NEW Clarion

SAM 1066 Newsletter

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www.sam1066.org

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THE GENERAL DATA PROTECTION REGULATION (GDPR)

The above new regulations come into force on 25th May 2018 and regulate how we store and use your membership data; this includes contacting you by email. To comply with this SAM1066 has decided to adopt a slightly modified BMFA privacy template, see: www.sam1066.org.

To enable the club to gain the agreement of its members it has been decided to ask all current members to:

re-join the club using the "new" online membership form on the club website.

This will not only cover the club with regards to the regulations but it is also an opportunity to ensure that our membership records are accurate and up to date.

All current membership records and email lists will be deleted by the 25th May 2018 so if you want the club to keep you informed of the publication of the New Clarion and information regarding Free Flight flying including changes to event details you will need to re-join. The "new" membership form does not require your postal address and only requires one phone number, if you have a mobile number then please use this.

More information about GDPR is available on the BMFA website at:
https://bmfa.org/News/News-Page/ArticleID/2521/The-General-Data-Protection-Regulation-GDPR-and-your-club

Michael Parker
Membership secretary

To re-join log on to sam1066.org and looking down the left hand column, click on the box 'Join SAM1066 online'. This will present the new application form. Fill in the details then click 'submit' - job done.

As I write this editorial, I should be eating an evening meal at the pub in Wilsford having completed my first day at the FF Nationals on Barkston Heath Airfield, but **no**. Rachel and I, shortly after our return home from the Bethesda indoor meeting developed severe chest infections and stubborn coughs which laid us both low and put Rachel in hospital for one night. Come the Nationals weekend we were in no fit state to attend so I had to knock it on the head and cancelled our hotel. I'm not a happy bunny.

That's enough griping for now, let's see what I've cobbled together for your entertainment.
It's the usual mix of reports, articles and reprints of past periodicals.
Peter Hall has done an in depth analysis of Coupe designs to come up with his 'Opticoupe' based on the data he has collected.
Nick Peppiatt continues his indoor articles still with CO2 motor details.
Walsall's Ian James penned a little piece about his dabbling with canards in the past.
Our Secretary and our Archivist have their usual columns, albeit a short piece by the secretary due to a well earned break but Roy Tiller continues his research into Performance Kits and Pete Fisher.

Finally, Rex Woodruff sadly reports on the death of **Tony Rogers:**
Tony passed away at home on the 7th. April. Tony had been modelling most of his life and was a long-time member of Swindon MAC.
In later years he joined Bristol & West MAC and SAM 1066 and was a regular visitor to Middle Wallop flying mainly vintage power models. Our thoughts are with his wife and family,

Editor

Ray Monks Remembered - Simon Dixon

As a boy I can remember Ray Monks being one of the top power flyers in the world and a good friend of my late Father.
I saw him as a hugely competitive F1C and open power flyer, whereas before I was born he was also very active as a rubber, glider and indoor flyer as well.
His models were always well thought out, functional and nicely built.
At some point in the late 70's I remember my father showing me the full size plans for a Ray Monks Wakefield and Open Power model which he had drawn up for Ray to send to one of the American magazines as their models of the year 1969.
So as a tribute to Ray and my Father, I dug out the plan and have just built the Power model. It's a lovely build with a wing area of approx 480 sq/in, it weighed in at 21 oz with a OS20FP up front - the plan shows vit and a/r which I left off as I want it as a no functions model for SLOP - as yet unflown. If anyone fancies a go at making one please get in touch and I can send them a plan copy.

Simon Dixon .

e-mail:
Dixonfamily100@yahoo.co.uk

Life gets Tedious

Keeping up with progress is all very exciting and spectacular, but it can be jolly tiresome. Anything more complicated than a few sticks of hairy balsa, a lick of dope and a skein of rubber sets me groping for the telly switch. This makes me feel a bit sorry for the less ambitious of the up and coming generation who'd look pretty silly pottering about with steam age rubber models when all the big stuff is shunting to and fro between planets.

And the great-hearted public won't go much on the idea either. When little Johnny asks what the big dicky bird is that the funny man is running after, Dad might not feel in the mood for a long and difficult history lesson.

No, it looks as if the modeller of the future will have to get his supersonic pumps on if he hopes to keep in the running. The electronic super model of today might well be the kids' stuff of tomorrow, and when you've got to go one better than a multi-channel jet just to keep face with the neighbours, then it's time you turned in modelling for a stereo-panoramic telly.

It might well be that his salvation will be some new wonder self-building material, twenty times as light as balsa and as tough as a broiler chicken. Already the backroom boys have brewed up a plastic five times as light as the pappy root, now available in ready-made wing lengths. From this we might suppose that the modeller of the future will buy his models by the yard, haberdashery style. For the do-it-yourself modeller a synthetic balsa will be provided, which, futuristic-ally enough, can only be cut with an electric razor.

Same Old Twist

Trimming models the old way was just a matter of juggling the wing backwards and forwards, and inserting slivers of balsa into strategic places. The new way is neither electronic nor atomic, but just the old-fashioned warp given an entirely new twist.

Steam age stuff, you might say, as you put the kettle on, but the very same warps that gave your model that one degree under look can, with slight displacement, put you right up in the expert class.

Your only sacrifice will be one of appearance. If you're the pure-in-heart type who likes his model all sweet alignment and straight, clean living surfaces, then you'll have plenty of room on the sideboard for the budgerigar. If, on the other hand, you can face the world with a switchback wing, a drunken tailplane, and an off-limits thrust line, then you could be all set for fame and fortune.

This gives me hope. If there's anything in the theory of a monkey on a typewriter eventually knocking out the complete works of Shakespeare, then there's a chance that one of my twisted up products might turn out to have the right warp formula for winning the Wakefield.

Rising Costs

I should have thought the mortality rate amongst radio jobs was quite high enough without introducing Combat, or should I say, " Aerial " Combat, into the Kamikaze airfield antics. But, I'm the last one to stand in the way of progress, especially ten pounds of tail-shorn same hurtling downwards.

Being a simple sort of soul, whose technical knowledge begins and ends with a crudely bent motor hook, I can only stand aghast at all the fearsome machinery flying over, and into, the flying field these days. Some of the aggressive looking stuff, foaming at the snout, and dripping with expensive gadgetry, makes life hard for a not-so-agile rubber modeller like myself, but I suffer it with good-humoured patience. After all, one should have a little tolerance for people who have to go to such extremes to get a kick out of model flying.

With all this technical innovation making almost as big a hole in the pocket as it does in the deck, being a permanent beginner has its advantages. Just think of the fun you can get out of five bobs-worth of balsa, when all the expert types have to fork out five guineas per flight per gadget.

Of course you do get some stirrings of inferiority, and a little unlocked for expense, when your rubber job gets in the way of the general stampede to the radio area, but, even so, look at the money you're saving, not to mention the midnight oil.

Title Deeds

It's encouraging to see the new clubs still springing up with the same old, title coining gusto. A sedate influence is evident in the Squares Stunt Club. No teenage, rock 'n' roll stuff here, but old time circulating in classical tempo.

We can only hope the name Four Ashes doesn't refer to one of those popular wreckage burn-ups, and that they can rake up a few members among the embers.

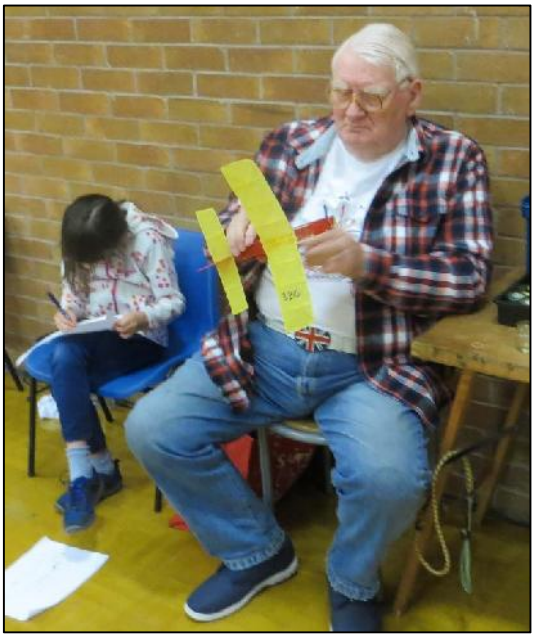
The Girling A.C. seems to suggest a hobby quite other than modelling, for which we suppose the name of the Secretary, B. Young, provides an interesting clue.

Pylonius

Bethesda Indoors - John Andrews

The wife Rachel and I travelled north to spend the weekend with the Martin Pike family in Bethesda, North Wales and to do a bit of indoor flying at the final meeting of his winter series. Martin's meetings, in the Plas Ffrancon Leisure Centre, are normally on the first Sunday in the month but due to holiday commitments he delayed this meeting until April 22nd. This change of date and failure of his facebook notifications led to a very low turnout, good for flying but not for revenue. The cost of hire of the hall is significantly below what is charged in the midlands, in fact Martin says it would be cheaper to hire the hall for three hours flying for himself when fuel costs for travelling to other events are considered.

There are few aeromodellers locally so Martin aims his meetings at families and to this end provides a box full of ready built models for the use of any attendees at no cost. Should the aeromodelling bug bite anyone, there are kits for sale at cost for those infected to try their hand at building.

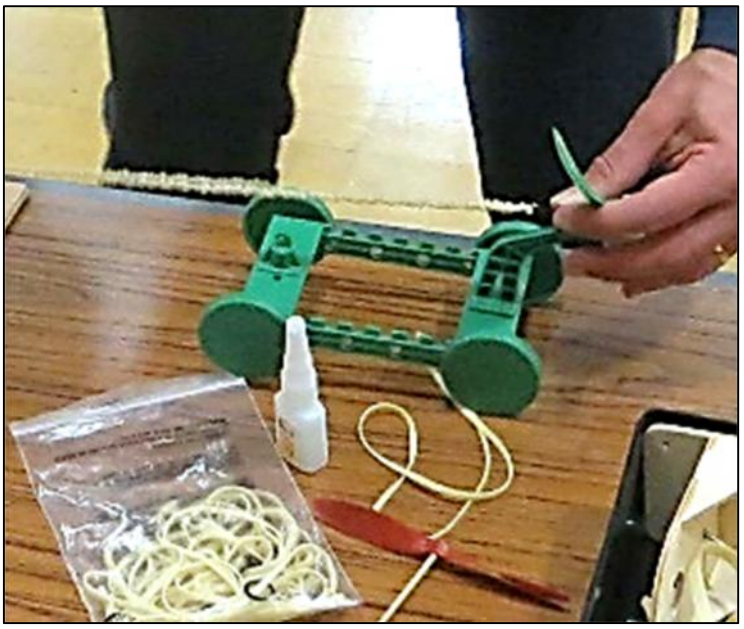


I had a reasonably good days flying, my 'Legal Eagle' No1 performed well enough when I finally got a motor to hang together, bust three motors but model damage was minimal. Flights were only a minute or so but considering the amount of cement and cyno repairs splattered all over the model, it hardly qualifies as light weight these days.

Picture above shows a patriotic belted modeller in the person of yours truly adding more cement as tissue repairs were effected. Caitlin Pike, Martins daughter, was suitably unimpressed as she scribbled away designing aircraft of sorts I assume.

Had some good flights with my 35cm Challenge model, best timed one 3-29 climbing just to first rail obstructions. I had a much longer untimed flight which circled well above the first rails and must have been well over 4minutes. The flight was untimed due to timekeepers Caitlin and Rachel messing about resetting their mobile phones to stopwatch, unaware of myself pleading for timekeepers, as I stood in the centre of the hall with my motor cooking. Gave up waiting and bent down and let the model go, sods law prevailed and the ensuing flight was the best of the day.

Martin was entertaining his children for some time with a rubber powered velocipede, a kit of clip together bits that I had acquired from somewhere or other. I imagine it was one of my daughters more bizarre xmas presents. It was quite effective and would run the length of the hall at a significant velocity, better than the kids could run. Propeller driven at a curious angle, to clear the floor I suppose.



Martin had a 'Kenny Penny' LPP and was having difficulty in getting it to fly properly. Eventually we twigged that his prop pitch was far too great and digging into my flight box, a smaller diameter and finer pitch prop was unearthed and fitted. This made all the difference and the 'Kenny Penny was soon flying amongst the roof trusses.

All in all we had a delightful weekend, it rained, but not indoors.

Had a rain and spray splattered trip back home on the Tuesday however.

John Andrews

Engine Analysis: Glo Chief 5cc - Aeromodeller Annual 1959-60

Material Specification

Cylinder : leaded mild steel
Piston : Mechanite
Crankshaft : hardened steel
Crankcase unit : light alloy gravity die casting
Cylinder head : machined alloy ; gold anodised
Back cover : die cast light alloy
Propeller driver : dural
Bearing : cast iron sleeve (plain)
Spraybar : brass
Glo plug : not specified, KLG plug used on test
Manufacturers :
GORDON BURFORD & CO. LTD.,
Grange, South Australia
British Agent :
PERFORMANCE KITS, Coventry
Retail price : £6/8/9

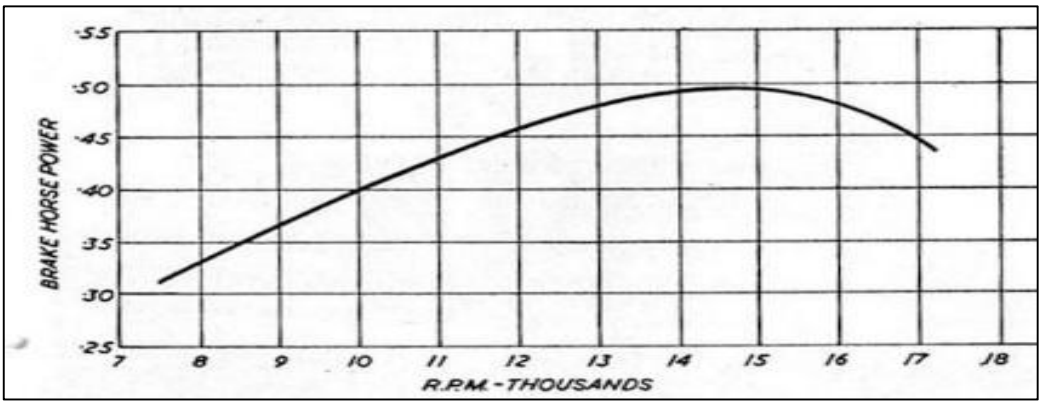
Specification

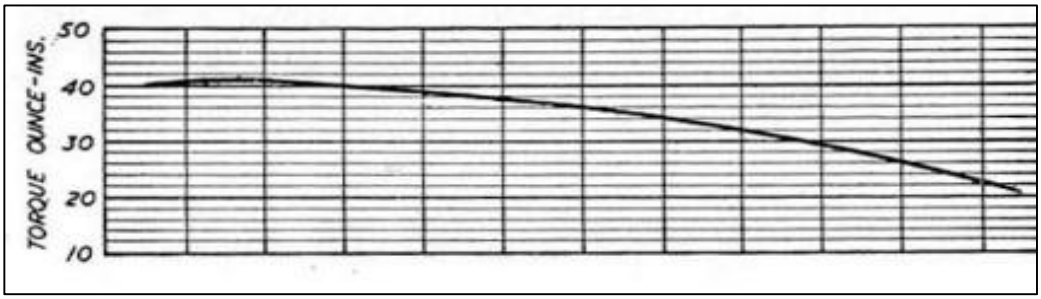
Displacement : 4·92 c.c. (·30 cu. in.)
Bore : ·739 in.
Stroke : ·700 in.
Compression : 8 : 1
Bore/stroke ratio : 1·04
Max. torque : 41 ounce-inches at 8,500 r.p.m.
Max. B.H.P. : ·495 at 14,600 r.p.m.
Power output : ·1 B.H.P. per c.c.
Power/weight ratio : ·065 B.H.P. per ounce
Bare weight : 7⅝ ounces

PROPELLER—R.P.M. FIGURES

Propeller dia. × pitch	*r.p.m.*	*Propeller dia. × pitch*	*r.p.m.*
12×4 (Trucut)	8,500	9×3 (Tiger)	14,900
11×4 (Trucut)	9,900	8×3½ (Tiger)	18,000
10×6 (Trucut)	9,600	10×4 (Stant)	12,800
10×4 (Trucut)	10,100	9×9 (Stant TR)	10,000
9×6 (Trucut)	11,400	9×5 (Stant)	13,000
8×6 (Trucut)	13,000	9×4 (Stant)	13,800
8×5 (Trucut)	16,500	8×4 (Stant)	17,000
8×4 (Trucut)	17,000	8×6 (Stant)	13,900
7×6 (Trucut)	15,000	7×6 (Stant)	17,300
7×4 (Trucut)	19,000 plus	7×4 (Stant)	18,000
		10×6 (Frog nylon)	10,800
		9×6 (Frog nylon)	12,800

Fuel used : 25 per cent castor ; 55 per cent methanol; 20 per cent nitromethane





Aeromodeller Annual 1959-60

Letters to the Editor

Chris Boll: Hi,
Further to your excellent May Clarion, I remember Ray Monks at Wellesbourne airfield in the early 60s, you could see him coming in a bright orange Mini-van, very popular at the time as they were cheaper than the car having no purchase tax, the snag was you were driving a commercial vehicle limited to 50mph, in theory.
The club I belonged to then was South Birmingam MFC, which still exists after lapsing for a few years, I don 't know if any other members from then are still active.
On the Southern Dragon, I have one built from a Cambrian kit, which goes well on a very early Mills 1.3 with 2 channel r/c.
The only snag is that the stepped leading edge (typical of cabin models of the period eg KK Pirate) is a slight weak point, I over-fuelled mine and in turning too tightly to try and slow the climb and keep it in sight folded the wing.
The plane came down at full power with the remaining half wing, but suffered no major damage thanks to long grass. I never did find the other wing half which fluttered away. A new half wing was built with a bit of strengthening at the centre.
Cambrian are hopefully going to reintroduce the Southern Dragon to add to their existing range, they are on the web as Cambrian Planes.
Regards *Chris Boll*

Glenn Stride: Have just read May issue.
Was interested see Nick Peppiat's article on Co2 engines and his reference to the ducted fan MIG 15 published in the February 1983 Aeromodeller
I also built this model for a Telco Turbo Tank.
I managed one flight attempt.
The main problem was getting the engine started and for this reason I did not make any further progress with this model.
I seem to remember the notes in the article that accompanied the plan suggesting that the engine could be started by blowing into the nose intake. However, this didn't work for me.
I still have the model and the wooden former on which I built the fuselage (my dad made the former on his wood turning lathe)

I thought that Nick would be interested to know that someone else had also attempted this model.
I would also be interested to know if anyone else has had any success with it?

PS: Have thought about converting it to a K&P electric ducted fan unit.
This however may require a fuselage rebuild.
Best Regards, *Glenn Stride*

London Gala/Southern Coupe Lg. - Gavin Manion

The week preceding the London Gala weekend was full of dire weather forecasts. At one stage, if I remember correctly, xcweather suggested 25-35mph, 4°C, rain and fog! Well at the finish the forecast wasn't that bad and, fearing falling further behind in the Southern Coupe Lg., I drove the 130miles to my usual campsite in Tilshead via my traditional fish and chip supper in Devizes.

At 07.00 I was greeted with a breeze, raw cold and steady drizzle. At this point I have a considerable advantage over more local flyers in that I cannot simply take one look and roll over for another couple of hours kip and a warm day at home. I'm going to have to fly.

Brave CD for both days, Gary Madelin, decided to move the few attendees about 1/3rd of a mile from Saturday's site, as wet French kisses from the cows downwind had caused a deal of model damage. We rocked up on a ridge, with upwind trees and a valley about 200 yards downwind. Turbulence a plenty, but no cows.

As I looked around in vain for familiar coupe flying faces Gary said "oh someone said that they're not coming" and so it was, with just my name on the sheet. By now the morning had settled into full cloud cover, only a moderate breeze (at one time Phil Ball's anemometer said 7-8mph though in the cold it certainly didn't feel like it), and no rain. As the day progressed we had an occasional little bit of drizzle but it got increasingly breezy and seemingly even colder, until by about 2pm it was decidedly unpleasant.

What to do? I couldn't remember what, if any, Coupe Lg. points were awarded in a single entry "contest" but I did know that there was a point for each max. Did I try for that elusive max? yes, but to no avail. Flights 1 & 2 produced identical sub max scores sucked down into the downwind turbulence. The double attempt 3rd flight was due to me not noticing the tailplane packing had dropped out. My guess that it would have been about 1/16th must have been about right as my 4th flight was my best of the day (but still 12s short). By now it was increasingly windy and cold and I reasoned that a max was probably beyond me so I called it a day.


Wallop September 2014
We used to get nice days

General impressions? Forecasts are a double edged sword, the first 4hours were certainly flyable from a weather point of view but the turbulence would have made F1G flying a bit of a lottery. High launches were a great help and the electronic F1Hs' with their 70-80M bunt heights seemed pretty much at home in the conditions (well at least John Cooper was).

Finally, Phil Ball's Dynamite is one impressive aeroplane shrugging off the weather with its long strong climb. I really must get my example finished.

Here's hoping the next round sees a return to better weather and the usual contingent of flyers.

Gavin Manion

INTRODUCTION

FIFTY YEARS ON!

FEW, if any, of our readers can claim that fifty years ago they were in the heyday of their youthful zest as aeromodellers—though many youngsters in their sixties and seventies can still show a clean pair of wings in competition with experts less than a quarter of their years. If we throw our net a little closer in and consider how many of today's Grand Old Men had already adopted the hobby before the outbreak of World War I, then we are surprised at the flying fish in our catch. Foremost in that number must be Alex Houlberg, A.F.R.Ae.S., Chairman of the S.M.A.E., who only last winter received a presentation for forty years unremitting effort on behalf of the Society. In the period 1910-14 he was busy establishing assorted British records with rubber-powered models typical of the period. Another up-and-coming youngster of those days was then running a model aircraft club at Radley, and already devoting time and thought to power model flying—his military career yet before him—today he is still as active if better known as Lieut.-Col. C. E. Bowden, A.M.I.Mech.E. Our own Managing Editor, in short trousers, was augmenting his pocket money in Parliament Hill Fields retrieving models for older and more affluent youths . . . . The list could continue almost indefinitely with the famous and the not-so-famous, which serves to convince us not only that aeromodelling has an enduring grip on its followers, but that it brings in its wake long life and continued activity.

Starting as the complement to full-size flying, and the medium of much original research in those far-off days, the hobby passed through the inevitable period of depression when it ranked as little more than the curious pursuit of adults who should have known better and youngsters to whom it could do no harm, until, with the advent of the Wakefield Trophy in 1928 and the Brown Junior in 1929, it commenced the long uphill climb to national recognition and a worthy place amongst our sporting and educational activities. Today it occupies a position where the Royal Air Force can affiliate something over a hundred service clubs, where the Home Office must introduce legislation to ensure that its participants enjoy their fair share of the public open spaces available—though *some* Councils may not yet be alive to this aspect of the matter, where a thriving model industry is exporting all over the world and supplying an active home market, and where in this country alone two specialist magazines are able to exist side by side and most countries in Europe and throughout the world publish either an aeromodelling journal or have space in some full-size aeronautical publication. Aeromodelling has flown full circle and begins once more to enjoy the status of a science to enhance its already proud position as a sport and hobby.

Looking back, more particularly over the events of the year, it is a pity to see how bad weather has detracted from the attendances at what should have been record-breaking occasions. The Easter South-Eastern Area Control Line Championships held at Brighton and sponsored by that town enjoyed only a moderate success judged by what had been expected, whilst the first Northern Nationals at York suffered from the typical weather of the year.

Perhaps the most significant advance of the year has been the development of small-size lightweight radio-control units utilising the thyratron valve. Expert and not-so-expert are busily building and flying and enjoying equal success once the elements of simple electronics have been grasped. Another stride has been in control line flying where the motorised plank is fast giving way to more elegant machines worth looking at as well as flying. Growing numbers of scale model control line fans are concentrating on team racing which for the first time is offering the public a spectacle where even non-aeromodellers can enjoy the thrills of competitive racing.

In the International field, Wakefield history has been made with the holding of the contest in Finland, where a small but enthusiastic country were able to provide visiting contestants with an organisation and welcome second to none by dint of every able-bodied member of their Aeronautical Society getting down to the job—no suggestion here that aeromodelling was beneath the dignity of the parent body—as has sometimes been our gloomy experience in the not so distant past. It was fitting that Aarne Ellila should win once again on his home ground, where for the first time the contest was run in still air, that nearly mythical condition in which our aeromodelling writers claim anything up to five minutes duration—only Aarne approached it, though Ted Evans came within striking distance for G.B., and deserves our warmest congratulations. In Sweden the first of what we hope to be an annual series of contests for A/2 Nordic Class Sailplanes was won by Bernfest of Jugoslavia, a country making a welcome return to international model flying.

At Eaton Bray the popular *Aeromodeller* International Rally celebrated its fourth meeting, when Ron Yeabsley won the *Aeromodeller* Trophy, as the best all-rounder, for the first time recording a British victory. Here again our Jugoslav friends were well in evidence and impressed all with their true aeromodelling spirit and sportsmanship.

For the future it seems likely that international meetings will be run on a host and guest basis with the sponsoring country entertaining visitors free of charge—thus releasing a greater amount of hard-to-get foreign currency for a round of return visits.

As usual, the model aircraft trade has anticipated rather than followed fashions with kits of such designs as Nordic gliders, team racers, and the like, while, as we suggested in our last Annual, quality has come to be the essential to any marked success, though the demon price is constantly forcing less than de luxe articles to be offered.

In making our third annual bow, we must not forget to thank the many foreign correspondents who have helped us in this book, our many overseas contemporaries whose courtesy we acknowledge in reprinting their plans, and not last, our public, who will, we hope, continue to buy *Aeromodeller Annual* and make our next year's task the pleasanter.

Hamilton Twin Pusher - Martin Ambrose

A word or two on the above model featured in the April issue of the New Clarion.
I built an example to enter in the 'A' frame event at Middle Wallop, as a simple and quick to build model.
As always, I didn't allow enough time and was still finishing the props the day before the event! With the help of a couple of my South Bristol clubmates it got airborne and flew rather well, much to our surprise. It hadn't been trimmed, adjusted or balanced - just put together and wound using a converted egg whisk.
I won third place in 2009 and have flown it at later events - never bettered that first flight though! Highly recommended as a first 'A' frame model.
I was shocked at how well it flew!
P.S. - note Peter Michel in background rounding up the competitors for the countdown to launch, headgear required to shield him from the intense sun!

Martin Ambrose

Mike Turner Launches
The late Jack Clampitt on extreme left - it was due to him that I made an "A" frame to carry on the tradition in his memory.

Editors note: Right, the late Tony Hall holding his "A"-Frame that I inherited and used at Wallop

Condor - Bill Dean

From the book - 'Bill Dean's Book of Balsa Models'

CONDOR

'PROFILE FUSELAGE'
TOWLINE GLIDER OF
23 INCH WING SPAN

5 TRAINER

BUILDING TIME: 5 HOURS

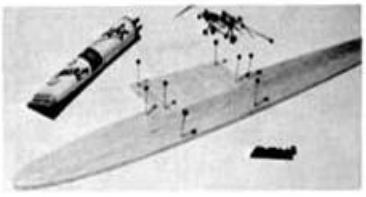
THE *Condor* is an advanced glider, capable of long flights of a minute or more, height being gained by towing up the model in much the same way as a kite. The tail surfaces are fixed to the fuselage, but the wing is detachable for safety in the event of a crash.

1. Cut out all balsa parts from $\frac{1}{16}$-in. *medium soft* (*MS*) and $\frac{1}{8}$in. *medium-hard* (*MH*) sheet as indicated—noting direction of grain. Balsa which curves easily across the grain must be used for the flying surfaces. Mark rib positions on wing panels (A and D) with a soft pencil. Bend wire tow-hook with aid of pliers, starting at front end.

2. Gently curve center wing panel (A) to obtain the camber as shown in the photo. Now cement ribs 'B' and 'C' in place—holding firm with pins (and paper clips at ends if necessary) until dry. Curve camber into wing tip panels (D), then cement the outer ribs (E) in place —in the same way as for the center panel. The remaining ribs (C) are attached to the tips at an angle to allow for the tip dihedral, as detailed below.

3. Secure 'X' to the building board with five pins, then cement the rib angle templates (Y) to it. Lightly attach the 'C' ribs to the jig with *dabs of cement* on the ends of the ribs and at the 'Y' templates. When dry, squeeze cement along the top edge of one of the ribs and place the appropriate tip panel in position, holding firm with pins until dry. Repeat the procedure for the other tip panel.

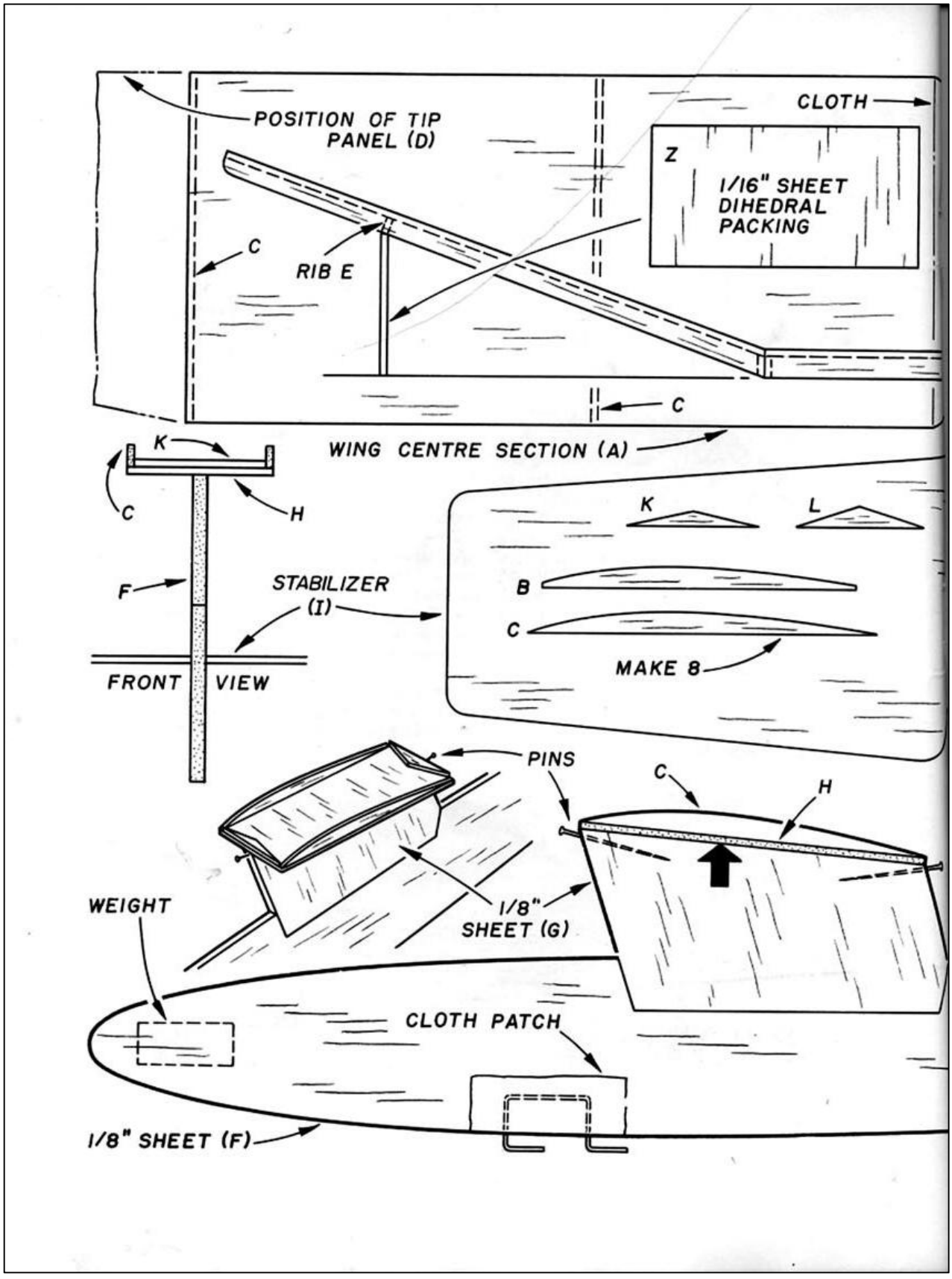
4. Pin the fuselage (F) down flat and cement 'G' in the upper slot—also pinning down. Cement the two remaining 'C' ribs to the outer edges of the wing platform (H). Mark the position of 'G' on the underside of the wing platform (H). Unpin fuselage from building board and cement wing platform to 'G'—checking that the parts are square to each other in the front and top views.

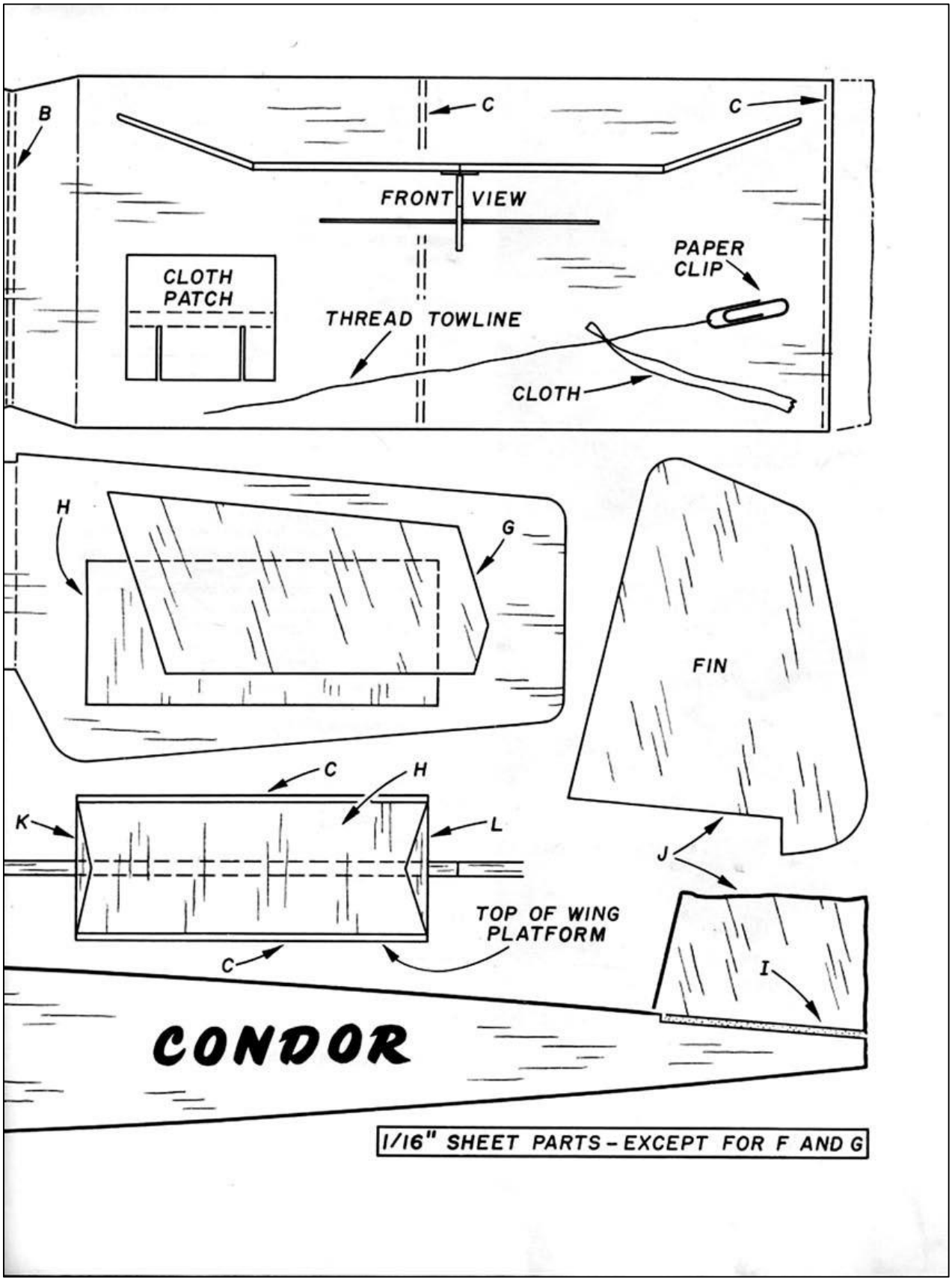


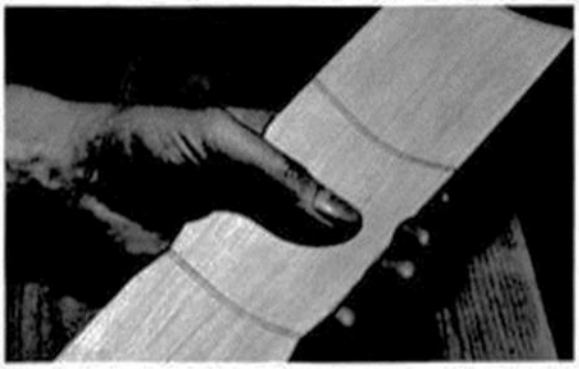
Cementing fuselage parts together.

Parts for making the 23-in. span model.

Completed CONDOR—ready for flight. Hold wing in place with rubber bands.

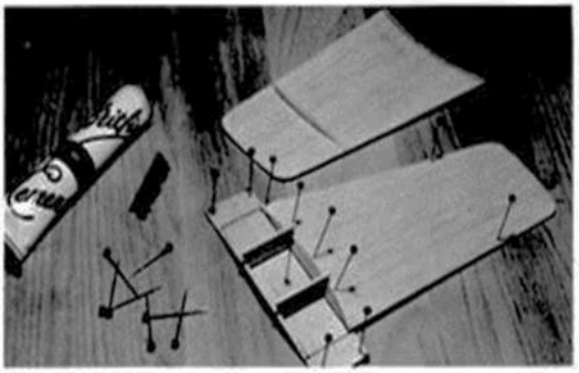

POSITION OF TIP PANEL (D)
CLOTH
Z
1/16" SHEET DIHEDRAL PACKING
C
RIB E
C
WING CENTRE SECTION (A)
K
C
H
F
STABILIZER (I)
FRONT VIEW
K
L
B
C
MAKE 8
PINS
C
H
WEIGHT
1/8" SHEET (G)
CLOTH PATCH
1/8" SHEET (F)


B
C
C
FRONT VIEW
CLOTH PATCH
PAPER CLIP
THREAD TOWLINE
CLOTH
H
G
FIN
C
H
K
L
J
TOP OF WING PLATFORM
C
I
CONDOR
1/16" SHEET PARTS - EXCEPT FOR F AND G



The sheet wing panels must bend easily across grain.

Cement ' E ' ribs to the tip panels. Note use of pins.



Attach ' C ' tip panel ribs—with aid of assembly jig.

Join tip and main panels—packing up with ' Z ' piece.

5. Now remove all pins from the wing panels and pin the center panel to the building board. Join the tip panels to the center panel, propping up each one at the correct dihedral angle by means of the 'Z' packing under the ' E ' ribs. Smear plenty of cement over the joints—on top surfaces.

6. Press the tow-hook into position on the fuselage—to obtain an impression in the balsa wood, then squeeze cement in the impression and replace the tow-hook. When the cement has set, secure the wire with a cloth patch cut from an old handkerchief (see plan). Smear cement over the inner surface of the patch, then press into place—finally spreading another layer of cement over the top.

7. Pencil in the fuselage position on the underside of the stabilizer (1) and cement the latter in place. Check that the stabilizer lines up correctly in the top and front views, allow to dry, then add the fin—again checking alignment.

8. Pin the wing to the stabilizer (H) and make sure that it squares correctly up with the fuselage in the top view. Now cement the triangular keying pieces (K and L) to the platform and put aside to dry.

9. Push two ordinary household pins into the front and rear of 'G' (close to the top). Strengthen the wing center section with a 1½-in. wide strip of cloth. Smear cement on the wing, then press the cloth firmly in place and apply another coating of cement over the top. Hold the wing in place with two 3-in. rubber bands ($\frac{1}{16}$ in. wide), stretched from front (leading edge) to rear and back again.

10. Add weight (old cement tube) to the nose to achieve correct balance. Push a pin into the top of the wing (over the large black arrow), then add nose weight so that the model balances level when suspended by this pin.

11. Check that the flying surfaces are quite true, correcting any warps by gently twisting over the steam from a kettle of boiling water. Fasten a large paper clip to one end of a 150-ft. length of strong *white* thread—then attach a small piece of cloth (4 × 1 in.) to the tow-line, 6 in. from the tow-ring.

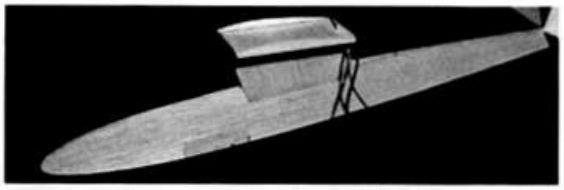
FLYING

Test glide from shoulder height—directly into wind. Correct a dive by gently bending up the rear edges of the tailplane. Correct a ' stall ' by adding a little more nose weight. A slight turn is desirable and, if this is not already present, the rear edge of the fin should be slightly twisted. If the model turns sharply, from the start, twist up the front edge of the wing on the *inside* of the turn.

When the glide is correct, get a friend to hold the model at shoulder height—pointing into wind. Place the paper clip on the *front* tow-hook and pay out the line upwind. When you are ready, give your friend a ' thumbs-up ' signal to start walking forward. Keep pace with him and watch the model over your shoulder all the time.

Your helper should release the model smoothly as he feels the wings begin to lift—after which it should kite up to a height of about 125 ft. If the model veers off sharply to one side, *drop the line* at once to avoid a crash into the ground. However, if the model goes up straight, gently relax the tension on the tow-line at the top of the climb, so that the wind can blow the small piece of cloth backwards and pull the tow-ring free.

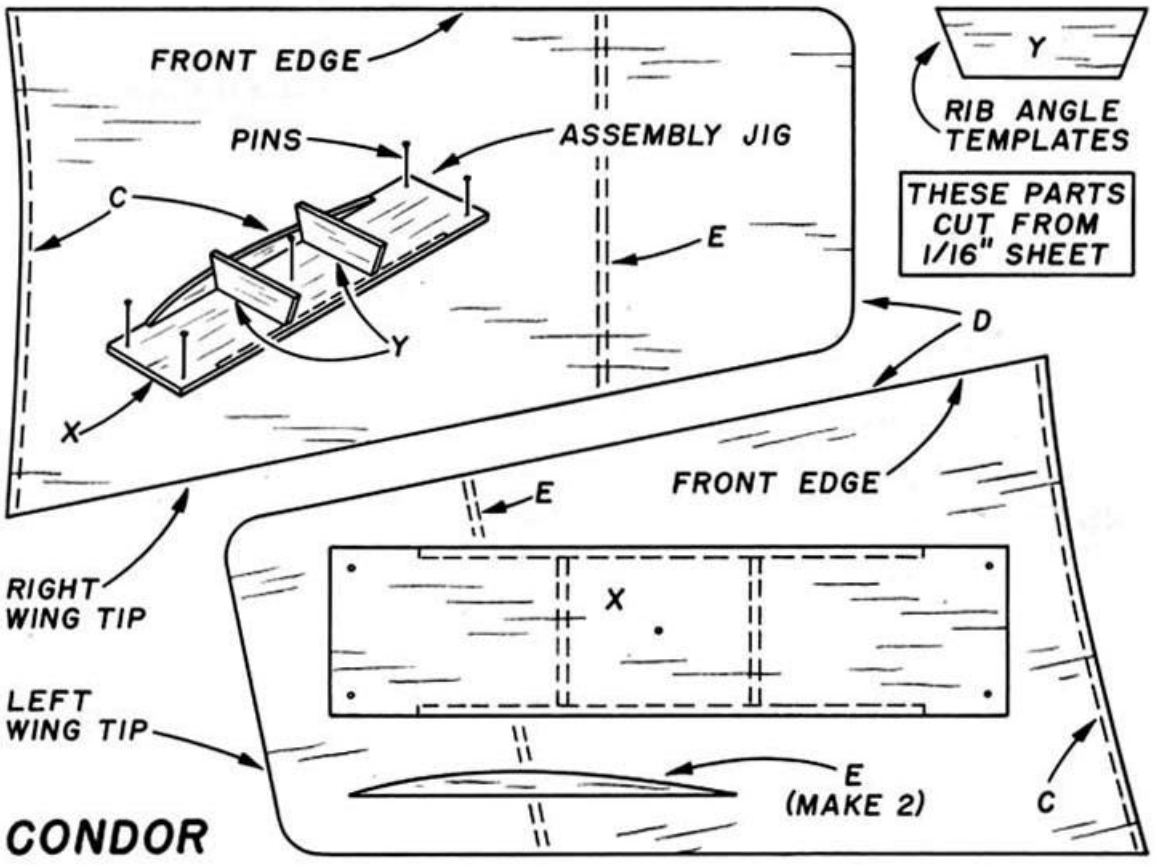
In a stiff breeze, you will be able to tow up the model without moving upwind at all. Be careful not to pull the model up too fast, since this puts a heavy strain on the wings. On calm days, hard running is needed to get the model up to a good height. Use the front hook for first tests and flying on windy days—and the rear hook for calm days only. As you gain experience, a longer tow-line of 200 ft. may be used.



Detachable wing is retained by rubber band over top.

MATERIAL LIST

Sheet—1/16" x 3" x 36" (MS)
Sheet—1/8" x 3" x 18" (MH)
Scraps of 1/16" sheet
3 in. of 1/32" dia. wire
150 feet of strong white thread
TOTAL COST: About 75¢



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Extracted from the book: - 'Bill Deans Book of Balsa Models' - ARCO Publishing Co., Inc.

Bill Dean

Southern Coupe League Rd.3 - Peter Hall

Third Round Southern Coupe League
London Gala, 29th April '18. Salisbury Plain

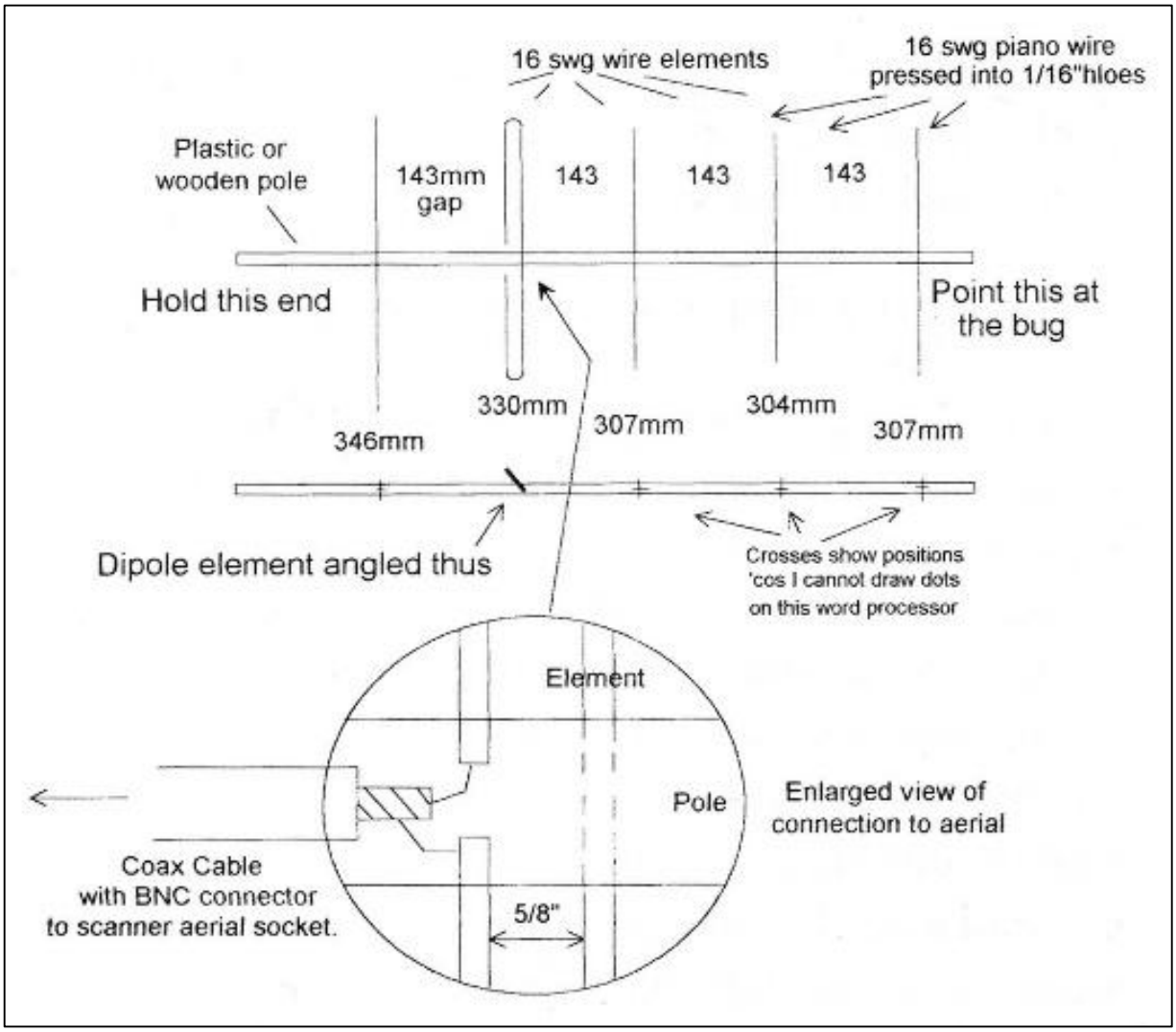
Yes, we all stayed in bed didn't we? And we all regret it now don't we?
The weather wasn't as bad as predicted until later in the day. Rain was supposed to wash out the day before but there were only spits and spots as the weather people say.
Regret is always the penalty for lack of enterprise.
But no regrets and twelve league points for Gavin Manion, the sole Coupe contestant.
Our scoring system does not reduce points at low attendance events, it rewards enterprise, persistence, diligence, application, grit.
Gavin now takes third place in the table and he was good enough to write a report on the event.
The next event is the B.M.F.A. Fifth Area at Ashdown Forest, Merryfield(?), Bodmin Moor, Salisbury Plain, Beaulieu, North Luffenham/Barkston and Sculthorpe.

Don't forget, only five event scores count in the final reckoning.

London Gala Results					
Place	Entrant	Club	Maxes	Score	Time
1	G Manion	Birmingham	0	12	

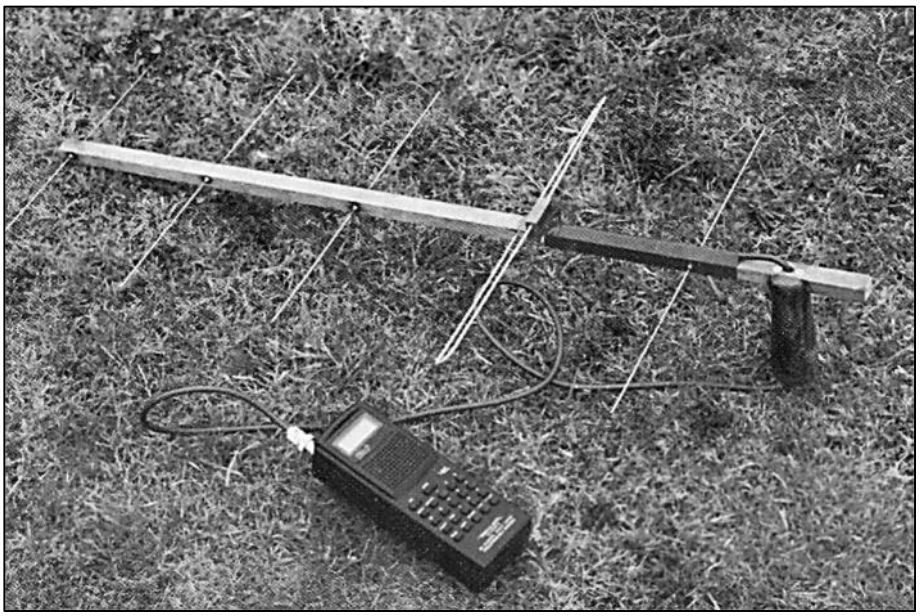
Southern Coupe League Table after Round 3											
	Entrant	Club	Coupe De Brum	First Area	London Gala	Dreaming Spires	Southern Gala	Odiham	Crookham Gala	Coupe Europa	Total
1	R. Vaughn	Crookham	17	13							30
2	W. Beales	Croydon	14	11							25
3	G. Manion	Birmingham	9		12						21
4	G. Foster	Grantham		17							17
5	P. Ball	Grantham	13								13
6	B. Whitehead	CM	2	9							11
=	P. Hall	Crookham		11							11
8	P. Woodhouse	Morley		9							9
=	K. Taylor	E.Grinstead		9							9
10	A. Moorhouse	Vikings	8								8
11	D. Thomson	Croydon	7								7
12	M. Marshall	Impington	5								5
13	R. Elliott	Croydon	4								4
=	W. Dennis	MFFC	2	2							4
=	J. Andrews	Timperley		4							4
16	M. McHugh	Peterborough		3							3
17	T. Bailey	Peterborough									0
=	P. Tribe	B&W									0
=	M. Stagg	B&W									0

Tracker Yagi - Ken Croft



The YAGI [pronounced Yargy as in lager] Aerial.

You can probably manage without one of these until you have a real fly away, but they are built from scrap plus the price of a plug, so get on with it. The drawing ought to be self-explanatory. It is made from square section wood, and 16 swg piano wire. It is a simple item but needs to be made precisely to the given dimensions. It should be fitted with a length of coax cable which is terminated in a BNC connector. The aerial is used as a hand held item and the cable should be long enough to allow the scanner, into which it is plugged, to be clipped onto the user's trouser [or skirt] belt.



The system in use.

Switch on the scanner, remove the aerial, and leave the squelch nob fully unwound so that a hissing white noise" is constantly heard from the speaker. Manually set the scanner frequency to your bug frequency [your scanner is unlikely to lock onto the bug signal on a direct scan due to the intermittent signal]. Turn on the bug ie connect the battery, and the constant hiss from the scanner will turn into hiss, hiss, hiss, etc. The gaps are quite audible, and are the pulses of radio frequency sent out by the bug. To ensure scanner is accurately tuned, you can manually nudge the scanner frequency up step by step, and then down step by step, until the strongest signal is heard. Store this in the scanner memory as the main frequency of the bug. With an aerial fitted, and on this frequency, a full clear signal will be heard quite some distance away from the bug, making close up location of the bug [and model] rather difficult. It is useful to store some slightly "off" frequencies that the scanner can only detect, with its little aerial, at quite close range. As the bug is approached and the signal gets more distinct, you can then change to weaker reception frequencies as an aid to location. The rubber duck aerial supplied with the scanner will give about 400 yards ground range for a 3 volt bug, but with the Yagi this will at least one mile.

Air range with a Yagi extends to miles. The Yagi gives its strongest signal when pointing straight at the bug, and a strong but not maximum signal when pointing directly away from the bug. The rubber duck gives its strongest signal when pointing 90 degrees away from the bug, i.e.sideways.

And finally....

I am reminded of the tale about the chap who had a golf ball that could not possibly ever be lost, since it had a radio tracker fitted, a micro satellite navigation system installed, and a small gamma source for Geiger location. Expensive though it was, there would never be a need for the owner ever to buy another golf ball.

"Where do I buy such a thing" his pal said, "I could do with one of those".

"I don't know' said the owner, "I found it!"

Ken Croft, 7 Mortain Close, Yarm. Cleveland TS15 9SU

Tel:01642-791645 anytime, but you'll be lucky to get a word in edgeways!

This piece is an extraction from an article on trackers and bugs,
by Ken Croft in the International Flying Model Designer & Constructor
Vol.5 No.2 Winter 1997/98

Indoor isn't for Everyone Pt.22 - Nick Peppiatt

I was hoping to submit a report on the Indoor Scale Nationals, which was held in the University of Wolverhampton Sports Centre on the 15th April, this month. However, as our esteemed editor reported in his editorial last month, unfortunately for me, I was unable to attend as I was struck down by a heavy cold the day before. So many thanks to John for his report.
The competition results are available in the Downloads section of the BMFA website (www.bmfa.org), in the 'Contest Results-BMFA' folder. However, I'm already looking forward to next year as I made my first entry to the Indoor Scale Nationals in 1979. Whether I will get round to building anything new is another matter!

So this month I will continue on the theme of CO_2 motors. In response to my comments on the TurboTank powered MiG 15, OEE John received an interesting email from Glenn Stride describing his experiences with this design, which is published elsewhere in this edition. He describes difficulties in starting the motor by blowing into the duct, as detailed in the original AeroModeller article. I do not recall having this problem, and I cannot think how else I would have started it. Both Glenn and I would be interested to hear if anyone else had attempted this model and had greater success.

CO_2 Motor Chargers

The chargers supplied with CO_2 motors are designed to take cartridge bulbs like those for the Sparklets Sodastream. The ones shown in the accompanying photo are the traditional green, and made by BOC. A web search indicates that equivalent bulbs are available. They are no longer green and cost more than 99p for ten! These bulbs are of the type fitted to the integral loader of the early OK and KK CO_2 motors to be used in one run.

Classic green Sparklets bulbs with box for ten.


Various cartridge bulb chargers, left to right: Telco, Brown and Modela.

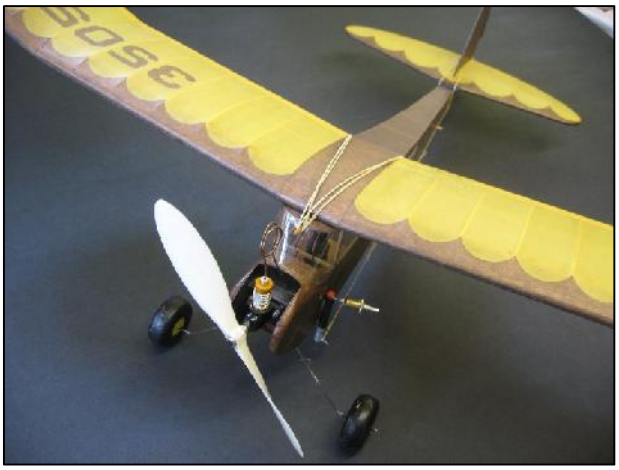
In the later motors, the bulbs are fitted to the charger and a screw is turned to pierce the cartridge to supply the gas to the charger nozzle. This has a valve, generally a ball bearing against a plastic sleeve, which is lifted by the motor filling nozzle to allow the gas to enter the tank. The pressure in the cartridge is around 60 bar and at this pressure the CO_2 is mainly in the liquid state. Thus, a gas charge is obtained if the motor tank is filled with the charger nozzle up. If the charger nozzle is down, a liquid charge is transferred to the tank, provided there is still some left in the bulb. Gas charges are useful for trimming and shorter duration flights. Unfortunately, these small bulbs only have sufficient CO_2 for three liquid charges. However, Doug McHard in his 1972-3 AeroModeller Annual article describes a useful technique of using two chargers where the second is used to top up the first after this has been used for three liquid charges. As a result I fitted my CO_2 motors with Telco tank nozzles and

standardised on the Telco cartridge bulb holder. The early Brown motors have a filler nozzle diameter of 1.6mm (1/16in), whereas that of the Telco is 2mm. In fact, my later Brown Campus A-23 has a 2mm filler nozzle diameter and this seems to have become something of a 'standard' diameter. The Telco charger is fine for typical UK conditions, but Fritz Mueller in his 'CO_2 A Guide for Success', published in the December 1999 edition of Flying Models and available in the articles section of the Gasparin website (www.gasparin.cz), points out that this charger is not man enough for hot US conditions, claiming that it will blow apart when piercing the cartridge at 96°F (35°C). At this temperature the gas pressure is too high and the plastic is too soft. As a result, Fritz recommends the use of metal chargers.

SodaStream steel 35l and aluminium 60l bottles.

Conventional thread on 35L bottle, left, and trapezoidal thread on 60L bottle, with KP Aero adaptors

CO_2 motor loading adaptors for SodaStream bottles, from left to right:
Telco for 35L, KP Aero for 35L, KP Aero for 60L AlCO$_2$Jet



One model photo this month - the 25in Cleveland Viking from John Watters' AeroModeller free plan, July1984.
Shown fitted with an. Aerographics Tornado. Was previously powered by a Shark, which uses the same plastic crankcase.

The larger re-fillable CO_2 bottles, such as those supplied by SodaStream are a better filling source. Originally these were steel 35L bottles, but they have been replaced by aluminium 60L bottles. For some reason the thread form at end of the bottle was changed from a standard to trapezoidal, meaning, of course, that a loading adaptor for one does not fit the other. I obtained my last 35L steel replacement bottles in 2010, and I recently contacted Sodastream who confirmed that they were no longer available, having been withdrawn in 2011. Adaptors for 35L bottles were made by Telco and Derek Knight (KP Aero). Derek also makes the Sodastream Alcojet adapter (www.kpaero.com). The 60L Sodastream bottle has its advantages in that it is lighter and contains more gas.

The charger nozzle of the adaptor screws into the body and has a plunger attached to it which opens the gas valve in the top of the bottle. There is also a face sealing nitrile O-ring static seal that seals the adapter to the bottle. It is a good idea to release the pressure in the adapter by unscrewing the nozzle and inserting a tank filling nozzle between motor running sessions. This is because the CO_2 will diffuse into the rubber seal over a longish period of time. When the pressure is eventually released, this gas will expand causing the O-ring to noticeably increase in size, a phenomenon known as rapid gas decompression. At atmospheric pressure, the gas will slowly diffuse out of the O-ring and it will eventually return to its original size. However, if the internal gas pressure in the O-ring is high enough, its material bonds can be ruptured, resulting in blistering and cracking.

Next time, I intend to take a look at some of the wonderful Czech produced CO_2 motors, one of which is the Aerographics Tornado, shown fitted to the miniature Cleveland Viking, an AeroModeller free plan by John Watters. I have flown this model successfully in a large sports hall, but I had not flown this model for some years until very recently. It is was also fitted with a fuse DT, which I have changed to the much more environmentally friendly tube-in-tube type, described by Peter Michel in the June 2007 New Clarion. I made a number of trimming flights with gas charges the other evening on Chobham Common, when it was relatively calm. With a throttle adjustment and a tweak more left rudder trim tab, the Viking was flying in a nice left-left pattern. I look forward to an even calmer evening when I can try some liquid charges.

Nick Peppiatt

Coupe Snippets - Gavin Manion

Classic Coupe at the Coupe de Brum,

Eagle eyed readers may notice that the notification for the next Grande Coupe de Birmingham contains an additional award for Classic Coupe in the form of a cartoon print by the recently departed French model flyer and artist Gerard Pierre-Bes. It is hoped to have the print personalised to the winner on the day.

I'm grateful to Sergio Montes, editor of Free Flight Quarterly, for permission to use this image

Vintage Coupe League

He much awaited 2nd round of the new Vintage Coupe League will take place on 17th June at the SAM 1066 event on Salisbury Plain.

The points scoring system couldn't be simpler,
3 for a win, 2 for 2nd , 1 for 3rd (nil points for last!)

The current leader is Chris Redrup and a lovely SAM1066 Trophy awaits the winner.

For a list of the remaining events see the Events and Notices section of this esteemed publication.

Gavin Manion

My Canard - Ian James

Since the New Clarion is still on the track of anything as a page filler, I thought you may be interested to see and hear about my one and only foray into Canard country.
The Walsall MAC used to have a trophy for O/D models of every discipline except of course scale.
Back in 1982 I think it was, my entry for this contest was a canard tractor as shown in the photo, you can see it has a profile fuselage, an electric Mabuchi A1-7 motor and a prop-in –a-slot arrangement.

The basic fuselage was of flat strip which turned out to be very flexible and it was at this point that I forgot the motto "temper the wind to the shorn lamb". The 'wind' in this case was the weight of the air forced back & the 'shorn lamb' was the Mabuchi A1. This motor had plenty of "GO" in spite of its small prop.

When I sheeted the fuselage with very thin balsa I reckon I was asking a lot of the 'shorn lamb' what with all that weight of wood, glue, tissue, dope and even a solid fin as well. The job looked neat enough but for a free-flight model it was very much on the hefty side.
The main and foreplanes were lightly built even by my standards and fitted through slots in the fuselage. Both slots had provision for increasing incidence. Deep Folly, I know now that the mainplane should be at zero or near zero incidence. On the field it took me quite some time to achieve something like the right set-up which must have meant quite a lot of incidence on the foreplane.

Did the thing fly? Well yes it did but in a heavy laboured fashion. I must add though that it was very stable.
Knowing what I do today, with modern materials, adhesives and so on, I think it could grab someone's interest as a deviation from the norm.

Ian James

Whither the Coupe - Peter Hall

The Standard Average Trendy Optimum Perfect Coupe

If freeflight survives for a couple more decades how would coupes develop? Not very much, given the progress over the last two decades. However, if today's aeromodelling participation rates and age profiles matched those of the 1950's you might predict the following. One piece molded, ultra-light, ultra-stiff, ultra-thin, elliptical dihedral wings with molded-in turbulation patterns allowing aspect ratios of around 15/1, ultra-thin, ultra-stiff and light carbon props with variable pitch hubs; micro-electronic 2 gram control packages operating full systems including thermal sensing and G.P.S. tracking; Tan 3 rubber with double the current storage capacity. How big? Material and production developments might allow a robust model capable of being discus-launched, at around 300 sq." (I will use old money because we'll be back to £sd, roods, poles and perches after Brexit), while keeping the weight down to 80 grams total. Thermal detection advances would guarantee the air. Motors would be reduced to 5 or even 3 grams and field boundary sensing DT's would prevent fly-ways..... Dream on.

Meanwhile you want to design a coupe. You will want to decide; systems or locked-down, the wing area and aspect ratio, the tailplane volume and aspect ratio, the fin volume, the moment arm, the static margin of stability, the wing and tailplane profile camber and thickness, the centre of gravity position on the wing chord, the prop. diameter and pitch and the motor length and approximate run time. Unless you are going for an experimental or an off piste model for extreme conditions you will probably go for what you consider 'best practice,' or an average of the successful coupes that have impressed you, informed by any convincing computer simulations and of course, your own experience. I decided to re-visit my (limited) reference library of Free Flight Quarterlies, Free Flight News, N.F.F.S. Symposium Reports and Free Flight Forums together with my own coupe records, to see what patterns emerge and what might be a current optimum design. I looked at twenty published, competition winning coupes; sixteen U K., and four Ukrainian /Russian 'factory' coupes, also two computer simulations of the optimum coupe. Sergio Montez in Freeflight Quarterly, January '17 looked at fifteen 'important models from diverse sources' from 1950 to 2015 and identified a gradual evolution. He then gives details of the 'Trendy Coupe' which incorporates the trends. He also cites Rene Jossien's analysis of French coupes in 1960 to reveal the state of the art in coupe design at that time.

The tables give the model, the approximate date, the wing area, (sources often not clear whether projected or not); the wing aspect ratio; the tailplane volume coefficient (tailplane area x moment arm/wing area x average chord; the moment arm is measured from the C.G. to the quarter chord point on the tailplane and the tailplane area is as on the plan) the tailplane aspect ratio, and the centre of gravity position on the wing chord.
I don't include the prop. diameter and pitch and the aerofoil details, my sources are too limited, and I will leave to you the pleasure of calculating the static margins of stability.

1. R. Jossien's state of the art 'Average Coupe' and S. Montes' 'Trendy Coupe'

Author	Date	Area	A.R.	T.P. Vol	A.R.Tp	C.G.
R. Jossien	1960	154	8.5	1.18	3.6	62
S. Montes	2017	192	10.2	1.3	4.5	---

2: U.K. Locked-down Coupes

Model	Date	Area	A.R	Tpvol	A.R.Tp	C.G.%
Ian Dowsett	1987	206	10.1	1.1	4.7	55
W. Beales	1994	195	9.5	1.5	5.3	65
D. Hipperson	1994	214	13	1.46	4.85	80
Ian Davitt	1998	210	10.3	1.57	5.4	65?
Spencer Willis	1998	238	11.8	1.47	4.29	66
D. Greaves	2001	251	10.2	1.12	3.9	66
George Sharp	2004	237	8.6	1.18	4	66
A. Longhurst	2008	203	9.1	1.37	3.6	60?
Gavin Manion	2010	166	8.7	1.42	3.6	60
A. Brocklehurst	2016	180	10.5	1.57	5	68
Averages		210	10.2	1.38	4.46	65.3

2. U.K. Systems Coupes

Model	Date	Area	A.R.	Tpvol	A.R.Tp	C.G.%
Peter King	1996	195	10.2	1.36	4.14	52
R. Sparrow	2001	180	11.1	1.38	3.7	55 ?
Roger Wilkes	2009	176	12	1.56	5	58
Peter Brown	2010	211	11	1..0	4.27	---
Roy Vaughn	2014	222	12.16	1.05	3.93	41
Peter Hall	2015	194	12.9	1.26	4.74	47
Averages		196	11.56	1.27	4.3	50.6

3. Factory Coupes (systems)

Model	Date	Area	A.R.	Tpvol	A.R.Tp	C.G.%
Burdov	2001	188	10.3	1.13	4.14	55
Bukin	2003	186	14	1.13	4	56
Stefanchuk	2008	176	12.8	1.44	4.14	56
Gorban	2010	198	13.6	1.4	3.8	56
Averages		187	12.7	1.3	4	55.75

4. Computer Simulation Optima

Author	Date	Area	A.R.	Tp Vol	A.R Tp	C.G %
Peter King	2006	225	13	1.4 ?	4	41
Paul Rossiter	2006	260	10	---	---	---

COMMENT

Wing Area and aspect ratio:

No model class rivals Coupe for the range of wing areas used. Oleg Stoev's factory coupe was P30 size at 132.sq." French practice according to R.Jossien in 1960 ranged from 132 to 222 depending on weather conditions. The factory coupes with full systems and carbon construction adding weight restrict themselves to 187 average. Based on his survey, Sergio Montes' 'Trendy Coupe' identifies 192 as his optimum in 2017. UK systems coupes' average is close to this at 196. U.K. locked- down coupes surveyed average 210 with David Greaves leading the pack with a 251 sq" model. The biggest of all was C.Corviaux' giant at 402 sq." described by Jean Wantzenriether in Free Flight Quarterly April 2006. King and Rossiter's simulations point to further headroom over the average if weight can be held down. Carbon construction allows U.K. systems coupes and the factory models to use higher aspect ratios. I can detect no other general trend.

C.G. and tailplane volume coefficient and aspect ratio:

As you would expect, the locked-down coupes have more rearward C.G. positions than those with V.I.T. in order to reduce the decalage and so help to control the pitch up on the burst. The UK systems models' C.G.'s are 5% more forward than the factory coupes. Tailplane volumes vary widely from 1.0 to 1.57, the locked -downers on the high side. The small samples of course render this close to insignificance, but you would expect a hefty T.V.C. to reduce the chance of the C.G. blundering into the neutral point as it migrates rearwards in pursuit of burst control if you don't have V.I.T. Similarly, tailplane aspect ratios vary widely from 3.6 to 5.4, and show no clear pattern.

CONCLUSION

The purpose of this brief survey was to see if any design trends over the last two decades or so would point the way to current best practice.

I find no clear trends. Of course, the picture is complicated as it is overlaid by the skill of the flyer in trimming and picking air and producing fault-free performance so that a mediocre model may look like a winner.

It might have been more fruitful to survey the flyers. The factory coupes and some U.K. systems models have features that are an obvious advantage - they're slick and low drag, they're shower-proof, their hubs are properly engineered and instant or delayed prop. release gives a useful boost to the climb, and V.I.T. manages the flight pattern more effectively.

But there have been no obvious developments except for the introduction of electronic timing and radio d.t. Nevertheless, in the hands of an expert flyer this type of model must be superior. Some would say that these are not truly free-flight models, their advantage is usually nullified by the vagaries of the air, the systems are not reliable or finger-proof and they are too expensive to lose; but all this is irrelevant to my purpose.

The wide range in wing area is no doubt due to the preferred flight pattern and the anticipated weather conditions. Some favour a long slow climb on a large wing, some the opposite. Some go for small fast- climbing models for windy weather and the opposite for calm conditions. There is no consensus on the former and extreme weather models are a special case. So, given that the examples cited are all successful competition-winning models the average wing area might qualify as optimal. For the sixteen U.K. coupes this is 205 sq." well below the simulations but a bit higher than Sergio Montes' 'Trendy Coupe' at 192. Aspect ratio average is 10.7 , close to Montes' but surely conservative given Peter King's convincing graphs which indicate 13 if you have a slim low-cambered aerofoil (no more than 5.5%). Tailplane volumes and aspect ratios and C.G positions reflect the flying mode, locked-down or systems, so there is no point in averaging these over the sixteen models.

So we arrive at last at my optimum coupe. This would have systems and use so-called high tech. materials and methods of construction. If the weight is kept to the minimum, the wing area would be a bit higher than average at 210 sq." as a gesture towards the simulations; the aspect ratio 12 (with aerofoil camber and thickness no more than 5%); I find that I can get a static margin of 0.43 with a tailplane volume of only 1.0 and a moment arm of 24.5" I can't see why it need be any bigger and I can save weight with the shorter boom. The tailplane aspect ratio is rounded down to 4.0 (because there's no need for a high lift-slope and it's very very very slightly structurally advantageous) The C.G. position is calculated to result in a zero lift tailplane (at gliding speed) which would in consequence have a symmetrical aerofoil. Since I'm allowing my prejudices to intrude I'll also go for a prop. diameter of about 20" with a P/D ratio of 1.25 driven by a 9.5" motor. I notice that this is not far off the Peter Brown coupe - and he used a 20" prop. If I remember correctly it was overweight, but very good indeed so that's encouraging.

Model	Area	A.R.	T.P.Vol	A.R.Tp	S.S.M.	C.G.%
Opticoupe	210	12	1.0	4	0.43	46

Peter Hall

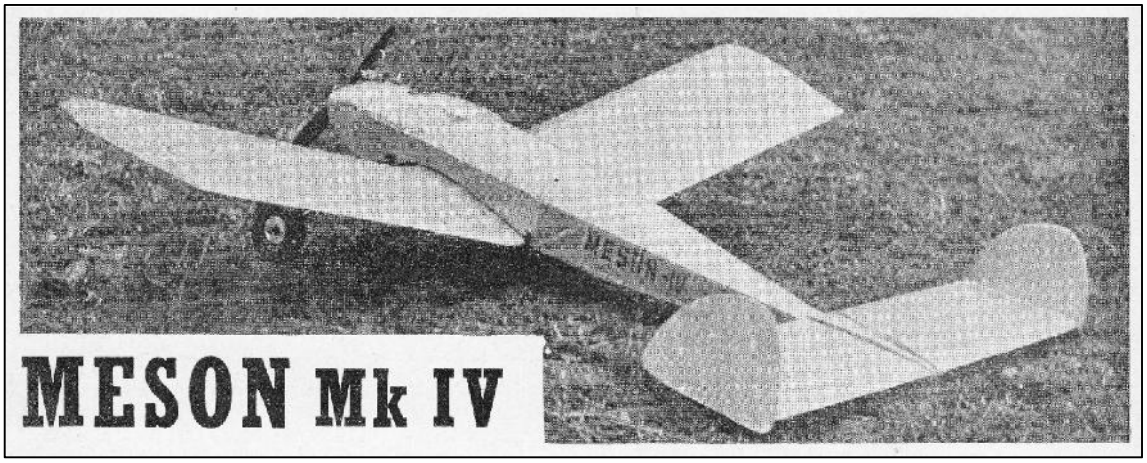
Report No. 88. Performance Kits continued:

Last month, we started with the first "Performance" advertised kits but prior to that two of Peter Fisher's designs were published as plans in Model Aircraft.

Cover photo: Yes, we did have some summer last year, and to prove it here's a photo of Peter Fisher, his "Ionosphere" and his 1949 Triumph 2000 Roadster, taken in the sunshine at the Woodvale Rally.

The picture above showing Ionosphere (possibly Mk 21, 60" span) is from SAM 35 Speaks February 1988.

The Ionosphere-8d, 31" span, plan was published in Model Aircraft July 1953.



The Meson picture is from the article accompanying the reduced plan in Model Aircraft March 1955. The full size plan of this 46" span power model is available from Outerzone.

The obituary below, by Ron Moulton, is from SAM 35 Speaks July 2005

O.F.W.Fisher

One of the earliest enthusiasts for engine collection and vintage model flying, "Peter" Fisher who created *Performance Kits*, died on April 13th aged 73. Though born in Watford, where his world travelling explorer parents owned considerable property, his home throughout early years was in more fashionable Kensington at Princes Gate Mansions, where again the family were property owners.

His actual forenames were Ocean, and the more conventional Francis and William. Like his younger brother Forrest, he disliked the geographical first name and somehow adopted "Peter", possibly for easier passage through education at Eton and Oxford where his knowledge of engineering and a capacity for calculation developed. A side effect of the tough dorm life was loud intonation and a tendency to talk down on many subjects. This characteristic as a teenager once got him ejected from Henry J. Nicholls' shop on a non-buying visit after he loudly criticised the quality of almost every kit on the shelves over the heads of a shop-full of irritated customers.

National Service mellowed him when on an Air Wireless Fitter course at Yatesbury '53-'55 as an AC2 in blue serge and overalls by day and with dinner suit packed, off to Mayfair in the 2.1/4 litre Lea Francis and cocktail parties with the Debs at weekends. That is when not aeromodelling with flying wings of the unique shapes that became his trademark. His *Ionosphere* set the British record in '54 for power tail-less, he held RAFMAA records, won tail-less at the *All-Britain* Rally, Radlett and Peter was quickly established as a champion of bizarre shapes. Few realised that each was in fact carefully calculated, proven in practice, as is known by the fact that no matter how eccentric (or asymmetric) they appeared, ALL of Peter Fisher's designs flew well.

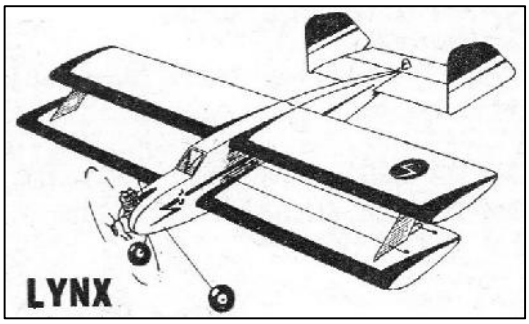
As an engine enthusiast, he joined Alvis Ltd at Coventry to go into research as a development engineer in 1957. It didn't last so he decided to get into the model business and launched *Performance Kits* in an old Clock Factory at Allesley Rd, also in Coventry. The kit range was all of his own designs, free flight and control-line. Then a suitable base at Thorncote Green, a mere 3km from Old Warden aerodrome became available in 1961 and with his attractive wife Kitty helping, the business expanded, with engine agencies like Micron from Paris, Kingshire, the local manufacturer in Beds, modelling materials from balsa to dopes, tools and adhesives. Of the kits, the *Apex, Meson* and original *Ion* became best known as the unconventional free flighters, while the biplane control-line *Lynx* with its back staggered wings became popular largely because of Peter Fisher's own demonstrations.

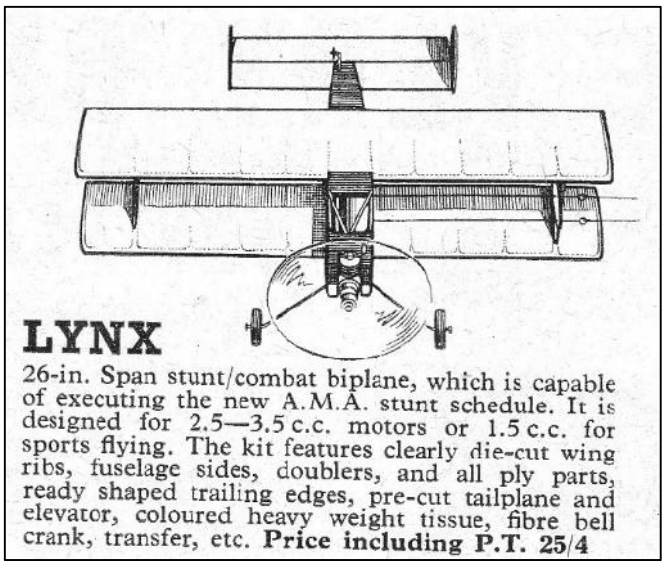
PK kits at Thorncote Green became a magnet for the engine collecting fraternity. He set up Region 13 in the International Model Engine Collectors Association, (MECA). One of their meetings at PK in 1975 appears in his book *"Collector's Guide to Model Aero Engines"*, published by Argus Books in 1977 showing 8 members, most of whom are still ardent well known collectors almost 30 years later. The same book was a ground breaking effort, rarely since rivalled in the same style, though at times difficult to follow with its two indices and jumbled text. It also publicises Peter's predilection for cats and reptiles, who else would pose a Morton M-5 radial on a pet python or a long haired cat with a rare Speed Demon diesel? Cats were given a special castle in the PK grounds, a Freudian influence on his move to Woodland Towers at Onchan in the Isle of Man in 1982. On his first visit to the Island he chanced to shelter from a rainstorm in an estate agency. The immediate outcome was an inspired purchase. He didn't take the cats or the snake but he had a Castle with a castellated tower even if it wasn't in very good condition.

On the I.o.M. he had ex-RAF aerodrome Jurby to replace Biggleswade Common and Old Warden where he had virtually pioneered meetings for vintage aeromodelling, and following divorce, concentrated on renovation of the new home and its wooded acres. With his unusually broad rimmed trilby and long stemmed pipe he became one of the Islands easily recognised characters, lunching regularly at the Hilton, a loquacious debater and as ever, a fast motorist. His likeness is no longer reproduced.

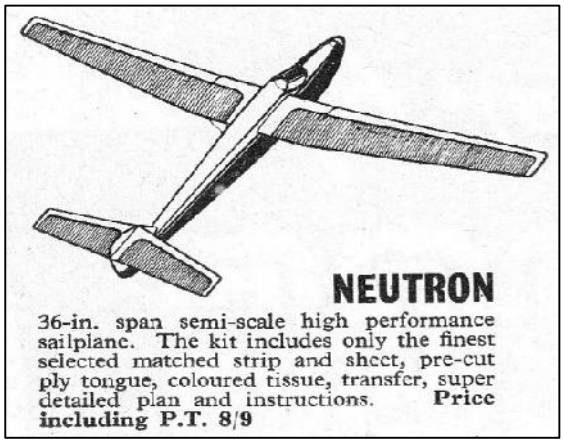
R.G.M.

Continuing now with Peter Fisher's designs roughly in date order, regardless of whether they were kits, published in magazines, or appear in his lists. I say "roughly in date order" because, apart from those published in magazines, the dates are not always certain or apparent.
The Lynx, a stunt/combat 26"span control line biplane appeared in an advertisement in the July 1961 Aeromodeller with the rather unhelpful sketch as seen on the right. Later advertisements carried the rather more informative sketch seen below left.
Full size plan available from Derick Scott.

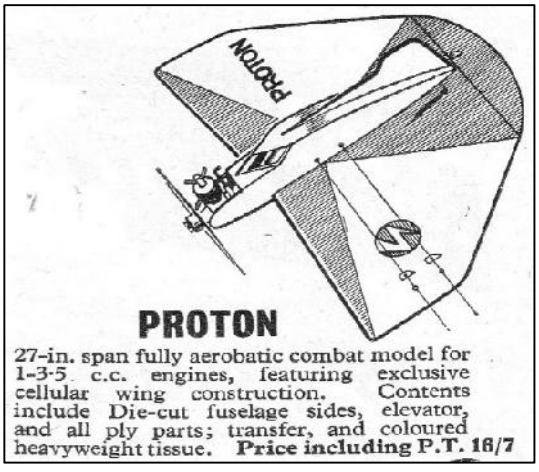




Also in the Aeromodeller advertisement for July 1961 was the first Performance Kits rubber powered sport/competition model, the Asteroid a 25" span cabin duration model. Would it be a competitive "Under 25 inch" model? Maybe it would and maybe not as unfortunately all we have to go on is this sketch from the advert. No source of supply for a plan is known to exist. So, it is one of those "Please if you have a plan……..well you know the rest.



Next, in an advertisement in Aeromodeller June 1959, were the Proton 27" span combat model and the Neutron 36" semi scale glider, full size plans from Derick Scott and Outerzone respectively. More of Performance Kits next month.



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

Roy Tiller

Those Were the Days

October 1929 It is an interesting point that when any type of model aeroplane has reached a certain standard of performance its place as the leading type is taken by another. Following the twin-pusher r.o.g. machine came the spar tractor, which point had been reached about the summer of 1914. There followed a gap of five years, and in 1919 many of the old hands had been swallowed up by the War, or had lost interest.

For a time the pre-war types of model aircraft were built, but soon the demand for a new field to conquer became evident, and the fuselage machine made its appearance as a successful type.

Stanger made a record flight of 51 seconds in April 1914 with a PETROL DRIVEN MODEL; then a few years later a man well known in model power boat work, Westbury, designed a petrol engine which was built into a scale model of the Cranwell light monoplane by aircraft apprentices. (See the recently published book "Jet" by Sir Frank Whittle.—*Ed.*)

"I have not said anything about the wireless control of models, for if I know little about engines, I know less about wireless. It does seem though that at least we have reached the size of model which justifies the use of wireless control, but what form it will take I have not the slightest idea. May we be preserved from the "scale" fiend who will not be satisfied until he has inserted his "scale" pilot with joystick grasped in one hand, and feet on the rudder bar! Whatever happens, the rubber driven model will continue to be built in increasing numbers, for the petrol plant will only be available to the prosperous few who have time and money to devote to it." (The foregoing is extracted from an article by "R.L." in the S.M.A.E. Journal for October 1929.)

1928 Rockets In 1928 the S.M.A.E. exhibited at the Schoolboys' Exhibition, and early in July entertained a team of aeromodellers from America. At Croydon Aerodrome a contest for spar models was won by Ford Grant of the U.S.A. with a flight of 79.2 secs., England winning a fuselage type event with Plater's 48.4 secs. The speed competition brought forth a surprise model in the form of a rocket plane by B. K. Johnson. R. N. Bullock won with a speed of 34 m.p.h. Fuselage model records were again beaten by T. H. Newell 76 secs. h.1., and 65.2 secs. r.o.g. by Mr. Bradley.

Formulae Controversy When fuselage models were first flown the fuselages varied considerably in cross-sectional area and in some instances veneer tubes of about one inch in diameter and three feet in length were deemed by their designers to be fuselages, inasmuch as they completely enclosed the rubber motor. The committee of the S.M.A.E. decided not to allow this, and thereupon agreed that the cross-sectional area of a fuselage should have a reasonable and definite relation to its length, so that a model should at least have some appearance of the full-sized machine. (The original formula of $\frac{L2}{100}$ was later modified to the F.A.I. requirement of $\frac{St}{80}$ where St represented the total surface area of the machine. The right to limit designers to any resemblance to full-size practice is still one of hot debate wherever aeromodellers gather.—*Ed.*)

C/L Stunt at Old Warden - Eric Hawthorne

Mayfly Old Warden 12th.May 2018

Arriving at Old Warden to slightly overcast skies but light winds, thinking good flying weather. At 10 o'clock circles were marked out and tables and chairs assembled and contestants booked in. this meant that the contest started at 11 o'clock with five entries in Vintage Stunt and three in Intermediate Taster.

Not too many mishaps in the first round but 2 flyers were out in front in Vintage.

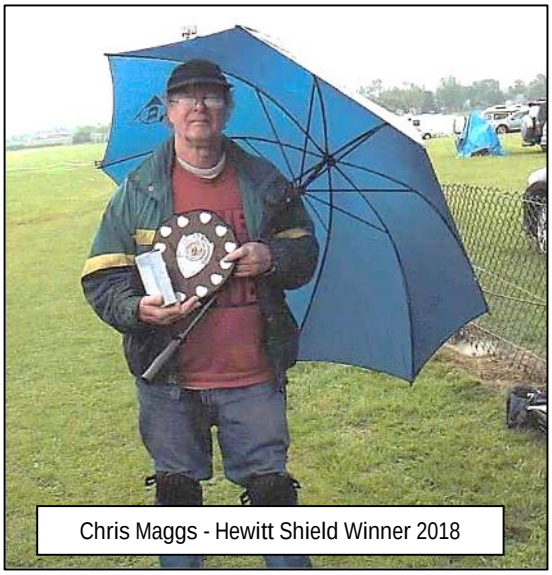
Taster Stunt followed on with 2 good flights but Derek Gardiner's flight ended abruptly resulting in a broken model. I must confess that at this point the flying of the taster Stunt pilots was of a good standard.

The second round of Vintage Stunt started in the dry and only one flyer bettered his first round score. The last two flyers this round finished in the rain which included Trevor Tennant.

Vintage Stunt for 'The Hewitt Shield'					
Place	Competitor	Round 1	Round 2	Final Score	Model
1	Chris Maggs	239	242	481	
2	Dick Stepney	228	198	426	
3	Trevor Tennant	168	91	259	Ringmaster
4	Dave Cowburn	165	94	258	
5	Nick Zotov	123	82	205	

Having decided to run a second round of Taster we now only had two entries left and wet conditions. Both wished to fly, one successfully but with David Feven unable to take off in the wet grass. This completed the competition and a swift wet trophy presentation followed.

Taster Stunt 'Intermediate'					
Place	Competitor	Round 1	Round 2	Final Score	Model
1	John Goldsmith	91	74	165	Sig Chipmonk
2	David Feven	140	-	140	Twister
3	Derek Gardiner	65	-	65	Twister



Chris Maggs - Hewitt Shield Winner 2018

John Goldsmith – Taster Stunt Intermediate Winner 2018

I have to announce that this will be the last time I will run this event. I would like to thank all of the people that have supported me through this, such as Tony field for judging, with Mick Castell on the later competitions. Hopefully the Hewitt Shield will continue through the South Birmingham club in the future which I will support.

Eric Hawthorne.

Secretary's notes for June 2018 - Roger Newman

Very little to report this month – mainly due to an extended holiday on the Isle of Mull, from which we have just returned. No TV, no radio for over two weeks – most pleasant!

Our next event of the season is scheduled **for:**

Sunday 17th June on Area 8 of Salisbury Plain.

Competitions are:

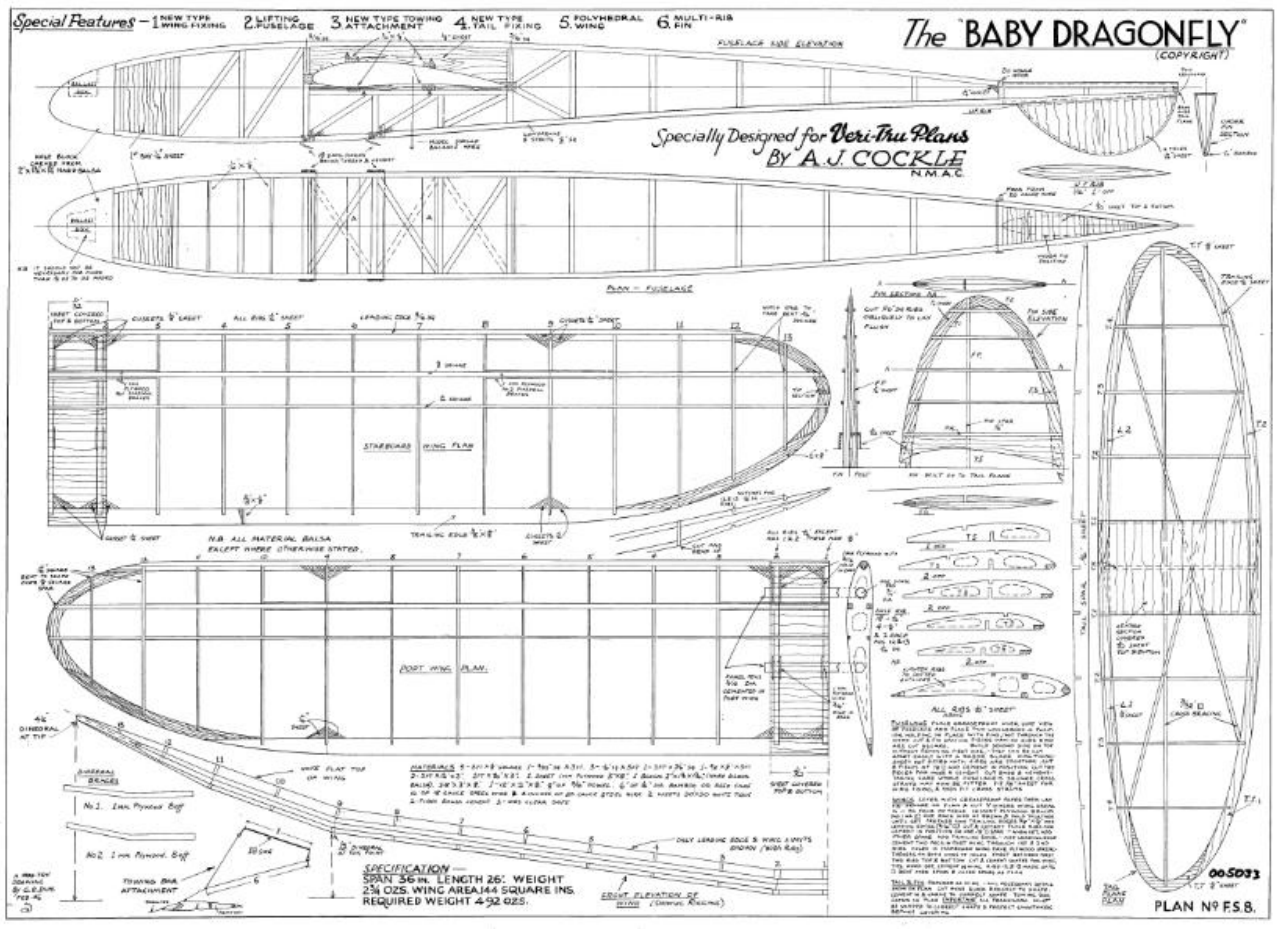
E36 Electric Power - Vintage Middleweights - Combined Vintage / Classic Glider under 50"
Combined Vintage / Modern Coupe d'Hiver - Vintage / Classic Open Power

It will be followed by two more at the same venue in July. The first being another SAM 1066 meeting on Sunday 15th July & then a rescheduled day for the Croydon Club/SAM 1066 Easter meeting that was cancelled due to appalling weather, which will now take place on Saturday 28th July. Full comp schedule for both in next months NC.

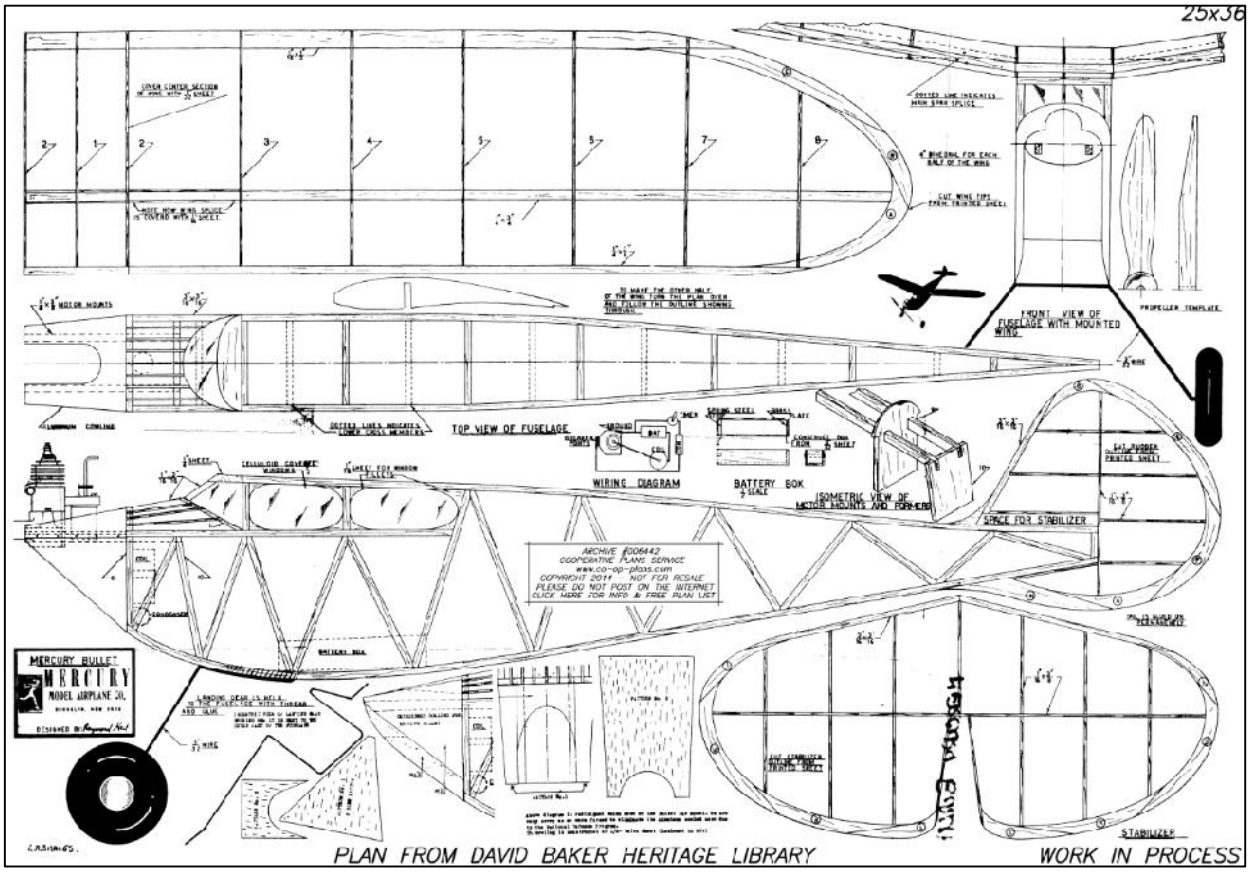
Roger Newman

Plans for the month - Roger Newman

Glider: Baby Dragonfly
a VeriTru plan that could be a candidate for vintage bungee glider.

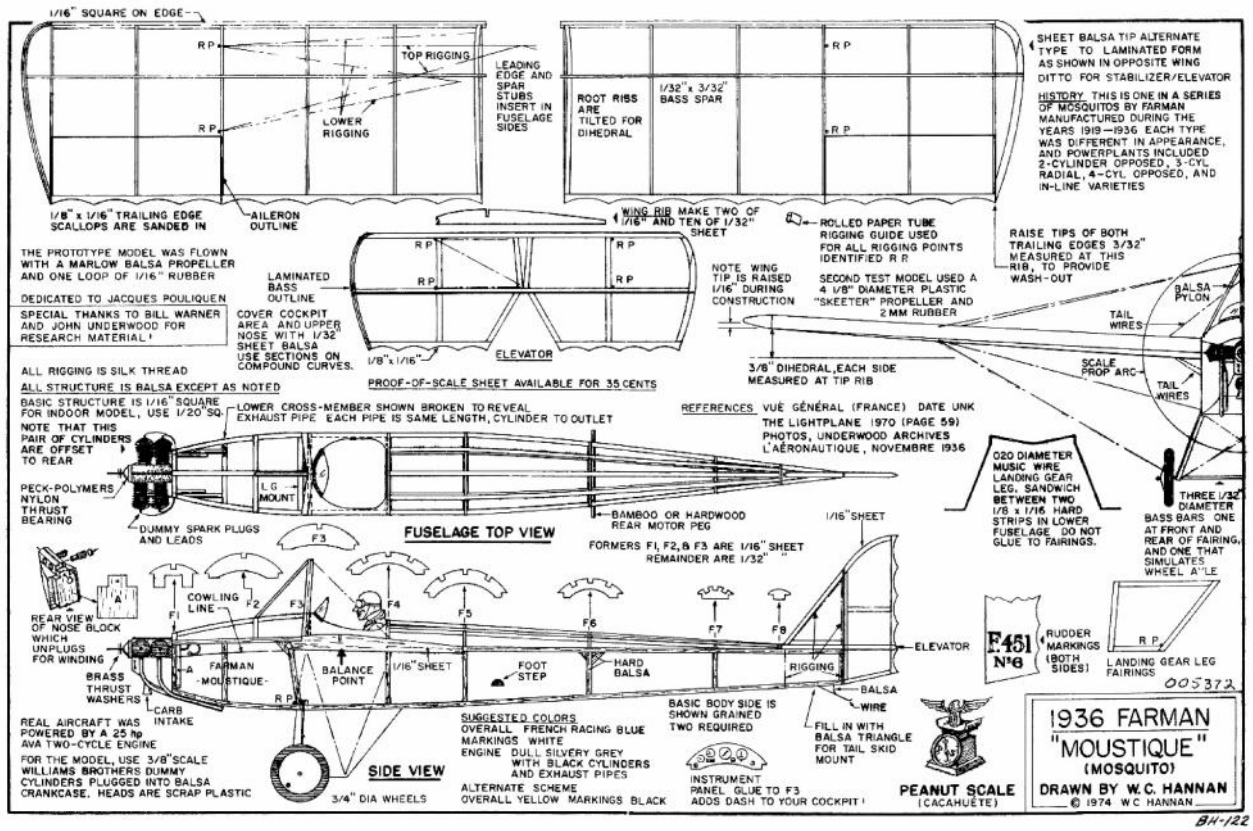


Power: an old American gassy – Mercury Bullet.



Rubber: one for the winter

a peanut scale Farman Moustique, to follow on from Nick Peppiatt's excellent series of articles on indoor scale models.

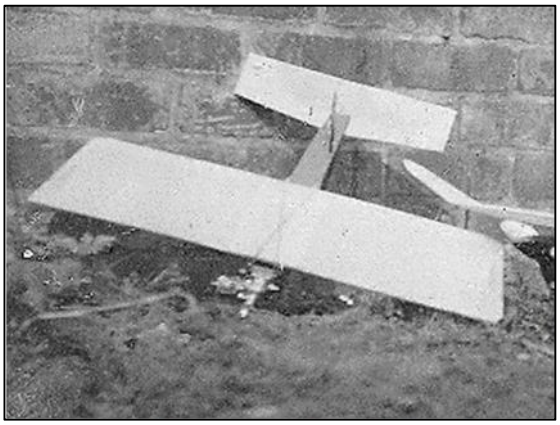


Roger Newman

My Vintage C/L in B&W - John Andrews

A few issues back I made a plea for some of our members to dig into their old photographs and provide me with copies and a few descriptive words. As seems usual the plea fell on stony ground so you are going to have to suffer from more from my old Black & White Photo Album which dates back to about 1948 if memory serves, which it does not do too well these days.
Back then my camera was one from Woolworths costing about 10 bob, it did not have a serious viewfinder just a single metal rectangle on top. My flying buddy and next door neighbour Ian had a better camera than I but still just a simple plastic Kodak 2¼ square model using size 120 film I believe. Mine used 127 film for minute pics about 1¾ x 1¼, not good for detail. Both cameras fixed focus of course. Sounds like I'm writing a photographic article but it's just to justify the poor picture quality of these early records.

I have no pictures of my earliest forays into Control-line which consisted of ED Bee powered various planks of wood, first on thread lines before we discovered steel. My only real recollection is building a model with a huge elevator with the intention of performing a loop. Needless to say I failed, as on application of the elevator the model stood up on end and lowered itself to the ground.

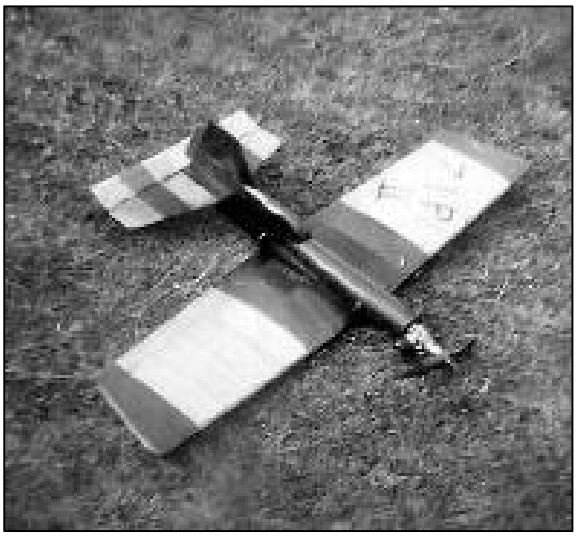


My first aerobatic model was a 'Small-Fry' built from a plan drawn up by Tommy Forrest. Tommy was one of two experienced flyers that had joined the club and he had a 'Small-Fry' powered by an Elfin 1.8, the best engine of the era in my opinion. My version had a Frog 160 Glo which was comparable. All my aerobatic training was achieved with this model, even inverted flight. With hindsight I find this difficult to believe as the model was all stick and tissue, but never the less it did the job.

There followed a couple of kit models powered by a Frog 500, I had lost the Frog 160 in a flyaway 'Slicker 50', no fuel cut-out or D/T.

The 'Stunt King' was the first and it did not last long as the elevator horn pulled out of the soft balsa tail-plain and subsequent oscillations terminated in the re-kitting of the model.

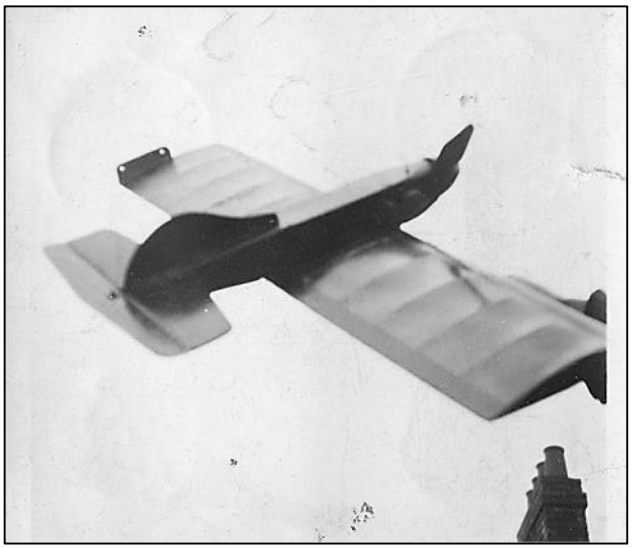
The fate of the 'Musketeer' I cannot recall nor the end of the 'Mercury Monitor' (right) which I acquired from one of our group. The 'Monitor' was powered with a plain bearing Amco 3.5 which I had bought from a model shop in nearby Coventry, a 15mile cycle ride each way.



One thing I recall is the running in fuel mixture for the Amco which was 50/50 ether and castrolXXL. You should have seen the black sludge this fuel excreted all over the wing. The 'Monitor' kept almost shedding its engine as it was a flimsy radial mounting in the planked fuselage with only two 1/8 ply keys. No amount of Durafix would hold the thing together for long.

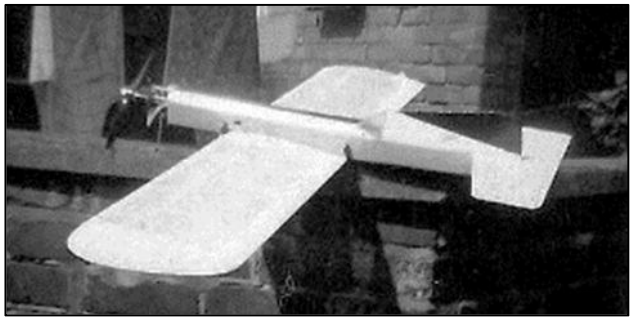
The Amco was a good powerful engine but the constant crashes of those days used to bend the 2BA prop extension fixing, leading to vibration which in turn cracked the crankshaft at the induction hole. I had three new crankshafts for mine before I gave it best.

Whilst the Amco was still intact I built a couple of versions of a design I cribbed from the Aeromodeller Plan 'Happy Harold'.

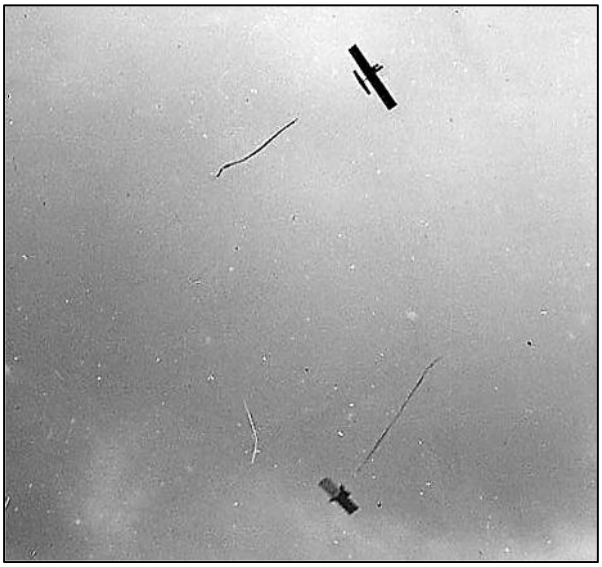


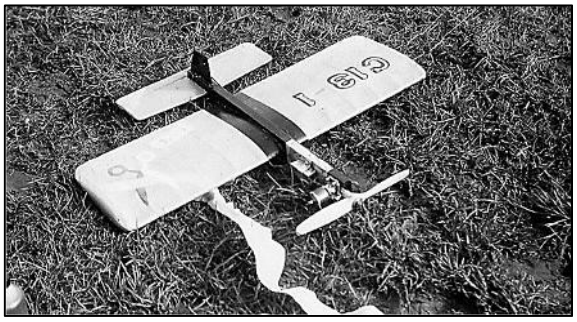
I did build quick in those days, I visited the local model shop in my lunch hour on Friday and ordered a sheet of ¼ to be stripped into 2 pieces 1" wide and one ½"wide. These were for the wing leading edge laminations and the first job on the Saturday was to stick it together. The next job was to bolt the engine to the bearers and affix the bell crank. The fuselage was then constructed followed by the wing when the leading edge lamination was dry. I was doping by tea time and flying on Sunday morning, crashing, repairing and flying again Sunday afternoon.

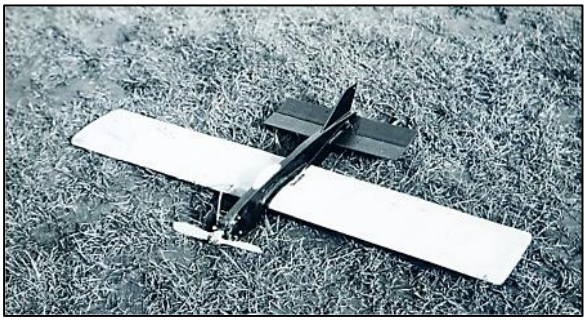
My aerobatic designs were improving, probably faster than my ability, this model being powered by a Yulon 49 which eventually blew its head off, shearing at the exhaust holes which were a continuous ring of small holes around the liner. The later Yulon Eagle was more conventional. I never owned one but one of our group did, but who I do not recall.



Combat also reared its head and for many weeks, perhaps even years, our Sunday sessions were mostly taken up chewing each other's models to pieces.







Above are couple of combat models before we went to flying wings, mine on the left having major front end repair with aluminium sheet by the look of it, must have flown like a brick with a nose that length. The one on the right is one of Ian's, it was a standard design we built one or two of and went to a couple of rallies. We used to come back with the remnants of one model if we were lucky. Ian made a final once and was using my last reserve model as it was all we had left between us. We were flying with AM35's at this time and we had trouble keeping them running on song until we realised that the standard 'Oliver Brew' (50-30-20 + 2% nitrite) did not have enough ether for the AM's and we used (40-40-20 + 2% nitrite). Those were the days before nanny H&S got a grip. Ether & nitrite from Boots, Caster oil by the gallon from a cattle market chemists and ESSO Blue paraffin from our model shop, which was also a hardware store.

John Bickerstaffe & myself giving it a whirl one Sunday

Well that's enough for this issue, I hope it will get one or two of you to dig out your old photos and pen a few descriptions. As you can see picture quality is not an issue, it's the vintage historic memories that I trust is the main interest for our members. I can enhance picture quality slightly so please don't be shy, **send me some photos.**

John Andrews

Salisbury Plain Area 8. 2018.

Area 8, Salisbury Plain is available for Free Flight use every Saturday/Sunday, plus 3 Bank Holiday Mondays from January to December. This is always subject to confirmation the preceding Friday morning. An annual permit is available for sport flying/trimming, and is issued by the BMFA Office. Apply through donna@bmfa.org or by phone/letter. The conditions of use, code of conduct, and undertaking remain the same as in 2017. The annual permit fee has increased slightly to £18.

The permit is for sport flying/trimming only. Anyone entering a contest will be required to pay a 'field access fee' of £5/day, whether they have an annual permit or not. The exceptions to this are those BMFA Centralised contests, plus the Stonehenge/Equinox Cups, for which the contest entry fee, or if applicable, a BMFA Free Flight Season Ticket, also covers the 'field access fee'.

Anyone not having a permit can enter organised contests, or sports fly/trim on contest days, on payment of the appropriate fee.

This apparently cumbersome fee structure is considered to be the fairest way to raise the necessary income to cover the cost of the annual licence to use the Area.

The New 2018 Free Flight Forum Report

For thirty-four years these Reports have included papers covering the widest possible range of free-flight topics. Have a look at what this year's Report covers and order yours now.

F1D Prop Selection for Slanic 2017 European Championships - Tony Hebb; The Power Egg - John Emmett; Use and Abuse of GPS Model Trackers - Chris Edge; Designing for BMFA Scale Competitions - Andy Sephton; Generating Youngsters' Interest in Aeromodelling - John Jacomb; Experience with Making Carbon/Foam "Moulded" Wings - Alan Jack;A Rubber Stranding Device - Russell Peers; Small Field Flying - John Ashmole; A Last Hurrah for the Outsize Open Glider - Stuart Darmon; All in a Day's Retrieving - Mike Woolner; Why FAI? - Stuart Darmon; A Simplified Description of Electric Drives for Free Flight Models - Alan Jack

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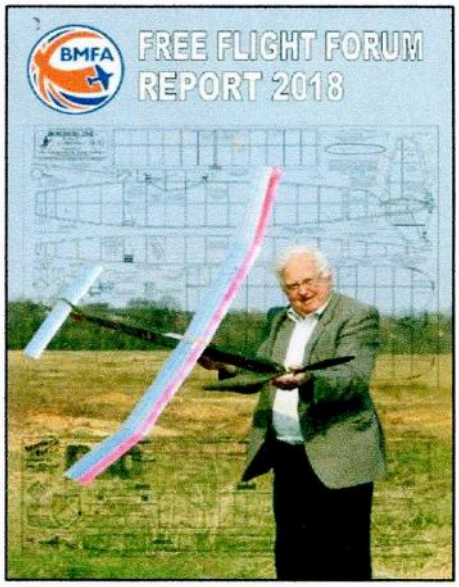

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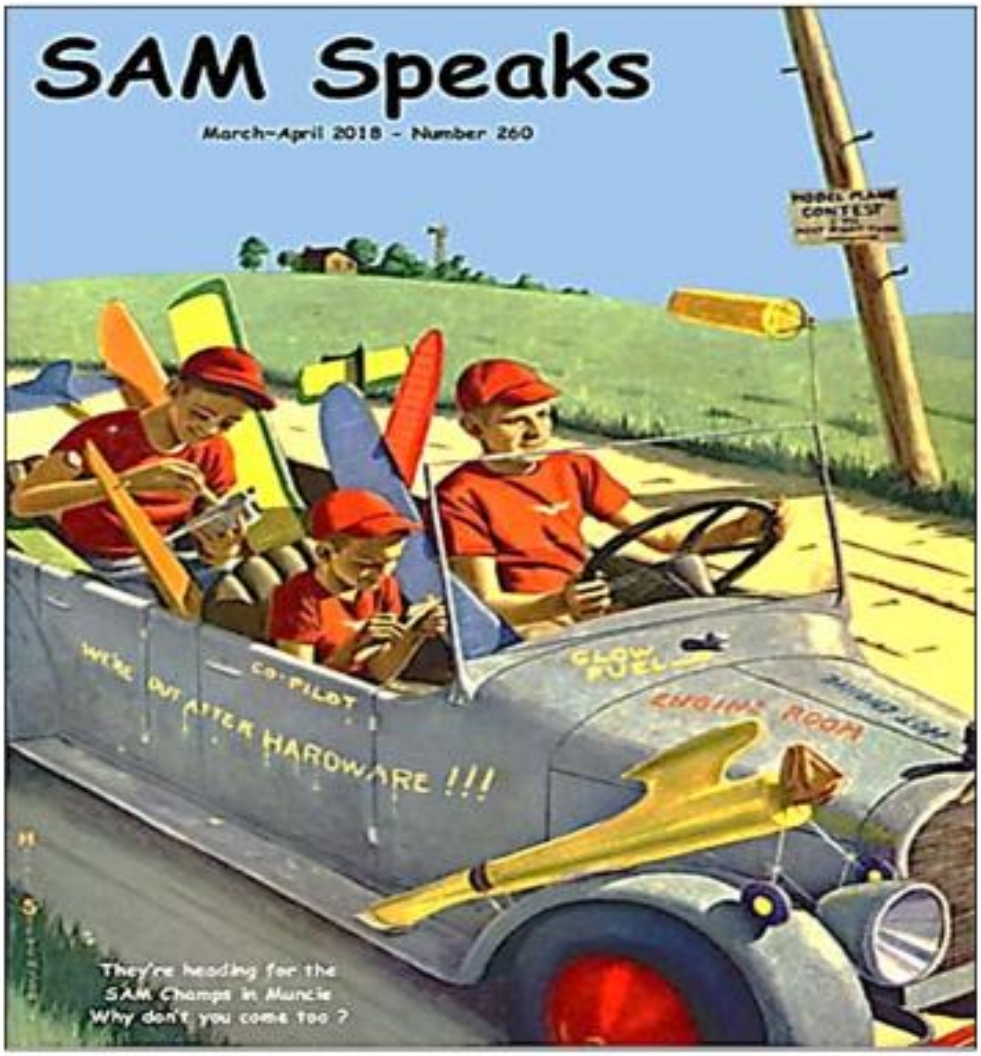
for the modest cost of $30 pa.
Quite a few UK people already belong, but a few more might help our Parent Body!



CROYDON WAKEFIELD DAY

28th July2018 (Saturday)

Salisbury Plain Area 8.

F1B (in rounds), - 8oz Wake, - 4oz Wake,
Marcus Lightweights
(RAFF V, Bazooka, Dinah-Mite, Supa Dupa).

Start 10am. Free entry although site fee still has to be paid.
Contact Ray Elliott
Tel: 020 8997 7745, e-mail: ray.elliott8@btinternet.com

TIMPERLEY FREE FLIGHT GALA

Saturday 4th August 2018.

MOD North Luffenham. 10am to 5.30pm

Contests

Combined Events

Rubber, - Glider, - Power. - HLG/CLG,

+ Mini-Vintage & E36.

All to BMFA rules.

Trophies and prizes. Airfield charge.

F/F Sport flyers welcome. Flyers require BMFA membership.

Contact--Gerry Ferer,

Tel: 0161.928.4955, or e-mail: gferer@hotmail.com

F1G and Vintage Coupe Contests 2017-18

Compiled by Gavin Manion

Date	Venue	F1G	Vint	Organiser	Comments
3rd Dec 2017	North Luffenham	✓*+	✓	gavin.manion84@gmail.com	Grande Coupe de Brum. F1G for A/M Trophy, Vintage for Vintage Plate
17th Dec	BMFA Buckminster	✓		mark.benns@btinternet.com	Experimental trial of this venue, check before as may be cancelled if windy
18th Feb 2018	Area Venues	✓*		BMFA areas	1st Area. F1G (Plugge)
28/29th April	Salisbury Plain	✓*		BMFA - TBC	London Area Gala, F1G on Sunday 29th
28th May	Barkston Heath	✓		BMFA	FF Nationals. F1G Mon 28th for 308 trophy
17th June	Salisbury Plain	✓	✓	SAM 1066	Combined Vintage and F1G
24th June	Area Venues	✓*		BMFA areas	5th Area
1st July	Oxford Portmeadow	✓*		laurencemarks64@googlemail.com Andy Crisp 01865 553800	F1G
15th July	Salisbury Plain		✓	SAM 1066	
18th Aug	Salisbury Plain	✓*		BMFA - TBC	Southern Gala
2nd Sept	Salisbury Plain	✓*	✓	Crookham	Crookham Gala Combined Vintage and F1G?
9th or23rd Sept	RAF Odiham	✓*		TBC	TBC
30th Sept	Salisbury Plain	✓*+	✓	Croydon	Coupe Europa. Vintage for the AAA trophy, Team F1G for the FliteHook Trophy
27th Oct	North Luffenham	✓		BMFA	Midland Area Gala

*Qualifying event Southern Coupe League. + Qualifying event Eurochallenge F1G 2017/18

All five Vintage events for SAM1066 Trophy, 1st – 3points, 2nd – 2pts, 3rd – 1pt; no points for last place!

SAM 35
FREE FLIGHT CALENDAR, 2018

(Events are open to all insured BMFA members)
(and some invited overseas members of SAM 35.)

Postal Contests:

25th Mar to 20th May Under 25" Vintage Rubber + award for best Achilles*

16th Sept to 27th Oct Lulu and Friends - Class A Lulu, conventionally towed.
Class B Lulu Hi-Start
Class C Open Hi-Start

Area Postals

(at any Area venue on dates as listed, or at any Gala or Rally excluding the Nationals in between those dates with approval of the local CD.)

4th Mar (2nd Area) or
25th Mar (3rd Area) or
30th Mar (Northern Gala)
The "March Wynde" for Lightweight Rubber. plus award for the best "Non-Senator."

20th May (4th Area) or
24th June (5th Area)
"Summerglide" for Vintage and Classic Glider. Plus award or Best Lulu

16 Sept (7th Area) or
14th Oct (8th Area):
The "Autumn Trophy" for P30.

At the Free Flight Nationals:

27th May Sunday: Vintage Wakefield 4oz./8oz. (combined, with class awards.)
Lulu Duration

28th May Monday: 36" Hi-Start Glider and Under 25" Vintage Rubber
(with separate award for best Achilles.*)
Low wing/Biplane Cabin Precision (hand launch, classes for Rubber and IC.*)

At Old Warden:

13th May Sunday: Small Models Day:
Frog Senior Duration: Class A: High Wing, Class B: Low Wing/Biplane*
K.K.Elf Duration.

22nd July Sunday: Scale Duration Day: Concours award.
Masefield Trophy for Rubber Scale.
Earl Stahl Scale: Class A: High Wing, Class B: Low Wing/Biplane

23rd Sept Sunday: Precision Day:
Rubber Bowden: Class A: High Wing Cabin, Class B: Low Wing/Biplane Cabin

At Buckminster:

(dates of contests to be confirmed: please check SAM 35 website)

7th July Saturday: Ajax/Achilles, 36" Hi-Start Glider, Open Hi-Start*
All-In Precision, Cloud Tramp,
Hi-Start Shootout, (evening event. Time & date to be decided.)

NB * award may be dependant upon number of entries in class.
All towlines 50 metres. Maxes for Area Postals 120 sec. (20 sec attempt)
Maxes for postals 90 sec. (15 sec attempt.)
Please check for alterations/updates. Rules for most events and explanation of "Area Postals" on SAM 35 website.
Enter Postals/Area Postals via John Ashmole, 164 High Road, Weston Spalding Lincs PE12 6JU. £3 per class.
Or £3.50 by PayPal to editor@peterboroughmfc.org
Extra categories under consideration for future events: Classic A/1 Glider, Vintage Coup d'Hiver.
NB: Further events may be added. Visit SAM 35 website and check FF Updates.

26th Annual World Wide Postal Competitions, 2017-2018,

between July 1st 2017 and June 30th 2018 inclusive

For full details see:

http://www.endlesslift.com/26th-annual-world-wide-postal-competition-2017-2018-including-sky-bunny/

Flights may be made outdoors The purpose of this postal contest is to encourage friendly participation among aeromodellers worldwide with the prime emphasis being on low-key, leisurely flying without the pressures of 'regular' competition. The Internet permits us to have a worldwide event in the spirit of a friendly local club contest. A wide variety of events are offered including classes for types and sizes of models which have been overtaken or outclassed by modern developments or are perhaps too small to be considered for 'serious' competition work, such as 20" and 25" Rubber, Sky Bunny and Cloud Tramp, many of which can be flown at any time on smaller local sites without the necessity of travel to more formal contests at larger areas.
It is not required that all flights in any event be made upon the same day but each is to be pre-nominated as 'official'.

Events

Foam Plate Rubber Band Powered Airplane – New event this year, per rules published. This is to give school, scout and other youth groups building foam plate planes an opportunity to participate in an international event and compare times with others around the world.

Sky Bunny – Flown per rules published, Rule 4, about the contest dates, is amended to conform with the dates of this current World Wide Postal Competition.

20" Rubber – For any published/kitted outdoor designs not exceeding 20"/51 cm span. Three flights to 60 second maximum followed by 30 second increments thereafter.

25" Rubber – Any published/kitted models up to 25"/63.5 cm span. Three flights to 60 second maximum followed by 30 second increments thereafter.

30" Vintage/Oldtimer – For pre-1951 designs, not exceeding 30"/76 cm. Three flights to a 90 second maximum followed by 30 second increments thereafter.

42" Vintage/Oldtimer – For pre-1951 designs, with spans greater than 30"/76 cm but not exceeding 42"/107 cm. Three flights to a 120 second maximum followed by 30 second increments thereafter.

P-30 Rubber – Standard P30 rules . Three flights to 120 second maximum followed by 60 second increments thereafter. (Note that this 60 second increment differs from the 30 second increment in the AMA rule.) No gears or movable surfaces, other than for d/t operation.

36" Freewheel Rubber – Any published/kitted outdoor design with a freewheeling propeller is eligible, wing span not exceeding 36"/91 cm. Three flights to 90 second maximum followed by 30 second increments

42" Unlimited Rubber – Any rubber model with wingspan not exceeding 42"/107 cm. No auto surfaces. Three flights to a 120 second maximum, followed by 60 second increments thereafter.

KK "Senator" – A one-design class for this popular design. Three flights to 120 second maximum, followed by 60 second increments thereafter.

Cloud Tramp – Any version of the Cloud Tramp design as published, 8" prop (plastic OK), any type of prop bearing. Five flights, no maximum; longest and shortest will be discarded and balance totaled for score.

Towline Glider – Any glider, straight tow only with no moving surfaces other than autorudder. Maximum towline length 164'/50 metres. Equivalent (164'/50 metres relaxed length) high-start launch systems permissible. Three flights to 90 second maximum followed by 60 second increments.

Small Towline Glider – Any glider to a maximum span of 40"/101.5 cm, straight tow with no moving surfaces other than autorudder. Maximum towline length 164'/50 metres. Equivalent (164'/50 metres relaxed length) high-start launch systems permissible. Three flights to 60 second maximum followed by 60 second increments.

6" Tiny Hand Launched Glider – For any glider with wingspan no greater than 6"/15.2 cm. Six flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Multiple entries permissible.

6" Tiny Catapult Launched Glider – For any glider with wingspan no greater than 6"/15.2 cm. Six flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Catapult – a 9" loop of ¼" flat rubber attached to a 6" handle. Multiple entries permissible.

8" Tiny Hand Launched Glider – For any glider with wingspan no greater than 8"/20.3 cm. Six flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Multiple entries permissible.

8" Tiny Catapult Launched Glider – For any glider with wingspan no greater than 8"/20.3 cm. Six flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Catapult – a 9" loop of ¼" flat rubber attached to a 6" handle. Multiple entries permissible.

Catapult/Handlaunch Glider (small) – For any glider with wingspan no greater than 12"/30.5 cm. Six flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Catapult – a 9" loop of ¼" flat rubber attached to a 6" handle. Multiple entries permissible.

Catapult/Handlaunch Glider (large) – For any glider larger than 12"/30.5cms. Six flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Catapult – a 9" loop of ¼" flat rubber attached to a 6" handle. Multiple entries permissible.

Tip-launch Glider – For any size of wingtip-launch glider. Folding wings and R/C are not permissible. Six flights to a 60 second maximum, increasing by 30 second increments thereafter.

Peanut Scale – Any type, any period, 13" maximum wingspan or 9" maximum length. Total highest three of six flights for score.

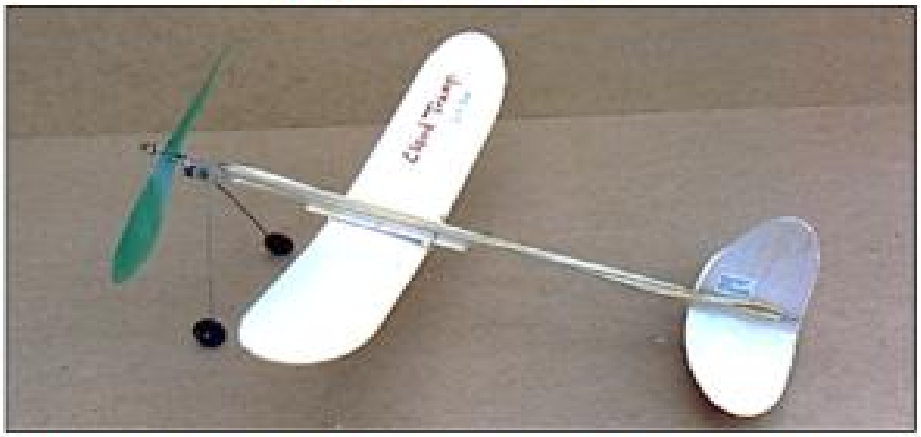
Dimescale – Any type, any period, 16" maximum wingspan, no scale or bonus points. Total highest three of six flights for score.

Phantom Flash – Per kit or plan, plastic or wood prop. May be hand launched. Total highest three of six flights for score.

GRANT MIMLOCT 2018

or

The 23rd Charles Hampson Grant Memorial International Mass Launch Of Cloud Tramps



We are promoting this event to celebrate the contributions made by Charles Grant to the development of our hobby. We hope that as many people as possible will make a Cloud Tramp and join in the simultaneous launch on:

Saturday, August 4, 2018.

The Launch Time will be 1700 hrs British Summer Time (GMT + 1 hour)

Individual participants will have to calculate the appropriate local time at their venue [New York, 1200 hrs; California, 0900 hrs; Sydney 0400 hrs, etc.]

GRANT MIMLOCT 2018 is not a competition and there are no prizes. We hope participants will enjoy the fun of building and flying the Cloud Tramp, as well as taking part in this unique event, which attracted 141 participants from all over the World in 2016 and 131 in 2017.

Please let us know if you take part in GM 2018 so that your name can be included in the official report. See www.endlesslift.com for further details

NEW! A CLOUD TRAMP MUG is available on eBay, type Cloud Tramp Mug into the search box. Mike Parker has one of these and they are very nice quality.

Cocklebarrow Farm Vintage R/C Events

Meeting dates

Sundays - 8th July, - 19th August, - 30th September.

All types of R/C to December 1969, sport flying no competitions.
BMFA insurance essential [A certs. not required].

Directions

Signposted from Aldsworth Glos. on the B4425
between Cirencester/Burford
and off the A40 between Northleach and Burford
[follow SAM35 signs]
Camping on the field [no facilities].

Contact: Tony Tomlin 02086413505, 07767394578
Email: pjt2.alt2@btinternet.com

R/C Events at Wallop

Aug 4th/5th - Sep 8th/9th - Oct 6th/7th

We will be sharing the airfield with other disciplines

Radio Frequency will be 2.4 gig only , no exceptions

The event is a SAM 35 sponsored,
so look towards R/C Vintage type aircraft
Plus C/L, with several circles

Entry to airfield is £5, (which goes direct to the museum)
Plus, for all flyers and helpers, SAM 35 fee of £5 per day

Event co-ordinator, Bill Longley
Tel - 01258 488833 email - tasuma@btconnect.com

DIG OUT THAT DIXIELANDER & PUT A SIMPLE RADIO IN IT

L'AQUILONE SAM 2001

TOMBOY RALLY INTERNATIONAL POSTAL CONTEST 01/06/2017 – 31/05/2018

We wish to present this competition to all the lovers of this nice model with the only aim of having fun in a postal contest which is organized to provide some fun flying together or at the same time as are all postal contests.
The Tomboy Rally wants to prove the performance of this model along with the ability of the builder and pilot, without reaching the peak agonism of usual contests and only wishing to fly the model having fun in a relaxed manner. After having carried out some tests we have decided to admit the use of i.c. engines and electric motors trying to reduce the gap between them.
Model - The 36" or 44" wing span (as per plan Aeromodeller) and 48" (as per Boddington plan or 36 "scaled up) models are admitted;

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

Engine/motors
I.C. engines and electric motors are admitted within the following limits:
36"-44" Wingspan - I.C. Engines:
Any engine with 1 cc. maximum displacement; - Fuel tank : 3 cc. - R/C carburettor is admitted.
Electric Motors: - Any electric motor is admitted with direct drive - The motor cannot be stopped and re-started: the motor must run continually without interruptions till the end of the battery charge or competitor's decision; - no folding prop is admitted; if a folding prop is used the blades must be held open.
freely assembled admitted batteries: - -450 Mah 2 cell LiPo - separate battery pack for Rx is allowed
48" Wingspan - I.C. Engines:
Any engine with 2, 5 cc. maximum displacement; - Fuel tank : 6 cc. - R/C carburettor is admitted.
Electric Motors: - Any electric motor is admitted with direct drive - The motor cannot be stopped and re-started: the motor must run continually without interruptions till the end of the battery charge or competitor's decision; - no folding prop is admitted; if a folding prop is used the blades must be held open;
freely assembled admitted batteries: - -500 Mah 3 cell LiPo - separate battery pack for Rx is allowed.

Flights and results
Each competitor may fly as many flights as wished during the admitted period but only the best flight will be considered for the final result. - Hand launches are admitted. - The flight time start when the model is released or takes off. The flight time ends when the model lands or hits a fixed obstacle. In case the model flies out of sight, the timekeeper will time for 10 seconds after losing sight of the model. Timing will continue if model is seen again or stopped after 10" deducting this time from the total time of the flight.
Awards: - A diploma for all competitors and prizes for the first three in each version rank. Special prize for best flight in float version.
Results: - Results, address, photos and technical specification about model must be forwarded to the Organization by the 15th June 2018 - to Curzio Santoni cusanton@tin.it - or - to Gianfranco Lusso gfl@orange.fr
Many pleasant flights and happy landings to ALL !!!!
Special Prize Vic Smeed - An extra Diploma will be awarded to the best flight by Tomboy floatplane version (36",44" or 48") taking off from water. The Editor will send to the winner a Diploma signed by SAM 2001 President and a bottle of special Italian Wine to drink to Vic Smeed! - Good ROW and flight.
Special Prize David Baker
We have scheduled a special prize for the three best flights obtained with 36" Tomboy Free/Flight. Only diesel engines max 0.75 c.c. shall be used. The other rules are the same for 36" or 44" wingspan type. It is possible to use an R/C Tomboy, however, being this a free-flight contest, the time must be stopped when transmitter is used, since the aircraft model should fly freely from any control from the ground.

Good thermals

DREAMING SPIRES FREE-FLIGHT RALLY 2018

DATE :— 1st JULY 2018, STARTING at 10 a.m
VENUE :— PORT MEADOW, Wolvercote, OXFORD
CLASSES :—
F1G (Coupe d'Hiver) } 5 FLIGHTS
F1H (A1 glider)
MINI VINTAGE RUBBER (max 34" span) } 3 FLIGHTS
VINTAGE/CLASSIC GLIDER (comb)
HI-START GLIDER
E30/P30/CO_2 (combined)
HLG/CATAPULT (comb) 7 FLIGHTS
All towlines 50 metres

FREE-FLIGHT SCALE to "Dreaming Spire" rules — No Documentation, static judging, quality of flight. i/c motors up to 1·5 cc allowed.

ALL FLIERS MUST BE INSURED
No streamers on poles, thermistors, bubbles etc.
No i/c powered models to be flown outside of the SCALE CONTEST.

CONTACTS :— LAURENCE MARKS
laurencemarks64@googlemail.com
& ANDREW CRISP
4 GROVE STREET OXFORD OX2 7JT
tel:- 01865 553800

La Grande Coupe de Birmingham (part cinq)

Sunday December 2nd 2018

at MOD North Luffenham
starting at 10:00

Qualifying event for the "Euro Challenge F1G" 2018/2019 (provisional)

F1G for the Aeromodeller Trophy

Two rounds between 10:00 & 12:00
then 3 rounds to timetable; finish at 14:45

Top placed "Classic" coupe (1/1/60 – 31/12/69) will be awarded a bottle and a GPB Cartoon print.

<>

Pre '58 Vintage Coupe

for the Vintage Plate
3 flights (no rounds) start 10:00, finish at 14:45

<>

Special prize – Bottle of fizz for the best aggregate score in both events

Entry Fee £10 covers both events

Fly-offs (Not DT!) and maxes as determined by conditions on the day
Prize giving and hot drinks/nibbles in the Golf Club on the flying site (hot food available for purchase at the club bar)

For further information contact:
Gavin Manion
at gavin.manion84@gmail.com - tel 01543 422509
Or **Stuart Darmon**
at stuartdarmonf1a@yahoo.com - tel 01858 882057

FLITEHOOK

Indoor Free Flight Meetings

West Totton Centre,
Hazel Farm Road,
Totton, Southampton.
SO40 8WU

Café on Site

Flyers £8
Juniors & Spectators Free
Flyers must be BMFA Members

Sundays 10.00a.m. to 4.00p.m.

2018
9th Sep - 14th Oct - 11th Nov - 9th Dec - 30th Dec
2019
13thJan - 10th Feb - 10th Mar - 14th Apr

Contact: Tel. 02380 861541 E-mail flitehook@talktalk.net

Indoor Flying with the South Birmingham MAC

Mainly Free Flight

Thorns Leisure Centre.

Stockwell Ave.
Off Thorns Road - Quarry Bank - West Midlands - DY5 2NU
Saturdays 1pm until 4pm

2018

May 5th - Sep 22nd - Oct 20th – Nov 17th – Dec 15th

Admission - Flyers £6 - Spectators £2.00

Ultra-light R/C models may be flown for the first 15mins of each hour (quad copters or heavy fast flying models not accepted)

For further information phone Colin Shepherd 0121 5506132 or e-mail cosh43@hotmail.com

Waltham Chase Aeromodellers

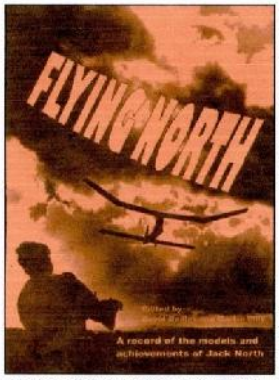
INDOOR F/F MEETINGS

Waltham Chase Aeromodellers
in association with South Hants Indoor Flyers
announce the continuation of the Indoor F/F Meetings
at the Main Hall at Wickham Community Centre,
Mill Lane. Wickham. Hants PO17 5AL.
These meetings will he held on the following dates:

All Tuesday Evenings
3rd Oct 2017 - 7th Nov 2017 - 5th Dec 2017
2nd Jan 2018 - 6th Feb 2018 - 6th Mar 2018 - 3rd Apr 2018 1st May 2018 - 5th Jun 2018 - 3rd Jul 2018

All meetings will run from 7.00p.m. to 10,00 p.m.
The Main Hall at Wickham Community Centre is suitable for indoor free flight models of all types, with a ceiling free of obstructions. Tables and chairs will be available in the hall and the organisers are always grateful for assistance with moving furniture.
A hot drinks machine is available on site.
Admission to the meetings will be **£5** for fliers and **£1** for spectators, whilst accompanied children will be admitted free.
Junior fliers will be charged as adult spectators.
Fliers will be required to show proof of insurance.
No R/C models may be flown at these events.
Flitehook, who carry a large stock of indoor models and accessories, will attend many of the meetings.
Waltham Chase Aeromodellers welcomes all indoor F/F fliers

For further details please contact:
Alan Wallington. "Wrenbeck", Bull Lane, VValtham Chase,
Southampton. Hants. Tel. 01489 895157
or see our web site: www.wcacro.co.uk

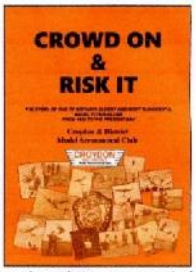


Flying North is a 163 page book covering the model flying career of Jack North, and including 23 previously un-published plans of his aircraft. Access to Jack's drawings and notes dating back to 1938 means that there are a number of designs in the book likely to be tempting to the nostalgia-minded.

Contact: Martin Dilly on 020 8777 5533 or write to: 20, Links road, West Wickham. Kent BR4 0QW or e-mail: martindilly20@gmail.com

The price in the UK is £18; airmail to Europe £20 or to anywhere else £22. Cheques should be payable to BMFA F/F Team Support Fund, in pounds sterling only, and drawn off a bank with a branch in the UK, you may also order by credit card, all proceeds help to fund the expenses of those representing Great Britain at World and European FF Championships

CROWD ON & RISK IT



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

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

Just £8 by PayPal or cheque.

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

E-Zee Timers

E-ZEE FF Combined Electric Motor Power and Servo Operated DT Timer Type EFF 1
Cost £15.00 + p & p

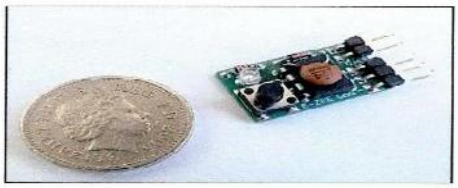
This timer controls electric motor power and run-time (via an ESC) and after a further delay drives a D/T servo to terminate the flight. The motor power is set by a single turn potentiometer and the motor run and D/T periods are set by a simple push button / LED interface

- motor run duration:-adjustable 1 to 30 seconds, set in 1 second increments
- d/t duration:-adjustable 10 seconds to 5 minutes, set in 10 second increments
- motor power:-adjustable at all times from zero to full throttle (by potentiometer)
- push button immediately stops the motor at any point during the flight profile
- duration settings are saved in memory a single button push serves to repeat a flight.

Length 30mm Width 20mm Height 11mm Weight 5gm

For installations where the timer is inaccessible remote pushbuttons and LED's are available

Servo operated DT Timer only Type SDG 1 Cost £12 + p & p



This timer was originally developed for use with 36 inch hi start classic gliders, but will be of interest to all sports free flight flyers not requiring electric motor control. The timer drives a D/T servo to terminate the flight, the D/T periods being set by a simple push button / LED interface. Driven by a small 30mAH battery and using a 2 gram servo the avionics can be used as nose ballast so there is no overall weight gain

- d/t duration:-adjustable 10 seconds to 5 minutes, set in 10 second increments
- push button immediately cancels the flight at any time
- duration settings are saved in memory a single button push serves to repeat a flight.

Length 22mm Width 13mm Height 11mm Weight 2gm

Timers are supplied with a comprehensive instruction manual and users guide

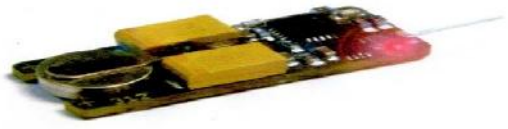
E-Zee Timers have been designed and are manufactured in the UK
Exclusively available from

Dens Model Supplies

On Line shop at www.densmodelsupplies.co.uk
Or phone Den on 01983 294182 for traditional service

BUGS

Free Flight Model Tracker



£50.00 - each including 6 batteries
Ready to use radio tracker
Suitable for most handheld receivers
Powered by one 312 ZincAir hearing aid battery
27mm long, 11mm wide, 5mm thick 3 grams including battery
Run time around 10 days
Red LED flashes when transmitting
Available in any frequency from 140MHz to 980MHz
Supplied in protective heatshrink
Very quick delivery, often next day
On sale at
http://www.leobodnar.com/shop/index.php?products_id=217
or contact Peter Brown 07871 459291 for options

Provisional Events Calendar 2018

With competitions for Vintage and/or Classic models

February 18th	Sunday	BMFA 1st Area Competitions
March 4th	Sunday	BMFA 2nd Area Competitions
March 25th	Sunday	BMFA 3rd Area Competitions
March 31st	Saturday	Northern Gala, Barkston
April 2nd	Monday	**SAM1066 Meeting, Salisbury Plain** (Croydon Wakefield Day) **Cancelled**
April 28/29th	Sat/Sunday	London Gala & Space, Salisbury Plain
May 20th	Sunday	BMFA 4th Area Competitions
May 26th	Saturday	BMFA Free-flight Nats, Barkston
May 27th	Sunday	BMFA Free-flight Nats, Barkston
May 28th	Monday	BMFA Free-flight Nats, Barkston
June 17th	Sunday	**SAM1066 Meeting, Salisbury Plain**
June 24th	Sunday	BMFA 5th Area Competitions
July 8th	Sunday	BMFA 6th Area Competitions
July 15th	Sunday	**SAM1066 Meeting, Salisbury Plain**
July 21st/22nd	Saturday/Sunday	East Anglian Gala, Sculthorpe
July 28th	Saturday	**SAM1066 Meeting, Salisbury Plain** (Croydon Wakefield Day) **Re-scheduled**
August 4th	**Saturday**	Timperley Gala, North Luffenham
August 18th	**Saturday**	Southern Gala, Salisbury Plain
September 2nd	Sunday	Crookham Gala, Salisbury Plain
September 16th	Sunday	BMFA 7th Area Competitions
September 23rd	Sunday	Southern Area Gala, Odiham
September 30th	Sunday	**SAM1066 Meeting**, Salisbury Plain (Croydon Coupe Day)
October 14th	Sunday	BMFA 8th Area Competitions
October 27th	Saturday	Midland Gala, North Luffenham
December 2nd	Sunday	Grande Coupe de Brum, Luffenham

Please check before travelling to any of these events.
Access to MOD property can be withdrawn at very short notice!

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

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

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

Useful Websites

SAM 1066	-	www.sam1066.org
Flitehook, John & Pauline	-	www.flitehook.net
Mike Woodhouse	-	www.freeflightsupplies.co.uk
GAD	-	www.greenairdesigns.com
BMFA Free Flight Technical Committee	-	www.freeflightUK.org
BMFA	-	www.BMFA.org
BMFA Southern Area	-	www.southerarea.hamshire.org.uk
SAM 35	-	www.sam35.org
MSP Plans	-	www.msp-plans.blogspot.com
X-List Plans	-	www.xlistplans.demon.co.uk
National Free Flight Society (USA)	-	www.freeflight.org
Ray Alban	-	www.vintagemodelairplane.com
David Lloyd-Jones	-	www.magazinesandbooks.co.uk
Belair Kits	-	www.belairkits.com
Wessex Aeromodellers	-	www.wessexaml.co.uk
US SAM website	-	www.antiquemodeler.org
Peterborough MFC	-	www.peterboroughmfc.org
Outerzone -free plans	-	www.outerzone.co.uk
Vintage Radio Control	-	http://www.norcim-rc.club
Model Flying New Zealand	-	http://www.modelflyingnz.org

Are You Getting Yours? - Membership Secretary

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

To get back on track, email membership@sam1066.org to let us know your new cyber address

(snailmail address too, if that's changed as well).

P.S.

I always need articles/letters/anecdotes/pictures 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*