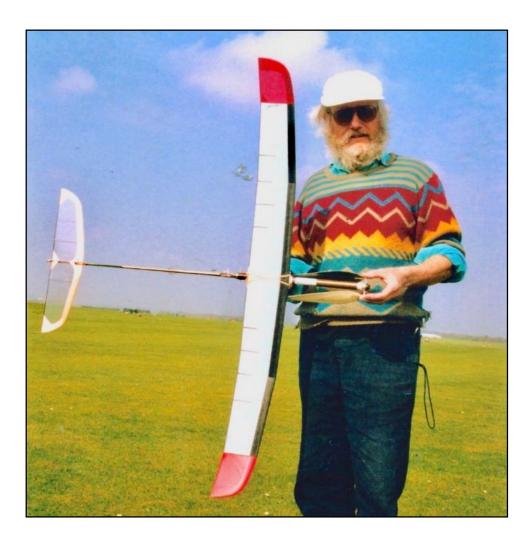
12

-

Aeromodeller Annual 1958-59

## Couprofile No.11: Roger Wilkes

Peter Hall



Roger, you started the Southern Coupe League with Ted Tyson in 2006. You played a prominent role in this until your move to Cornwall. Your main concern was and is, design development and testing. You took part in many French competitions. Tell us something of your experience. Give us some examples of your Coupe innovations.

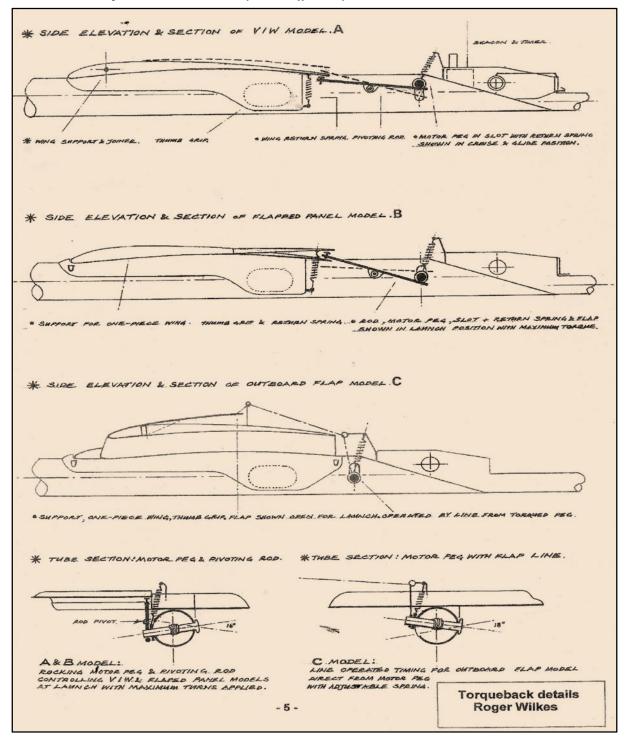
## Epsom to Moncontour and back

Around about 1989 whilst working in London I purchased a copy of 'Aeromodeller' at Waterloo Station on my way home. I was intrigued to know whether free-flight flying was still happening. I had heard that radio control had now become very popular on Epsom Downs and a new flying club had formed. Back in1952 I had been a member of the Epsom Free-Flight Club together with Robin Wills who still flies there. We both remember trimming models next to Surbiton club members, who were Peter Buskell, Dave Posner, Mike Gaster and Vic Jays. All their models were superbly made and trimmed to perfection which enabled them to get into the U.K. F1C power team. We were greatly inspired and lucky to get their expert advice on building and trimming our models. Peter Buskell was helpful with my first free flight models. His hand-launched gliders had interesting wing sections with steps in the upper surface which improved performance. Also flying at Epsom was P.E. Norman with his interesting pendulum controlled models together with the first ducted fan scale jets ever seen. O.F.W. Fisher was also there flying his tailless models and on one day he achieved a world record launching from Epsom Downs. The fifties were a golden era for all things free flight but it is nice to know that all B.M.F.A. members can still fly on the Downs with Epsom Downs Model Aircraft Club.

Many clubs trimmed at Chobham Common before the motorway was built across it and many free-flight competitions were held there and several Crookham Contest Fliers attended, Gary Madaline, Fred Chiltern, Dave Cox and Chris Edge flew regularly there and persuaded me to join their club. This got me into competition flying starting with A1 glider. These models had solid foam hand-carved wings which performed well but were quite heavy. My first competitions flown were at the B.M.F.A. Area meetings at Beaulieu.

This was a good introduction because clubs from Croydon, Bournemouth and Bristol and West competed. It was a chance to meet up with my old friend Peter King who like me had returned to free-flight flying after a thirty year break. He suggested that I should design and build F1G and F1B class models which were a more interesting aerodynamic challenge. We both built F1B's first and compared performance details. Peter used both VIW and VIT straight away as he had seen Alex Andruikov's F1B models in the World Championships in France. Interestingly enough Bob White won the championship flying a P.G.I. set- up with no functions. Bob's model, with low aspect ratio wings and stabiliser suited the hot and windy conditions of the day - rather like flying in California.

My first models were P.G.I. pattern with built- up wings. They were competitive but didn't get as high as Peter King's F1B's. I then decided to design a torque activated trimming system that would control variable wing and stabiliser incidence. Basically the wing incidence is changed by a lever connected to the motor peg moved by the rubber's torque. Fully wound motors activate a simple mechanism to move the left-hand wing trailing edge upwards. Adjustable return springs are used and usually 2 to 3 degrees of incidence variation is used. After launch motor torque provides movement for up to 20 seconds but this can be adjusted. Torque can vary from different batches of rubber along with its run-down time. As wing decalage is directly linked to the model's thrust and speed a balanced aerodynamic efficiency and trim is achieved.



VIT was also linked to the torque activated motor peg. Later models fully trimmed in France showed more stability in the climb and finished at greater heights. The wings were now part blue foam with built up carbon ribs and thin 'D' boxes. This helped the higher aspect ratio wings which now had six panels. These models also had variable pitch Cyclon hubs with modified cams giving 10 degrees more pitch when the motor was fully wound. This again helped performance and utilised motor torque. I then considered that maybe Coupe d' Hiver models might benefit from these systems so I simply scaled down the F1B torque variable wing incidence system to fit. The first new Coupes had built -up balsa and carbon wings, but later models had blue foam and thin carbon 'D' boxes. ( see header photo. ) These models trimmed out well and got in many fly-offs at competitions. I also tried out variable cambered wings, hinged wing panels and small deflector flaps but found VIW simpler and more reliable having no surface hinges. I used thin low-cambered wing sections similar to Bob White's and Peter King's. The six panel wings were tapered with an aspect ratio of about 12:1. Model types 'A' 'B' and 'C' are shown in the drawings.

Each year several English competitors would go to Moncontour in France where all the F.A.I. classes are flown.

Many French, German, Dutch and Italian fliers would also support the Beauvoir sur Noir competition the week before Moncontour. Being in August the weather was good, very hot around 2 - 3 p.m with very strong thermals. The evenings were cool with still air perfect for last minute trimming.

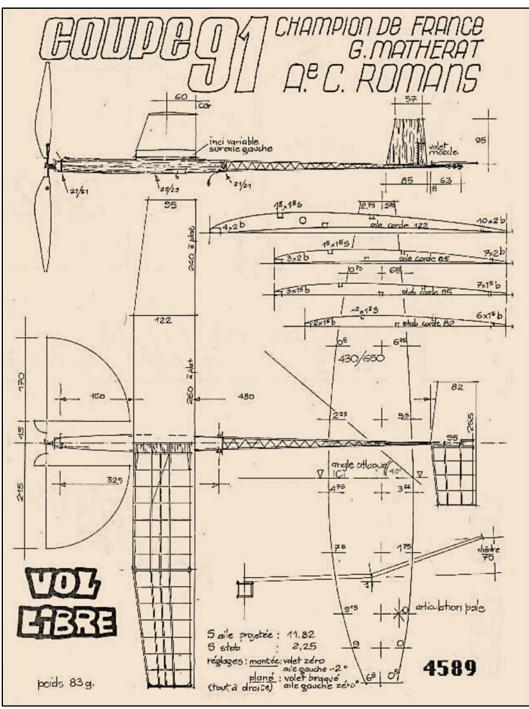
Here you could see Europe's best F1Bs and F1Gs fully trimmed. Here I met Anselmo Zeri and Pym Ruyter who had won several international competitions. Their models were their own design and flew exceptionally well. Pym Ruyter would have interchangeable wings on his F1Bs. He would assess the weather conditions at the start of the competition and then select high or low aspect ratio wings to suit. Coupes would get very high in the strong thermals and often not come down after the D.T. operated. I started losing my models in these conditions and Pym Ruyter kindly lent me his retrieval system so I could carry on competing. Anselmo Zeri answer to DT failure in strong thermals was to design a system where the wings folded up vertically above the fuselage. This worked well, His later Coupes used larger wing areas and he found that the reduced wing loading got the models higher and improved the glide. Wing sections became thinner in order to reduce drag and wing tip vortices. Luckily Anselmo gave a B.M.F.A. lecture in1992 about his design approach to F1Gs. This included wing area and configuration and his prop hub and blade design. The pitch distribution showed that considerable wash in was used nearer to the hub. Seeing him compete in France was most interesting. Motors were loaded into his fuselages then fixed at the front to the stooge. He would then pull out the motor from the back and fully stretch it and hold for a timed period then reverse wind in the motor. He knew that this method can produce different torque values and smoother and longer motor run -down times. The rear boom with timer was then fitted and function lines clipped into place. He had amazing confidence and an ability to always end up in the fly-offs.

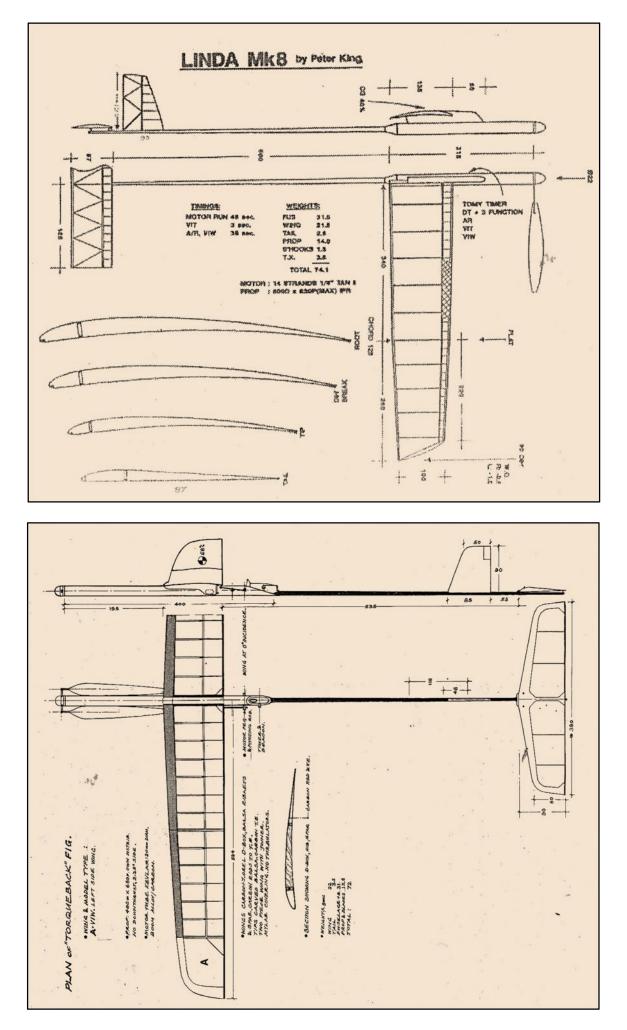
Many interesting Coupe d'Hiver could be seen at Moncontour. Both Jacques Valery and Georges Matherat produced very refined models. Jacques Valery's models were well designed and he used a thin wing section and the diagonal ribs were supported by a three-piece central spar. He used a delightful variable pitch prop. with the outriggers pivoted behind a small nose cone which had angled slots. Motor torque would twist the outriggers in the slots to give 8 degrees pitch variation. All his F1Gs and F1Bs had tapered wings and elliptical stabilisers which had laminated balsa edges. The long booms had delightful large oval inverted fins and the pylons were curved so that the models looked elegant in profile. Coupes had VIT and auto rudder and F1Bs had these plus VIW. All were beautifully made and flew extremely well. George Matherat had been Coupe champion in France during 1991. He had developed many successful Coupes over the years. His wife would also fly Coupes and sometimes beat him to his great delight. His attention to detail was superb and his plans and elevations for his 'Les Trumaux' Coupe for Schandel's 'Vol Libre' are exquisite. George could build and repair Coupes literally on site. He would sit at the back of his van with a workbench cutting balsa, glueing and doping wings. Rubber motors would be sorted, lubricated and hung up all around his van, the happiest Coupe competitor you could meet. He invited me to the French Nationals which was very enjoyable and where I saw many French families flying Coupes. Certainly this class has proved to be very popular in Europe making it easy for U.K. fliers to simply turn up and compete with their identical class F1G models.

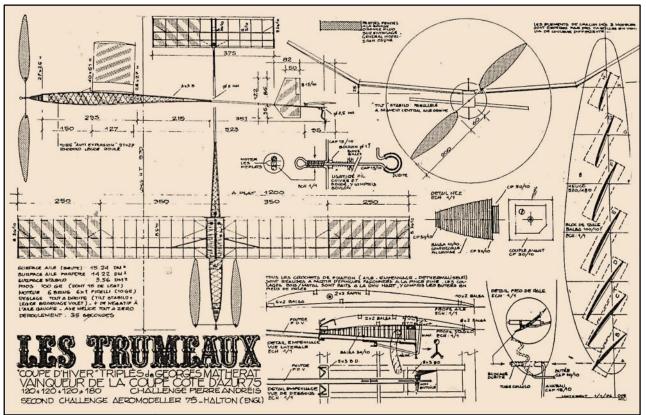
Probably the most developed English Coupe was designed and made by Peter King of the Croydon club. He had seen and analyzed the best coupes in Europe and knew what was needed in a good competitive model. He used computer aided design to find the best aerodynamic requirements. His 'Linda' Mk. 8 model had VIT, VIW, and auto-rudder. The wing and stabiliser were constructed of thin light carbon to minimise inertia. The prop. blades were light because he was aware that on fold they might change the critical position of the C.G. The wing and stabiliser incidence variations were carefully timed because a two position auto-rudder was used. The C.G. position at 40% of the wing chord and its relation to the neutral point, the decalage and the position of the turbulators were calculated. When fully trimmed this model would out perform any other F1G in a fly-off.

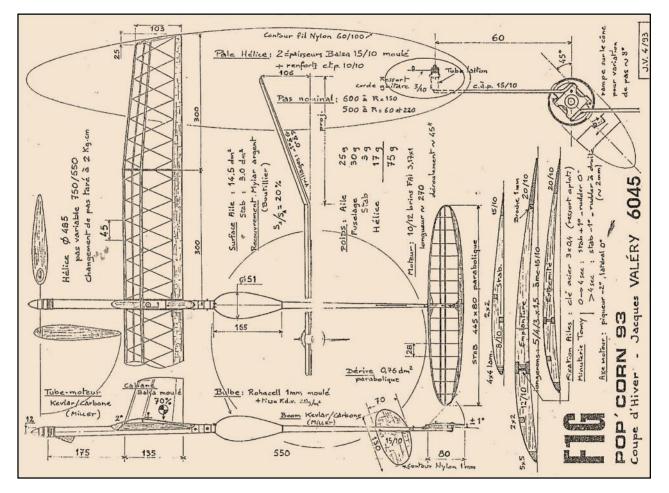
In America Coupes started to be flown and Bob White who had been very successful in F1B, developed a very good Coupe based on his P.G.I. trim method. The wing area was small with geodetic construction so he could use a very thin wing section. This reduced wing drag gave the model an impressive climb also helped by low decalage. Stability was very good with a 'V' form twin-finned stabiliser. The wing section was very similar to that used on Peter King's model.

Around 1998 many more Coupes were being flown in the Area Meetings at Beaulieu. Several Croydon and Bristol and West club members had good competitive models. This inspired Crookham members to improve their models leading to successes at Beaulieu and Middle Wallop. In 1999 the Ripmax Coupe d'Hiver event at Middle Wallop saw a record number of 74 entries in 80 gram F1G, 22 in 100 gram and 24 in Vintage Coupe. Dave Hipperson was the Contest Director. This was a very enjoyable competition which showed that there were many more Coupe fliers in the South than we had thought. The Crookham club now had several competition, so at the A.G.M. I suggested that a Southern Coupe League could be started at our Gala at Middle Wallop in 2006. Ted Tyson supported the idea and said that many Southern fliers would be keen to compete at Salisbury Plain, Odiham, Beaulieu, Oxford and Middle Wallop. Six Coupe competitions would qualify and a points scoring system was established. I wrote to Free Flight News in 2006 to announce the inauguration of the League and the first competition was at the Crookham Gala. Now in its seventeenth year the League has proved very popular.









The F1G class still gives us the challenge to design and produce original models, with or without trimming functions, that we can compete with in wonderful European locations.

18

Peter Hall & Roger Wilkes

## Heard at the Hangar Doors

CIDOGUAN .

402

August, 1956



Official Air Minister Photo

#### Designers Please Note !

Processing at the Flying Wing Contest, fully reported on page 408, brought to light an interesting controversy appertaining particularly to the tailless category of model. This referred to the use of "park bench" ailerons on a flying wing, the interpretation being that these aids contravened the F.A.I. Code, which states (see Definition 1.1.3 Flying Wing): "The flying wing is an aircraft which has no horizontal or oblique stabilising surfaces separate from the mainplane."

With the "separately supported" stabiliser ruled out, Andersson of Sweden and Graham Gates had to remove their high-mounted stabs, and fasten them to the trailing edge of the wing. This undoubtedly affected Gates' machine, for it was not until he had fitted small supplementary tabs during the fourth round that his model settled into its known performance.

Another point of discussion is whether a model can be picked out of the air before 20 seconds has been reached, thus claiming an "attempt" and a further flight. This occurred when Waldhouser (Saar) had a poor launch on his fifth flight, and assistants moved to stop the model before the 20 seconds were up. Officials prevented this happening, and the competitor had to be satisfied with only 24 seconds added to his score in the final round.

Arguments are that the rules allow a glider to be brought back to earth still attached to the line, *i.e.*, the model can be controlled down to a "no

#### Golden Wings Contest

Junior modellers under 16 years of age at December 31st, 1946, who have not yet joined the "AEROMODELLER" Golden Wings Club with the intention of participating in this year's Golden Wings Contest should hasten to do so immediately. Closing date for the eliminating round is August 10th, 1956, and the finals will be held at R.A.F. Halton the week-end September 8th and 9th. Besides a most enjoyable week-end finalists will reap the benefit of a magnificent prize list which includes a B.S.A. "Golden Wings" bicycle.

To join the club and enter the contest all that is necessary is to send 2s. 6d. for the "Golden Wings" glider plan which will include club badge, transfers, and entry form.

#### American Team Members

We learn that the teams selected to represent the United States in the 1956 World Championships are as follows:

WAKEFIELD	POWER	GLIDER
Cliff Montplaisir	Bill Hartill	Bill Hartill
Jerry Kolb Joe Hilgri	Lawrence Conover Dick Sludek	Hub Meulton
Herby Kothe	W. F. Huffman	Carl Hermes

Bilgri and Hartill thus score double honours, and many of the names will be recalled as regularly featuring in specialist contests. Cliff Montplaisir has been here before, as has also Carl Hermes, and we hope that negotiations succeed in finding a sponsor for the teams in order that they may participate in person. Our newshawk is not optimistic on this score at present. 403

#### **Radio Controlled Gliders**

Latest international model record to be ratified by the F.A.I. is that for Radio Controlled Gliders, flier again being Frank Bethwaite of New Zealand. On April 2nd, 1956, flying from Long Bay, Auckland the truly astounding time of 7 hours 37 minutes was recorded, and our sincere appreciation of Bethwaite's effort is coupled with a sense of wonder at the powers of concentration required for a performance of this nature.

The annual Slope Soaring Meeting at Chwyd saw another very fine flight in this category, when Don Bailey of the Burton-on-Trent club made a flight of 14 minutes 15 seconds, which will form the first application for a British record in this class. The feat is all the more meritorious when it is realised that the Clwyd meet was only the second occasion on which these fellows from Burton have been able to tackle slope soaring. We understand that "Lord Gosling of Clwyd" has put his mountain lair at their disposal for future attempts, and we foresee the world figure taking a beating in the not too distant future.

#### The Hill Beceiver

Following publication of the Hill 2-valve receiver in our June issue we have had enthusiastic reports of the reliability of the equipment from radio control operators up and down the country. Inevitably we have also had plaintive letters from the odd few builders who have been unable to get their sets working correctly. Mr. Hill the designer is giving the best possible advice that can be given by post, providing the enquirer encloses a stamped addressed envelope. Messrs. Dockerty, who advertise sets of components for the receiver, also offer to investigate any trouble that may be experienced by modellers without expert radio knowledge and the necessary test equipment. There are, however, provisos to this offer as follows: A reasonable job must have been made of the construction. The valves and relay must be in good order. Sufficient postage and packing is enclosed for the return of the receiver. This offer is only available to people who purchased their companents from Messrs. Dackerty.

#### Meccurian Might !

Best fly-away story we have yet heard, which unfortunately does not qualify for the subscription prize offered in last month's Editorial as the model was lost, comes from reader J. Margree of Clacton. After a bout of flying his version of Ray Malmstrom's "Mercurian Mite" in its normal control line form he decided to free flight same. Quite a ridiculous thought when one considers the diminutive proportions of this 7-inch span flying saucer which in this instance was powered with a Dart. Anyway, from a hand launch the model went into a 45 degrees corkscrew climb and has not been seen to this day. The flight was witnessed by five senior club members, who no doubt are still recovering from shock, and certainly is a warning to "Mercurian Mite" owners to fit D.T.s if they intend letting go of the handle!

#### Supply and Demand

Although perfectly true, we can start this story' thus: Once upon a time there was a modeller not unknown in control line circles to whom nitro methane was then just a name which he had read in an American magazine. Accordingly he went along to a certain chemical suppliers in London and calmly asked for two gallons. They, also scennigly ignorant of its worth, supplied him and charged something like ten shillings.

Both parties, it appeared, benefitted. The control line flyer's name became Nationally, and indeed, Internationally known. The suppliers did not know this, but they did know that they had sold their complete stock of nitro at the time for a mere fraction of what it had cost them. From that time on nitro methane has cost about a pound a pint.

The sequel happened fairly recently. The same modeller went back to the same people with a repeat order. The man behind the counter was rather taken aback at the value of the order and thought it best to mention the price—about fifteen pounds.

"Why, it didn't cost anything like that the last time I bought some from you!" the indignant modeller exclaimed.

"Oh!" said the man behind the counter. "So it's you! We've been waiting for you to come back. You owe us . . ." But by this time he was talking to an empty shop. Which also explains why the modeller must remain anonymous.

#### Scots awa"

Will Meecham sends news of the 1956 PAA Scottish Festival of Model Aviation which will take place at Royal Naval Air Station, Abbotsinch, Paisley, near Glasgow, on the 25th and 26th August, 1956.

#### STOP PRISS\_

Latest news on World Power Championships entrics is that Russia will be sending a team, also Czechoslovakia. Entries to date include Finland, Germany, Italy, Canada, Russia, Australia, Czechoslovakia, Eire and Great Britain.

The Contest will be held on August 6th, which is, of course, August Bank Holiday Monday.

Aeromodeller August 1956

## The Wainfan FMX-4 Facetmobile

## Wikipedia

An American homebuilt aircraft designed by Barnaby Wainfan, a Northrop Grumman aerodynamicist and homebuilt aircraft engineer.

While only one Facetmobile prototype was produced, it has become well known due to its unique nature. The aircraft is unusual in that it is a lifting body – the whole aircraft acts as a low aspect ratio wing: a flat, angular lifting shape. unlike traditional aircraft which use distinct lift-generating wings attached to a non-lifting fuselage. Also notably the aircraft's shape is formed of a series of 11 flat surfaces. somewhat similar to the body of the F-117 Nighthawk jet strike aircraft in using flat plates, but without separate wing structures. Although aerodynamic efficiency is reduced due to the simplistic shaping. that shaping reduces structural weight, improving payload mass fraction.

FMX	-4 Facetmobile
The FMX	-4 Facetmobile in flight
Role	Homebuilt Aircraft
National origin	United States
Designer	Barnaby Wainfan
First flight	April 22, 1993
Number built	1

### **Design and development**

#### Shape

The FMX-4 Facetmobile shape forms 11 flat planes, plus two wingtip rudders. Three flat shapes form the bottom of the aircraft (slightly inclined front, flat middle, and sharply raised back), and eight form the top (one large downwards-sloping rear section, one thin nose section, and three inclined side panels per side). The wing section is an 18% thickness ratio, much thicker than the typical 12-15% thickness of normal light aircraft wings. At least one commercial model airplane kit of the Facetmobile is in production.

The prototype FMX-4 Facetmobile crashed on October 13, 1995, after an in-flight engine failure. The aircraft landed at low speed into a barbed wire fence, which caused extensive skin, engine, and some structural damage, though there was no injury to the pilot, Barnaby Wainfan. As of 2006, the aircraft has been partially repaired but not flown again.

#### Structure

The Facetmobile structure is composed of 6061 aluminum tubing fastened with Cherrymax rivets. The fuselage uses conventional fabric covering. The aircraft uses elevons and rudders for control. The landing gear is a fixed tricycle type. The large windshield sections are augmented by two floor-mounted windows. The aircraft is boarded through a bottom-mounted hatch. The aircraft has a BRS parachute system installed.

### Variants

Wainfan has proposed two derivative aircraft based on the FMX-4 Facetmobile.

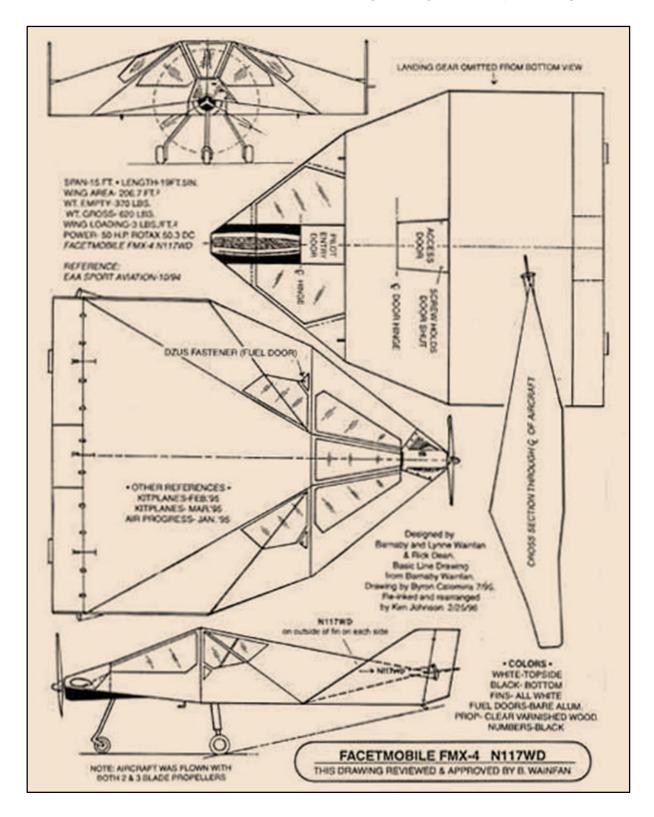
FMX-5 Facetmobile, a larger 2-seat design using the same aluminum-tube-and-fabric construction. An unnamed similar 2-seat design using advanced flat composite panel construction.

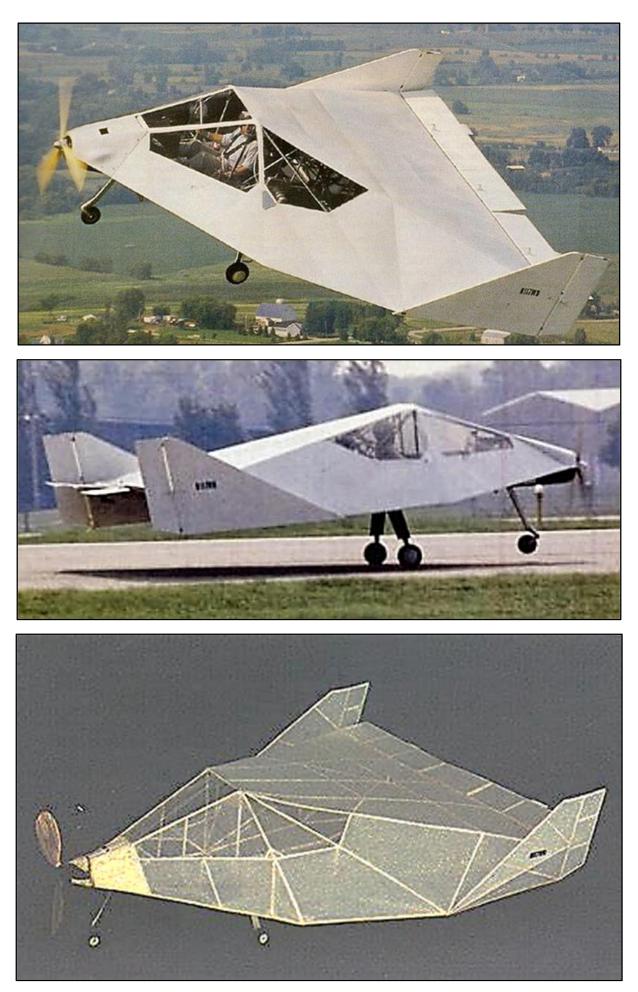
### **Specifications (Facetmobile FMX-4)**

General characteristic Crew: 1 Length: 19 ft 6 in (5.94 m) Wingspan: 15 ft (4.6 m) Wing area: 214 sq ft (19.9 m<sup>2</sup>) Empty weight: 370 lb (168 kg) Gross weight: 740 lb (336 kg) Fuel capacity: 10-13 gallons Powerplant: 1 × Rotax 503 DC , 50 hp (37 kW) Propellers: 3-bladed GSC ground adjustable

#### Performance

Maximum speed: 96 kn (110 mph, 178 km/h) Rate of climb: 750 ft/min (3.8 m/s) Cruise speed: 80 kn (92 mph, 150 km/h) Wing loading: 3.45 lb/sq ft (16.8 kg/m<sup>2</sup>)





Wikip<u>e</u>dia

## Petit Classique de Brum

## John Andrews



Rachel and I motored up the A14 and off through Uppingham to North Luffenham on Sunday May 17<sup>th</sup> to spectate at the 'Petit Classique de Brum'. The weather was superb and as a result the attendance was good. Early morning drift was a bit of a problem for the organisers and the positioning of Control was a bit fluid at the start of proceedings.

Gavin Manion will be penning a detailed report on the event elsewhere in this issue so this epistle of mine will be something of a pictorial review.



Tony Rushby piles on the turns on his last remaining Keil Kraft 'Ace' from a former fleet of five.



Then up and away she goes



A couple of recovery options: the back pack or the electric bicycle



There were one or two Free Flight scale models around but I did not see any of them flying



Ray Elliot with E36 Electric;



One or two odd bods my camera captured: Bill Dennis a vintage coupe;



Para-gliders were adjacent



A couple of control desk jockeys, Gavin Manion on the left and Kris Best on the right



A couple of contestants tend their models



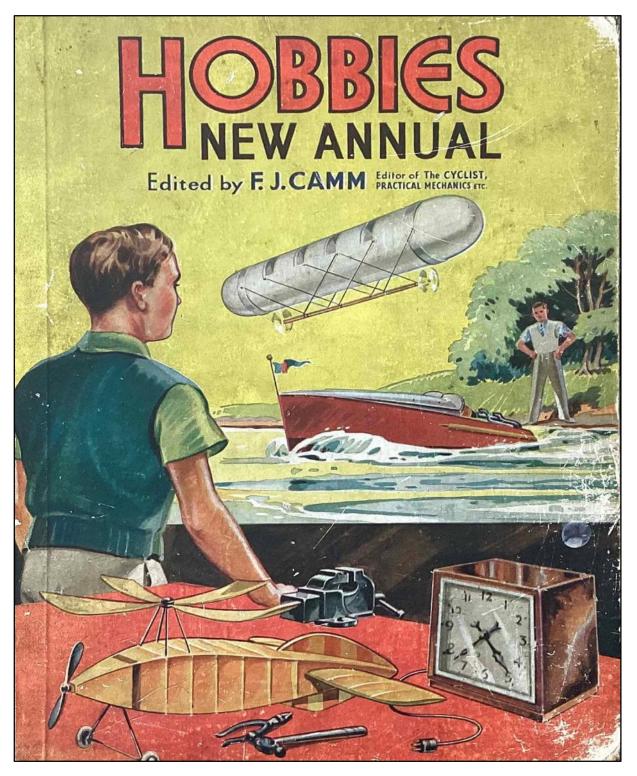
Fire it up then chuck it

John Andrews

Model Dirigible	-	Joe Northrop
•		•

John, re your interest in Zeppelins I wondered if you have ever seen this Annual. It was edited by F J Camm brother of Sydney and this man must have put more youngsters off Aeromodelling than anyone. The effort he advocates going through to make this thing is incredible even down to having to make the gas to inflate it. When it was all complete what was the youngster expected to do with it surely not take it outside and release it. I recollect some years ago I made a floatplane designed by this man and my all up flying weight was a good deal less than he quoted and when I did a floatation test it sank. I had to set to and make larger floats which makes me think that although he designed them, he never made them.

Article taken from Hobbies Annual by F.J.Camm dated circa 1937



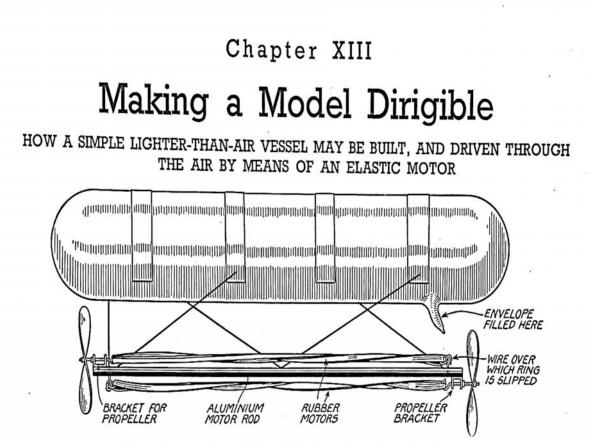


FIG. 1.—The complete dirigible showing the method of mounting the motor.

**O**NLY one shape is worth consideration—the Zeppelin—a long, cylindrical body with semispherical ends.

This would consist of one of those long and straight types of thin rubber balloons—the largest obtainable—such as can be purchased at certain toyshops. If one of these were filled with hydrogen, lifting-capacity of which is twice that of coal-gas, it would, of course, have to be filled from hydrogen compressed in a cylinder obtainable from a chemist. Then if the nacelle, i.e., the rod carrying the motor, were made from drinking straws which vary slightly in size—being stuck together with lightly-gummed cigarette paper, and the propeller being made of very thin steel wire covered with goldbeater's skin, and but little rubber used, the nacelle and rubber motor being the full length of the balloon, then—although I have not actually tried it—I feel pretty sure that such a model would fly, i.e., that the supporting hydrogen would carry the necessary weight of the balloon which would have to be well inflated. The nacelle would be supported by guy-threads as described later (see Fig. 1).

We know that 1,000 cu. ft. of hydrogen lifts 70 lb., and we can easily calculate the buoyancy of any model from the following formula:

Vol. of cylinder = height × area of base =  $h \times \frac{22}{7} r^2$ , where h = height and r = radius of circular base.

### HOBBIES ANNUAL

Vol. of sphere  $=\frac{4}{3}\pi r^3$  where r = radius of sphere.

Lateral surface of a cylinder (excluding ends) = height × circumference of base =  $2.\frac{22}{7}$  r.h.

Surface of a sphere =  $4 \cdot \frac{22}{7} r^2$ .

From this, knowing the weight of the rubber balloon, nacelle and rubber motor, we can work out any individual case.

### A REAL WORKING MODEL

For this purpose the model should not be less than 12 ft. long and 2 ft. in diameter. It is constructed of gold-beater's skin, a very thin tough membrane prepared from the large intestine of an ox. It cannot be obtained in larger pieces than 24 in.  $\times$  14 in. It weighs only 0.11 oz. per sq. ft. The buoyancy of such a model is 34.24 oz. The entire surface area is approximately 76 sq. ft.

Allowing ten per cent for overlapping for joins, the weight of our envelope works out at  $76 \times 11$  oz. = 8.36 = 25.88 oz. A very large amount of netting, more than ample for interior supports is needed, motor, propellers, etc. Unfortunately, there is a drawback to this model, as such an envelope will retain the gas for only a short time. If, however, the skins be coated on both sides with elastic varnish, its gas-holding properties will be much increased.

If you wish to make a thoroughly efficient job, you must employ a tripleskin, coated as above. Such envelopes can be built to weigh slightly less than  $\cdot 328$  oz. per sq. ft. (the figures are taken from an actual model). Now this would make the weight of our model  $76 \times \cdot 328 = 25$  oz. approximately, leaving a buoyancy of about  $9\frac{1}{4}$  oz., quite enough, since our nacelle need weigh only 4 oz.; propellers,  $\frac{1}{2}$  oz.; rubber 4 oz.; sundries,  $\frac{3}{4}$  oz. If you were content to use a single skin and inflate your model with coal-gas, you would have a lifting capacity of  $17 \cdot 12 - 8 \cdot 36$ , which equals only  $8 \cdot 76$  oz. But if you were only prepared to increase your 12 ft.  $\times 2$  ft. by one-half, you would have a buoyancy of  $3\frac{3}{4}$  lbs., or, with a little more than double the material you have increased your lifting capacity from  $\frac{1}{2}$  lb. to  $3\frac{1}{4}$  lbs. Hence the reason why modern dirigibles are of such immense size. Therefore, the actual size rests with the constructor.

## CONSTRUCTIONAL DETAILS-THE CYLINDRICAL PORTION

The construction of the cylindrical part of the envelope is easy enough. The piece of gold-beater's skin must be placed in a vessel containing some soft or rain-water (preferably filtered), a day or two before use. In the

[79]

### HOBBIES ANNUAL

water should be dissolved some fish glue in order to add to the adhesive properties of the skins. Smooth oiled board must be used to prevent sticking and some means must be provided to keep the skins taut whilst drying; any irregular sides or ends must be trimmed down with a blunt pair of scissors.

The only satisfactory way to build up the cylindrical portion is to construct a light cylindrical framework and cover it with oiled cardboard the size of the proposed model.

### THE SEMI-SPHEROIDAL ENDS

Suppose the diameter of these is 2 ft. First, find the circumference, or 1 ft. = 6.29 ft. Divide this by 4 and the quotient 1.57 ft.

Ă			0.0875
Н	-+		0.174
			0 259
	1		0.342
			0 500
			0.574
	1		0.643
_			0.707
			0.766
_			0.819
			0.866
_			0.906
		+	0.940
		+	0.966
_			0.985
-			0.990

FIG."2.—Details of the semi-spheroidal ends.

Now in Fig. 2, B-A represents this scale. Divide the circumference by 24, i.e., double the number of gores, the quotient is  $3 \cdot 14$  in., this is the length of A-C or A-D. Next divide A-B into 18 equal parts and draw lines parallel to C-D through the points of division. Find the actual length of the required lines by multiplying  $3 \cdot 14$  in. by the decimal given in the respective lines in Fig. 2. This gives the right-hand side of the gore, the left-hand side being the same. C-B-D in Fig. 2 represents a complete gore for the required ends. The pattern gore should be made of cardboard, or better still of tin. When cutting out the actual skin gores about  $\frac{1}{2}$  in. should be left for overlapping. Some difficulty

will be met with in joining up the second semi-spheroidal end on to the cylindrical body because the envelope must be withdrawn before this is done.

Slide the envelope off the framework, and cut a slit large enough to admit the hand—near the end not yet enclosed; this should afterwards have fitted round it a funnel-shaped projection or bag which can be left open or to be used for inflating the envelope.

Having completed the envelope and allowed it to dry, it should be inflated with air by means of a foot-pump and every leak carefully attended to—it should then be given two coats of elastic varnish—keeping it fully inflated all the time.

## FILLING THE AIRSHIP

The question of filling the envelope with hydrogen has already been dealt with. Bear in mind that hydrogen and air form an explosive mixture and should not be brought near a naked light.

[80]

### HOBBIES ANNUAL

To endeavour to inflate the balloon from an ordinary gas jet is quite useless, owing to lack of pressure. Some kind of force-pump or pressure-bag provided with a suction and delivery valve is essential—or if the pressure-bag has a tap at the end not fitted to the gas jet, then by alternately turning on first the gas-tap and turning off the pressure-bag tap, and doing this alternately, and pressing on the bag when the gas tap is off, and the other on, the balloon can be filled.

In any case before starting to inflate the envelope it should be well pressed together to squeeze out all the air and any pump or pressure-bag must also be worked a few times to get rid of the air with which they are initially filled. If you construct your own force-pump it is much better to use gas taps than valves—in spite of the extra trouble in turning them on and off.

## THE NACELLE OR CAR, AND THE MOTOR

A small model of this type can only be driven slowly through the air and twisted rubber must be used as a motor, say, two strands twisted practically the full length of the airship—several thousand turns should be possible—rubber of course, well lubricated—do not use any form of geared motor. The twin motors should run from 5 to 10 minutes, and the propellers should not turn at a greater speed than 500 revolutions a minute.

The simpler the form of the nacelle, i.e., the motor rod, the better. For a 12 ft.  $\times$  2 ft. model it can consist of a single magnalium or aluminium stayed with any necessary king-posts and very fine steel wire. Or you can use instead, three much finer tubes arranged so as to form a triangular-shaped girder, stayed with the same and braced with steel wire as before, if necessary. Everything must be kept as light as possible. The nacelle must be hung from the envelope as shown in Fig. 1, and not by parallel vertical threads swinging backwards and forwards must be prevented.

These should be constructed of thin steel wire covered with gold-beater's skin and of such a size and pitch that the motor drives them—as already stated—at about 500 revolutions a minute. In proportion these propellers are much larger than those used on model aeroplanes.

Steering in a horizontal direction can be accomplished by a rudder placed just behind the rear propeller, and the framework should consist of thin steel wire covered with gold-beater's skin. For elevation, horizontally revolving propellers are the best; they can be much smaller than the driving propellers, and can be geared to the rubber motors; a simpler way would be to place them horizontally in the slip-stream of the driving propellers. On a larger model separate motors could, of course, be used. Finally, so dispose all your weight that your dirigible rides on an even keel perfectly horizontally.

6

[81]

## Petit Classique de Brum, CD's Report - Gavin Manion

## 2<sup>nd</sup> Petit Classique de Birmingham. 16<sup>th</sup> April 2023, MOD North Luffenham.

The day had been forecast well in advance as being just about "mint". This may have prompted many of last year's attendees to go elsewhere for some valuable trimming time, indeed several F1x flyers used the day at Luffenham for just that.

Early arrivals were greeted by a very unexpected North Westerly breeze off, and presumably influenced by, the nearby Rutland Water. By the official start time this had backed to WSW where it remained all day. On a mainly bright and sunny day there was much more breeze than had been forecast and, at 5-10mph, it was enough to take models which were high in lift into some adjacent paddock areas. That said, many flyers spent their day happily within the airfield boundaries and there were no reports of models being lost.

Overall entries were similar to previously, the exception being Classic A1, last year's success story, which had but four flying entries against eight in 2022. Combined E36 and 1/2A was well contested with a fly-off only averted when Steve Barnes' RDT transmitter failed leaving him unprepared to fly further. This necessitated a "DT-off-the-top" from Pete Watson to post the required tie-break score. Bob Garner was the victim of a fine climb into poor air on his last flight, it disappeared behind a building to drop those vital two seconds. Barnes and Garner both used 1/2A models but in truth Watson was in a different league with his E36 which seemed untroubled by the reduced 8 second run and looked perfectly capable of maxing off very much less. Other potential fly-offs were averted by Roger Heap managing to drop his first Classic Glider flight by 10 seconds and, in Mini Vintage, Tony Rushby and Colin Foster dropped just 8 and 15 seconds respectively on their last flights.

Prize giving followed promptly after the fly-off and those with journeys ahead were happy to leave the field for a drive home in daylight.

The raison d'être of the Classique (stop it!) is that it should be a low stress enjoyable day. It seemed that in the fine warm (ish) weather people were happy to be out and enjoying some gentle competition. Enough people flew with enough intensity to make the event worthwhile and it's hoped that we'll repeat it next year.

As ever if you flew, or nearly flew, please do make your suggestions for improvement to me at <u>gavin.manion84@gmail.com</u>.



## **Results:** Classique de Brum, 16th April 2022 MOD North Luffenham

Start 10:00 - Finish 16:00 Weather - WSW 5-10mph , dry, 12°C.

All Flights 120sec Max, E36 and 1/2A both 8s run, Classique Gliders 50m towline, ONLY BEST SCORE SHOWN.

Classic A1									
Entrant	R1	R2	R3	Total	Place				
Pete WOODHOUSE	120	120	120	360	1				
Colin FOSTER	120	120	65	305	2				
Kris BEST	98	0	0	98	3				
Stu DARMON	56	0	0	56					
Stephen FIELDING	DNF								

Classic Glider										
Entrant R1 R2 R3 Total Pla										
Colin FOSTER	120	120	120	360	1					
Roger HEAP	110	120	120	350	2					
Mike EDWARDS	74	85	120	279	3					
Mike CHAPMAN	80	120	67	267	4					
Gary PECK	83	53	120	256	5					
Stu DARMON	120	54	0	174	6					
Kris BEST	55	0	0	55	7					

	Mini \	/intage	2			Pre 1970 Coupe D'hiver					
Entrant	R1	R2	R3	Total	Place	Place Entrant		R2	R3	Total	Place
Ken FAUX	120	120	120	360	1	Pete WOODHOUSE	120	102	102	324	1
Tony RUSHBY	120	120	112	352	2	Brian LAVIS	45	63	120	228	2
Colin FOSTER	120	120	105	345	3	Bill DENNIS	113	26	79	218	3
Dave RYALLS	78	0	0	78	4	Stephen FIELDING	118	0	0	118	4
Sue JOHNSON	DNF					Gary PECK	DNF				

E36 + 1/2A Combined									
Entrant	R1	R2	R3	Total	F/O	Place			
Peter WATSON	120	120	120	360	65	1			
Steve BARNES*	120	120	120	360	0	2			
Bob GARNER*	120	120	118	358		3			
John COOPER	120	110	104	334		4			
Gordon WARBURTON	103	102	116	321		5			
Dave GINNS	89	120	73	282		6			
Ray ELLIOTT	98	120	33	251		7			
Gerry WILLIAMSON	96	54	0	150		8			
*Flew 1/2A									

Finally, and most importantly thanks to all who flew and also those who just came, chatted, laughed and made the day a pleasure to be at.

## The DBHLibrary (Magazines)

### Report No. 147 Our earliest magazines, continued.

Next in the look at U.S.A. magazines we come to Popular Aviation, launched in August 1927, given a short lived name change to Aeronautics from June 1929 to July 1930 and then retitled to the original name. This was another magazine primarily concerned with man (or woman, that being the extent of choice at the time) carrying machines. I have no evidence of the extent of aeromodelling content in the earliest issues but I do have a list of Joe Ott and Jack Noble designed model plans featured in the magazine, with a first date of February 1931 and for Paul Lindberg designs, with a first date of February 1934. The plans featured were almost exclusively for scale models, with "gas engine" models regularly appearing from 1938. There was a further name change to *Flying* in January 1941 which I believe saw the end of any aeromodelling content.

The earliest dated **Popular Aviation** item in the is a photocopy of library the "Model Department" pages featuring ۵ "Fokker Monoplane" designed by Joseph S. Ott. Plans are given for building a 15" wingspan model. I have not included the plans here but, as always, they are available by email.

The earliest complete **Popular Aviation** magazine in our collection is the issue of August 1934 which includes plans for building a 20" wingspan model of the "Monocoupe D-145" designed by Paul W. Lindberg.

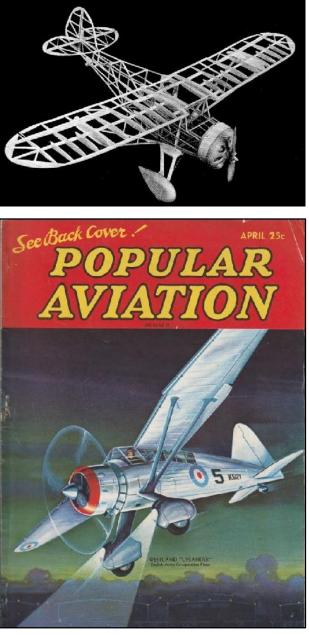
The building instructions for these scale models concentrate in some detail on the structure, covering and the paint job but generally the only reference to a flying model advises the use of a propeller made with "fibre" blades, see the plan above.

No advice at all on C of G or trimming, so the conclusion must be that these plans are primarily for the building of display models.

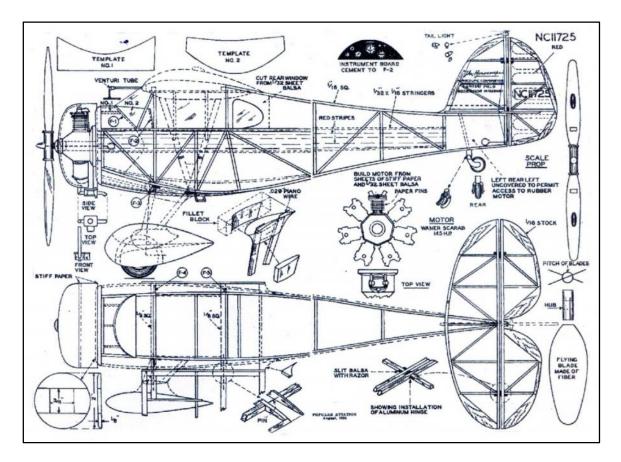
Looking for something more encouraging, I found the issue of April 1937 with a Westland Lysander on the front cover. This shows a nice picture but the plan is clearly display only, without the rubber motor hooks seen on the earlier plans, so if you want the prop to rotate a few turns, just give it a flick.

There must have been a change of policy in 1938 to permit the featuring of non-scale "gas engine" flying models, most months there was a design

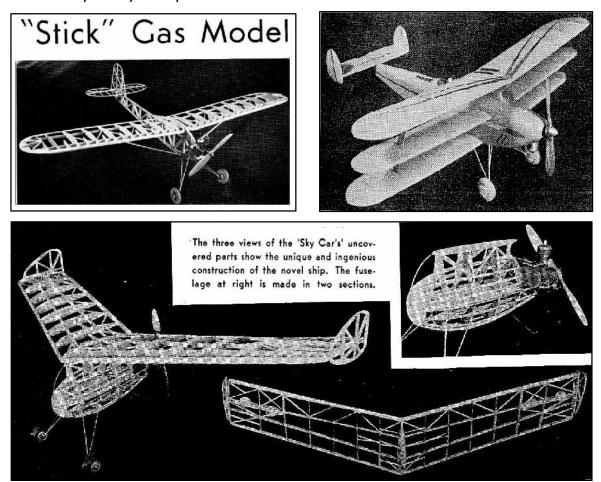
by Paul W. Lindberg including his "Sky Charger/Stick Gas Model" at 72" wingspan, "New Gas Powered Model" 46" span, "Bumblebee" 28" span, "Jitterbug" 49" span, "Skycar" 40" span, "Cloudbuster" 48" span, "Popular Aviation Special" 40" span,. "Gull Wing" 72" span, "Triplane" 30" span and "Puddle Jumper" 64" span.



Roy Tiller



Pictures of some of these are shown below and plans, as they appear in the magazine, available by email for any that you may wish to build.



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

Roy Tiller

## Indoor Scale Nationals

## John Andrews

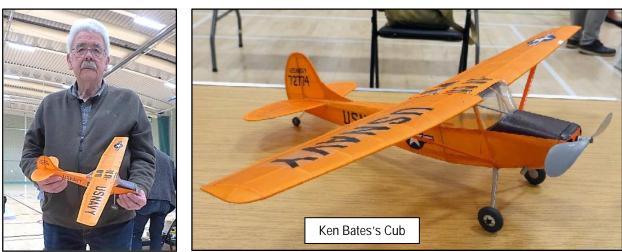
Rachel and I spent the weekend 22<sup>nd</sup>/23<sup>rd</sup> April at the Wolverhampton University Sports Hall, which is actually in Walsall for some reason unknown, We were spectating at the Indoor Scale Nationals, in the main, viewing from the hall balcony.

We spent most of Saturday, which was R/C day, with Martin Pike and son Rory and only visited the hall after R/C close of play to watch the FF trimming session.



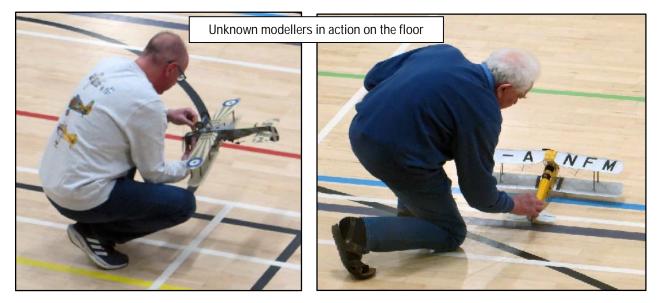


There were quite a number of events with 3 or 4 rounds and they were run in fixed time slots. It was one flyer at a time for the majority of the events which meant a constant queue at the pits entrance as competitors waited their turn.



Just a few random pictures..





We had a good couple of days out. Sorry I did not get a picture of the 'Air Race' this year but come the time, Rachel had the camera and she was outside in the car having a snooze. It would have made a good video with burst marker balloons and line entangles etc.

We had a good trip home, straight down the M6 and back in time for late lunch.

37

John Andrews

# Secretary's Notes for May 2023 -

Time flies - maybe summer will arrive soon?

Due to various happenings, realisation dawned that I haven't yet renewed my Area 8 permit, thus I am not aware of recent happenings on the Plain. However a short conversation with Ken Brown reminded me that it has to be done & he also told me that he had been notified of potential issues regarding use so I have to get up to date. There does seem to be confusion surrounding this topic. A quick conversation with Chris Redrup has clarified that - at present, it seems the London Gala will go ahead as planned & that the Crookham Gala will also take place on the scheduled date of  $7^{th}$  May.

However, it would be very prudent to check that future Area 8 events will be held on published dates - best way is to look regularly at the BMFA FFTC web site news bulletins.

You will all probably be aware that poor weather led to a last minute cancellation of the Easter Monday meeting of the Croydon Wakefield day, so very little to report on that front. Whether it is possible to reschedule the event remains to be seen.

Looking ahead, our Cagnarata Day - likewise - is still on the calendar for 24<sup>th</sup> July.

On the indoor front, the intended last meeting of the season was very successfully held at Totton with a good attendance. Again, I am grateful to Ken Brown for taking over the running as I am still away from home. I say intended as Ken tells me that - due to popular demand he has booked a date of 17<sup>th</sup> May as an extra day, so make a note. The advert in this NC has been updated to reflect the addition. Ken has also made bookings for the winter season commencing in Sept, so a new ad will be in the June NC for the first four meetings of the Autumn/Winter. Welcome news for a change. By the way, apologies to anyone who phoned my home number & left me a message - I'm not there at present. To make matters worse, I lost my mobile phone recently - it was found outside full of water hence totally inoperable, so email is the only route to contact me. Hopefully things will improve provided I can steel myself to get another mobile!

Following the inclusion of happenings in Holland in previous NC's I received a very nice email which included several good pics from Toine Schoenmakers in Tilburg, The Netherlands which is posted below. Surprising how widespread we reach with the NC readership & very pleasing as well. Says a great deal for the efforts of our esteemed Editor. Thank you Toine & John!

"Dear Roger,

As a member of the Dutch SAM Chapter (and monthly reader of your New Clarion) I was surprised to read about the Dutch information in your March 2023 "Secretary's Notes".

First the very old pictures; the latest one was familiar for me, it was taken at Ermelo in 1939 during the Annular Aeromodellers Week of the KNVvL (Royal Dutch Aeroclub).

Altough I am born in 1946, in the mid- sixties I was also participant at such an event several times. My aviation activities started somewhere in 1957, and is still going on......

- aeromodelling: two times Dutch Champion with Free Flight Scale models (1965 and 1966),
- gliding and technical servicing, homebuilding (Bensen B-8),
- vintage glider restauration (member Vintage Glider Club) and owner of an ex RAF Slingsby T.31 Tandem Tutor.

The old picture on page 36 of the February issue of NC, shows Mr. Juste van Hattum, publisher of many many articles, books and aeromodelling designs and well known also in the UK. In the picture also is the person (builder and designer) from the flying wing PH-10 "Flierefluiter", P. Napjus.

This recordholder model was published in "De Modelbouwer" spring 1939, complete with drawings, building instructions and flight adjustments.

See my attachments.

Left side, on the ground, is another famous Van Hattum design: "Havik" Wakefield (I build an electrified one in 2007, see picture).

On top row: second from left: Ron Dijkman with twinboom glider "G-1".

Another remarkable item is the drawing of the "Atakee" a design of the brothers Rob and Rudolf Das.

Highschool students in Aviation Technology in early 50's, and later well known for their regular aviation cutaway drawings of many new aeroplanes.

A special story is their publication of the cutaway drawing of the (that time) just developed and produced "Supermarine Swift" jetplane !

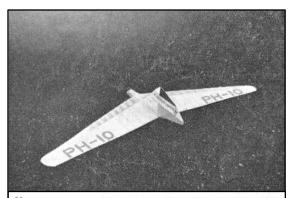
This was declared as depending on corporate espionage.....

But their work was only based upon a precise studying of many pictures (and looking for rivet rows for example) in combination with the given limited engine marks and specifications.

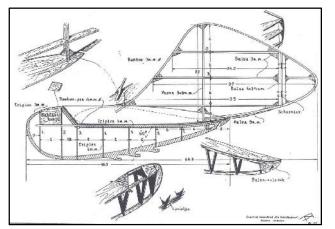
*Their drawing intentions became my inspiration to become finally a highschool teacher in engineering ! If more information is desirable, please contact.* 

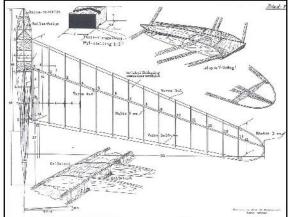


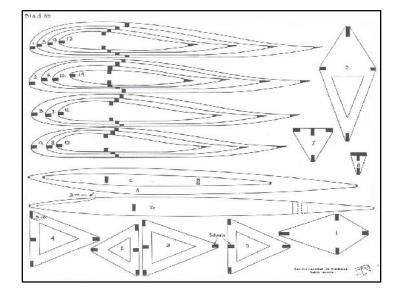
De "Flierefluiter" (P.N. 17), een vergroote uitvoering van het staartloze modelvliegtuig, waarmee Napjus het Nederlandsche record bracht op een tijd van 11 minuten en 3 seconden.



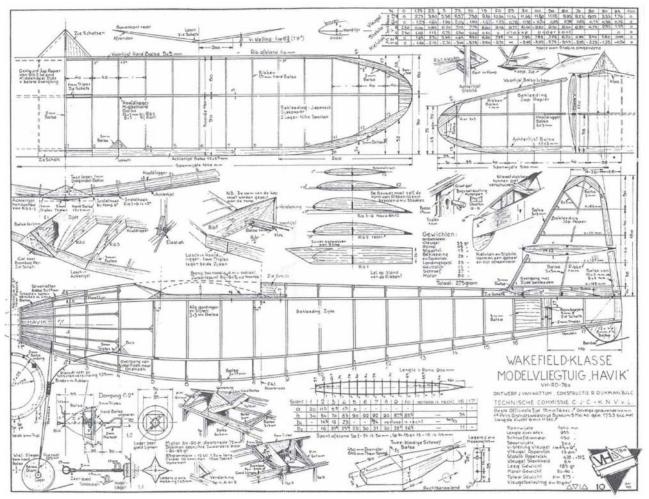
Verschillende typen modelvliegtuigen (zie ook Fig. 3). In het midden het staartloze zweefvliegtuig van Horten; onder het staartloze modelzweefvliegtuig "Flierefluiter".











Yours faithfully,, Toine Schoenmakers, Tilburg, Netherlands."

### **Curiosity Corner**

Whilst having an idle browse through the web recently, I came across a site with some interesting models, inevitably from China. The model that caught my attention was a Leprechaun Pro.

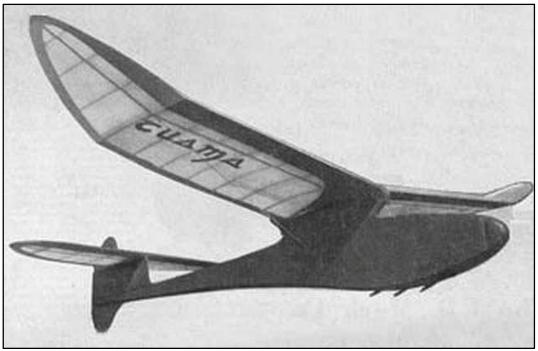
40

Now readers will probably be aware of the Leprechaun glider designed, built & flown by the late Dick Twomey. Several examples of this fine old large vintage glider have been seen at Middle Wallop over the years.

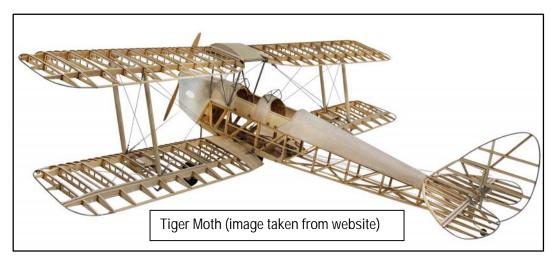
The Leprechaun Pro looks to be a bit of a take-off from the original Twomey design – 102" span (not 103") & is an electric powered RC glider. It does have some resemblance to



the original design as the pics below will indicate, but is it a Leprechaun – not really! However, having seen some of the models that have come out of China in recent years, it is likely that the build standard & quality is good. Ready built examples are apparently on sale from a model shop in this country for around £170.



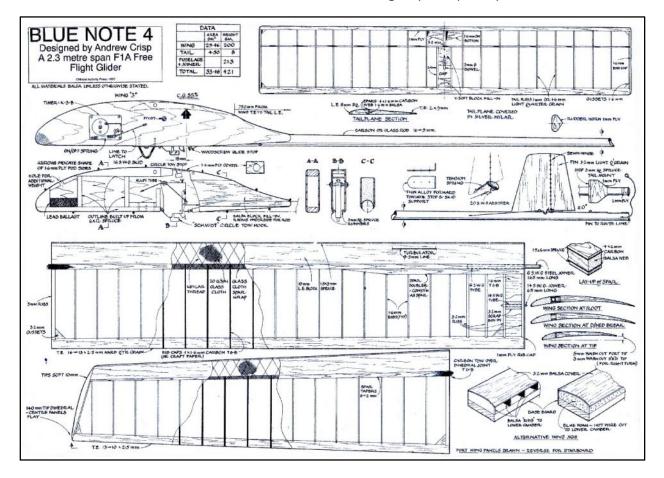
The real Leprechaun



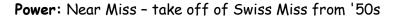
A (quite small) range of models is produced by the Chinese Company. Whether other designs are available in the UK is unknown. but the Chinese outfit is ValuePlanes & their website is: <u>www.valueplanes.com</u> for anyone interested in looking further. The range includes a 1/3 scale Tiger Moth & a  $\frac{1}{4}$  scale Miles Hawk Major - all RC of course.

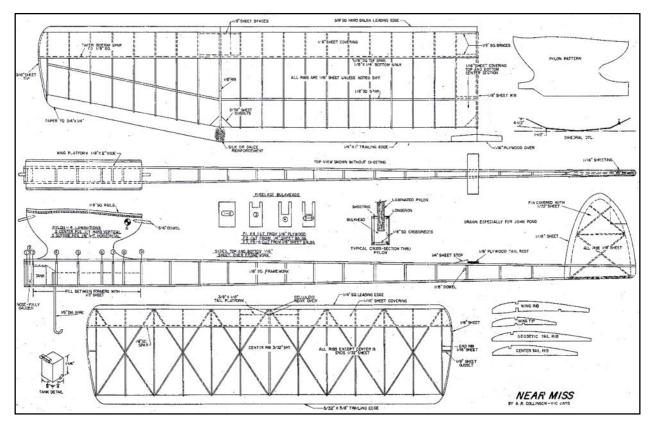
Roger Newman

## Plans for the Month

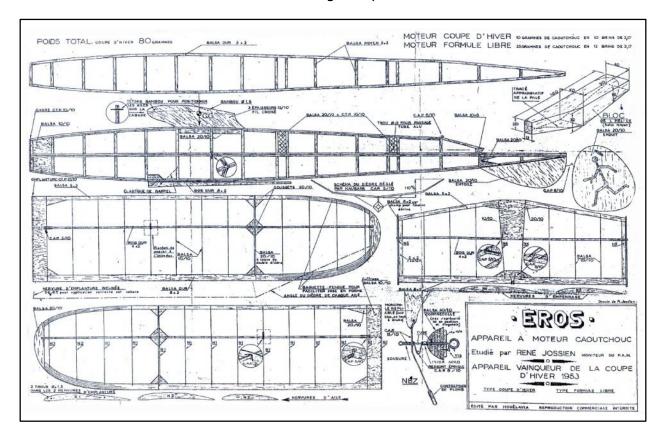


### Glider: Blue Note 4 - an FAI design by Andy Crisp



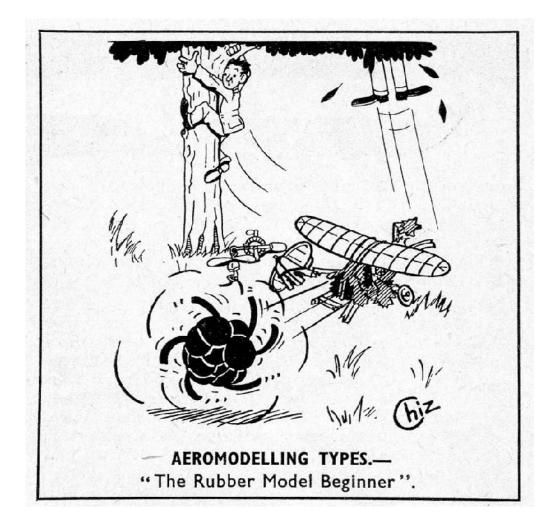


\_



Rubber: Eros - 1953 Vintage Coupe from Rene Jossien

Roger Newman



### 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
- withoutinterruptions till the end of the battery charge or competitor's decision;
- no folding prop is admitted; if a folding prop is used the blades must be held open with a rubber
- band;
- freely assembled admitted batteries:
- · -450 Mah 2 cell LiPo
- separated batteries pack for Rx alimentation is allowed
- 48" WNGSPAN

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.

- Mand 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 files 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 :

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 ( gfi@orange.fr ). Many pleasant flights and happy landings to ALL III

#### SPECIAL PRIZE VIC SMEED

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

#### Good ROW and flight

#### SPECIAL PRIZE DAVID BAKER

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

flights obtained with 30" Tomboy F/F. Only engines diesel max 0.75 c.c. shall be used. The other rules are the same for 30" or 44" wingspan type. It is possible to use a R/C Tomboy, however, being this a freeflight 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 OQW or by phone: (44) + (0)20-8777-5533, or by e-mail to <u>martindilly20@gmail.com</u>.

# 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
4 June	Nationals Small Classes	North Luffenham
9 July	5th Area	Area venues
20 August	Southern Gala	Salisbury Plain
8 October	Coupe Europa	Salisbury Plain





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 stuartdarmonf1a@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.



# 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

# 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: <u>mike@freeflightsupplies.co.uk</u>.

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

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

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

## **ORDERS and PAYMENT**

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

WESTERN UNION, PAYPAL

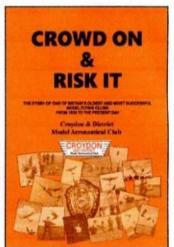
## AVAILABLE

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

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

# **CROWD ON & RISK IT**

This is the story of one of Britain's oldest and most successful model flying clubs, Croydon & District MAC, from 1936 onwards. The club contributed much to aviation, both model and full-size, and the late Keith Miller compiled its history till around 1960. Now, this up-dated 73 page version of the club's history, copiously illustrated with many previously unpublished photos, takes the Croydon saga up to the present. Contributions by past and members vividly capture the present 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 (<u>martindilly20@gmail.com</u>), 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 ressult 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 £16 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: martindillv20@gmail.com

#### INDEPENDENT REVIEW OF DILLY JAPANESE TISSUE

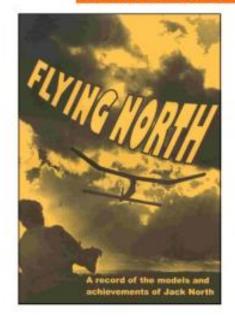
The following appeared on the Hip Pocket Aeronautics Builders' Forum. Nine different tissues were tested, doped and un-doped.

"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 Ib	Spec Str Ib/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 -

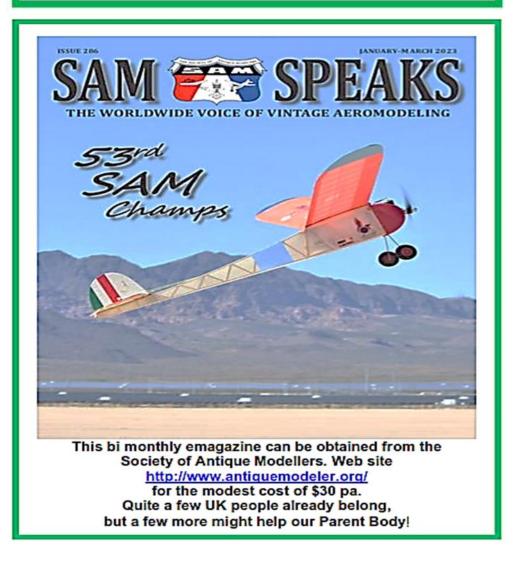
FLYING NORTH traces the model flying career of Jack North, one of only three people to represent the UK on all three outdoor free flight teams, - Wakefield, Power and Glider. It covers his flying and models from 1938 onwards and includes no less than 24 of his previously-unpublished designs.

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



4.4

# FREE FLIGHT FORUM REPORT 2021

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

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



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

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

### FREE FLIGHT FORUM REPORTS OVERSTOCK SALE

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

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

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

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

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

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

# Provisional Events Calendar 2023

With competitions for Vintage and/or Classic models

All competitions are provisional. Check websites before attending

February 26 <sup>th</sup>	Sunday	BMFA 1st Area Competitions
March 12 <sup>th</sup>	Sunday	BMFA 2nd Area Competitions
March 26 <sup>th</sup>	Sunday	BMFA 3 <sup>rd</sup> Area Competitions
April 7 <sup>th</sup> April 10 <sup>th</sup>	Good Friday Easter Monday	Northern Gala, Barkston Croydon Wakefield Day + <b>SAM1066,</b> Salisbury Plain
April 16 <sup>th</sup>	Sunday	Le Petit Classique de Brum, N Luffenham
April 29 <sup>th</sup>	<mark>Saturday</mark>	London Gala, Salisbury Plain
April 30 <sup>th</sup>	Sunday	London Gala, Salisbury Plain
May 7 <sup>th</sup>	Sunday	Crookham Gala, Salisbury Plain
May 27 <sup>th</sup>	<mark>Saturday</mark>	<b>FF Nationals,</b> Salisbury Plain
May 28 <sup>th</sup>	Sunday	<b>FF Nationals,</b> Salisbury Plain
June 4 <sup>th</sup>	Sunday	<b>FF Nationals, Mini,</b> N Luffenham
June18 <sup>th</sup>	Sunday	BMFA 4 <sup>th</sup> Area Competitions
July 9 <sup>th</sup>	Sunday	BMFA 5 <sup>th</sup> Area Competitions
July 23 <sup>rd</sup>	Sunday	<b>SAM1066</b> Cagnarata Day, <mark>Salisbury Plain</mark>
July 29 <sup>th</sup>	<mark>Saturday</mark>	East Anglian Gala, Sculthorpe
July 30 <sup>th</sup>	Sunday	East Anglian Gala, Sculthorpe
August 20 <sup>th</sup>	Sunday	Southern Gala, Salisbury Plain
September 2 <sup>nd</sup>	<mark>Saturday</mark>	Stonehenge Cup, Salisbury Plain
September 3 <sup>rd</sup>	Sunday	Equinox Cup, Salisbury Plain
September 17 <sup>th</sup>	Sunday	BMFA 6 <sup>th</sup> Area Competitions
October 1 <sup>st</sup> October 8 <sup>th</sup>	Sunday Sunday	BMFA 7 <sup>th</sup> Area Competitions Croydon Coupe Day + <b>SAM1066</b> Salisbury Plain
October 15 <sup>th</sup>	Sunday	BMFA 8th Area Competitions
October 28 <sup>th</sup>	<mark>Saturday</mark>	Midland Gala, Venue, Barkston
November 5 <sup>th</sup> or 12 <sup>th</sup>	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 -<u>www.SAM1066.org</u>

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

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

# <u>Useful Websites</u>

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

control/left click to go to sites

<u>Are You Getting Yours?</u> - 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