

	<h1 style="color: red;">NEW Clarion</h1> <h2 style="color: red;">SAM 1066 Newsletter</h2>	Issue nc072023
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The Society of Antique Modellers Chapter 1066

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## Editorial

Here we are again, I've managed to get a 51 pager together thanks to our regulars and a bit of nostalgia from me together with a dip into magazines of the past.

The Nationals suffered from low entries, the Salisbury Plain venue I suspect being the culprit. I fear we will not see a well-attended Nationals meeting until we can get back to Barkston and then only if competitors have not lost interest or aged too much like myself.

Right what have we got for this issue.

- J Peter Hall reports on the F1G content of the Mini Nationals held at North Luffenham, with thanks to the individual inputs from the Leading Competitors
- J Roy Vaughn follows up with the detailed results and the current standings in the Southern Coupe League Table after round 5.
- J I've decided to bore you all to death with a repeat of the first of a series of articles I wrote for the original paper-back Clarion in 2001.
- J I also have penned a piece on the Bowden Trophy held in conjunction with the Mini Nationals at Luffenham. Rachel and I sat and spectated as the few competitors made attempts to make qualifying flights in the fresh wind of the day. The event took place thanks to the Peterbro' club who were the organisers.
- J Martin Hurda of the Czech Republic weighs in with his No.7 model report.
- J Nick Peppiatt reports on his exploits at the Old Warden Mayfly and tells us he has also been playing with Super Capacitor powered models.
- J Alan Brocklehurst sent me an email which I turned into a brief report on the Nationals.
- J I ferreted out another unusual full sized aircraft, The Bumble Be II. This 5ft-6" wingspan aircraft was designed and built specifically for the Guinness Book of Records and holds the record for the smallest aircraft in the world. To look at it you have difficulty in believing it could fly but if you get onto tinternet you can find a video showing it up and away.
- J Peter Hall has put together another of his Coupfiles, this time the victim is Croydon's Ray Elliott. I trust the fact that it is No.13 will not affect Ray's performances.
- J I have popped in another of Ray Malmstrom's masterpieces, the SAAB A37 Vigen. I continue to be amazed at the way Ray gets so much information and model details on a single A4 piece of paper. Mind you the Vigen took three pieces.
- J The issue is interspersed ,as usual, with articles from vintage copies of the three major British magazines: the Model Aircraft; the Aeromodeller; & the Aeromodeller Annual.
- J One of our stalwarts, Roy Tiller, scribes another piece from our magazine archives.
- J As a filler I've popped in another Paper Airplane, the Rocket, from Nick Robinson's book. Has anyone had a bash at folding up one of Nicks offerings?
- J We wrap up with our secretary Roger's Notes for the month, followed by the usual three plans from the archive.

*Editor*

Mini Nationals At North Luffenham June 4th  
Fifth Round Southern Coupe League



The view from downwind - Alan Brocklehurst

Pause for a moment, look at this. And yet a poor turnout for F1G. Only six flew and this was the Nationals.

**Gavin Manion**, Gold, tells us -

*"Another" Mini Nats" on my local field North Luffenham. The shorter journey plus the very leisurely start meant of course that I didn't make the early arrival I had planned and I parked up near to Alan Brocklehurst pretty much as the hooter blew. Alan and I joined forces in our own mini "coupe corner" in the company of Colin Sharman who I hadn't seen in 25+ years since we had last shared a glider flight line. I don't know what Colin had planned for his day but in the event he timed, fielded time cards and generally assisted Alan and I all day. Many thanks Colin and I hope I can return the favor sometime soon.*

*Of the flying; it's a field I know well and the breeze was ideally suited to my preferred mylar streamer for thermal picking. I was lucky to be near Phil Ball's huge streamer pole which dwarfs mine and certainly gives clearer signals it being that much further above local ground disturbance.*

*Having banged on about longer runs and newer models in recent reports I did revert to my "good ol' No5" which has been much described and is now faded and a bit brittle. With 12 of 1/8th" it gave a 40s run ideally suited to the breezy turbulent day. Of course with such a set-up it's a bit essential that you throw it into a thermal. With Phil's streamer I got it beautifully right for the first four flights but my timing must have been off for the fifth and final as the model climbed out well and then settled into a steady descending glide for a drop of 12seconds. I think I was a bit early with my throw...maybe?*

*I was very lucky to beat Ivan Taylor who's taken to coupe flying like the proverbial duck and flew his all new/own design/tiny tailplane/VIT coupe to great effect (see below). Early DTs cost him dearly and he was 18 seconds short by the finish. A man to watch..*



*The field was lovely to behold, daisies and other wild flowers with butterflies (the lovely blue ones took my eye) flying in the meadow. I used my BMK GPS system for all recoveries, I bought it as a direct response to the trouble I'd had recovering from the long grass and flowers at last year's Nats. No such troubles this time so money well spent."*

**Ivan Taylor, Silver, says -**

*I built my first coupe in 1971 the next two were built in this last month or so, that's a 52 year gap.*

*Gavin Manion has been giving me earache for some years about building one. It was my Birmingham club who thrust one upon me to fly for Plugge points. It was a great days flying and I am now liking these small models. We thought we had won that area event. However we soon found out that the rules had unknowingly been broken with the last flight. Obviously we were happy to lose that last flight max.*

*My own Coupe was well on the way 7 days later.*

*Not knowing much about these models I referred to my beloved A/M Annuals. A Bernard Raulin 69 model seemed something sensible for very basic sizes. My observation of coupe flying led me to want something with a more positive initial climb, and no wing over, but still with a good prop run.*

*Ball race supported prop shaft, VIT, Montreal stop, shortish nose, high pylon, good moment arm, not a huge wing, clean low drag model and just for fun a small low drag tailplane.*

*The wing section is a version of that used on my Wakefields. R/L trim of course. The wing construction is a simple Balsa D box and is rigid in torsion. The weight came out at 73g including tracker bug.*

*One very well-known coupe expert from the past had serious misgivings on seeing photographs of the finished model. It was all wrong, a mini Wakefield is not what a good coupe is about. Others echoed doubts about the small stab. I certainly did not set out to scale down an F1B.*

*The prop. was kindly give as a blank by the Ace flyer Gavin for me to try, it seems most satisfactory! Anyway I could always make a bigger stab.*

*The first trimming at Luffenham included the Bernard Raulin classic coupe built immediately after my modern job. They both showed promise but when I hooked up the VIT on Mr Modern some real performance was apparent.*

*I did not expect 5 such good flights at the Nats. A mistake in calibrating the Tomy timer dropped me some time but once fixed all went well. The motors were 12.25 inch long and took 430 to 440 turns on each flight. The first two flights were very turbulent all through the climb. The air was not difficult to pick but patience was sometimes needed.*







Ivan's vintage and modern coupes

*The last two flights used the full Airfield length.*

*I have had a nice introduction to Coupe with some luck along the way. I can't see me getting too serious with the excellent coupe league at the moment. When I've finished my Meteor EDF model I shall build a copy of my coupe, I can't think of any changes I might make at the moment.*

**Alan Brocklehurst, Bronze, reports -**

*Due to the distance involved, this was my first trip to North Luffenham. Lovely to fly on a flat field with so many white daisies and butterflies. Quite a contrast to Salisbury Plain with its undulations and yellow buttercups, but what a pity there are so many small bushes all over the place. Fortunately, the wind wasn't quite as strong as forecast, generally NE. From our end of the line of cars, the drift started off across the airfield, towards bushes and trees, but varied during the day.*

*For all my flights, I used C-03 fitted with a BMK GPS tracker. I started off well with a 2:00 max which according to my new gadget climbed to 70 m (230ft) in lift before it D/T'd. Fortunately, it missed the isolated tree, landing beyond in the long grass on the far side of one of the runways. Thinking that the day was going to go well, I didn't wait long enough on my second flight and misjudged the air for a 1:43. My third flight was once again a victim of the turbulence and was down in 1:30. However, as luck would have it, my final two flights were both maxes, each climbing to about 60m (196ft) and D/T'ing down, the final one drifting over the barbed-wire-fenced plantation which gave some concern. On the retrieve, I walked around the boundary, expecting the GPS to point me into the middle of the almost impenetrable trees and bushes, but as the device counted down the distance in metres as I walked along, the pointer led me past the end of the plantation to find the model in the long-grass beyond and still on the airfield. Phew!*

*Congratulations to Gavin on his near-perfect score - he seems to have an in-built sixth sense for thermal picking, while mine seems to sometimes fail me in turbulent NE wind conditions!*

Gavin Manion has three wins out of four rounds so far with four to go. Ivan Taylor, second in the league table, also from the Birmingham club looks very promising. The next round is at the Fifth Area event on July 9.

*Peter Hall*

Mini Nationals F1G Results, Luffenham			
	Entrant	Club	Score
1	G.Manion	Birmingham	12
2	I.Taylor	Birmingham	9
3	A.Brocklehurst	B&W	8
4	M.Marshall	Impington	7
5	B.Dennis	Oxford	6
6	G.Peck	C/M	5

### Southern Coupe League Table Standings after Round 5

	ENTRANT	CLUB	Coupe De Brum	Second Area	London Area	Crookham Gala	Nationals	Fifth Area	Cagnarata	Southern Gala	Coupe Europa	Total
1	G. Manion	Birmingham	12	8		12	12					44
2	I. Taylor	Birmingham		12			9					21
3	P. Woodhouse	Morley	9	7								16
4	A. Brocklehurst	B&W				7	8					15
5	S. Darmon	Birmingham	8	5								13
=	M. Marshall	Impington	6				7					13
7	S. Fielding	Morley		9								9
=	R. Fryer	Oxford				9						9
9	S. Willis	Croydon	1	7								8
=	J. Paton	Crookham				8						8
11	B. Whitehead	Peterborough	7									7
12	M. Stagg	B&W				6						6
=	B. Dennis	Oxford					6					6
14	R. Elliott	Croydon	5									5
=	B. Hobbs	Oxford				5						5
=	G. Peck	C/M					5					5
17	C. Foster	Morley	4									4
18	C. Redrup	Crookham	3									3
19	R. Vaughn	Crookham	2									2
20	M. Woodhouse	Vikings										0

I've managed to find my first real article that I wrote for David Baker and the old Paperback 'Clarion' in 2001

*John Andrews and*  
THE RUGBY MODEL ENGINEERING SOCIETY  
AERONAUTICAL SECTION  
Part 1

*I thought I'd write a few words about a somewhat less than famous aeromodelling club of the 50's and 60's. and some of its members, perhaps sparking an article or two on similar clubs of the period.*

*The club, as the name implies, was associated with a model engineering group who possessed an old two story clubhouse with a workshop and small clubroom on the ground floor and an extensive 0 gauge model railway in the two upstairs rooms.*

*The engineering club were very active at local shows and fetes providing rides for children on four wheel pedal cars and a model double decker bus also pedal power.*

*The aero section also provided control-line demo's where possible. I don't know when the club was formed, presumably immediately post war, nor can I remember when it became defunct.*



**Some Rugby M.E.S.A.S. members pose at an exhibition in the 1950's**

*I first came across the club's activities sometime in 1948 due to the interest of my future father-in-law who took myself and wife to be on a bicycle ride out of Rugby to RAF Church Lawford.*

*We slipped onto the airfield, via an unopened gate off the back road, and made our way to the area of activity, my first contact with successful freeflight, about half a dozen fliers, a couple of cabin power jobs one certainly a Black Magic, some rubber jobs one I think a*



*Waring Wakefield with parachute D/T in fuselage box and also gliders of which I had no knowledge whatsoever, but the Sunnavind flying that day really sticks in the mind although my memory is of a much larger aircraft than it actually is.*

*My own efforts to that date was first a Frog rubber model of some sort bought as a present and duly built, how badly I dare not contemplate, the tissue was water shrunk but no dope. The attempt at flight in the back garden of a small terraced house resulted in a tremendous stall followed by disintegration.*

*The next effort was a Keil Kraft Contestor bought for my next door neighbour and future flying companion Ian Lomas, we quickly abandoned the stringered front end and built it square (we were soon into own design) the results were identical to the Frog, at least we were consistent*

*My next effort was the Keil Kraft Competitor, better built (experience) with DOPE, albeit bright red colour dope. We took it to the local 'humpty dumpty fields' and test glided it (must have read the instructions) then finally after a few up round and downs a complete circle and off down wind. We were hooked.*

*(Acronym **FROG**, Flies Right Off Ground, ref. Antiques Road show)*

*I digress, back to Church Lawford, we left the airfield with the secretary Frank Powell's address and back home my future father-in-law gave me a Frog Radius control-line kit in return for which I was to build, for him, a Southerner Mite with Mills . 75cc and an airdraulic timer.*

*Somewhere around this point I joined the club and also started my apprenticeship, as an engineering draughtsman, with the local British Thompson-Houston Company. The financial riches, specifically 5 shillings a week, enabled me to purchase, in due course, an ED Bee engine for the Frog Radius.*

*I well remember rushing up town to Charlie Moore's, the local hardware store and model shop, one Saturday morning to make the purchase. Together with clubmember Laurie Moon the engine was mounted on ply and attempts were made to start it.*

*After a break for lunch the Bee finally sprang to life at about 2-30 in the afternoon.*

*The Frog Radius was completed and under the guidance of another clubman Jim Whitehorne preparations to fly were put in hand.*

*Jim Whitehorne and Laurie were experienced? C/L fliers, well they both had Keil Kraft Phantoms complete with finger snapping EDComp Specials.*

*Jim's later claim to fame within the control-line circle of the club (pun) came about when he was flying a Mercury Musketeer with Frog 500 and an enormous aluminium spinner, he pancaked the aircraft into the floor at full chat and bounced back into the air with only the remnants of the wooden propeller.*

*The noise of the ensuing shaft run in those unsilenced days had to be heard to be believed, he glided the Musketeer down and it lay on the floor still screaming away. The aluminium cowl concealed the fuel line and we could not get at it to stop the cacophony, we stood panic stricken by the plane thinking in terms of drilling holes in the ground with the spinner, when the Frog 500 relented, stopping of its own accord and the silence was deafening.*

*Where was I ? I told you I digress, my first control-line flight thread lines and all. Jim and Laurie had gone through the usual straight arm, point at the model, lift it up and down etc., second attempt up in the air, a couple of switch-back circuits and a few quick laps on the short lines and I was an experienced C/L pilot. The engine cut, then followed the usual bounce and nose over landing, I took one joyful step towards the model then the next leg went sideways and I up-ended giddily onto the grass to the guffaws of Jim and Laurie who had waited expectantly for just such a result.*

*To be continued in Part 2 I'm afraid.*

*John Andrews*

# TOPICAL TWISTS

by pylonius

Extract from Model Aircraft July 1954

## Topical Twists

### A Complete Box-Up

Sometimes, the adventurous traveller, exploring the remote backwaters and primitive retreats of our countryside, will chance upon what at first sight appears to be an old vehicle dump. A closer inspection will cause him to wonder what strange connection there could possibly be between model aircraft flying and a vintage car rally, plus the added diversion of a motor cycle scramble.

What he fails to realise, of course, is that model flying is now generally regarded by civilised man as a barbaric ritual, to be banished far from the sight and sound of urban life. Nor is he aware of the unwritten law which makes illegal the gathering of two or more people within ten miles of any public transport system for the purpose of model flying. Thus, the penniless modeller must make his way to the distant venue by any ancient and decrepit means at his disposal.

Another reason for the wealth (?) of vehicles is the dogmatic belief of almost every modeller that the divine purpose of the human undercart is for the retrieving of model aircraft, and nothing else; the only exceptions being those who do not believe in using it even for this enlightened purpose, preferring to make use of the horde of trained lackeys, brought along especially for this and other menial functions.

Imagine now our adventurous traveller walking blithely among the vehicles, followed by sundry threats and abuse as he gaily tramples down yet another model wing. The first thing that would strike him (apart from a well deserved boot) is the weird and precarious manner by which the frail models are carried thither to the flying field. On all sides of him will loom huge box-like contraptions clinging for dear life to the ramshackle roofs and sagging luggage grids, and imparting to the ancient jalopies an even squarer look than they normally have.

Perhaps, he might take particular notice of the large black saloon with its equally large box, which has caused many a noble citizen reverently to doff his cap as it soberly proceeds through the town at its full 5 m.p.h. Or, again, he might pause to examine the latest products of the Roger's Shadow Factory, and may even be informed that the huge power duration machines, mounted in all their naked aggressiveness atop a surprisingly mild little van, have had their certificates of airworthiness withdrawn whilst investigations proceed into the nature and extent



of a large, newly formed crater on Chobham Common.

After idling away the greater part of the day wandering about the area, some zealous type, scenting a possible convert, might ask him if he had ever thought of having a dabble at this model flying business himself. This, in turn, would produce from our travelling friend the inevitable reply, "Just haven't the time, old boy."



### Cover Story

A recent article on covering has caused me to reflect on the horrible bind of wrapping our intricate balsa frameworks in swathes of crinkly tissue paper. Still, after the noble skeleton has been duly paraded before the compulsory admiration of the long suffering family, you are at least left with the comforting thought that the model is all but completed—notwithstanding the fact of past experience proving the covering operation to take about three times as long as the actual building process.

When eventually you emerge from a sea of tissue trimmings to apply the final coat of dope with the usual gummed-up-solid brush and wet brow, there awaits that thrilling moment when the ultimate, glorious result is eagerly examined—just to see which way the warps go.

Sometimes, by an incredible stroke of luck, they resolve themselves into an ideal 3 degrees wash-out under each wing tip, and a regular up-buckling of the tailplane—this latter often described by the warp-happy line-shooter as elliptical dihedral. Mostly, however, you find the wing has had a pretty good stab at emulating the helical contortions of the propeller, whilst the complex undulations of the tailplane are too gruesome to be contemplated.

Now, since we know that wing warps must be accepted as a permanent fixture in spite of all the well-meaning advice and tips to the contrary, there follows a one-man gymnastic display of body weaving and hand waving to determine the sort of turn that should result from 7 degrees wash-out on the left hand wing and 10 degrees wash-in on the other.

After collapsing from sheer exhaustion you are just as ignorant as when you started, and so, with what little strength you can muster, you begin to flip your weary way through all the back issues of the model mags in search of the vital information. Eventually, with luck, you uncover the elusive gen in some yellowing pamphlet on "How to Trim the Mann Monoplane," but only to find that all references are to "port" and "starboard" flying surfaces. And, since you haven't the vaguest clue which is which, you fervently wish you had never seen a sheet of tissue, and left the skeleton to linger in the family cupboard.

Not that any of that sort of trouble ever bothers me: you only have to look at my covering efforts to realise I could still show the experts a few wrinkles, although it has often been said my models would be improved were I to use a more suitable form of covering—preferably a dustbin lid.



We understand the Editorial Department has been faced with something of a dilemma: whether to insert the Bradford M.A.C.'s report in Club News or in the personal column under Lanfranchi, Silvio.

Pylonius



## The 2023 Bowden Trophy

John Andrews

The rules and scoring for this event are extensive but under adverse conditions the Contest Director has the right to modify the requirements as he sees fit. The fundamental rules are as follows:

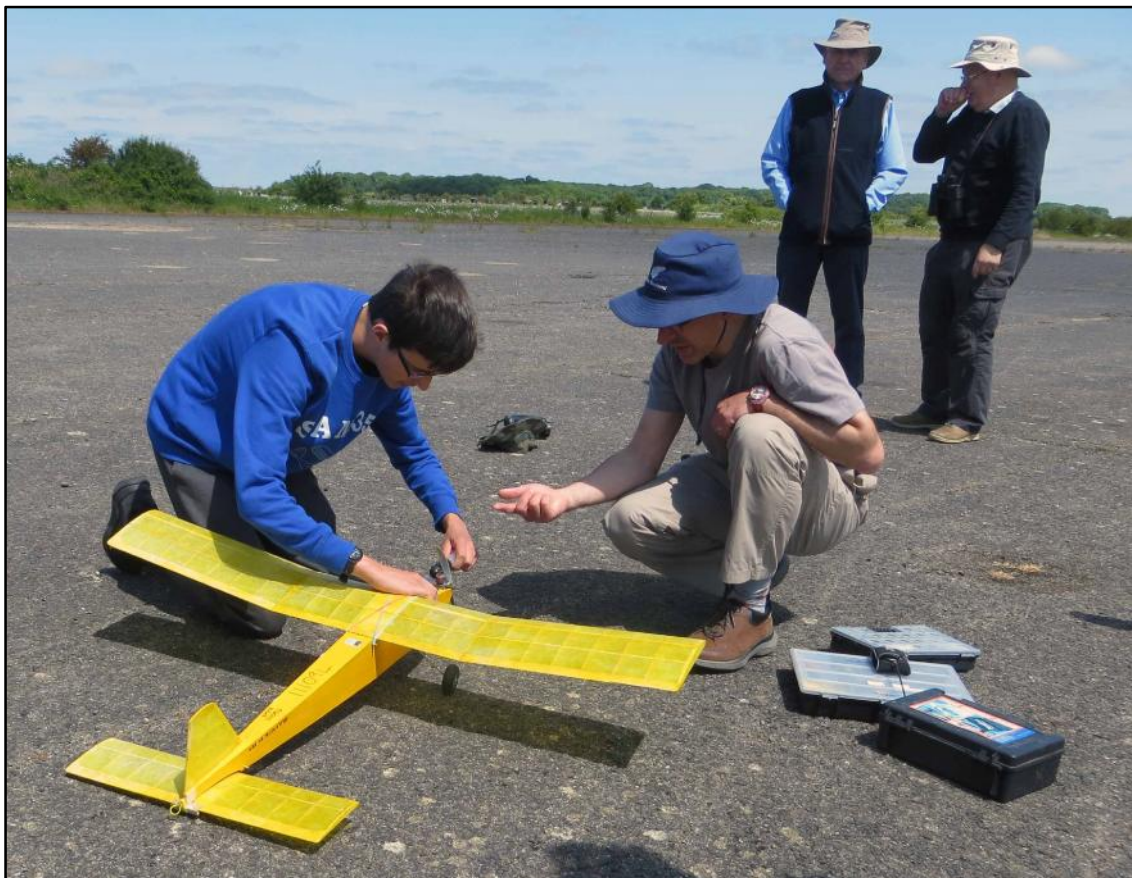
This trophy is intended to encourage the design & flying of Sports Models with cabins or cockpits able to hold an imaginary pilot. The flying of these models in a controlled manner is an exacting competition of Precision, Flight Stability & Appearance. Models may be powered by either Petrol, Diesel or Glow-plug motors.

Each competitor shall be allowed two flights, each with a target duration of 45 seconds. Flights below the minimum of 30 seconds or above the maximum of 60 seconds will be disqualified. Engine & d/t timers are allowed but flights where a dethermaliser, or other device to cause a rapid descent, operates before the model lands shall be disqualified.

A competitor will be credited with 100 points for each flight. One point will be deducted for each second or part of a second flown above or below the target duration of 45 seconds. Each competitor shall be allowed two flights, each with a target duration of 45 seconds. Flights below the minimum of 30 seconds or above the maximum of 60 seconds will be disqualified.

There are many other points deductions that can be made, using elements of the models flight performance but these are rarely used these days. In point of fact most contests currently are decided purely on the flight deviation times alone.

The 2023 contest was flown at the Mini Nationals at North Luffenham under the supervision of the Peterborough MFC. Rachel and I spent some time spectating from alongside the flight-line as competitors battled against the somewhat fresh wind that was blowing.



Rory Pike, with dad in support, attempts to fire up his engine.  
Rory had difficulties as he had little or no experience of starting a diesel engine before,





A competitor fires up for a flight.



Doug Campbell, the event winner - the only competitor to register qualifying flights.



Ready, Steady Go.

*John Andrews*



# NEWS Review

May 1948

## *A Great Loss to the Model Movement*

It is with deep regret we have to announce that Mr. Percival Marshall, for so many years Editor of *The Model Engineer*, passed away suddenly on Saturday, April 10th, at the age of 77.

It can truthfully be said that model engineering in this country owes its present high status mainly to his encouragement and efforts over the last 50 years.

He has been the friend and adviser to thousands of model makers, not only in this country, but all over the world and his loss will be very widely felt by all interested in model making.

He has always shown extreme kindness and sympathy towards the model aircraft movement, which owes him a tremendous debt of gratitude for his energetic encouragement at *The Model Engineer* Exhibitions and in the devotion of space in the pages of *The Model Engineer*, when the Society was not blessed with its own journal. It was characteristic of him that he should become keenly interested in the production of the Society's journal and his generous outlook was largely responsible for making the present scope of the journal possible. All modellers will, we feel sure, feel his loss very keenly.

## *The Society Loses Another Friend*

We also regret to record the death of Mr. Harold E. Perrin, C.B.E., late secretary of the Royal Aero Club, who passed away on April 9th, at the age of 70.

The history of the Royal Aero Club is largely one of Harold Perrin's efforts on behalf of aviation, and its present position is a fitting monument to his work since the inauguration of the club in the days when the only method of air travel was by balloon.

During his period of office both the old K. & M.A.A., and the present S.M.A.E. received unbounded help from him, and his loss will be deeply felt by all aeromodellers.

No aeronautical function in the past has been complete without his presence, and his passing leaves a gap that will be hard to fill.

## *Continental Groupings*

The lack of cohesion between the various European model aircraft clubs which was evident before the war, appears to have been resolved as a result of the post-war conditions, as we find the European countries not only grouping their clubs within their own country, but grouping themselves internationally with a view to improving their knowledge by the interchange of ideas, visits and healthy competitions.

Thus we now find the Nordic group consisting of Norway, Denmark, Sweden and Finland, firmly established, unifying their national rules and meeting in annual competition; with the Benelux countries, Holland, Belgium and Luxembourg following suit.

This "get together" on the part of our continental friends is all to the good, and is already having its effects on the Model Commission of the F.A.I., where fewer conflicting propositions are put forward, and better agreement attained as the result of the prior discussions which take place in the groups.

This year the annual Anglo-Dutch contest, inaugurated two years ago, will be held so as to coincide with the annual meeting arranged by the Benelux countries, so that our model makers will have the opportunity of contacting the members of this group and so widening their overseas contacts.

## *The Nordic Gliding Competitions*

The annual contests for gliders between the four Nordic countries, Norway, Denmark, Finland, and Sweden, took place this year on the frozen surface of Lake Mjösa at Hamar, north of Oslo, Norway, on March 20th.

The event was fixed to take place during Norway's winter season, owing to the scarcity of suitable aerodromes and the opportunity which the freezing of the Norwegian lakes offers in the way of large open spaces.

Flying over ice is not conducive to thermals so that results below average are not to be wondered at, particularly as a stiff breeze was in evidence at the same time.

The winner this year proved to be the Swedish team who succeeded in averaging 1 min. 43 sec. under the prevailing conditions, although Denmark gained the honours for the best individual performance with an average of 2 min. 39 sec., achieved by Aage Host-Aaris.

The well-known Swedish exponent, Rune Andersson, made the next best individual performance with an average of 1 min. 52 sec.

The final team results were Sweden 1 min. 43 sec.; Norway 1 min. 32 sec.; Denmark 1 min. 30 sec.; and Finland (last year's winner), fourth with 1 min. 21 sec. average.

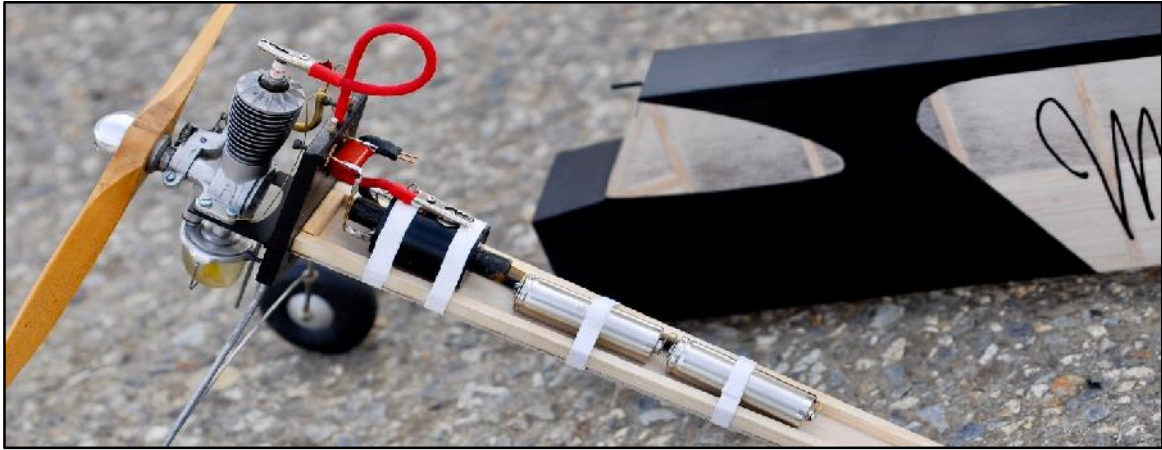
Through the courtesy of Per Weishaupt, of Denmark, photos of the winning Swedish team and of the two best individual performers will appear shortly.



Mercurio (1943) by Adriano Castellani  
39 inch/ 990mm  
Engine Super Atom .098 (1941)  
Vintage Austin Timer  
Aero-Spark coil





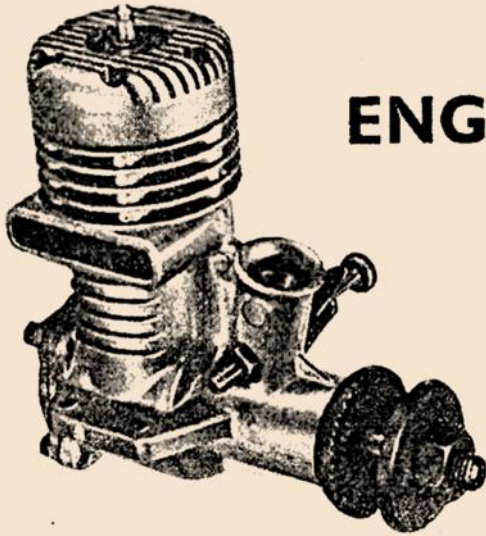


*Martin Hurda (Czech Republic)*



264

May, 1958



## ENGINE ANALYSIS No. 47

The latest engine from one of America's leading manufacturers for Team racing, stunt or combat flying

# FOX 29X

by R. H. WARRING

BASICALLY THE FOX 29X has been evolved from the 29R and the Combat 35 engines, all parts being interchangeable with one or other of these models, with the exception of the cylinder head. Unlike the 29R, however, the 29X adopts a conventional layout with normal induction.

The 29X is a sturdy, rugged engine with excellent smooth running characteristics and plenty of power. Despite its high output it is an easy engine to handle, is free from marked vibration except at very high speeds, and is also easy to start.

The compression ratio appears fairly high and using a doped fuel there is a marked tendency for the engine to kick back when hand starting, with increasing nitromethane content. With 20 per cent. nitromethane the kick-back is quite noticeable, demanding a powerful flick for starting. A maximum of 10 per cent. nitromethane would appear about the limit for normal operation with easy hand-starting without decreasing the compression ratio.

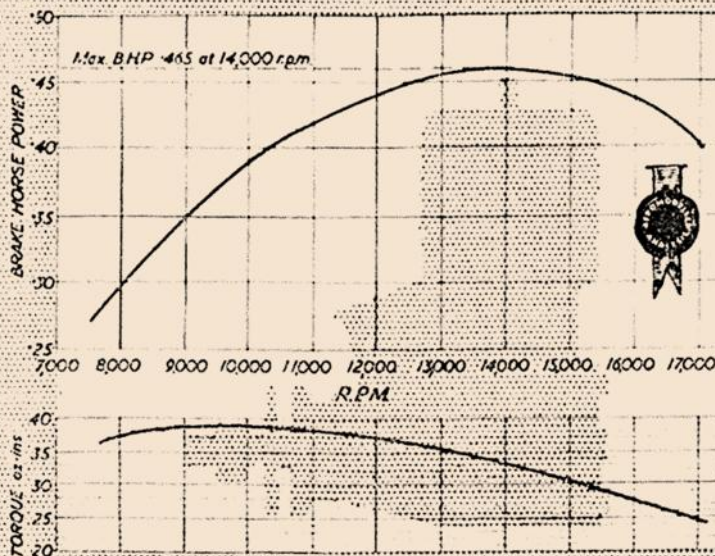
Starting characteristics are exceptionally good, there being no tendency to falter once running. Starting when hot deteriorates with straight fuel, but is again easy with a doped fuel. Due to the good suction, little or no choking is required for starting—except for an initial

choke when cold, if only to "degum" and free the engine. *All the handling tests were conducted in particularly cold March weather and may not be typical because of this.* It is a flattering point, however, that despite near-freezing temperature no trouble at all was experienced in getting the Fox 29X to hand-start on any size of propeller.

Good torque is developed at low speeds, without the engine showing any signs of exceptional power output. Running is quite steady and consistent but the Fox sounds happier at higher speeds (10,000 r.p.m. and above). At speeds above 16,000 r.p.m. the performance was very steady, although there was a noticeable tendency to vibration. At all speeds the needle valve control is exceptionally non-sensitive, allowing plenty of time for adjustment.

### Useful power peak

Maximum power output on test was developed at 14,000 r.p.m., and maximum torque at 10,000 r.p.m. The 29X tends to run quite hot and unless properly cooled with an airstream performance is affected by overheating (e.g. as could occur in a close cowl without adequate venting for airflow through). Fuel consumption is quite high, without being excessively so for an engine of this size.



### SPECIFICATION

Displacement: 4.896 c.c. (295.5 cu. in.)  
 Bore: .738 in.  
 Stroke: .697 in.  
 Bore/stroke ratio: 1.06  
 Bare weight: 7½ ounces  
 Max. B.H.P.: 46.5 B.H.P. at 14,000 r.p.m.  
 Max. torque: 39 ounce-inches at 10,000 r.p.m.  
 Power output: .095 B.H.P. per c.c.  
 Power weight ratio: .062 B.H.P. per ounce  
**Material specification:**  
 Crankcase unit: light alloy pressure die casting  
 Cylinder liner: alloy steel  
 Piston: Meehanite  
 Connecting rod: machined from 24 ST aluminium alloy  
 Main bearing: Bearing bronze  
 Crankshaft: alloy steel, surface hardened to Rockwell "C" 58  
 Head: light alloy  
 Spraybar: brass  
**Manufacturers:**  
 Fox Mfg. Co. Inc.,  
 5305 Towson Ave., Ft. Smith,  
 Arkansas, U.S.A.





*Basic components of the 29X show remarkably little out of the ordinary, yet the plain appearance belies the high performance obtainable. Piston and cylinder are interchangeable with the 29R, but connecting rod and crankshaft are longer on the racing engine.*

Fuel used: 20% Nitromethane, 50% Methanol, 30% castor.

PROPELLER—R.P.M. FIGURES	
Propeller dia. x pitch	r.p.m.
10 x 6 (Poplite)	12,500
12 x 4 (Trucut)	8,200
10 x 4 (Trucut)	10,000
11 x 4 (Trucut)	9,800
9 x 4 (Trucut)	13,700
8 x 8 (Trucut)	12,200
8 x 6 (Trucut)	14,500
8 x 4 (Trucut)	16,000
10 x 4 (Stant)	12,500
9 x 4 (Stant)	13,300
9 x 9 (Stant)	10,400
8 x 4 (Stant)	16,700
8 x 8 (Stant)	13,500
7 x 4 (Stant)	17,500

Constructionally the Fox 29X employs a light alloy crankcase casting incorporating the cylinder barrel, exhaust stub and induction tube, into which fits the liner capped by a light alloy head. The only machining operations on the casting are drilling through the induction tube (and inserted main bearing shell), reaming the main bearing for the bronze bearing shell, and the barrel reamed to fit the liner and the top faced, drilled and tapped for the head screws.

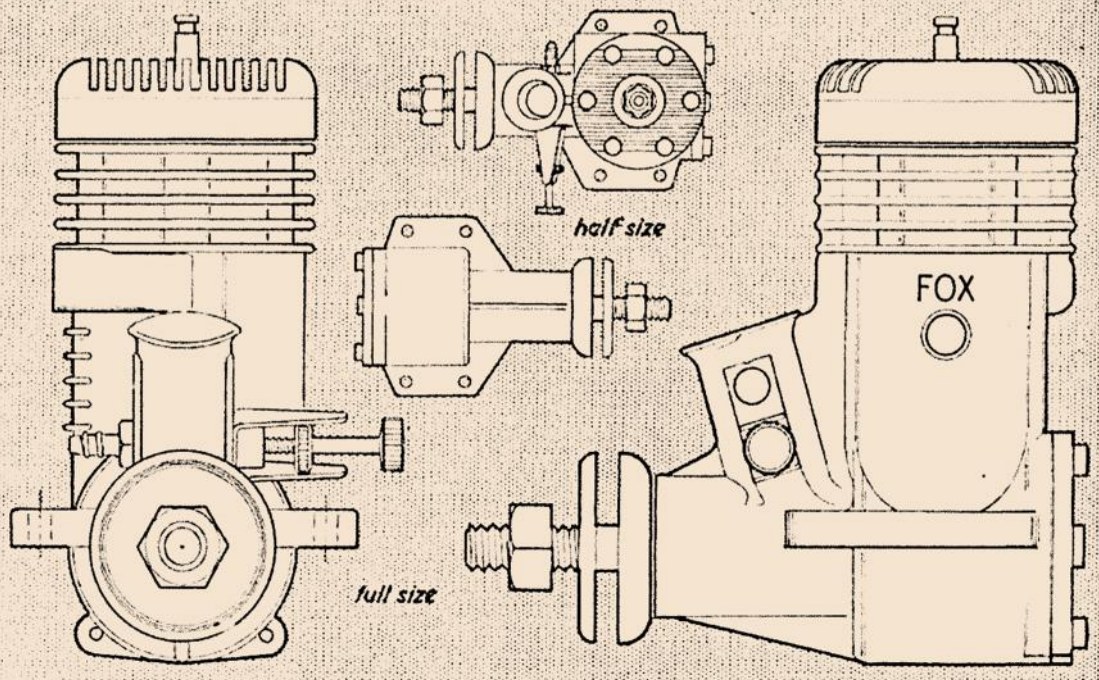
The liner is fully machined from leaded steel, turned, reamed and honed internally and ground externally to a plug fit in the crankcase casting. The top of the liner is flanged and seats on top of the cast barrel with a thin aluminium gasket under the flange. Ports are rectangular, of large area and depth, and milled in the liner walls. The bottom of the liner is ground away in a half-moon shape on the transfer side, presumably for con. rod clearance since the cylinder is slightly de Saxe.

The piston is fully machined from a Meehanite billet, ground externally, and is a beautiful job lightened to logical limits. The gudgeon pin is  $\frac{3}{32}$ -in. in diameter,

drilled to take brass end pads. To dismantle, the liner must first be withdrawn and the gudgeon pin "fiddled" out through the hole in the rear of the crankcase casting, when the piston falls free and the con rod can also be removed. The latter is machined from light alloy stock and is of substantial proportions.

The head has an annular recess to fit the liner flange, into which is fitted an aluminium gasket. Compression ratio can be adjusted by removing this gasket, or adding another, if required. The head is contoured with a cross slot to match the straight deflector on the top of the piston, and is of substantial proportions to eliminate warping or distortion.

The crankshaft is a massive unit, although relatively short in length. It is machined from alloy steel hardened and ground to  $\frac{1}{4}$ -in. diameter stepping down abruptly at the end of the bearing length to a  $\frac{1}{8}$ -in. diameter threaded length. The port is rectangular, approx  $\frac{1}{2}$  in. x  $\frac{1}{4}$  in., drilled, milled and possibly finished by broaching. The central hole through the crankshaft is  $\frac{11}{16}$ -in. diameter. The crank web is machined away to provide counterbalance and the  $\frac{1}{8}$ -in. crankpin ground to finish





**A catch up on projects  
Outdoor Adventures at Old Warden**

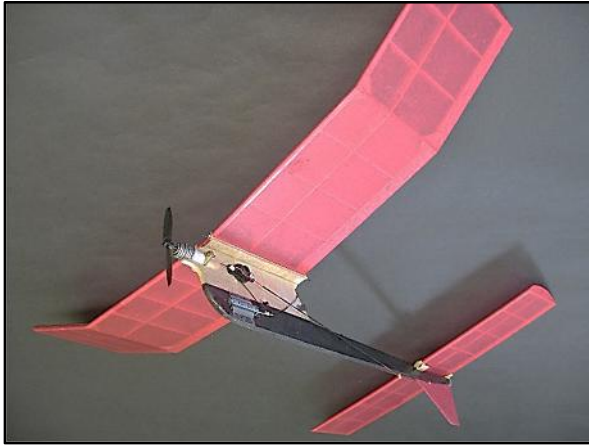


The Dornier Libelle gets away at the Old Warden Mayfly. Colin Hutchinson photo.

Regular readers may remember I built a Dornier Libelle, powered by a Brown Campus A-23 CO<sub>2</sub> motor, in response to the Hip Pocket Aeronautics Walt Mooney cook-up. I have flown it on the Sundays of the last two Old Warden Mayfly's, where the conditions on both days have been particularly clement and suitable for the flying of such small models. It has flown nicely in left-hand circuits. Apart from treading on a wing tip, causing minor damage, the other issue has been with the CO<sub>2</sub> filler valve. After a number of charges, it would not hold a liquid charge. I had fitted a slug of 90 IRHD rubber cut from an O-ring with a 1.78mm minor diameter. I have put this down to the rubber becoming too hard to seal properly at a lower temperature and have now replaced this with a piece of 70 IRHD rubber. Hopefully, this will overcome the problem.

Last year our Hon. Secretary, Roger Newman, kindly let me have a copy of Alexandre Cruz's article from Free Flight Quarterly, April 2019, 'Outdoor free flight with supercapacitors', which includes his micro Starduster plan. This 20" span model uses a standard 8.5mm dia x 20mm long coreless motor driving a 65mm dia. drone propeller, powered by a 10F super capacitor. I found some sockets to suit the plug of the three AA cell charger supplied with models such as the BMFA Rookie and super cap. ARTF foam aircraft from China and one is fitted at the rear of the pylon.

The CG position specified in the micro Starduster article is 70mm from the le, i.e. at 74% chord. I could get the model to glide well with the cg in this location, but as soon as power was supplied it became unstable. If the nose pointed down, it carried on with no sign of recovery. After I had spent a nice, weather-wise, but otherwise frustrating afternoon on Chobham Common trying to overcome this with minor adjustments last October, I decided that more radical action needed to be taken. I have discussed Rene Jossien's formula for the CG position (AeroModeller September 1983) before in IIFE 12 (NC May 2017). I took a look at what his formula suggested for the CG position for the micro Starduster



Super cap powered micro Starduster



Ganagobie Peanut from Peck kit.

With  $KA=38$  (it is a power model with a pylon) and  $KT=27$ , the suggested  $CG$  position is 58%, i.e. 55mm from the le, considerably forward of where it was. So some cored solder was wrapped around the motor and packing added under the te of the stab. Further glide tests had been conducted, but the Old Warden Sunday gave the opportunity to try the model under power. After a couple of short charges, which gave encouraging flights I tried a 15 s charge (the batteries were not fresh). The model climbed straight to a good height and transitioned into a left hand glide as the power ran down. Gliding nicely it had hooked a gentle thermal. Fortunately the viscous damper dt operated so that the model came down within the airfield.

I also took the opportunity to try Lindsey Smith's Hot Air, which is powered by the tiny Air Hogs compressed air motor (see IIFE 64, NC May 2023). I used a stirrup pump and Gerard Moore's adaptor and achieved a pressure of 80 psi in five or six pumps. This compares with the 40 or so mentioned in the instructions using the Air Hogs pump. I had a couple of good flights, then on pumping it up again, the motor would not start. There appeared to be slippage in the plastic sleeve that connects the crankshaft to the propeller shaft. Back home in the shed, the problem was quickly fixed by undoing the two tiny screws that retained the prop shaft bearing, removing the prop shaft, putting a drop of CA in the plastic coupling hole and re-assembling.

### Ganagobie

I last reported on the Peanut Scale Ganagobie built from the Peck kit in IIFE 55 (NC August 2022). Since then I have carried out quite a bit of test flying indoors. It generally appears happy flying in right hand circuits, but the thrust line is sensitive, possibly because of the long nose. I discussed this model with Bob Hauk, who has also built one, at the Indoor Scale Nationals. He agreed it was tricky to trim, also because of the short moment arm between the wing and the stabiliser. I've certainly got a long way to go to match Jiro Sugimoto's flights <https://www.youtube.com/watch?v=sJuoLADxBqQ>, but his must be somewhat lighter with plain tissue covering and no pilot.

### Dayton-Wright RB-1 Racer

IIFE 61 (NC February 2023) left this Peanut Scale Henry Struck design in an uncovered state. I usually cover models using a dope and thinner technique, but for this one I followed Tom Hallman's techniques, and used a glue stick with IPA (Iso-Propyl Alcohol, not India Pale Ale, unfortunately) to activate it. See for example: - Free Flight Basics #6 'Covering an Oval Fuselage with Tissue and Color Trim', <https://youtu.be/Adq3CNcH2o0>. This involves attaching longitudinal strips of tissue, and folding back the excess at the stringers at right angles to the surface, so that it can be sliced off with a sharp blade. The problem I encountered was ensuring that a previously covered area was not stabbed. The eagle-eyed will spot where I had to apply a small repair patch.

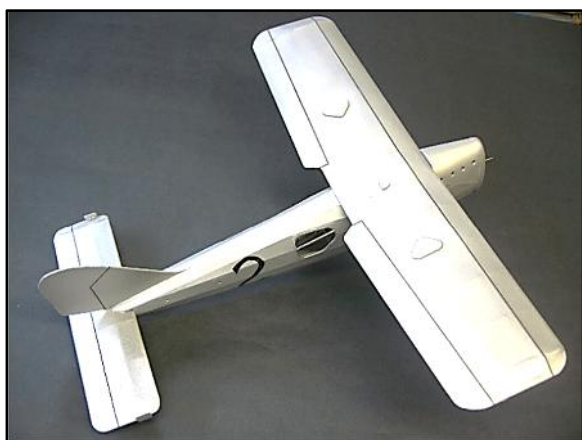




Covered fuselage prior to shrinking the tissue



Components covered, tissue shrunk and thin dope oil applied. The nose is covered with doped copier paper.



Assembly after spraying with Tamiya Acrylic flat aluminium



Nearly complete model. Further details will be added after flight trimming

The fuselage covering was water shrunk before applying a coat of thin dope and then a coat of banana oil. The tissue for the flying surfaces was pre-shrunk on a frame before attaching to the framework. I used the same approach as I had for the Dornier Libelle and covered the model with black tissue. The separation lines for the control surfaces were then masked off with thin strips of masking tape, before applying the Tamiya Acrylic flat aluminium (XF-16) with an airbrush. A piece of silver coloured paper was supplied for the nose cowl in the kit, which, unfortunately, was slightly too small, so I substituted a piece of doped copier paper. The cockpit windows were masked off and the race numbers '2' on the fuselage sides and under the wings were also masked off and sprayed with gloss black (X-1). They were then covered with the centre of the mask prior to the application of the flat aluminium. The propeller was carved to the balsa blank details given on the plan.

There is a certain amount of detail still to be added, such as the dummy linkages on the top of the wing to the control surfaces and the exhaust pipes, after flight trimming has taken place. This model is no lightweight at 21 g with a rubber motor. The plan quotes 0.8oz (22.7 g), so it is more of an outdoor Peanut. So far, I have carried out some test glides (undercarriage up) with the propeller and nose plug replaced by a dummy; these looked reasonably encouraging. Test flights under power await a calm day and KeilKraft long grass.

*Nick Peppiatt*



MODELLER

514

October, 1956

# Heard at the HANGAR DOORS

## Winners Corner

REFLECTIONS on the just-concluded World Power Championships are the obvious theme for discussion in the group at right of Dave Posner, Ron Draper, Team Manager Pete Buskell and proxy ther Silvio Lanfranchi. Just what Silvio was saying at the time we cannot recall; but one can safely presume that it concerned the very narrowness of his ultimate defeat by the two British lads, for Silvio is not one to let others remain ignorant of his position in the fly-off! Earlier, he had rocked the onlooking crowd by answering an emphatic NO to the request as to whether he was ready to fly. This was followed by an immediate YES; but the effect of the first reply on the organisation was more than obvious, and served to relieve much of the tension associated with a deciding fly-off.

It is interesting to note that while these four prominent modellers were engaged in one discussion group, a larger and more international gathering was centred about Mike Gaeter. His was the model that most people wanted to study, and possibly gained greatest respect for its performance in the contest.

## Doug Gordon

Interesting presentation made at the final banquet of the World Power Championships took the shape of a chiming clock awarded to Doug Gordon who resigned the Secretaryship of the S.M.A.E. last June.

S.M.A.E. Chairman Alex Houlberg expressed the appreciation of the Council for the ten years excellent service put in by Mr. Gordon, who as readers will remember was awarded the Paul Tissandier Diploma by the F.A.I. earlier this year. In reply to his presentation Doug expressed the anticipation that he was getting the clock case this time and the "works" later; but he need not have any concern, for the timepiece was complete and ticking merrily.

## Radlett Sequel

One sufferer of the downwind engine thieves, who are particularly notorious at Radlett during the All Britain Rally, was P. E. Norman who lost his well-known Mew Gull during the 1955 event. A letter was subsequently received at the AEROMODELLER Editorial Offices from a young reader who recognised the engine when it was offered to him for sale.

The sequel took place in St. Albans Juvenile Court last month when a boy aged 15 years pleaded guilty to stealing the engine from Mr. Norman's crashed model. The youth stated that he and other boys saw the model caught in a tree. They left it,



but he returned a few days later and removed the engine. Later he sold it to another boy for 10s.

This offender was granted a conditional discharge and ordered to pay £3 17s. 10d. costs which, considering the engine alone was valued at £5, was poor recompense to our old friend, P. E. Norman. We only hope that the appearance in court of this particular engine thief will be a deterrent to the other light-fingered gentlemen who loiter downwind.

## All Britain Rally

As a contrast to the attractions of Miss Carol Carr who added glamour to the 1955 event the St. Albans Club have this year engaged the services of M.G.M.'s Robby the Robot, who for the benefit of the un-enlightened, features in the film "Forbidden Planet". Aeromodellers need have no fear, however, that Robby will be participating in the actual contests, although we doubt very much whether even a robot would succeed in the centre of the Team Race circle against some of the rougher and tougher pilots. Robby's main duties, so we understand, are to assist in the Spectator Event, just how we are not certain, but doubtless many thousands of our readers will find out when they go along to Radlett on September 16.

Contests are basically the same as last year with John Cunningham, Peter Bugge and Hedley G. Hazelden judging the concours, the scale section of this latter event featuring a £4 4s. 0d. increase in the prize list. Sir Frederick Handley Page will present the prizes, with the exception of the All Herts Trophy which will be presented by Lord Verulam, Mayor of St. Albans.

## Radio Control in the South

RADIO-CONTROL flyers in the South-West, who until now have had a very thin time in the way of local rallies, contests, etc., will be interested in the announcement in CLUB NEWS regarding the



formation of the "South-West Radio-controlled Model Flying Society". The Society aims to bring together all radio enthusiasts in the region for regular R/C rallies, contests, etc., and should meet a long-felt need.

### Juste Married!

Our old friend, Juste van Hattum, who is Secretary of the Model Section of the Royal Netherlands Aero Club, was married on August 24th, to Miss Johanna Wilhemina Feijen at the Hague. Readers will join with us in wishing them many years of happy married life, and we sincerely hope that "Vans" new marital status will in no way affect his prolific output of aeromodelling words and drawings.

### Maker's Modesty

In reply to an AEROMODELLER letter informing them of their success at the World Power Championships the Japanese makers of the O.S. Max 15 engine, the Ogawa Model Mfg. Co., sent the following reply:

"Thousand thanks to you for your kindness to give us the most happiest report of the result of the World Power Championships recently held at Cranfield, Bedfordshire. How we were surprised to know the winning engine in the event was our Max 15 engine used by Mr. R. F. Draper of England.

"The good result made by Mr. R. Draper was mainly due to his long time experiences and training in his own aeromodelling. Only the very happy opportunity for Max 15 engine to be used by Mr. Draper.

"Here in Japan Radio Control method is getting popular among modellers. But it is in beginning stage. One or two experts are high in their techniques, but average modellers are in low. Spring and Fall event in this radio control are to be held periodically and applicants to these contests are increasing in number. Radio control kits are showing their good selling of late."

Yours very truly,

Ogawa Model Mfg. Co.

YASUO OISHI (Manager)

### Service in the Model Shops

Earlier this year we commented on the poor service, due to inadequate stocks, offered by many Model Shops. At the same time we did mention that "many shops provided splendid service".

One of our regular readers quotes this phrase in a recent letter saying we are much too kind in our reference, and comments that with the experience of many years as a substantial aeromodelling customer, he knows of only two shops where he can get *anything* he wants and they are in London. Fairly obviously he cannot have shopped through the entire country, but taking London alone and bearing in mind the substantial number of model shops not only in Central London, but also in the suburbs, his statement gives food for thought.

He goes on to say: "You once commented upon a lack of 6 B.A. spanners in the shops. In this area there are four model shops where no B.A. spanners and few B.A. nuts and bolts can be purchased to this day. At the moment no Frog nylon props, 8 x 5

have been available for over three weeks and this probably the most popular size. I have had a new 1-49 Frog engine on order for six weeks and five days ago wrote to the makers, who informed me delivery was per return. This sort of thing is not confined to one make—no radio control sets are stocked and no information is available.

One dealer remarked, "it is no use stocking expensive goods, engines, radio, etc., as practically all the demand is from impecunious youngsters for three and ninepennys". There is no effort to induce or stimulate a demand, and consequently the customers, who can afford "expensive items", are neglected and have to obtain from London or by mail order from AEROMODELLER adverts.

Well, there it is! The only comment we would make is that model shop proprietors should examine once again their consciences and their shelves. It seems utterly ridiculous in this day and age, that an aeromodeller cannot buy a simple 6 B.A. nut and bolt and a spanner to fit. Added to which the retailer without an adequate display of goods on the shelf is doing himself out of trade besides disappointing the customer.

### Wood Green Exhibition of Transport

Wood Green Corporation are organising an exhibition relating to the development of land, sea and air transport. There will be a fascinating collection of models of all kinds and the Air Section features B.O.A.C., B.E.A., De Havilland, Faircy Aviation and many other airline models.

Interested readers should attend between 1 p.m. and 9.30 p.m. from October 6th to 13th, excluding Sunday 7th, at the Gaumont Cinema, High Road, Wood Green, which is near to Wood Green Underground. Admission is free.

### Stop Press

As we close for press, the results of the Wakefield Contest held at Hoganas in Sweden, come to hand. Conditions were bad from the weather angle, the contest finishing in continuous rain squalls. No competitor recorded five maximums, although three of them made four, plus near misses. Russians did participate this time with outstanding models. Winner Petersson appears to be a newcomer to international field. Kothe's model was flown by Hakansson of Sweden, who placed second last year and did outstanding job of proxy flying. O'Donnell brothers well and truly upheld British angle, and John in particular, was unlucky with extreme turbulence. Fea of Italy was unluckiest man, with four maximums and both models lost! Full illustrated report will be in next issue.

#### WAKEFIELD RESULTS, 1956

1	Petersson, L.	Sweden	879	8	Ivannikov, I.	Russia	811
2	Kothe, H.	U.S.A.	874	9	Kolpakov, V.	Russia	809
3	O'Donnell, J.	G. Britain	871	10	Hyvarinen, V.	Finland	808
4	Knudsen, E.	Denmark	871	11	Srolders, J.	Netherl.	804
5	Smirnov, E.	Russia	850	12	Haag, R.	Sweden	801
6	O'Donnell, H.	G. Britain	848	13	Lafavor, G.	G. Britain	750
7	Ahman, R.	Sweden	829	14	Revell, H.	G. Britain	604

#### TEAMS

1	Sweden	2509	4	U.S.A.	2444
2	Russia	2470	5	Italy	2228
3	Great Britain	2469	6	Denmark	2204

All total times given in seconds.



Hi John,

I haven't forgotten that you were asking for copy for New Clarion and I'll try to get something together shortly - several things in mind, but events seem to keep overtaking me.

Attached are a few of photos from the Free Flight Nationals (didn't take that many and, as requested, sent most to Mike Woodhouse for BMFA News).

Salisbury Plain: Photo of southern half of line of cars at SE corner of the field - note the buttercups!



Below is a photo of the Caprice, built a while ago by Chris Chapman, which I flew to place 4th in Classic Glider (I'm listed as 'Andrew' in the results).





Martin Stagg winding in Combined Rubber followed by Chris Chapman with one of his Wakefields with which he came 3rd. What a pity the entries were down in all classes.



At North Luffenham - I was busy all day flying F1G, so only took a few photos at the end. On the right above, a photo of Julian Pennington with his E-36, taken prior to the fly-off. (he came 4th after the model developed a stall on the glide).

Sorry I didn't find time to send these before I went on hols!

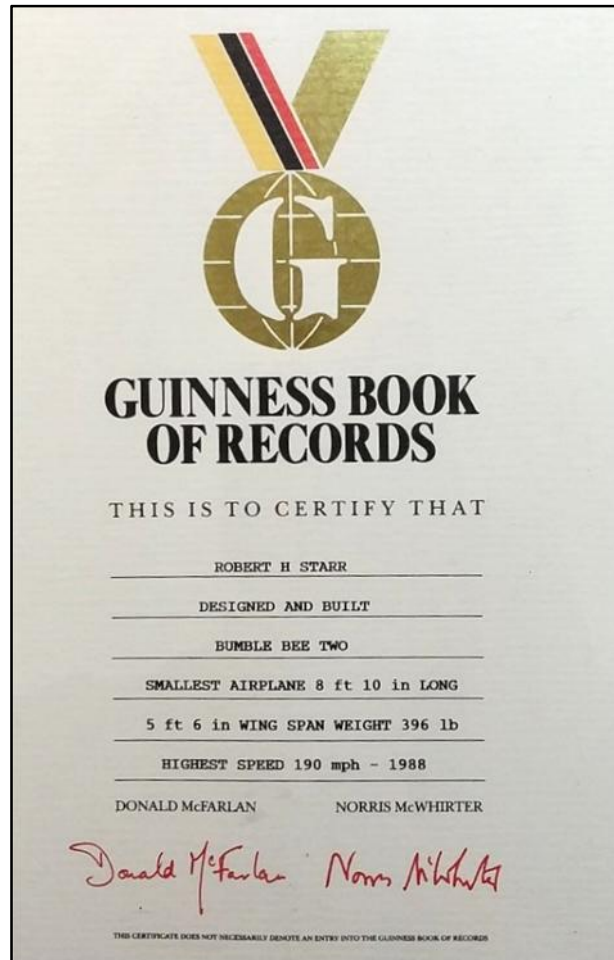
*Alan Brocklehurst*



The *Starr Bumble Bee II* is an experimental aircraft designed and built specifically to acquire the title of “The World’s Smallest Airplane”.

### Design and development

The *Bumble Bee II* was designed and built by Robert H. Starr in Phoenix, Arizona with the intent of breaking the record for the world's smallest biplane. Before building the *Bumble Bee II*, Starr had been deeply involved with the development of previous aircraft holding the title of "world's smallest airplane". His own plane, the *Bumble Bee I*, had lost the record to an aircraft called the *Stits DS-1 Baby Bird*, until the *Bumble Bee II* flew and regained the Guinness record. The design of the *Bumble Bee II* was similar to Starr's original *Bumble Bee I*. Both aircraft were biplanes with negative staggered, cantilevered wings and conventional landing gear. However, the *Bumble Bee II* was smaller and lighter with a fuselage constructed of welded steel tubing covered by sheet metal, and wings covered in aircraft plywood. The power plant was a Continental C85 4 – cylinder air-cooled horizontally opposed cylinder engine (Boxer Motor) that produced 85 hp. The upper wings had flaps while the lower wings had ailerons. All wing air-frame structures were equipped with tip plates to enhance the lift coefficient. The airplane had a small cockpit with the rudder pedals located under the engine compartment toward the front of the cowling.



### Operational history

The *Bumble Bee II* was flown on April 2, 1988, at Marana Airport just outside of Tucson, Arizona to achieve the world record for the smallest piloted airplane. According to the Guinness Book of World Records, the *Bumble Bee II* crashed and was destroyed during the 3rd flight on the 5th of May, 1988. At 400 feet of altitude, the engine failed on a down-wind leg. The crash destroyed the *Bumble Bee II* and severely injured Robert Starr, who made a full recovery.

### Aircraft on public display



The Bumble Bee I on display at the Pima Air & Space Museum



### Naming

Starr named the aircraft in reference to an urban legend which states that according to standard aerodynamics, bumble bees do not have enough wing area to fly. Engineers and pilots had made a similar statement about Starr's *Bumble Bee I and II*, yet both flew.

### Specifications

*Data from* Guinness Book of World Records, Disciples of Flight, Aviation Trivia

#### General characteristics

Crew:	One
Length:	8 ft 10 in (2.7 m)
Wingspan:	5 ft 6 in (1.68 m)
Height:	3 ft 11 in (1.2 m)
Airfoil:	23012
Empty weight:	396 lb (180 kg)
Max takeoff weight:	574 lb (260 kg)
Fuel capacity:	3 US gallons (11.35 litres)
Powerplant:	1 × <u>Continental C85</u> 4-cylinder air-cooled horizontally opposed piston engine, 85 hp (63 kW)

#### Performance

Maximum speed:	165 kn (190 mph, 305 km/h)
Cruise speed:	130 kn (150 mph, 241 km/h)
Stall speed:	75 kn (86 mph, 139 km/h)
Service ceiling:	14,000 ft (4,270 m)
Rate of climb:	4,500 ft/min (23 m/s)





1. Ray, you've been a prominent member of the Croydon Club since 1966 and you have run the Coupe Europa competition for as long as I can remember, tell us a bit about this history.

*As a bit of background I have been a member of the Croydon Club since 1967, Prior to that I was in the Portsmouth Club and then joined Lee Bees so as to be able to use HMS Daedalus for trimming. My primary interest in the early to mid sixties was Open Rubber with some Open and 1/2A Power. I then built my first Wakefield in 1965 soon followed by a second. I flew in the 1966/67 Trials which was an interesting experience. I built my first Coupe in 1966. Since then I have flown most classes of rubber, stopped flying Power, built one A2 and, from 2013, become very active in Electric.*

*Croydon is a club that has had a keen interest in Coupe flying over the years and when the Aeromodeller comp, which had become the Coupe International, was moved to a Northern venue in 2001 club members David Beales and Martin Dilly stepped in to run a contest at Middle Wallop. This event became Coupe Europa and was run by Martin and David until 2013 when I picked up the mantle. This coincided with a move of the contest from its traditional early December date to late September, brought about, I seem to recall, by the non-availability of Middle Wallop on the usual date. This resulted in an offer by Gavin Manion to run a new contest in early December at North Luffenham and this has become a popular fixture on the calendar. Coupe Europa now takes place in early October.*

2. What's your approach to Coupe flying? High tech/low tech. locked down or systems, flight pattern ?

*First of all I should point out that I'm not a dedicated Coupe flyer; I see myself as more of an all-rounder, or should that be dabbler? I think I've only built about 15 Coupes in total, the last one being in 2016, that's less than one every three years.*



*My first Coupe was a Dwarf Dip designed by Charlie Sotich and published in the 1964/65 Frank Zaic Yearbook. I can't claim to have had too much success with it but it was a start. I didn't build another one until 1977 when I built two, one with a 52in x 4in wing and the other with a 44in x 4in wing. I flew these for a number of years with reasonable success. Over the next 30(!) years I built a small number of Coupes of various sizes, most of them not particularly memorable. However in 2010 I built a largish model with a 46in x 5in wing and a 22in diameter single blade prop which I have been quite pleased with. I opted for this arrangement after having taken a similar approach with an F1B which, in turn, came about after reading a NFFS Symposium paper by Georges Matherat, the well-known French F1B and Coupe flyer, sadly no longer with us. ( I gave a paper on this at the 2011 Free Flight Forum). I fly this model on 12 strands of 1/8 and get a motor run of about 55 seconds. I recently dug out the 52"x4" model (yes I still have it) and equipped it with a similar 22in single blade prop. It'll be interesting to see how it performs.*

*My models are essentially low tech although the wing of the single-blader does have a carbon capped spar and ribs. Since the mid 80's I have used a PGI set up with the wing set at -2 deg, thrust line through the CG which is at 60%. I do not use any moving surfaces. They are flown right/left.*

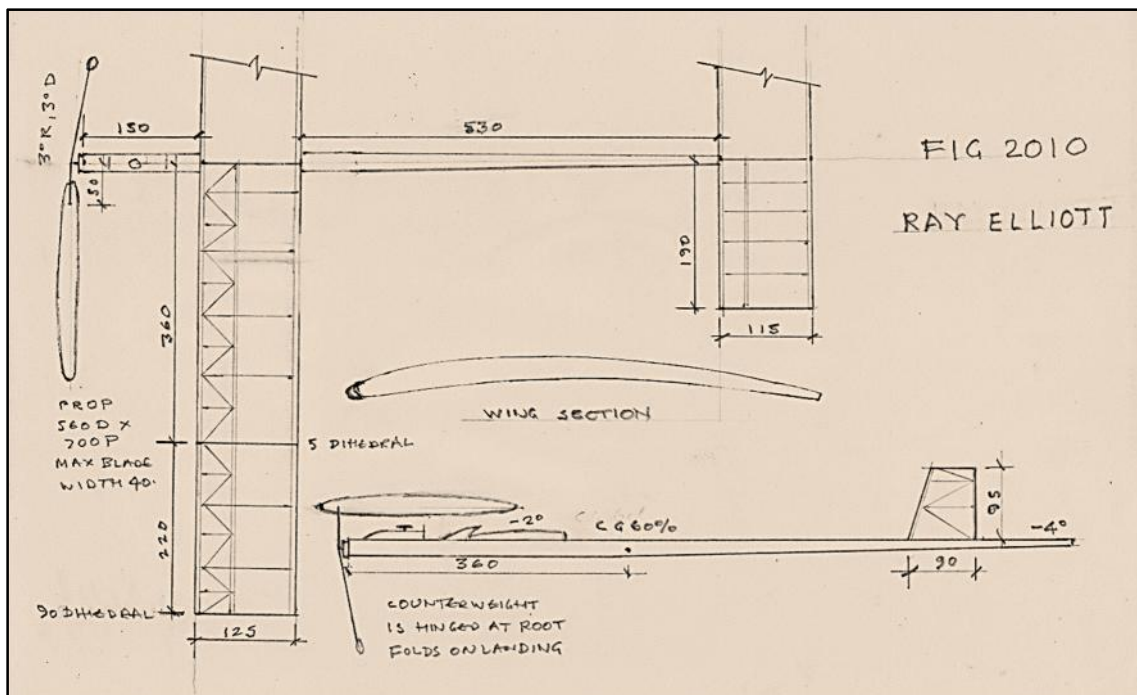
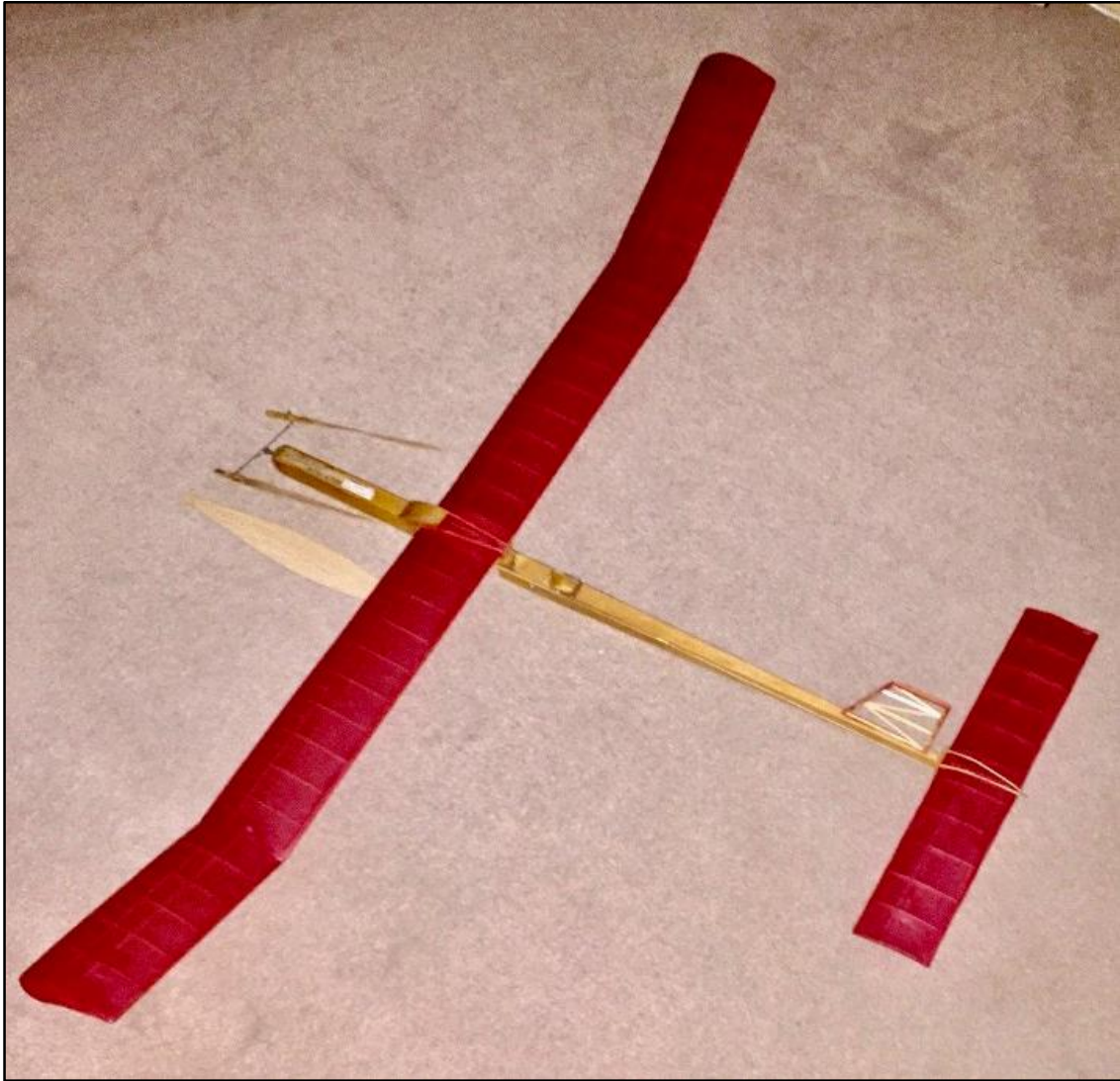
3. How do you pick the air?

*When it comes to picking air I have to say that I am of the "wing it" school. I have neither thermistor nor mylar pole although I have no compunction about using the latter if someone has put one up. For me it's about "sniffing" the air, watching other models, even birds of prey (buzzards, red kites- rare but it has been known).*

4. What for the future? Any developments in mind?

*I haven't built a modern Coupe since 2010 (the one described above). The one from 2016 is a Joe Bilgri Mini from 1967 which I built to fly in the Hippocket Aeronautics 1960's Coupe Postal. I also have one of the late Peter Jellis's more recent Coupes which I don't think he had ever flown so getting that sorted will be interesting. As to innovation, if you can call it that, at some point I would like to build another model with a large diameter single blade prop, trying to get it down to weight. Maybe with a higher aspect ratio wing but that'll be difficult to build light. [Speaking of innovation reminds me of the time when the company I worked for was undertaking research on the design of concrete offshore platforms. The client we were working for said they were quite happy to see innovation providing someone else had done it first].*





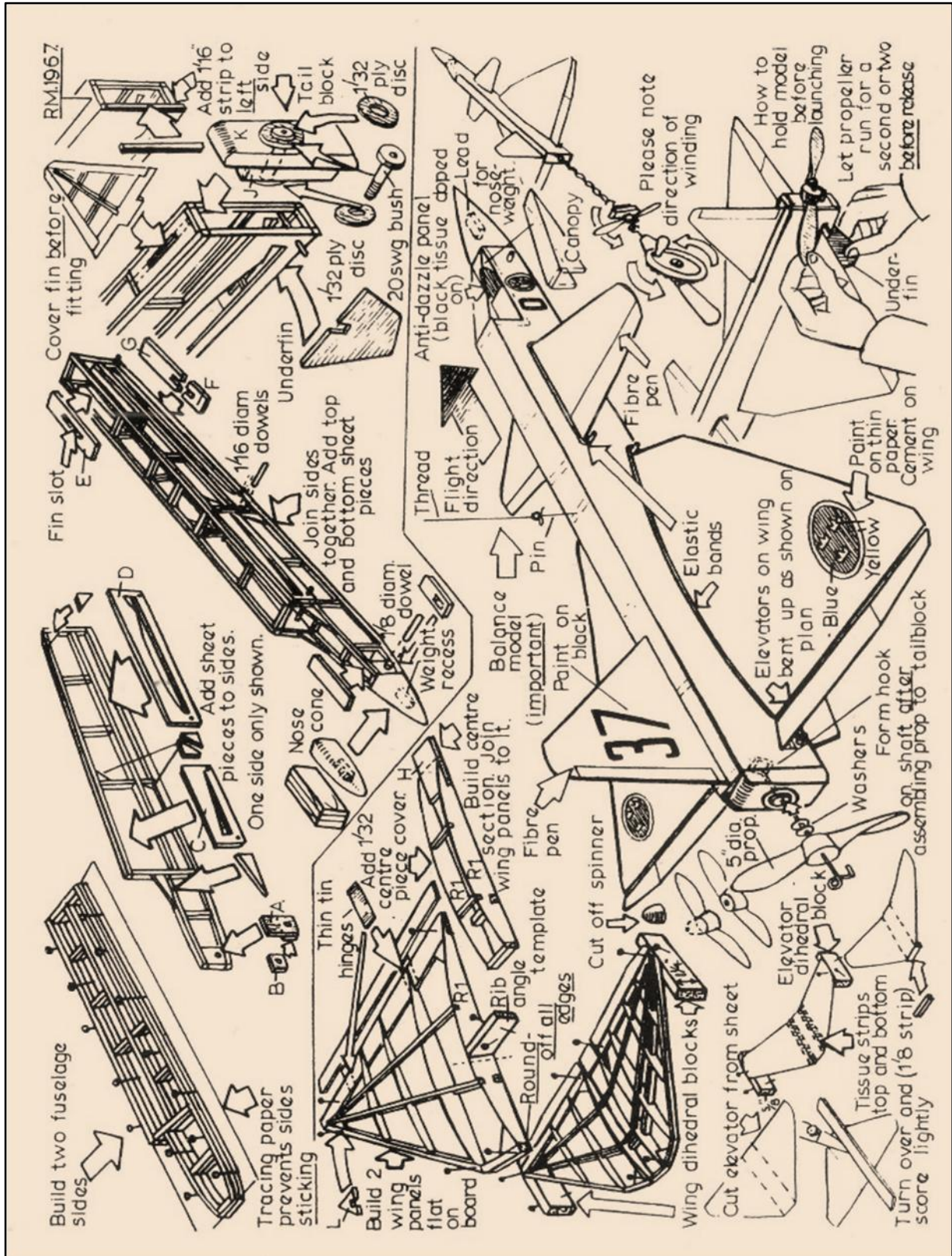
*Peter Hall/Ray Elliott*



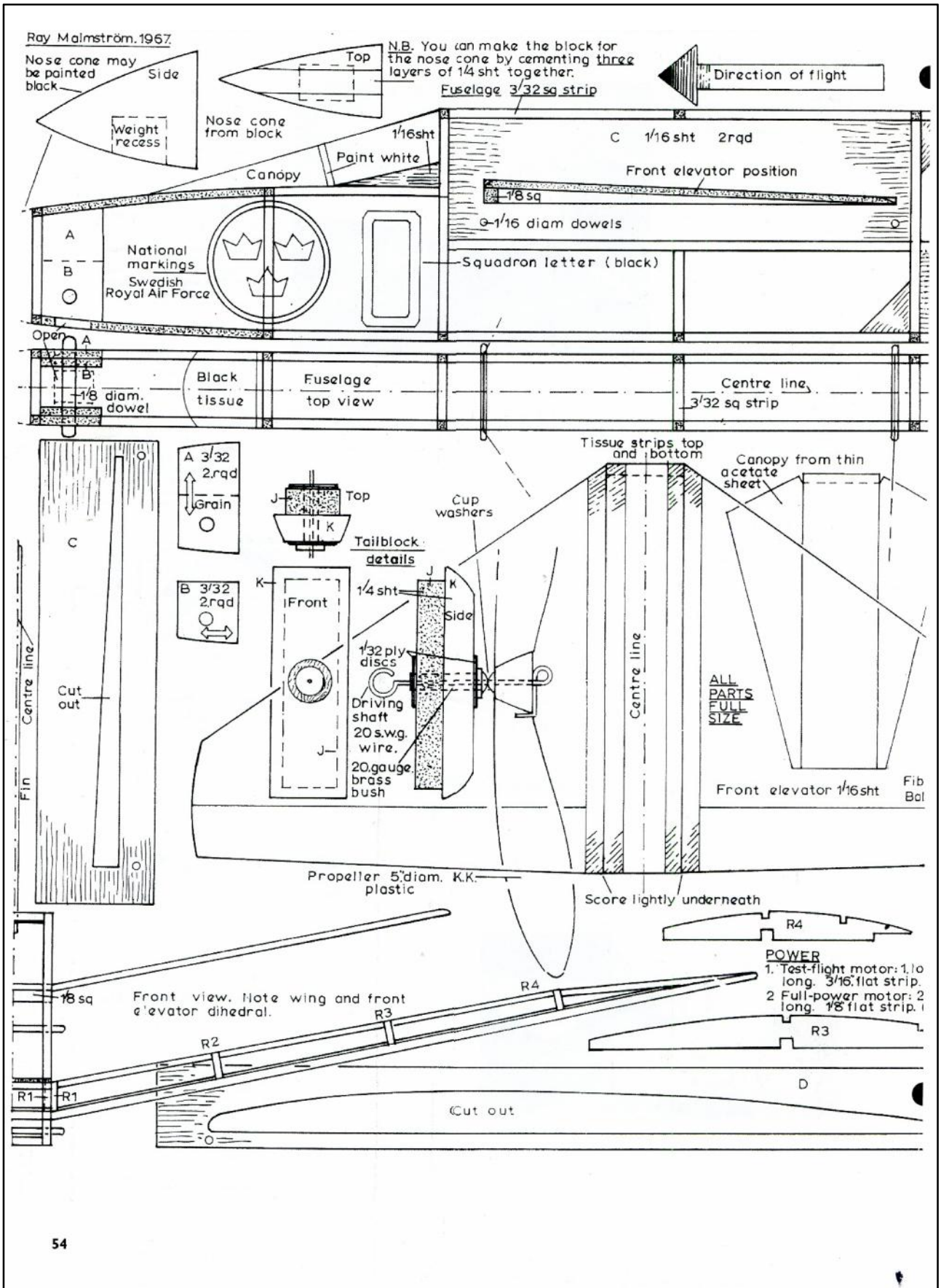
From the book Ray Malmstrom - 60 years of IVCMAC (courtesy Chris Strachan)

# THE SAAB A37-VIGGEN.

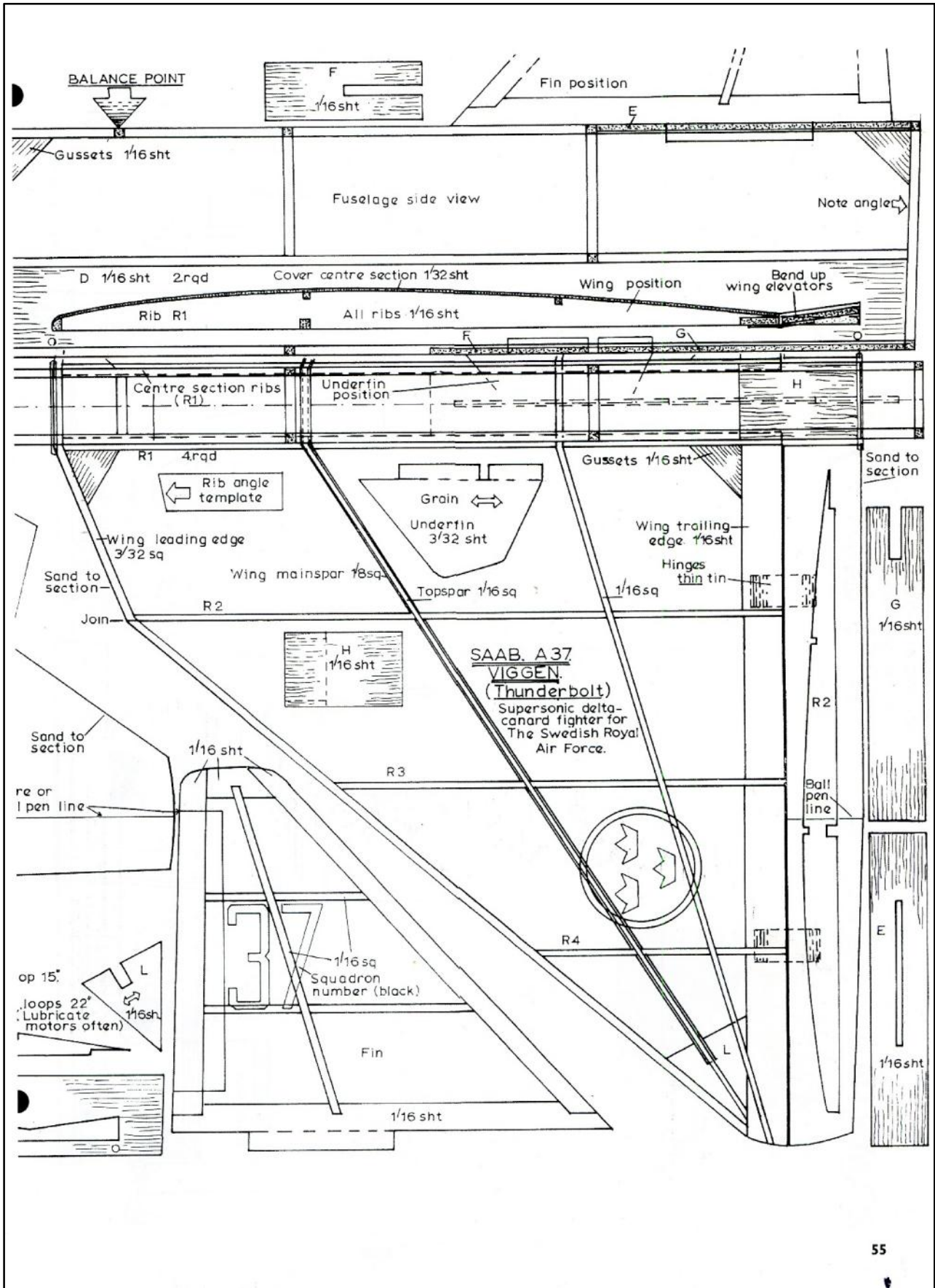
An exclusive MM design by Ray Malmström











Ray Malmstrom



## Report No. 149 Our earliest magazines, continued.

Next in the look at U.S.A. magazines we come to *Model Aircraft Engineer*. This magazine was launched in April 1934 and had a short life, the final issue being published December 1934. We have just two issues in the library, those of July and August. The magazine was comprised of 50 pages about A4 in size with a full colour cover. The contents included full size plans, articles on building and trimming model planes and advertisements from kit manufacturers such as Scientific Model Airplane Co., Cleveland Model & Supply Co. and Ideal Aeroplane & Supply Co. So why did it fail? Perhaps the 20 cent cover price was just a little too much.

The use of the word "Engineer" in the title reminds of our own S.M.A.E. now trading as B.M.F.A.



The July issue of *Model Aircraft Engineer* has an article reporting the progression of model designer to aeronautical engineer.

MODEL AIRCRAFT ENGINEER, JULY, 1934

### From Model Designer of 1909 to Sr. Aeronautical Engineer, U. S. Army, 1934

In this history of Jean Roche, and his career from model builder to aeronautical top notcher, lies the inspiration and the pattern for present day model engineers who look to Aviation as their stepping stone to greatness.



Roche as a model contestant. This photo of the N. Y. Model Aero Club shows left to right, kneeling in second row: Roche, Barnaby, and Ragout. Left to right, top row: Percy Pierce, Geo. Page, E. Lott, R. Holderman, and H. Graulich

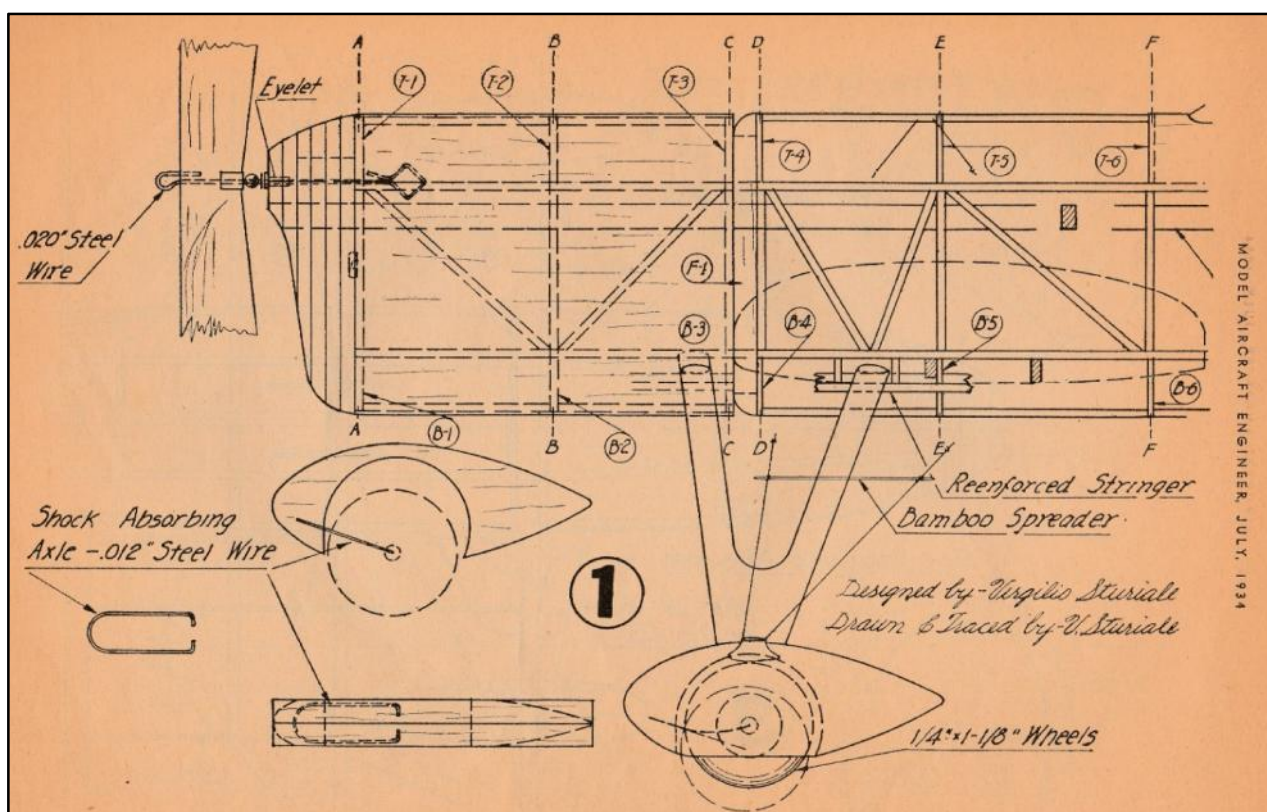
MODEL AIRCRAFT ENGINEER, JULY, 1934

### BUILDING A FLYING SCALE MODEL OF THE HOWARD "MIKE" TO THE 1" SCALE

By VIRGILIO STURIALE



Now to the plans in the two issues held, starting with the "Howard Mike", a rubber powered scale model by Virgilio Sturiale who had more than a dozen model plans published in magazines in the 1930's.



The full size plan of this 20" wingspan model is spread over seven pages and the instructions cover the building of the various parts including the "Motor Stick" which can be seen on the part plan above.

The build instructions cover 25 column inches followed by just one column inch devoted to flying instructions, which concludes with the comment "Write to the author if any difficulties arise."

The caption to the picture in the article declares it to show the full-size aircraft rather than the model as "Pictures of Mike are so hard to obtain." Or was it because the model had not been built prior to publication?



Pictures of the Mike are so hard to obtain that we publish this view in place of our model.

MODEL AIRCRAFT ENGINEER, JULY, 1934

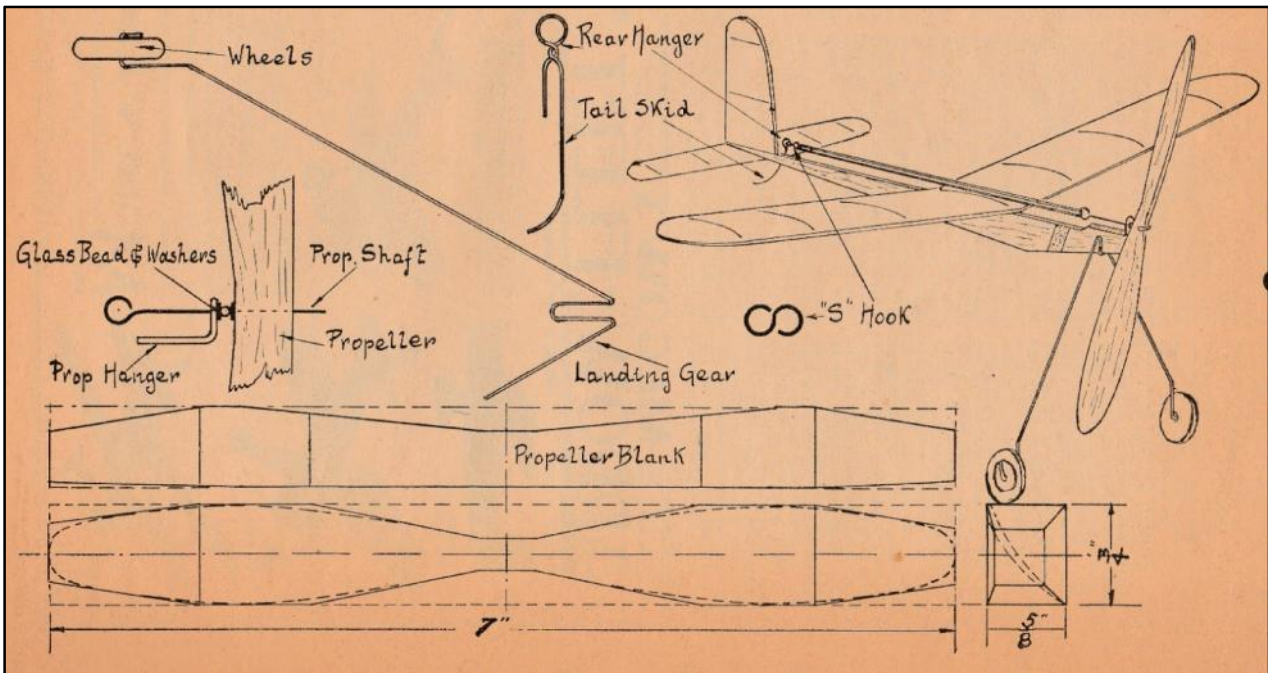
## Model Aircraft Engineer B-2

Now to something for the relative newcomer.

This is the second in a series of "Beginners" models, the article expresses the hope that the builders of B-1, a simple all sheet balsa R.O.G. model, published the previous month, had fun. The B-2 is a similar type but of more advanced design and construction. See the plan below.



The instructions include advice to refer to the May issue article "How to adjust your model to fly", so perhaps I was too harsh in my earlier criticism of the "Mike" flying instructions.



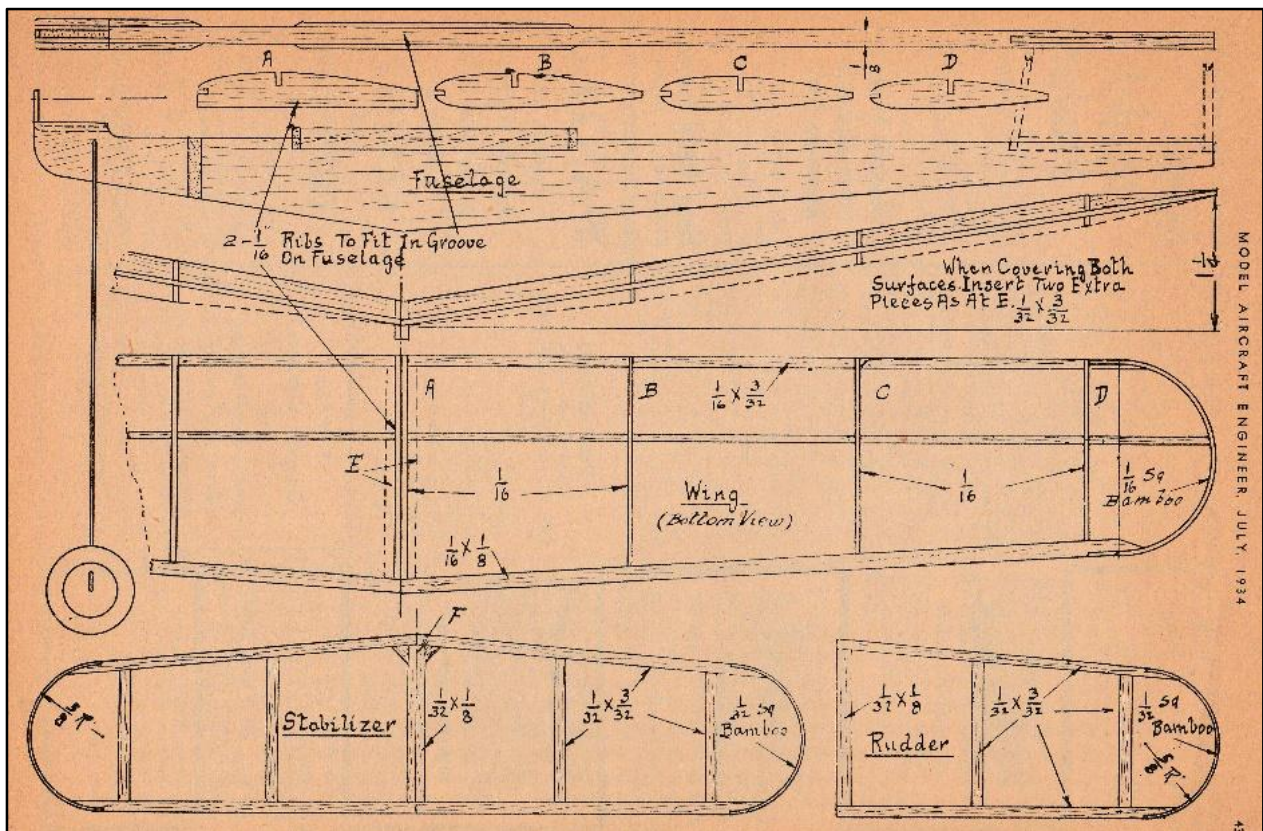
Next for something a little more complicated.

MODEL AIRCRAFT ENGINEER, AUGUST, 1934

7

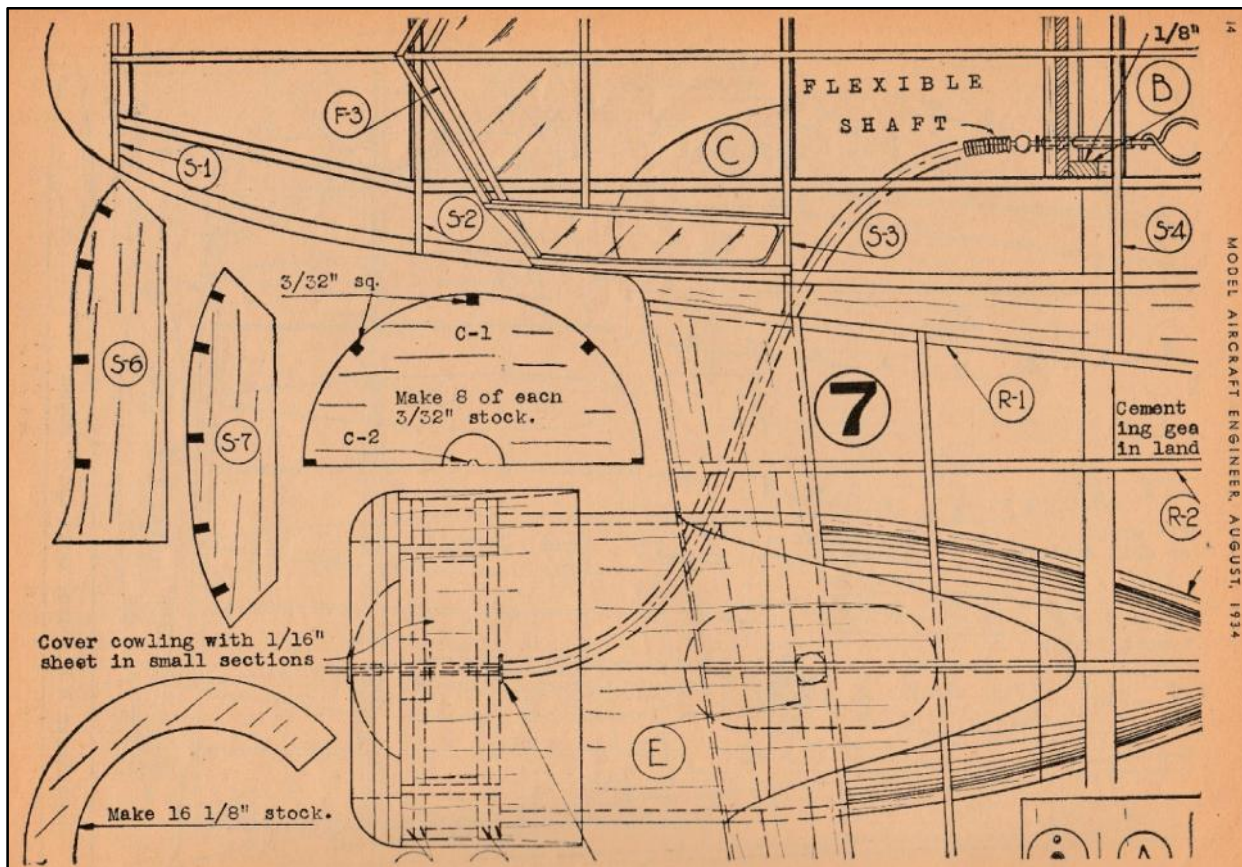
## Opening a New Era in Model Science!

An Enclosed Power, Flying Scale Lockheed Electra

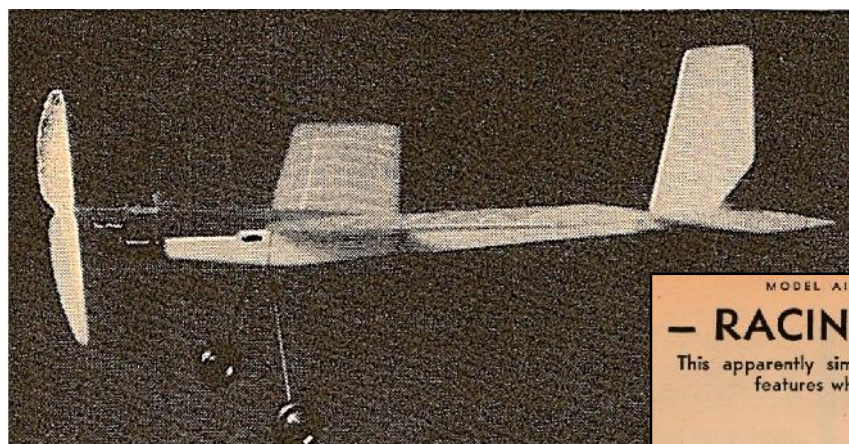


This rubber powered twin engine model is another plan from the drawing board of Virgilio Sturiale. The instructions cover the building of all the parts including the "Flexible Shafts". These are constructed from steel coil spring 0.128" O.D. and 0.062" I.D. and full descriptions are given of the soldered in fittings at each end. See the part drawing below.





The next plan offered is a design by I. Sturiale, the reader is not advised of the full given name of this Sturiale nor is there any indication of their relationship.



One thing we can say about this designer is that he would seem to be an early adopter of the swept wing concept in the search for speed.

MODEL AIRCRAFT ENGINEER, AUGUST, 1934  
**— RACING STICK MODEL —**  
 This apparently simple stick model embodies several novel features which model builders will be glad to add to their collection  
 By I. STURIALE

You may have noticed the initials I. A. A. P. E. on the cover of the July issue reproduced at the beginning of this report. Whatever do these initials represent? Further clues herewith.



An Honourable Mention will be given to all those forwarding the correct answer plus a printed **Gold Star** (Microsoft Word willing) for the most amusing answer

All plans, as in the magazines, available by email.

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

*Roy Tiller*



From the book 'Paper Airplanes' by Nick Robinson

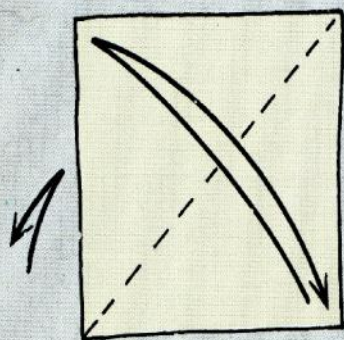
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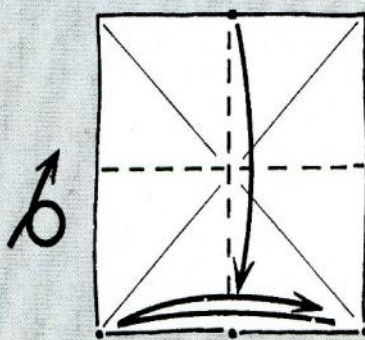
This is a fold that was taught to (and remembered by) American folder Shawn Truitt when he was a child. The folding sequence may at first appear complex, but will soon become straightforward with practice and you can then enjoy the exciting and interesting moves such as steps 3, 9, 14 and

23, as well as the beautiful arrangement in step 22.

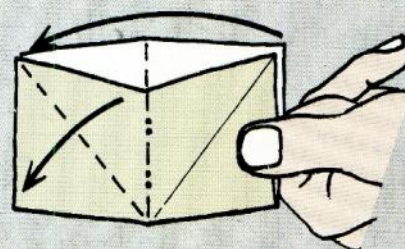
Use slightly heavier paper than normal, but not so thick that you cannot crease accurately. It will work well made from foil-backed paper. Start with a square, coloured side down.



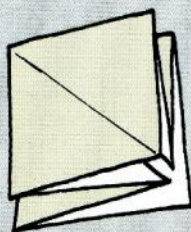
**1** Crease both diagonals firmly and turn the paper over.



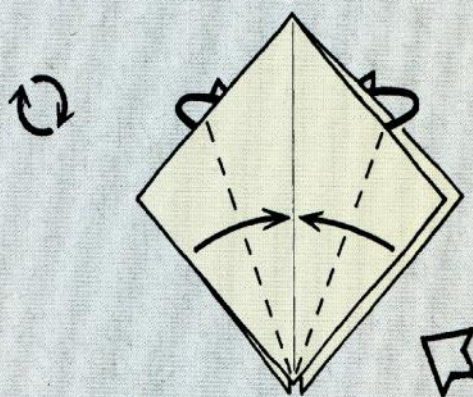
**2** Crease in half from side to side, then fold the top edge to the nearest edge.



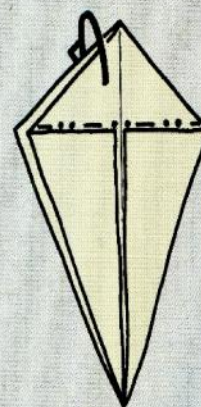
**3** All the creases you need are in place, so gently swing the left hand side over to flatten on top of the right hand side. This should happen quite naturally.



**4** This is the result. Turn the paper so the corner where the four points meet is nearest to you.



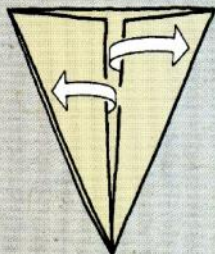
**5** Fold a flap towards the centre crease on the left and right hand side to form a kite shape. Repeat underneath.



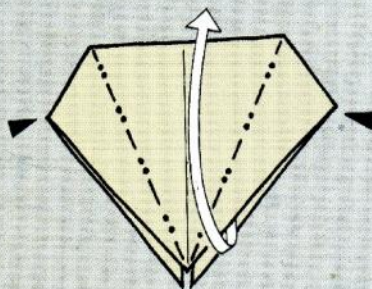
**6** Fold the triangular flap behind.



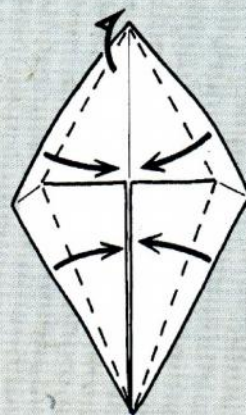
## ROCKET



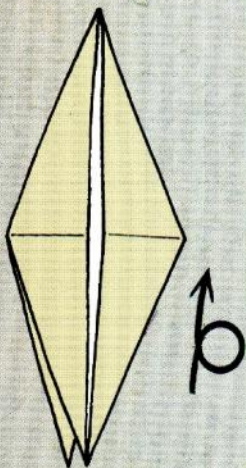
**7** Open the two flaps back out.



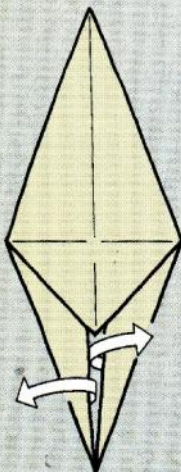
**8** Making sure the paper is flat on the table, lift up the first layer at the near-side corner and open up a pocket.



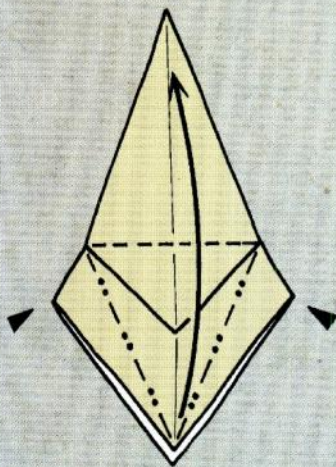
**9** Keep lifting and swinging the point away from you and begin to fold the sides in using the valley creases shown. The lower flaps will already be valleys but you will have to alter the direction of the upper ones.



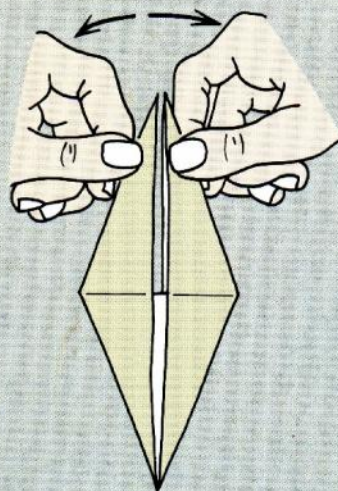
**10** This is the result. The move is known as a "petal fold". Turn the paper over.



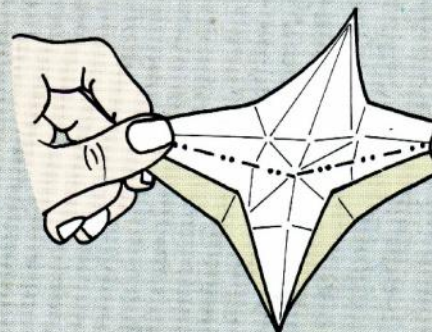
**11** Open out the flaps from beneath the triangular flap.



**12** Repeat steps 8 to 10 on this side, swinging the triangular flap upwards. Turn the resulting shape upside down.



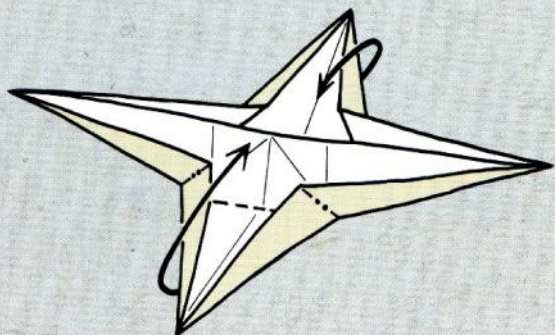
**13** The two loose points should be on top. Hold one in each hand and slowly pull apart ...



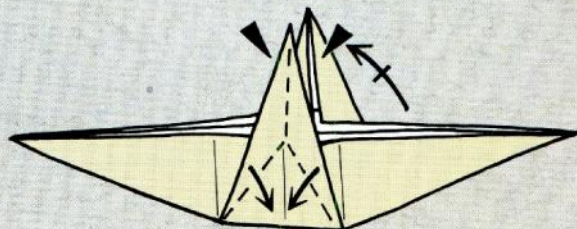
**14** ... until the paper opens up. You are trying to persuade the central crease to pop up into a continuous mountain crease, so keep gently moving the points apart ...



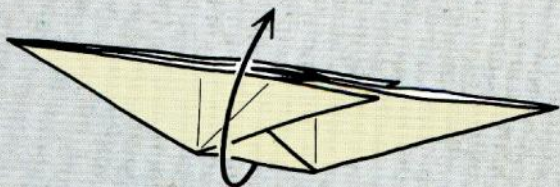
## ROCKET



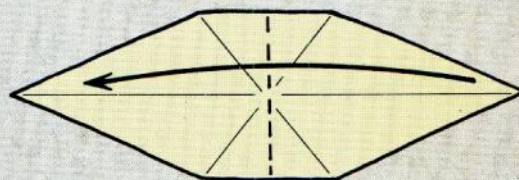
**15** ... There it goes! Flatten the two side points inwards, allowing them to flatten into a natural position ...



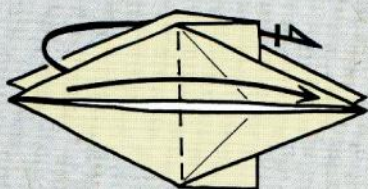
**16** ... like this. Make a rabbit's ear fold on each flap, flattening them to the right.



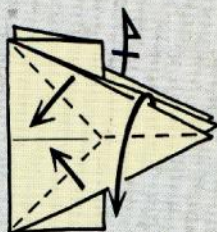
**17** Open the first half of the paper out and flatten.



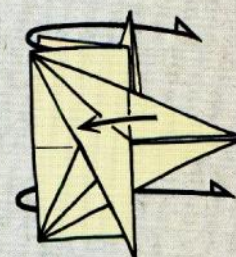
**18** Fold the right side across to the left on the half-way crease.



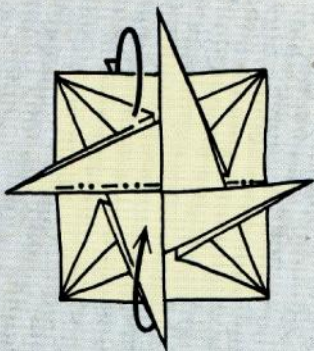
**19** Fold both long points in half to the right.



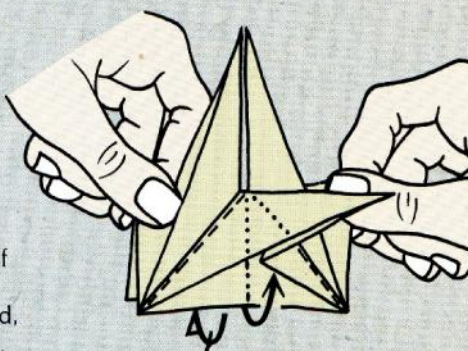
**20** Make another rabbit's ear fold on either side in the same way as step 16. Fold the nearside flap down, the other one upwards.



**21** Swing the lower half back into view, flattening the upper horizontal point to the left.



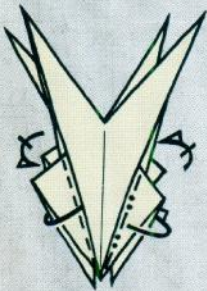
**22** This should be the result. If not, rearrange the flaps to match. Fold the top section in half behind, allowing the lower point to rise ...



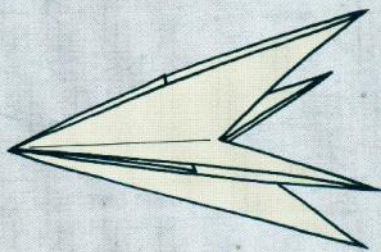
**23** ... to this position. Press the sides slowly together, encouraging the vertical centre crease to spread apart on either side. You are forming a small "preliminary base". Follow the creases carefully, repeating behind and the flaps will point in different directions.



## ROCKET



**24** This is the result. Moving anti-clockwise, fold each of the lower flaps within the pocket of the larger points. This locks the design together.



**25** Complete.

**FLYING HINTS**

Hold the Rocket towards the front end by a single layer and launch it high into the air as fast as you can. You need to experiment with the angle of launch (trajectory) to get the maximum distance. If you make a target on the floor you could play darts with the Rocket.



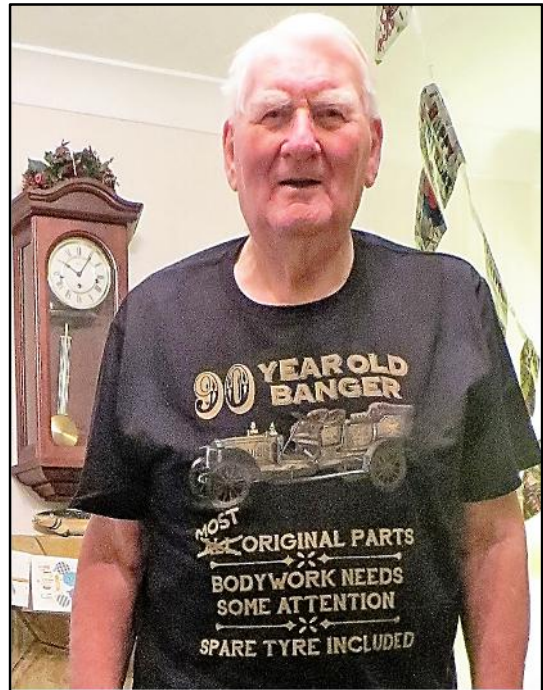


Most notable event for this month has been the 90<sup>th</sup> anniversary of our esteemed Editor. It is impossible to understate the contribution that John has made to SAM 1066 over the years of his editorship & contribution to our hobby. His dedication to producing our monthly communication is absolutely commendable & I am sure you are all equally grateful for his efforts on our behalf.

Thank you John on behalf of the membership.

Also on behalf of the membership, I give equal thanks to our former Membership Secretary Mike Parker (who incidentally persuaded John to take on the New Clarion when Vic Willson passed on).

Mike has finally managed to make the move to Gloucestershire after somewhat trying circumstances & will now be settling into a new environment. Happy "retirement" Mike.

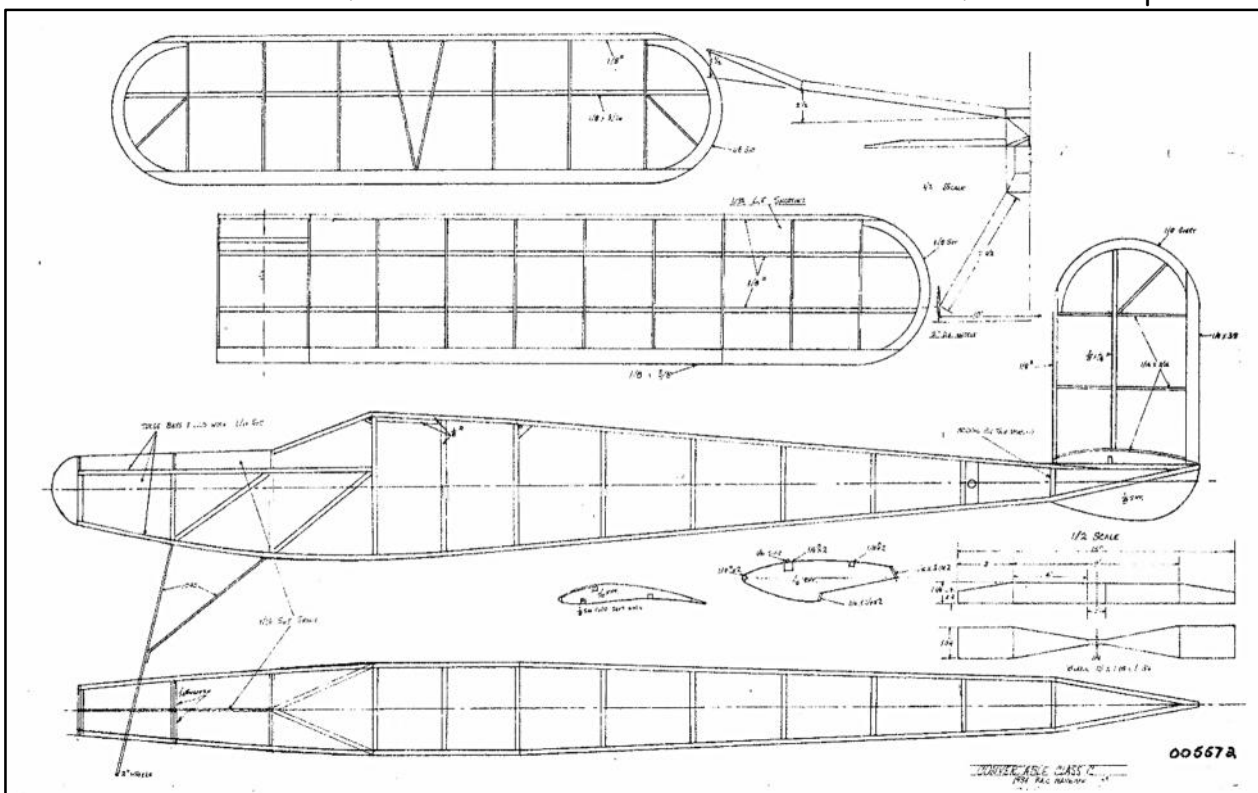


What else - well on the modelling front not a lot from my point of view. Don't forget our Cagnarata meeting on Salisbury Plain on 23<sup>rd</sup> July - take advantage of free comp entry & prizes down to 5<sup>th</sup> place. plus the Odiham meeting on 6<sup>th</sup> August. Both need a dose of the good weather that we have been experiencing during June to encourage attendance.

Short month this time as I have much catching up to do - good flying to all..

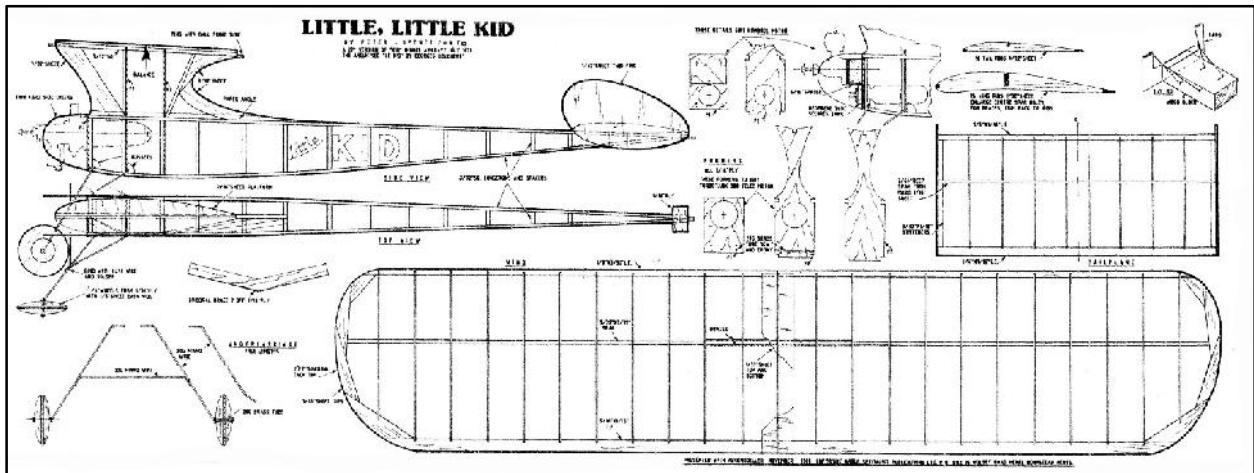
## Plans for the month.

**Rubber:** Convertible for 1934 Zaic Yearbook. Named cause it has floats on the plan.

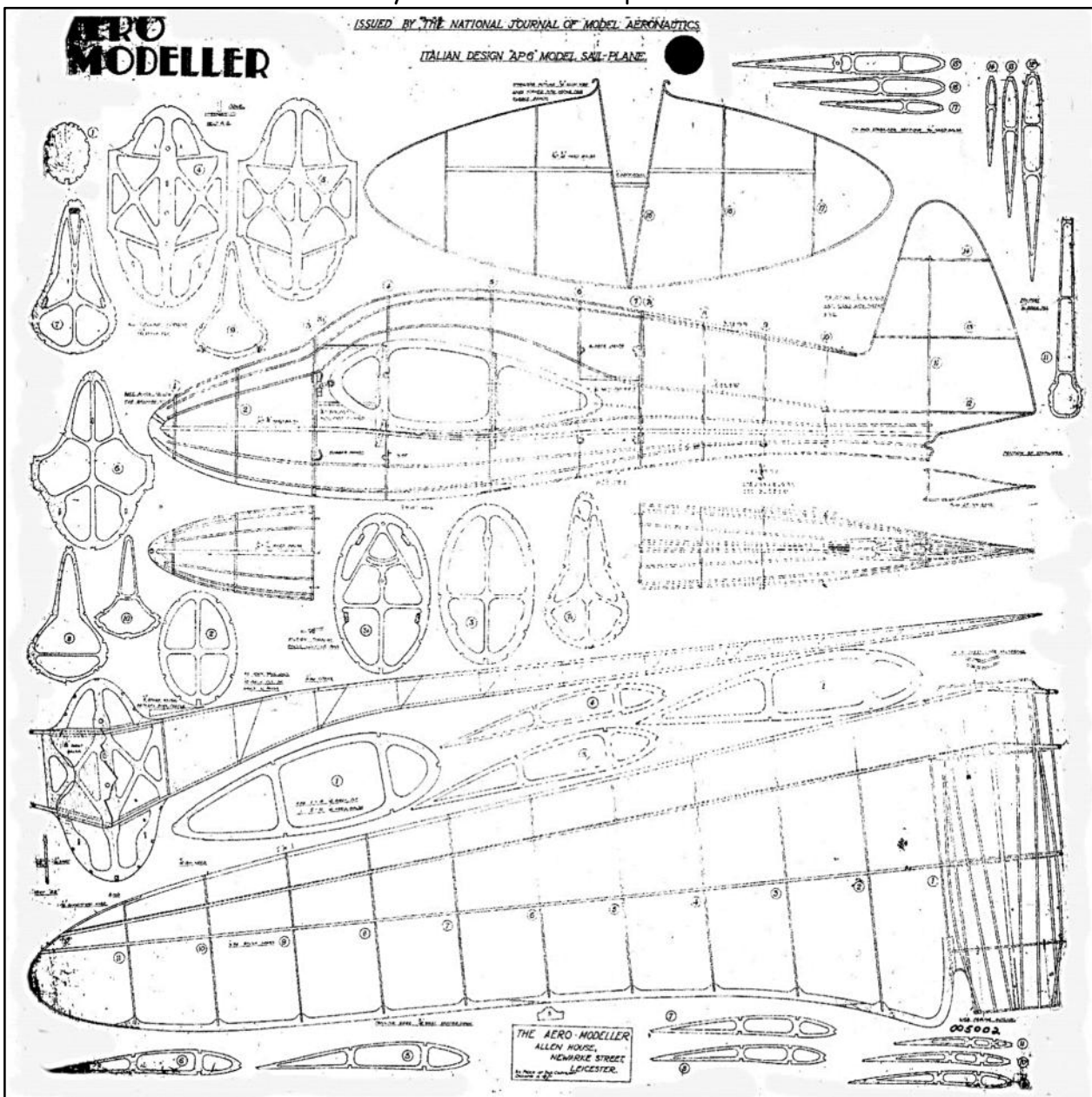




Power: Little little Le Kid - CO2 version of Le Kid, the full size version was a nice flier.  
Still in the loft somewhere!



Glider: AP6 - very old Aeromodeller plan of an Italian model.



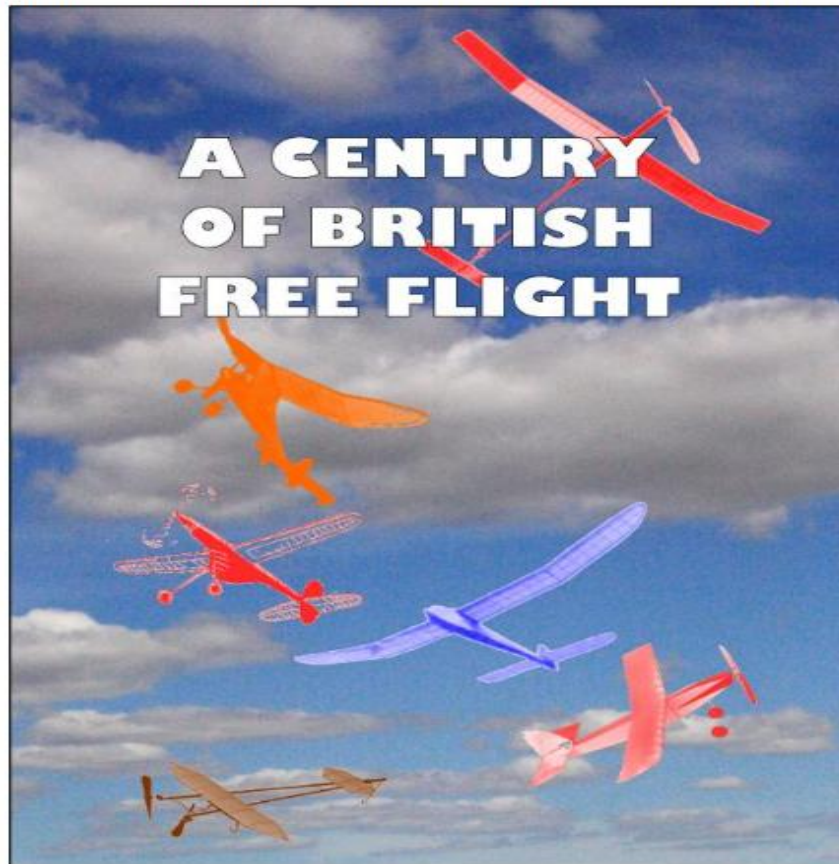


## A CENTURY OF BRITISH FREE FLIGHT

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

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

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



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

## Permits for Salisbury Plain & North Luffenham

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

The costs are:

£20 for Salisbury Plain - £35 for North Luffenham

The details of the Conditions of Issue

And Code of Conduct are included with the application

And must be strictly followed



# Southern Coupe League

## Programme for 2023

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

18 or 19 February	Coupe de Brum	North Luffenham
12 March	2nd Area	Area venues
30 April	London Gala	Salisbury Plain
7 May	Crookham Gala	Salisbury Plain
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



# EAST ANGLIAN GALA



29th and 30th July 2022. Sculthorpe Airfield,

It will soon be that time again for free flight aeromodellers to head towards the lush green and spacious fields of Sculthorpe airfield. This site offers the largest unobstructed flying site in the UK set in the heart of the Norfolk countryside. Camping nearby at Fakenham Race Course, 01328 862388; the Garden Caravan Site, Barmer Hall, Syderstone, 01485 578220 and Fakenham Camp Site, [Fakenham.campsite@gmail.com](mailto:Fakenham.campsite@gmail.com)

Saturday 30 July	Sunday 31 July
Combined Rubber	Combined Power
Vintage Rubber/Power	Combined Electric
Classic Glider	Combined Glider
Tailless	Mini Vintage
E36	Classic Rubber/Power
P30	CO2
HLG-CLG.	Vintage Glider
SAM 35 4 Oz Wakefield	SAM 35 8 Oz Wakefield

BMFA rules apply for above events .

Start time each day 10.00 am, finish 6.00 pm. Competition entry £10.00 each day for events taking place on the field. .

Location. Sculthorpe airfield, OS Map reference TF 852300. 100 Metres in a NE direction along the B1454 from its junction with the A148 road from Kings Lynn to Fakenham. No refreshments on the field this year but there is a cafeteria close to the entrance. There will be toilets. BMFA membership essential. For safety reasons no motorised retrieval and no dogs.

Flyers not taking part in BMFA events, fun flyers and engine runners must register and pay the £5.00 site fee at control.

For further information on this event contact:  
Steve Bowles: tel 07484 680245; email [jcrispins@hotmail.co.uk](mailto:jcrispins@hotmail.co.uk)



## **ODIHAM**

**Southern Area BMFA Freeflight gala.**

**Sunday August 6 2023.**

**0.900-1800hrs**

R A F Station. Odiham. Hants.  
All types of Freeflight Sport flying.

**Freeflight CAGNARATA Competition,**

Contact Chris Redrup For details  
[chrisredrup@yahoo.com](mailto:chrisredrup@yahoo.com).

For security reasons, all attendees  
are required to pre-register,  
therefore those wishing to attend  
must send the following details to Peter Carter  
by post including entrance fee  
cheques made payable to Southern Area BMFA.

NAME

CONTACT. Details. (. Phone/ e- mail )  
BMFA. No

CAR. Make, Model, Colour.  
Entrance fee £10.

Arrive Station main gate from 0800hrs. - 0945 hrs.

Peter Carter:-

74 Buckland Avenue ,  
Basingstoke, Hants, RG226JA  
Tel 01256 352922.

E-Mail. [P.carter34@btinternet.com](mailto:P.carter34@btinternet.com)

## **Cocklebarrow Vintage R/C** **Dates for 2023**

**Sundays**

**16<sup>th</sup> Jul: 20<sup>th</sup> Aug: 24<sup>th</sup> Sep**

Signposted from Aldsworth Glos.  
on the B4425 between Cirencester/Burford  
and off the A40 between Northleach & Burford  
(follow SAM35 signs)

All types of R/C up to 1975  
Sport flying, no competitions

**BMFA Insurance Essential**

Contact: Tony Tomlin

Tel: 02086413505 & 07767394578



## Classic A1 Email International 2023

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

### Eligible models

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

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

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

### **Towline**

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

### **Scoring**

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

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

30+60+90+112 = 292

### **Entry**

Entry is free of charge. Score should be submitted to

[stuardarmonf1a@yahoo.com](mailto:stuardarmonf1a@yahoo.com)

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

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

## Bloxwich Indoor Flyers

Free Flight & lightweight RC  
Sneyd Community School

Vernon Way, Sneyd Lane,  
Bloxwich, WS3 2PA

Saturdays 12 noon until 4pm

Flyers - £8 Spectators £2

2023 dates

16<sup>th</sup> Sep - 14<sup>th</sup> Oct - 11<sup>th</sup> Nov - 16<sup>th</sup> Dec.

Contact:-

Peter Thompson: [peter.thompson7408@gmail.com](mailto:peter.thompson7408@gmail.com)



## **E30/RDT/BMK/E20 Batteries**

The 75mAh lipo's which I sell for E30 now come with Micro JST plugs which make them suitable for BMK timers etc. Since they do not have the current limiter, they work well with the Band Burner and can also be used as lightweight E20 batteries. Just send me £10 and I will put 4 in a Jiffy bag  
 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: [mike@freeflightsupplies.co.uk](mailto:mike@freeflightsupplies.co.uk).**

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

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

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

### **ORDERS and PAYMENT**

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

WESTERN UNION, PAYPAL

### **AVAILABLE**

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

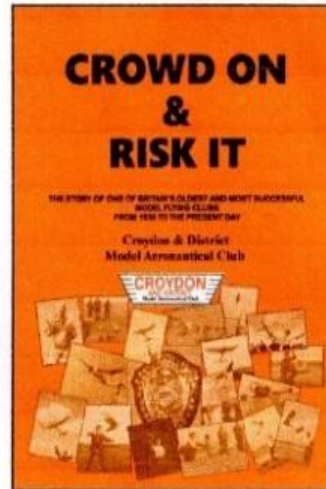
Full details of the above items are on the Free Flight Supplies Web site.



## CROWD ON & RISK IT

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

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



Just £8 by PayPal or cheque.

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

## DILLY JAP IS BACK

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

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

Anyhow, since the last roll came in 2015, the price is slightly higher (maybe as a result of you-know-what ...xit and its effect on sterling), but it's still only £13 for a five yard roll a yard wide, or £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: [martindilly20@gmail.com](mailto:martindilly20@gmail.com)

### INDEPENDENT REVIEW OF DILLY JAPANESE TISSUE

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

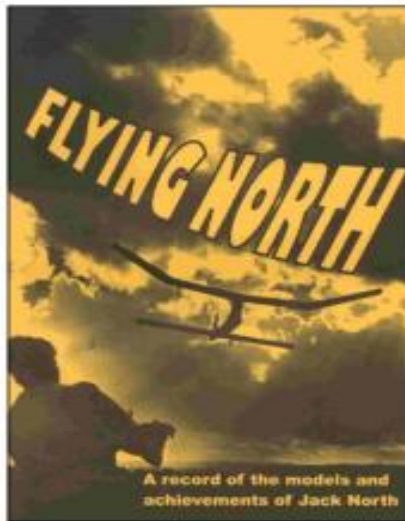
"I am really impressed with how well this tissue performed. Dilly Jap tissue with 2 coats of thinned nitrate dope is around 8% stronger than the old 00 Silkspan with 2 coats of dope, yet Dilly Jap is 0.09 grams per square foot lighter. Here are the test results:

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

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



### THIRD RE-PRINT JUST ARRIVED



#### FLYING NORTH

A goldmine for vintage and nostalgia model flyers -

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

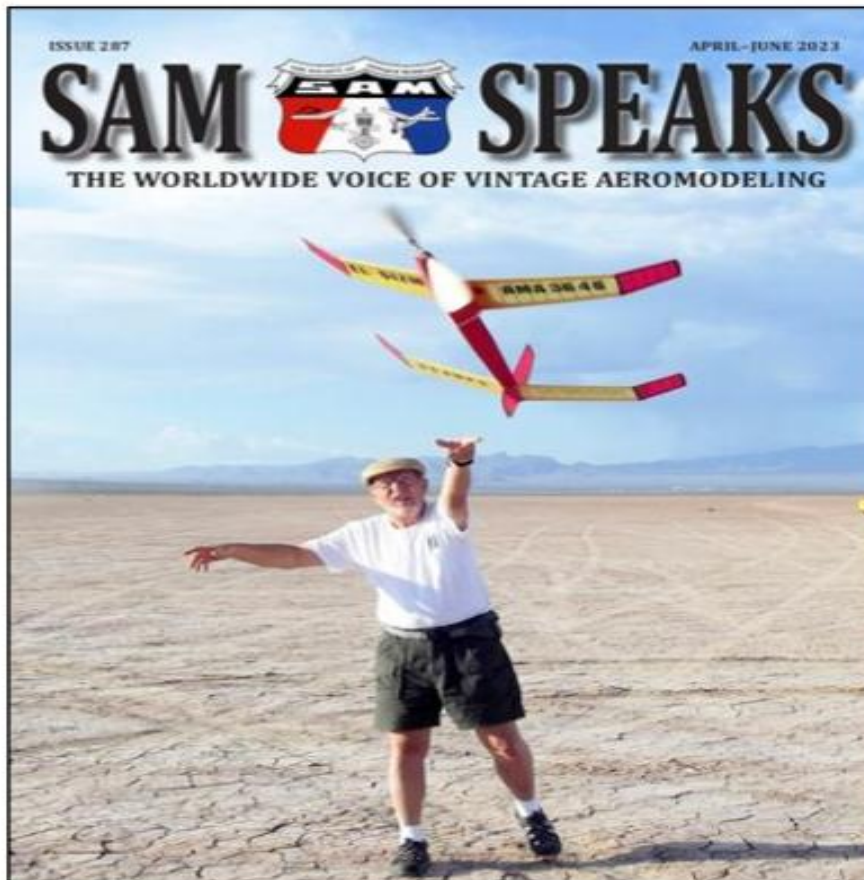
FLYING NORTH was compiled and edited by two of Jack's Croydon clubmates, David Beales and Martin Dilly, who had access to Jack's extensive notebooks, photographs, drawings and his original models.

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

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

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

Contact Martin Dilly on +44 (0)208-7775333 or e-mail [martindilly20@gmail.com](mailto:martindilly20@gmail.com)



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

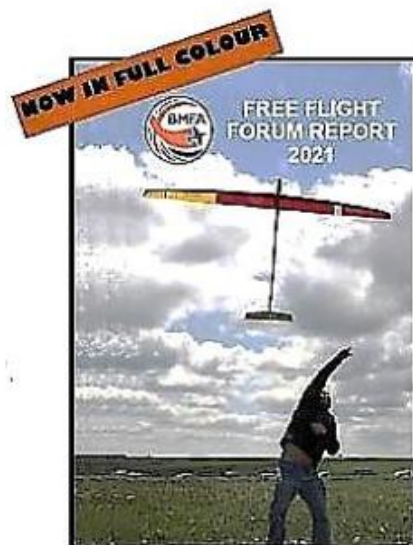


## FREE FLIGHT FORUM REPORT 2021

Indoor Duration - A Challenge To Conventional Design - Tony Hebb  
 Coupe In A Box - Gavin Manion  
 Building Other People's Mistakes - Stuart Damon  
 The Models Of Ray Monks - Simon Dixon  
 Simulated 3d Flight Dynamics - An Approach To Gain Insight For  
 Trimming And Aircraft Development - Peter Martin  
 Building During Lock-Down - Phil Ball  
 Tame Your F1b And Related Thoughts - Mike Woodhouse  
 What Next For A Lady Flyer - Sue Johnson  
 F3 Res • Rc For The Aging Free Flyer - Andy Sephton  
 From Wichita To Robin Iii - Mike Fantham  
 Further Thoughts On Carbon-Skinned Wings For F1a - Stuart Damon  
 Geo Fencing And Electronic Stability - John Emmett

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

Copies are available from: Martin Dilly, 20, Links Road, **WestWickham**, Kent BR4 0QW  
 Or by phone: +44(0)2087775533 Or e-mail: [martindilly20@gmail.com](mailto:martindilly20@gmail.com)



"I TOLD YOU THAT THIS WAS NO PLACE FOR PRE-WINDING"



## 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>	<b>Good Friday</b>	Northern Gala, Barkston
April 10 <sup>th</sup>	<b>Easter Monday</b>	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>	<b>Saturday</b>	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>	<b>Saturday</b>	<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
June 18 <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, <b>Salisbury Plain</b>
July 29 <sup>th</sup>	<b>Saturday</b>	East Anglian Gala, Sculthorpe
July 30 <sup>th</sup>	Sunday	East Anglian Gala, Sculthorpe
August 6 <sup>th</sup>	Sunday	Southern Area BMFA FF Gala, RAF Odiham
August 20 <sup>th</sup>	Sunday	Southern Gala, Salisbury Plain
September 2 <sup>nd</sup>	<b>Saturday</b>	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>	Sunday	BMFA 7 <sup>th</sup> Area Competitions
October 8 <sup>th</sup>	Sunday	Croydon Coupe Day + <b>SAM1066</b> Salisbury Plain
October 15 <sup>th</sup>	Sunday	BMFA 8th Area Competitions
October 28 <sup>th</sup>	<b>Saturday</b>	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 -

[www.SAM1066.org](http://www.SAM1066.org)

For up-to-date details of all BMFA Free Flight events check the websites

[www.freeflightuk.org](http://www.freeflightuk.org) or [www.BMFA.org](http://www.BMFA.org)

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

[www.SAM35.org](http://www.SAM35.org)



## Useful Websites

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

control/left click to go to sites

### Are You Getting Yours?      -      Membership Secretary

As most of you know, we send out an email each month letting you know about the posting of the latest edition of the *New Clarion* on the website. Invariably, a few emails get bounced back, so if you're suddenly not hearing from us, could it be you've changed your email address and not told us? To get back on track, email [membership@sam1066.org](mailto: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*