NEW Clarion

SAM 1066 Newsletter

Happy New Year

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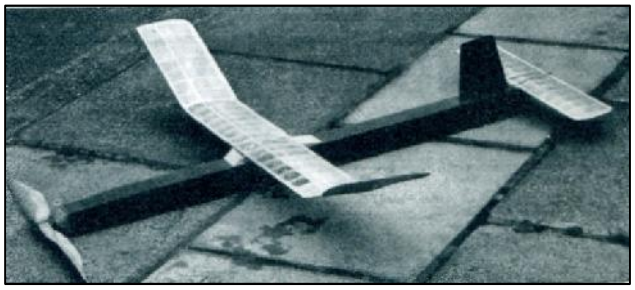
Editorial

Well hello folks, happy new year to you all, I hope we will have perfect flying weather at all events in 2013 (that's a forlorn hope) but at least we finished 2012 with a superb flying day at Wallop for Coupe Europa on December 2nd and Lindsey and the scale lads must have thought it was all their birthdays come at once with the benign conditions enabling them to air their creations without too much fear.

An interesting article by John Godden, that was published in the now defunct but excellent magazine 'Flying Model Designer and Constructor', was forwarded to me by John Wingate, the article carries the title 'So you would like to participate in a Fly-Off'. I think John W sent it as a bit of a dig at me because it sums up my attitude towards competition flying, I like to get in fly-offs if I can but do not try to win them, I always D/T to try to finish at the edge of the field. Having said that I have recorded a few fly-offs well under three minutes with the D/T still intact.
The interesting thing is the uncanny similarity of John Godden's model to my early designs when I returned to free-flight a few years back. Just that he used a freewheel prop whereas I used a folder.



John Godden's Model

Editor's Model

John Wingate is an advocate of the freewheel propeller and his opinion of its stabilising influence is echoed in John Godden's article.
The article is quite detailed so I may have to break it up over a couple of issues.

New for 2013 is the introduction of bungee launch glider competitions, Peter Michel outlines the details in his article.
This event reminds me of David Bakers 106.6 Square inch wing area gliders of the past. David had plans of several vintage gliders scaled down to 106.6 sq in wing area and many were built and flown off bungee lines.

The Indoor Technical Committee are also introducing a new model class for 2013, the '35cm Entry level'. The spec is quite simple, projected wingspan 35cm maximum and airframe weight 1gm minimum. Competition details appear later. I understand that kits of a suitable model are already in production.

The dates for our Middle Wallop meetings are now firm and event programmes just about finalised. Keep your eye on the website for details. The sad thing is that it appears that our historic 3 day August Bank Holiday event is now a thing of the past.

Editor

Coupe Europa – Our bit - Roger Newman

At last we had some decent weather for the final meeting of 2012. Over 100 people through the gate & lots of flying by all & sundry. A very competitive F1G comp, ending with that rarity these days – an unlimited fly-off. The coupe comps being under the masterful touch of Martin Dilly & David Beales. Our bit was constrained to a couple of combined open comps for power & glider & the Wallop Bowl for rubber scale.

Roy Tiller winding in Vintage Coupe under watchful eyes

There were three entries in the Wallop Bowl. Lindsey Smith triumphed with his very nice Heinkel HE112. Second was Peter Smart with a Pitts Special & third was Brian Stichbury with a Fairchild PT19.

The three 'Wallop Bowl' entries, winner Lindsey Smith on the left

Seen in the Bowl judges tent was a very nice electric powered Lancaster, later also seen flying very serenely. Made & flown (I believe) by Peter Smart.

There were two entries in combined power. Tony Shepherd flying an o/d electric job & Andrew Longhurst flying a Helides. Both maxed but kindly dispensed with a fly-off in view of the gathering dusk.

Electric Powered Lancaster

Combined open glider came up with a rare (model) winner. John Taylor on top flying his Penumbra wing, in spite of having to make an out of field retrieval for one flight. Tony Thorn found a burst of energy making two entries & Ken Taylor was very unlucky with his first flight. Peter Michel remarked that it was the first occasion that he could recall where a tailless glider had won a combined open comp. Well done John.

Combined Glider: 7 entries

1st	John Taylor (Penumbra)	5.51;	2nd	Peter Michel (Lunak)	5.21;
3rd	Dave Etherton (Caprice)	5.14;	4th	Tony Thorn (Lulu)	4.31;
5th	Ken Taylor (Hyperion)	4.18;	6th	Dave Cox (O/D)	3.50;
7th	Tony Thorn (Brevity)	1.24.			

Lots of flying for fun as well.
Mark Lester features elsewhere in this month's edition but here is a photo of the man & his model having just enjoyed a flight.

Mark Lester with his own-design model Complete with his own-designed and built engine

(details in Secretary's notes later)

Roger Newman

Coupe League Results - Peter Hall

Coupe Europa F1G and Southern Coupe League 2012

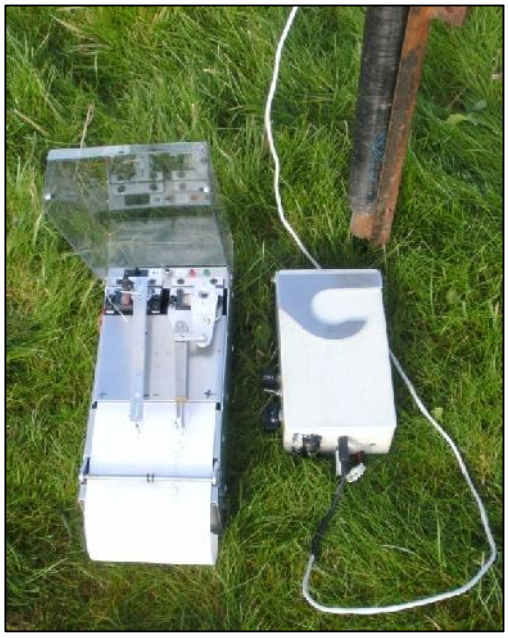
Martin Dilly, David Beales and the Croydon Club have been organising Coupe Europa for longer than they care to remember and it is no secret that Martin sacrifices a goat just before the event in order to guarantee good weather. Such practices, unremarkable in many countries in earlier times are bizarre let alone illegal in contemporary Croydon. Never mind, goat sacrifice has a lot in common with aeromodelling - arcane, skilled, messy and subject to unsubstantiated claims. My records show that out of eight December events, 2004 - 2011 the goats delivered only two good results. A 25% success rate is only half as good as the average for any sacrifice method but just before we asked Martin to lay off the goats along came Sunday December 2nd , a perfect day, the best this year, possibly the best ever, affording a rare opportunity to compare coupe performance not so totally dependant on air - picking.

32 entered F1G and by about 2.45 pm well into round four, twelve had four maxes. The gentle northwest drift became variable and high cloud masked the sun. The CD decided that a cull was needed and set a four minute max. for round five. Just after the hooter a small rise in temperature triggered a multiple launch. The sight of a flock of coupes circling so high on only ten grams of rubber reminded us what a great class this is when the conditions are right. Like the BMFA 50 gram class (shouldn't it be 30 grams ?) it generates design variety. Three types are now common. High tech with systems, low tech with locked down surfaces and increasingly a hybrid – locked down with high tech construction. Compare for instance Chris Redrup's tiddly vintage Etienvre (placed first in vintage coupe and sixth in F1G) David Greaves' locked down giant (bigger than an F1B, placed 7th) Gavin Manion's PGI trimmed hybrid (placed 4th) and Jim Paton's Bukin (the only factory built coupe flown this year, placed.21st)

COUPE EUROPA				
Place	NAME	CLUB	MAXES	SCORE
1	P.Brown		5	15
2	P.Hall		5	14
3	R.Vaughn		5	13
4	G.Manion		5	12
5	E.Tyson		5	11
6	C.Redrup		4	9
7	D.Greaves		3	7
8	T.Gray		4	7
9	P.Carter		4	6
10	A.Brocklehurst		4	5
11	C.Shepherd		4	4
12	G.Stringer		4	4
13	A.Crisp		3	3
14	P.Tolhurst		3	3
15	D.Thomson		3	3
16	C.Chapman		3	3
17	P.Jellis		2	2
18	K.Taylor		2	2
19	J.White		2	2
20	J.Minshull		2	2
21	J.Paton		1	1
22	M.Marshall		1	1
23	R.Kimber		1	1
24	E.Horne		1	1
25	R.Owston		1	1
26	A.Longhurst		1	1
27	M.Stagg		0	0
28	M.Cook		0	0
29	D.Beales		0	0
30	R.Elliott		0	0
31	S.Willis		0	0

Three high tech and two hybrids maxed round five and flew off at 3.10 pm. By then the temperature was flat - lining and it was clear that the southwest drift would allow unlimited flights. Because of the uncertain drift direction the CD relaxed the flight line restriction. Peter Brown flew immediately from close to the car - line, Gary Manion following. Roy Vaughn and Peter Hall trekked out east into the field to find a safer launch point. Ted Tyson also near the car-line flew late after breaking a motor.

Brown took the Aeromodeller Trophy with a very fine 4.39, 55 seconds ahead of Hall with 3.44 and Vaughn with 3.42. Manion took fourth place with 2.47 and Tyson 5th with 2.04. Crookham took the team prize.. Given the conditions can we conclude anything from these results ? Hall and Vaughn flew from the same position within seconds of each other with similar models and the same motors using March 2011 Supersport rubber, Hall wound 408 turns Vaughn only 380.. Did that account for the two second difference ? Let's pretend it did. Why the difference in turns ? Hall winds outside the model, fussy but it emboldens you to go to the limit. How do we account for Brown's extra 55 seconds ? Well now, he is totally dedicated, super skilled, and is arguably UK's best F1B/F1G flyer today. He was flying his latest coupe, 85 grams, around 220 sq." wing area, large 20.5 "prop. and full systems. Not markedly different from Hall/Vaughn. It was beautifully trimmed of course – perfect burst, transition and a lovely glide. So was it the sum of small differences ? He was using 2002 Supersport 1/16" sq. rubber with at least 24 strands and would you believe it, wound to 470 turns ! Rossiter (F.F.Q. 2011) found March 2002 to be the best Supersport ever and Brown has confirmed this with his own tests..Just all round excellence then , or was the air not so innocent? After all, it never is. In the morning the grass was white with hoar frost which melted and left it wet all day. Cold wet grass is not good for generating lift. Hall and Vaughn, unthinking, walked out into it to launch. Brown was adjacent to the peritrack and apron area - lovely dark dry asphalt storing the sun's meagre heat all day , gently lifting a warm parcel of air over Mr.Brown's thermal detection apparatus..... Manion, nearby probably just missed it but Tyson certainly did. Well, it's possible, but a glance at the Southern Coupe League 2012 final results, to which we shall now turn, show just how good P. Brown is.



Pete Brown's Thermal Detector

This year, a total of 40 flew in league events - about the same as last year, but the average number of fliers per event was up from 8.8 to 12.4 Competition weather was better this year than last (although you may not believe it) so this may account for the increase. Peter Brown took the cup with three firsts and a second (the four best scores count) and a score of 59 points out of a possible 60. There were notable performances from Alan Brocklehurst, Gavin Manion and Chris Redrup all competing for the first time in the league. Andy Longhurst started strongly with two wins but didn't compete again until Europa where he dropped his second flight. He spent the rest of the day trimming amongst others, a Scalded Kitten. Small vintage power seems to have got its claws into him. To keep you on your toes for 2013 we are changing the scoring system yet again, and reducing the number of events over the Summer to avoid coincidences with French competitions.

2012 Coupe League Final Results Table

PLACE	NAME	CLUB	CR'HAM GALA	LONDON GALA	S HENGE	OXF'D GALA	SIXTH AREA	STH'N GALA	CR'HAM COUPE	EIGHTH AREA	COUPE EURO	TOTAL
1	P. Brown	CM			15	12		15	11	14	15	59
2	R. Vaughn	Crookham			7	14	1	11		15	14	53
3	P. Hall	Crookham	13		2	5	14		7	10	13	51
4	D. Greaves	B&W	14		10	6	10		4	13	7	47
5	E. Tyson	Crookham	9				15			8	11	43
6	A. Brocklehurst	B&W						14	10	12	5	41
7	C. Chapman	B&W			11		8	11	4	6	3	36
8	P. Tolhurst	Crookham	4		7	11			11	4	3	33
9	C. Redrup	Crookham	9		6	8	1				9	32
10	A. Longhurst	SAM35	15			15					1	31
11	J. Paton	Crookham	7		13	7	1	3			1	30
12	T. Gray	Crookham				13	9				7	29
13	P. Seeley	B&W			5		12	4				21
14	K. Taylor	E.Grinstead							13		2	15
15	D. Thomson	Croydon					11				3	14
16	G. Manion	Birmingham				1					12	13
17	B. Martin	Tynemouth			11							11
18=	R. Elliott	Croydon				10						10
18=	M. Marshall	Impington						9			1	10
20=	A. Crisp	Biggles			4						3	7
20=	M. Cook	Crawley					2	5				7
20=	G. Ferer	Timperley							7			7
23=	G. Stringer	E.Grinstead					2				4	6
23=	P Carter										6	6
25=	D. Neil	B&W					5					5
25=	J. White	Croydon	3								2	5
25=	J. Minshull	Brighton	2				1				2	5
28=	P. Jellis	Croydon					2				2	4
28=	C Shepherd	B'ham									4	4
30	D. Powis	CVA					3					3
31=	R. Marking	CVA					1					1
31=	M. Stagg	MFFG					1					1
31=	R Kimber										1	1
31=	E Horne										1	1
31=	R Owston										1	1
36=	M Evatt	Biggles										0
36=	R Willes	Crawley										0
36=	D Beales	Croydon										0
36=	S Willis											0

Spencer Willis

John White

Peter Hall

Seasons End at Wallop - John Andrews

I, as yet, do not fly coupes so I had no competitions to fly in at Coupe Europa but the weather forecast was looking so favourable that I decided on a final day out. The wife and I booked in at a premier inn on the Saturday night, I trimmed on Sunday and returned home the same evening. It was a cold but perfect flying day, I was wearing long-johns, thermal vest and two jumpers and did I need them.

I was playing about with a newly acquired tracker but old batteries eventually suspended the exercise.

I then set about checking the trim on my 'Jaguar' which had got damaged a couple of seasons back when, at a windy Wallop, I decided on a trim flight before entering 8oz and paid the price as the low turns let the wind dump the model soon after launch. Shan't do that again. Apart from superficial airframe damage both prop blades were sheared off. I had made a new hub and spliced on the blades with 1/16th ply inserts and was concerned that the slight increase in nose weight might upset the trim. I need not have worried, the 'Jaguar' flew perfectly, it seems to shrug off all repairs without effort.

I was set up adjacent to the control tents and Lindsey Smith's scale comp attracted the attention of my camera and I. The perfect weather gave the entrants the chance to show what their models could do. I saw Lindsey's own 'Heinkel HE112' circling perfectly 50ft or so above his head. These rubber powered creations require skill to produce an accurate scale model that is light enough to fly successfully.

A Few Pictures of the Rubber Powered Scale Model Event

Here we see the Scale Judges nit-picking over Bryan Stichbury's 'Ryan PT19'

Bryan also had a 'Waco SRE with him, and Lindsey's 'Heinkel' does what it says on the box

Peter Smart was exercising this electric 'Lancaster'
Powered by 4 Voodoo 25's and a Zorb controller
(whatever they are)

These models don't only look good on the judges table, they fly as well

Including Peter Smarts 'Lancaster'

John Andrews

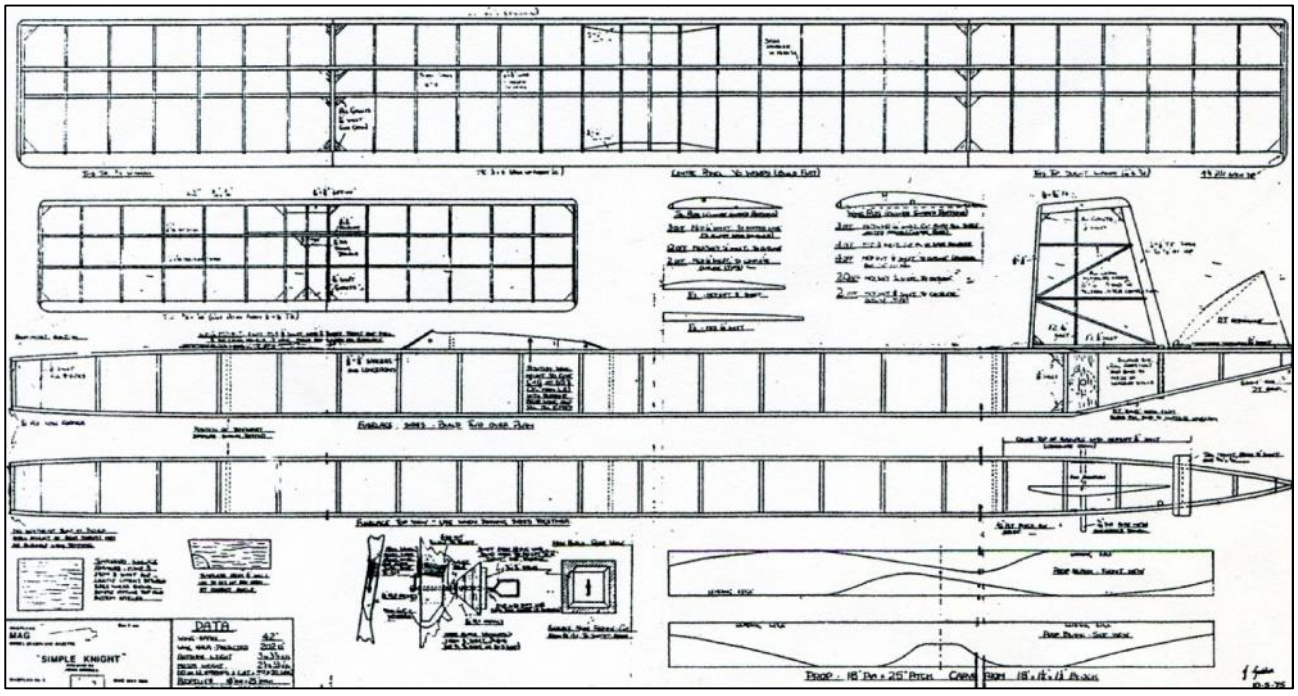
So You Would Like To Participate In A Fly-Off - John Godden

Originally published in Flying Model Designer & Constructor

I have often spoken to modellers over the years who have expressed the wish to compete in a "fly-off, often after many years of competition flying without ever managing a "full-house" score. To actually reach a "fly-off is not too difficult providing the weather is reasonable, the modeller is sufficiently dedicated, the correct choice of competition class is selected and two simple, competent and reasonably sturdy models are used (both well trimmed prior to the day of the event!). No doubt after taking part in a few "fly-offs", you will wish to win one? - well I'm afraid you will have to seek guidance elsewhere for that achievement, since this involves high performance models and a competitor with attributes of dedication and single mindedness which I'm afraid elude yours truly!

There are many free-flight duration classes which could be chosen, but there is just one which is way above all the others for ease of achieving a "full-house" score. All the glider classes are ruled out since only the top designs flown by the best fliers are capable of a maximum in "average" air. Most of the power classes (F1C, open, slow open, ½ A and vintage) are capable of the maximum appropriate for the specific class, but are generally rather complex models (especially F1C and open), and are all prone to human error, or model systems or engine malfunction on at least one flight per event when flown by the average non-dedicated modeller. This then leaves only the six rubber classes from which to make our choice (FIB, open, CdH, unrestricted vintage, vintage Wakefield and mini-vintage). Of these classes, the open class is the one which a relatively simple model has the largest margin of performance "spare" above its usual class maximum of 2½ minutes (occasionally 3 minutes). - Some may argue that the large unrestricted vintage model will have a similar or even better performance than a simple and relatively small open model - true, but models such as the large Lanzo's and Korda's are quite complex, not easy to build, very difficult to trim for ultimate performance and require a lot of rubber which must be carefully wound to avoid "bunching".

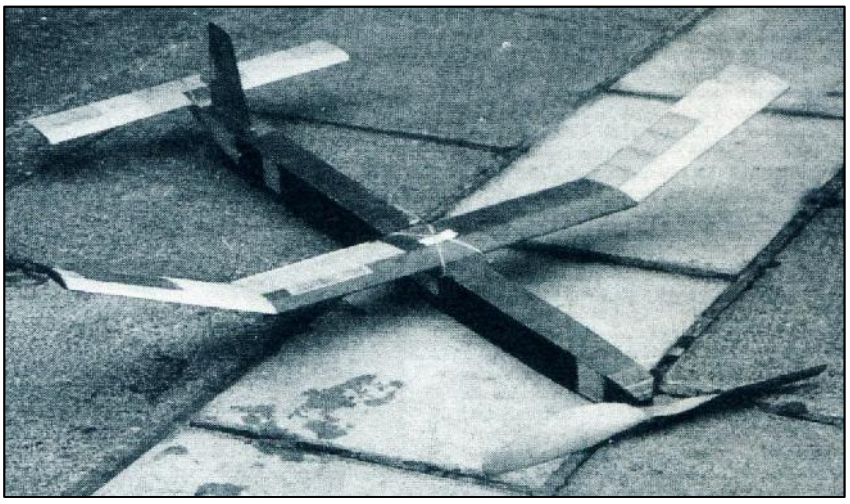
Now we have decided that open rubber is the class to fly, a suitable model is required , preferably a design which has been proven in competition, is large enough to be seen by the timekeeper for at least 3 minutes in most conditions, yet small enough to be handled by the "smaller" modeller (juniors and Ladies?) in other than calm conditions and be robust enough to withstand a fair amount of rough handling by both the flier and the English weather and countryside. This approach may well be at variance with the modern trend towards ever larger and flimsier models especially designed for the fly-off, but which require large quantities of rubber -up to about 5½ ounces, and the ultimate in strength and skill to wind-up and handle.



So, with our primary aim of achieving the fly-off, we shall start with the SIMPLE KNIGHT of just 200 sq in wing area, constructed with similar sizes of wood to that used in the very large open models, but requiring the minimum of local bracing, etc., so aiding simplicity.
A simple free-wheel prop is also used which eliminates setting-up of blade angles, fancy wire bending for the hinges etc., and soldering is kept to a minimum, (to keep down cost, two props can be carved from a 36" length of 1½ " sq block).
One drawback of using a simple sturdy model is that we tend to require "brute-force" to obtain performance, hence the need for about 3½ ozs of rubber in what is actually a rather small model. (10 or 12 strands of ¼ x 48" to 54" long or 14 or 16 strands of 3/16 x 48" to 54" long).
Having the model, or more precisely two models, is only part of the answer, since both models must be trimmed and then further tried and tested to ascertain the ideal rubber motor required and the maximum number of turns the motor can take without "stranding" or "fraying" and thus be good for at least several competition flights.
Similarly, actual rubber winding technique needs to be practiced to perfection using a "winding stooge" and "winding tube" - all this in conjunction with remembering to light and adjust the DT fuse (or set correctly and start the Tomy timer) prior to launching the model at its ideal elevation and correct direction with respect to the wind (some models prefer to be launched slightly to the left or right or directly into wind).
Whilst doing all this, especially in the early stages, it is advisable to have an experienced rubber flier to observe and comment on your methods, and technique (plus ensuring your fuse is lit and adjusted, or timer started, BEFORE you launch!). Once you have mastered all this, then it only remains for your nerve to hold once you have paid your entry fee and the timekeeper is stood-by whilst you wind up for the first of your three flights leading to what will hopefully be your first fly-off.

The Simple Knight, so called because of its simplicity and use of Deri Morley's Garter Knight wing section (at 5" chord instead of the CdH chord of 4"), is a basic open rubber model capable of flights in excess of three minutes under most conditions (excluding of course the dreaded down-draught!). It was developed many years ago to encourage better club participation in the team rubber event held at the sixth area meeting for the FARROW SHIELD, and proved fairly successful. My own original model was lost fairly early in its life, but its MkII replacement (slightly longer rear fuselage with flat plate fin slotted right through the fuselage instead of the original rather small lifting section fin which tended to cause spinning-in under high power), is still capable of about 4 minutes even after much repairing and outdoor storage in trees and the like. Although the free-wheel prop adversely affects the glide efficiency, it also has the advantage of acting like a damper under turbulent air conditions, quickly ironing out any stall which may result from turbulence, whereas a model with a folding prop may continue to stall for the remainder of the flight.

Since full building instruction follow, you may well decide that the model would be ideal for "junior" (10-12 year old son, daughter, grandson or grand-daughter) especially as wood sizes are better for young hands and fingers than those used on smaller models, and there is little longeron bending to create built -in fuselage distortion. There is of course the drawback that the young arms and hands will not be able to wind-up and hold 3 ½ ozs of rubber - never mind, if the prop is trimmed to about 15" diameter, the model will fly quite well on 8 strands of 1/4 x 34" long which will be just taught in the fuselage without being pre-tensioned. Full potential of the model can then be obtained at a later date, when ability and "arm strength" increase, simply by replacing the prop and motor, and possibly repositioning the wing mount slightly further aft on the fuselage to restore the centre of gravity (CG) to its correct position.



To be continued John Godden

Bungee Launch Gliders for 2013 - Peter Michel

GOOD news for glider flyers – and for those who thought that towing at full gallop was a thing of the past... Contests for small bungee-launched gliders are to be held at Middle Wallop in the coming season. The rules, pioneered by the Peterborough club and tailored to Middle Wallop requirements, are as follows:

Up to 36in. Vintage Glider – Hi start (bungee launch)

1. Any model designed as a glider with wingspan up to and including 36in., from the Vintage period* may be flown.
2. Maximum towline length 30 metres comprising 7.5 metres (unstretched) of 1/8in. rubber strip and 22.5 metres of line.
3. Fixed end of line to be held by an assistant (no stakes to be used).
4. Line to be reeled in immediately after launch to avoid risk of entanglement.

Up to 36in. Classic Glider – Hi start (bungee launch)

1. Any model designed as a glider with wingspan up to and including 36in., from the Classic period* may be flown.
2. Maximum towline length 30 metres comprising 7.5 metres (unstretched) of 1/8in. rubber strip and 22.5 metres of line.
3. Fixed end of line to be held by an assistant (no stakes to be used).
4. Line to be reeled in immediately after launch to avoid risk of entanglement.

*[*As defined in SAM 1066 and SAM 35 contest rules.*]

Bungee launching, or Hi-start as the Americans call it, has many attractions as those who have tried it will affirm. To see a model sailing high and handsome at the top of the launch and then neatly casting itself off into its flight pattern is a great joy.
But remember, this is not catapult launching. In fact, if you use a bungee as a catapult the model in all probability just ping off the line in a couple of seconds. Surprising little power is required to waft a glider aloft in, ideally, a normal glider-towing breeze – hence the specification of 1/8in rubber.

After some discussion over the rules it was decided that the normal bungee anchor peg should be dispensed with at Middle Wallop for reasons of line discipline. (Nobody wants the nightmare of multiple lines snarling up after use or getting entangled in other people's legs.) However, there should be no problem here because competitors will in any case have to grab a timekeeper who will then become the "anchor" and reel in the line after launch.

There are a few simple tricks of the trade to be learned, such as gauging just the right amount of stretch and releasing your model at just the right angle. But there's a big bonus: the Peterborough flyers have found that there is really no need for an auto-rudder. These little jobs seem quite happy to select their own flight circle after a straight tow.

Plenty of designs are available, such as the Ato 36, the KK Dolphin, the Frog Diana and, of course the American gliders including the Thermic C and Frank Zaic's Trooper.

List of some Suitable Designs

Ato 36	Baby Gull	BH5
KK Conquest	Crowfly	Doofa
Elite No 1 (Warring)	Frog Diana	Frog Petrel
Jersey Skeeter	Jetco Trooper	KK Cadet
KK Dolphin	KK Soarer Baby	Lulu Baby
Meteorite	Sinbad Junior	Thermic 36
Thermic C	Towline Terror	Trooper
Veron Classic	Veron Wagtail	Vespa

Geoff Stubs Launching a typical model at Peterborough MFC Ferry Meadows
(a Peterborough MFC Picture)

So there we have it – a nice addition to the Middle Wallop bill of fare and one which might well be copied at Old Warden and elsewhere. After all, why should the rubber flyers have all the fun with their Lightweight class!

Peter Michel

Selected Ravings from an Old Lag - David Parker

I am one of a number of people who have made a return to the fraternity of aeromodelling after a stint in the wilderness. In my case some 30 years although wilderness it was not. I just fancied trying other things - including model yacht racing and then onto the real things including a day on a "J" Class.

But here I am - a bit older but certainly not wiser.

My goodness how things have changed and advanced. Almost as though I have been projected into the future. Radio now extraordinarily inexpensive and tiny - the most diminutive models can be flown under complete control - electric motors batteries and speed controllers whose weight is measured in a few grams rather than pounds or kilos. One is really spoilt for choice. The biggest surprise however was that I can today buy a pretty good set of radio gear (2.4 wotsits) for less pounds by a few score than I paid for a basic 4channel set in the seventies - then a couple of weeks wages whereas today more like pocket money, almost!

So I embarked onto radio flying - and succumbed to what I am told is known as a "foamy" -motorised glider. I flew it a bit - which was surprising because I was never that much good and after 30 years?? But I loathed it - and still do. Often referred to as my *****%%$$@ ceiling tile was not much troubled when I broke it - carelessly dropping it during launching. There was nothing wrong with the thing as such - quite attractive to look at - ready to fly and it did so quite well in fact. So why was the poor thing so hated? Simply because there is nothing of me in it - you just take it out of the box - connect up a wire or two and off it goes - or not, if you drop it!

I suppose I should have remembered that as far back as I can go never liked building from kits. It was so not so much that "kits are for wimps" but more a habit I formed when a callow youth and pocket money only stretched to a few lengths of balsa strip and a bit of sheet. Of necessity then I had to scratch build - sometimes from a well used plan that had been passed around the school but often out of one's head. There was a momentous day though when for my twelfth birthday (or thereabouts) I received a Keil Kraft Gipsy.

Wow, it was enormous. So I duly used every bit of my dexterity and care in building it. There was one very scary moment when impatience made me temporarily install the rubber motor and put on a few turns to see how well the carved (by me) prop. performed. Almost a disaster - I had not at that stage covered the fuselage and inevitably it began to twist under the torque of the rubber motor. But the Gods were with me and all was well. But it did teach me a lot about stress, in all senses.

In the local park it flew beautifully - almost "off the board" as we more experienced chaps say. In rather beautiful lazy circles landing the right way up and undamaged. At last I was an aeromodeller.

A year or two later I received an ED Bee for Christmas, which during running in in my bedroom (not a good move) almost brought about the cancellation of Christmas lunch due to the severe laceration of my Mother's finger (she was protectively pointing out a seemingly loose screw). But it did for a while, well until Boxing Day, deflect

parental minds away from the fact that my bedroom needed redecorating. So then I progressed to Epsom Downs with Madcaps et ali. Just like most people. Some knowledge of radio control was bestowed upon me by grown ups with Radio Queens and reed sets and so was my vocabulary because I do recall both the engines and the radio receivers seemed very incompatible - nether wanting to perform at the same time as the other.

So here I am again. I headed for radio control because that is where I left off and the purpose of buying a foamy seemed sound because it would get me into the air quickly. Well it did but as I said it was not that exciting.

So I built a Popsie by the Master and exceedingly nice gentleman Vic Smeed. It does resemble a Bumble Bee which defies all the laws of aerodynamic. And like the Bumble Bee, Popsie flys rather well. First flown at the East Anglian Gala this year at Sculthorpe on a beautiful day - the old Mills .75 (another relic of my well spent youth and must be possibly 60 years old) struggling a bit - but a bigger prop has improved things - gave me a pleasure I had not experienced for many a decade.

Thus it was that I became drawn to the free flight fraternity and re established my relations with SAM (I was lucky enough to get to know David Baker quite well) and probably doing no more in fact than returning to me roots.

Now perhaps I should explain that radio did seem an obvious choice because the pursuit of free flight today is not that easy. There are simply very few places one can fly unless it is an organised event. Radio can be accommodated in a much smaller area. Oh how I would love to have been born so much earlier (a thought shared by some who know me and like the idea of my now being frail and infirm (or even not of this world) and not the curmudgeonly illegitimate individualist I am at present. To have the freedom to wander out onto the local common or field with those pioneers like the "Colonel" (a true gentleman) Pelly Fry Mr Houlberg and other "greats" and to whom we do owe more than a bit.

Without their ingenuity and imagination and skill we would not be doing any of this. So smartly dressed were they. And very few controls by jobsworths and others. But there's the rub! The problem today very simply is that too many people fly model aeroplanes and so rules regulations and impediments are inevitable. Not good I say - and I don't think we really need to encourage others to fly model aeroplanes. But then I have no commercial interest so I can say that. I am however all for encouraging people to become aeromodellers - or even model aeronautical engineers. Oh, so you can see where I am heading then? Yes I was around when the big dumb down occurred and the opponents of the (they claimed culture of elitism) had their way. And yes I don't think much of the ARTF stuff. I don't think it does much other than to introduce those who can afford it to the sport of model flying but in many cases only for a short while. And the BoM rule has gone too.

And so there is the cry "If we don't get more young people into the hobby it will die". Do you know that has been bleated since I was about ten years old - over 60 years ago if you want to be more precise - I remember it well. In truth I don't think you can do much better than the Peterborough Club who host their "Flying Aces" event

each year which certainly attracted a goodly number of young people all heaving various types of model into the air, with the added advantage that many disciplines were on show for the undecided. But a another big plus was that the accent is on "economy" aeromodelling. And that, particularly today, is important from Mum and Dad's point of view. I notice as well a surprising number of young folk competing too.

Since the Popsie, bless her little rubber wheels, I have built Mr Gosling's Nordic Tern, encouraged by some of the Sages in our midst but who neglected to tell me that his models are a bit complex! But a good learning curve. However he does not show the CG on the plan. Alright - use the old maxim "one third chord" and this coincided with the position of the towhook on the plan. The model was balanced accordingly but somehow did not feel right. So test glide in the garden. Gave it a good heave to clear the fishpond (the Duchesses' pride and joy) and it almost did an Upkeep* on one of her favorite Koi. Frankly it dived groundwards instantly. So reduce the nose weight - yes felt much better and now glides quite well -just on the point of a stall - for quite a respectable distance on a hand launch. Weather has not been sensible enough for me to try a tow (found my old winch with line attached) and I admit to being apprehensive. You see the CG is now about 66% chord - how will this "balance" with the 'ook which is fixed?

And I am almost finishing the Wakefield (the winning one) of Mr Judge - including a carved (by me) prop and a Gerami clutch under the tutelage of one Peter Michel who claims to know a bit. Plans for the future - an Aurikel and an enlarged M'slle radio assist (or interference) and maybe something scale like one of Bill Dennis's designs, having cut my teeth recently on Charles Newman's little Pup.

To date am finding it all great fun - and a steep re - learning curve. Apart from the Peterborough "Flying Aces" excellent day have spent a (the one dry) day at the free flight Nationals, Eastern Area Gala (Sculthorpe is just up the road) "done" Impington Indoor - excellent flying by some of the best and a hearty breakfast, along with some local indoor events and a day with the Scale Soaring Brotherhood. So heading fast back to my well spent youth. Can't complain - save that retirement has led to me being undisciplined and wanting to try everything.

Hurry up 2013 - but am mindful we must say our thanks to all those who organise the events we so enjoy - it is not easy particularly if negotiations with Government Departments are involved.

Finally there may be one or two readers who consider me to be bias if not downright partisan and with no patience with the instant flying brigade. I don't blame you - I don't in fact have any time for the ARTF model nor do I really appreciate the models which are flown taking up a load of airspace and a high rate of knots emitting noise one decibel under the limit. But do carry on - and do not consider for one moment joining the vintage and free flight fraternities.
We are happy as we are - a select and happy band and I don't like crowds.

David Parker

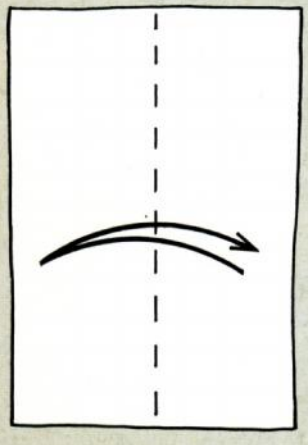
Paper Airplane No.2 - Nick Robinson

CLASSIC GLIDER

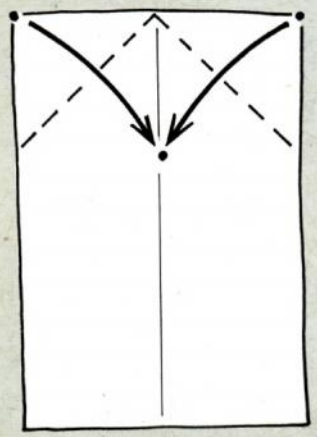
The design of this plane is traditional, but the clever triangular "lock" was made popular by the eminent Japanese designer of paper airplanes, Eiji Nakamura.

Whereas the classic dart is designed for fast flight, this design concentrates a lot of layers at the front to provide weight and hence stability.

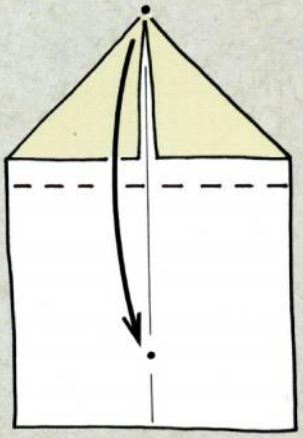
Start with a sheet of A4, coloured side down.



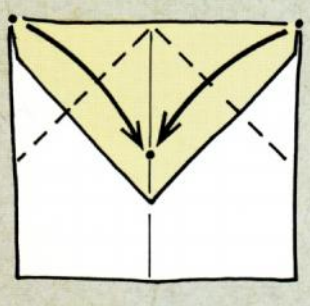
1 Fold the two long sides together, crease firmly and open to form the vertical centre crease.



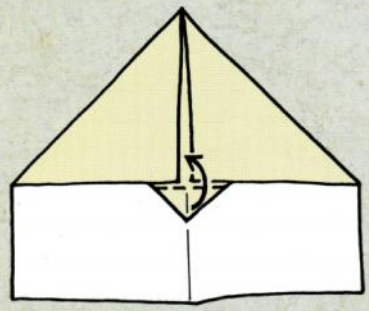
2 Fold two corners in to lie along the centre crease. Try to make the edges lie exactly along the crease.



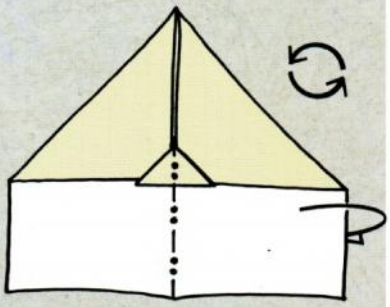
3 Bring the top corner downwards to touch a point a short distance from the lower edge. Note that the valley crease does not lie along the inside edges formed in the last step.



4 Repeat step 2 with the upper folded edge. The corners do *not* meet the inside corner, but leave a triangular flap sticking out.

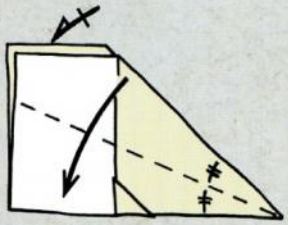


5 Fold the small triangle upwards to hold the two corners together. This stops these flaps from coming loose during flight.

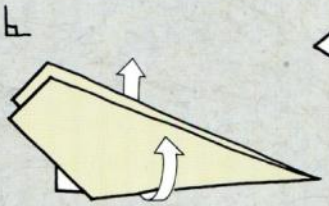


6 Use the centre crease to mountain fold the paper in half behind. You can fold this in the air, or turn the paper over on the table and make a valley fold. Rotate the paper to the position shown in the next step.

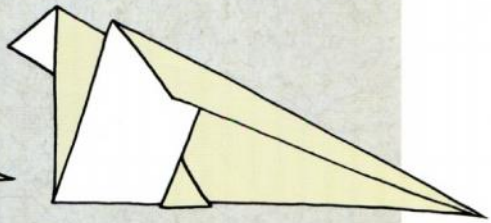
CLASSIC GLIDER



7 Fold the first upper flap downwards to lie along the lower edge. Don't flatten until you are sure the edges are neatly lined up. Repeat on the other side.

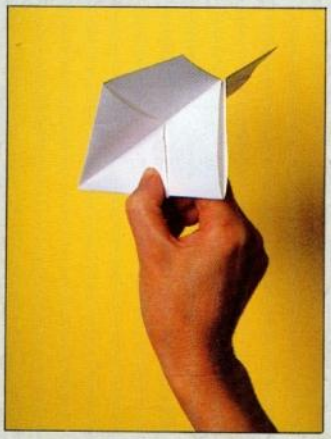


8 Open out both wings to 90 degrees.



9 The Classic Glider ready for flight.

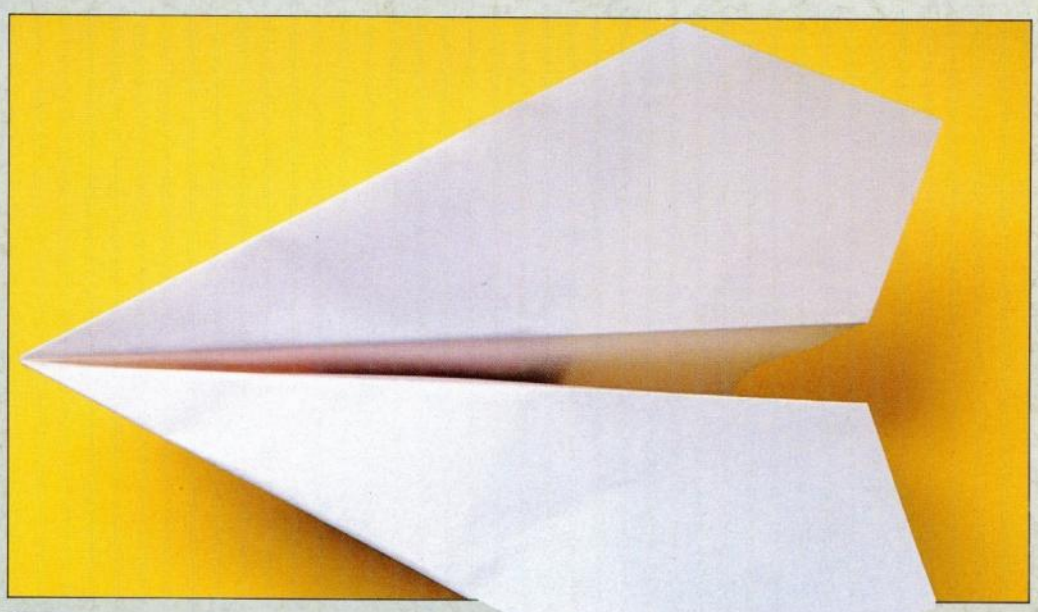
VIEW FROM BELOW



LAUNCHING POSITION

FLYING HINTS

Launch slowly and with moderate strength for a superbly stable flight-path. Alter the angle of the wings if it dives too quickly. Try different angles of attack for aerobatic stunts.



TOP VIEW

35cm Entry level specification - Indoor Tech. Committee

It was agreed that this should form the basis of the ITC Challenge for the next 2 years, Mark Benns informs us that around 25 kits have already been despatched so hopefully plenty will be recording flights. Kits for this model are available from:

email.sales@indoorbalsa.net

or see the BMFA Indoor web site section for a plan and build notes.

This is a postal event running from January through to October 2013, your flight times should be recorded by a club mate and we need to know the height of the ceiling at your venue to the lowest central beams Send your times and a photo if possible to tony_hebb@hotmail.com. As its name suggests it is intended as an entry level class for non "experts"!

The specifics of the model are as follows:-

It's basically to 35cm rules i.e. projected wing span is under 35cm!
N.B. this is not a one design event so you can get the pencil and paper out if you want.

Make it how and out of what you like.

No VP hubs allowed. This means anything that changes pitch or diameter whilst in the air, other than the natural flexing of the propeller.

Model, excluding rubber, to weigh 1 gm or more.

Half motors to be used. ie. Motors can be any weight but a ballast spacer of at least equal weight must be used.

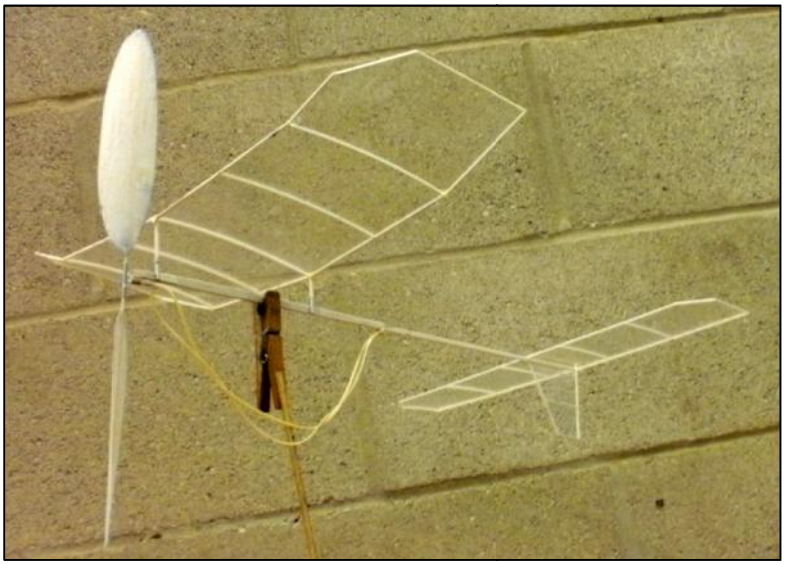
The usual height adjustment formula will be applied to "normalise" times from entries under different ceiling heights.

ie. 627/(167+[46xSquare Root of ceiling height in feet])

At the Nationals it will be flown in the F1L slot.

This is a great little starter model at an achievable weight from pretty normal balsa wood. Give it a go, I think you'll enjoy the challenge.

Whilst we anticipate that most models will use sheet balsa propeller blades, built up blades are not excluded.



On the right we have your editors early version of the class, the ½ motor Spec had not been initiated. The model came out nearer 2gms than 1, but performance is most satisfying.

Indoor Technical Committee

4oz Wakefield League Results 2012 - John Minshull

4oz League review for 2012

2012 was not a good year for 4oz Wakefield with only two qualifying events.
The cancellation of the Odiham gala and the lack of combined 8/4oz competitions were the main reasons for this disappointing situation.

The Croydon 4oz Wakefield competition determined the top league positions as none of the SAM Champs entrants had flown on the Croydon day. Roy Tiller was the victim of a timekeeper malfunction at the Croydon event, as reported in the Clarion, where a DT fly off was employed. The timekeepers had been unable to determine when the DT occurred and had this not happened Roy would have had pole position in the league.

It is hoped to run more 4oz Comps in 2013 – see below

2012 4oz Wakefield League Results

Competitor	Croydon 4oz	Bonus	SAM Ch.	Bonus	Total
J Minshull	5	4			9
R Tiller	4	3			7
M Marshall	3	2			5
M Turner			3	2	5
D Beales	2	1			3
R Kimber					0
J Wingate			2	1	3
P Jackson			1		1

Provisional dates for 4 oz events next year:

Either/and

Croydon Wake Day **Sat.30th March** - SAM 35 Gala **Sun.31st March** or **Mon.1st April;**

Also

Sat 10th August (SAM Champs); **Sun.27th October (**SAM 1066 comps day).

Mike Turner, a regular competitor & past winner in 4oz Wakefield

John Minshull

Dyeing Polyspan - John Hoyle

I was talking to Derrick Collin and John Taylor about my recent experiments with dyeing Polyspan and John thought the information would be helpful for SAM members so here goes.

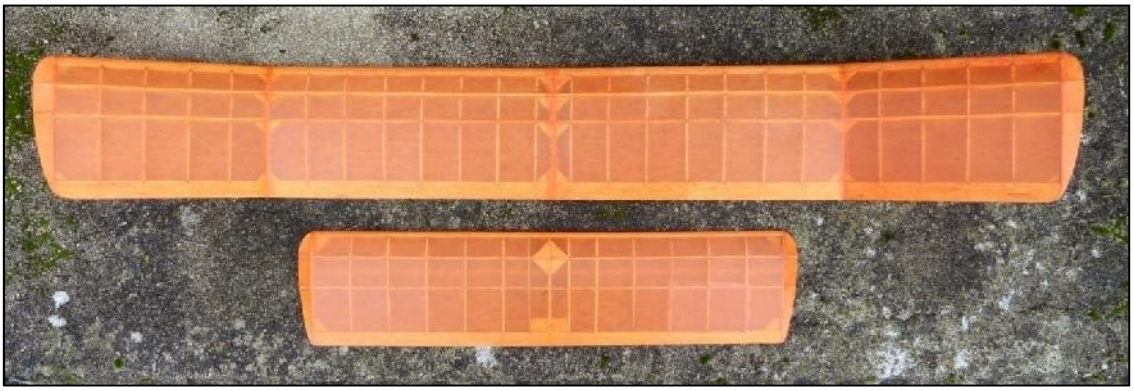
Essentially I have been using a polyester dye obtainable from "The Dye Shop" on the internet, with highly satisfactory results. The dye called "iDye Poly" is obtainable in a variety of colours including black, blue, red, orange, yellow, green, brown and violet and comes in a packet containing enough powdered dye to stain 2-3 lbs of fabric plus a liquid colour intensifier all for £6.28.

In use a small proportion of the contents are added to enough water to cover the Polyspan in a container, I used a galvanised bucket, and brought to simmering temperature for about 30 minutes, agitating frequently to ensure complete immersion. I used the orange dye and it has produced a superb bright colour with no streaks. The Polyspan is rinsed under a tap and after drying is ready for application. The Polyspan wrinkles but does not shrink during the process and covers perfectly with balsaloc adhesive followed by heat shrinking.

The usual 2-3 coats of 50:50 dope/thinners renders the fabric airtight and does not affect the uniformity of the colouring. I found that once dyed it becomes more difficult to distinguish the shiny side from the rough side of the fabric but solved this by stapling the corner of the fabric before dyeing to give a "side reference". It is important to buy the "Poly" version of the dye which is specifically intended for polyesters as The Dye Shop sell a parallel line for cottons.

I have just covered the tailplane of a Dixielander in this way and could not wish for a better result and of course the amount of dye supplied will last a long while for our use! The intensity of the colour is related to the length of immersion so I think say an "antique" finish might well be achievable with a few minutes insertion using the brown dye; this is something I intend to try.

I should add that I have no connection whatever with "The Dye Shop"!



To round off the Polyspan dyeing information, on the basis that the proof of the pudding.etc..... here is a photo of the covered flying surfaces of my little Dixielander. I am ashamed to say that having burnt a hole in the top fabric of the tailplane I then compounded the issue by patching it with the grain crosswise, hence the uneven appearance! I should say that the apparent darkness of the R/H outer panel of the wing is a trick of the light, it is in fact the same colour throughout.

John Hoyle

Area 8 Salisbury Plain - Martin Dilly

In the mid-1990s I negotiated with the Army to obtain the use of Area 8 for the use of those training for a possible place on the British national teams for World and European Championships. There was a limited number of dates and the fee was £50 for a year or £5 per day. Each year we had to make an educated guess about the fee to set, bearing in mind the vagaries of weather and the possibility that the licence charge may increase.

Over the years, with the help of Lindsey Smith, Bernard Aslett and Peter Tribe, we built up a good relationship with the Army and with Landmarc, who issue the licences; it was then possible to extend the use to all types of free-flight and, eventually to reduce the cost to today's £15 for a year and with access limited only by the Army's priority training needs. Also over the years the surplus built up and, even in 1999, some was forwarded to the Free Flight Team Travel Fund to offset the costs incurred by those representing the UK at World and European Championships.

My intention is to continue to keep the annual fee low, and also to allocate part of any surplus to help our national teams for whom Area 8 was originally made available. All we need now is some good weather and maybe some hungry cows to get the grass a bit shorter. Full details of dates and fees will be in BMFA News.

Martin Dilly

Secretary's Notes for December 2012 - Roger Newman

Program for 2013

We are slowly but surely getting the program in place for 2013. A summary of the proposed events is given in the table below. This should also be on our website, together with the details for Crookham Gala (27th Jan) & the SAM Champs (10th / 11th Aug). SAM 35 has been invited to host two days over Easter & John Huntley is busy sorting out details. There are also a couple of dates for radio assist & control line aficionados'. The program is of course dependent on favourable weather – in the event of poor conditions, some things may get shuffled around, so be sure to keep up to date with the website & the latest New Clarion.

Note that these dates are still provisional – dependent on our licence being granted for Middle Wallop by the Defence Estates Agency of the MoD.

Included in the program are a few new comps, as well as the regular favourites. The new ones feature E36 – a class for electric duration, now excluded from Combined Open Power under BMFA rules. The first such comp will be part of the Crookham Gala.

2013 proposed dates	Events (to be confirmed)
27th January	Crookham Gala - SAM Fun Fly & Trimming
30th Mar 31st March, 1st April	Sat - Combined Glider/Croydon Wakefield Day Sun/Mon – SAM 35 Gala *(to be Confirmed)* - RC Assist/Vintage C/L
5th May	SAM 1066 Fun Fly & Trimming - Jimmy Allen Mass Launch Bungee Glider: - Rybak A2 glider - Flight Cup (Vintage middleweights) Pre-4oz Wakefield - Combined Open Power - E36 Electric
10th/11th August	Annual SAM 1066 Champs (Separate program of events listed on website)
21stSeptember 22nd September	SAM 1066 Fun Fly & Trimming - Bungee Glider; Combined V/C Glider over 50" - Large Open Rubber SAM 1066 Fun Fly & Trimming - RC Assist/Vintage C/L
26th October 27th October	26th SAM 1066 Fun Fly & Trimming - Combined Open Power E36 Electric Power; Tailless - Small Vintage Rubber Jimmy Allen Mass Launch Combined V/C up to 50" Glider - 4oz Wakefield; HLG/CLG
1st December	Coupe Europa - (Southern Coupe League) SAM 1066 Fun Fly & Trimming - Bungee Glider ; Rybak A2

On another front, Peter Michel has penned some excellent notes elsewhere in this edition on the merits of bungee or Hi-Start gliders. We have run a low key comp at Beaulieu over the past several years for these models, as part of the annual BMAS comp schedule – albeit we haven't had a wing span restriction. Very good for an aging population who still enjoy flying gliders! There are plenty of plans available.
Brian Martin is "hosting" a spark ignition comp for the August meet, postponed from last year. This one is in memory of John Maddaford & Brian has some good prizes awaiting. Additionally, he says he would like to promote more spark ignition interest, so we shall try to squeeze in further events for him during the latter part of the year.
Finally, again with deference for tired legs, we've included a few HLG/CLG comps. Tony Shepherd has been busy updating the SAM rules, in conjunction with his colleagues & these should appear on our website in the near future (if they are not there already!) covering changes to include E36, Hi-Start glider & CLG/HLG.

There are also extra comps in 4oz & 8oz Wakefield classes & in Tailless, to add support for the leagues run by John Minshull & Spencer Willis.

If that's not enough – Roy Tiller has requested that we put on more Jimmy Allen mass launches. So these too have been integrated into the program.

Binders: Although I appreciate we are an "electronic" society, many of us still have magazines, journals etc that can be safely housed in binders. Recently, I received a reminder from the Company who previously must have supplied binders for the old Clarion. Contact details are: Modern Bookbinders Ltd. Magazine and Loose Leaf Binder Manufacturers, Pringle Street, Blackburn, Lancs. BB1 1SA:

www.modernbookbinders.com:

Telephone : 01254 59371: Fax : 01254 59373 if anyone has a need.

Letter from a Happy Modeller

Mark Lester is one of the band of happy modelers who frequent the wilds of Beaulieu from time to time. He also happens to be a talented craftsman who has gone down the path of making engines for his own planes. The letter below describes his latest activities, along with accompanying photos. Well done to Mark.

Dear Roger,
Thank you for your interest in my little IC engine, which I call Midge 89. It is a 0.39cc piston port compression ignition engine, based on the popular ML Midge. It is machined entirely from bar stock. Plans for Midge, designed by Mark Lubbock, were published several years ago in AMI. Sometime around publication of the plan, on a windy day at Middle Wallop, I bumped into Ken Croft who had a recently completed a Midge 0.5cc which, as it was too windy to fly, he kindly demonstrated it to me.
I was impressed by its easy starting and flexible running characteristics. Since then I have seen one or two at Middle Wallop.

The ML Midge has been suggested as a beginners IC project. It can be made in 0.5cc or 0.79cc versions depending on chosen bore diameter of either 8mm or 10mm. It is radially mounted and the carburettor fits one side of the cylinder, with a single exhaust port on the opposite side. A nice feature of the plan is that almost all dimensions stated are in whole number millimetres. This appeals to me.

I decided that I needed a smaller engine than 0.5cc and I felt I would prefer it to be beam mounted, with carburettor mounted Mills style, at the rear. This results in the exhaust port at the front of the engine. To add novelty value and to reduce machining wastage, I decided to employ a detachable, 40 TPI left hand threaded front bearing. This made a back plate redundant. Other notable engines without backplates are Enya and the ED Comp Special, although they have bolted on front bearings. Some authorities feel that threaded front bearings might work loose in service, without the additional retention of thread locker fluid. I decided to ignore this advice - I am not aware that this was a problem for the Kalper 0.32cc, of which enthusiasts seem to have fond memories. Disassembly requires use of a special tool, held in the lathe chuck - multigrips are inadvisable!

Reducing the size of the original Midge was achieved simply by entering all dimensions onto a spread sheet and reading off the reduced scale figures. Unfortunately, all the whole number measurements are lost in this procedure! The only thing to be wary of is that the fixings and thread sizes may have to be reduced in size, e.g. cylinder retaining bolts. Using M2 socket head screws rather than 8BA helped in this respect.

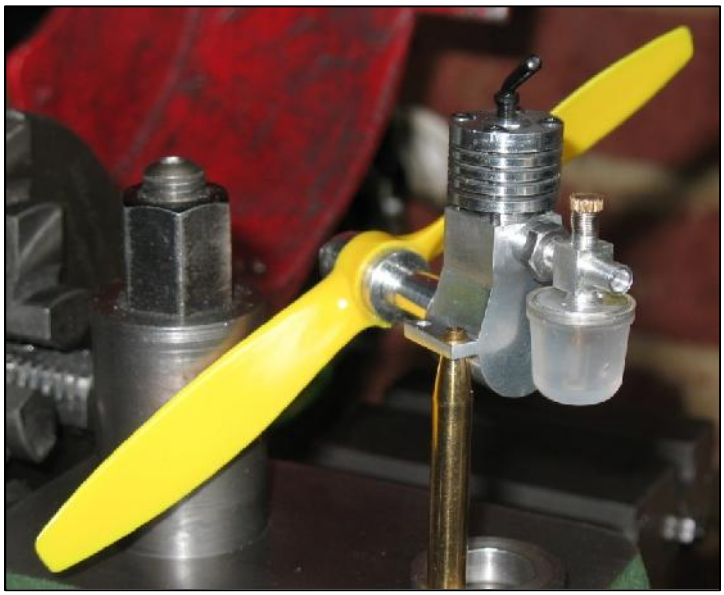
What made me choose to reduce the scale to 89%? Well, I wanted a side valve engine that could be interchangeable with a Dart. I had already previously made two Dart replicas, from bar stock, so it was convenient to make the engine with the same stroke, at 8.9mm, which is 89% of the stroke of a standard Midge. That allowed construction of a crankcase of about the same external dimensions as the Dart and I could use exactly the same bearer mounts. I also chose a main bearing size at 5.2mm,

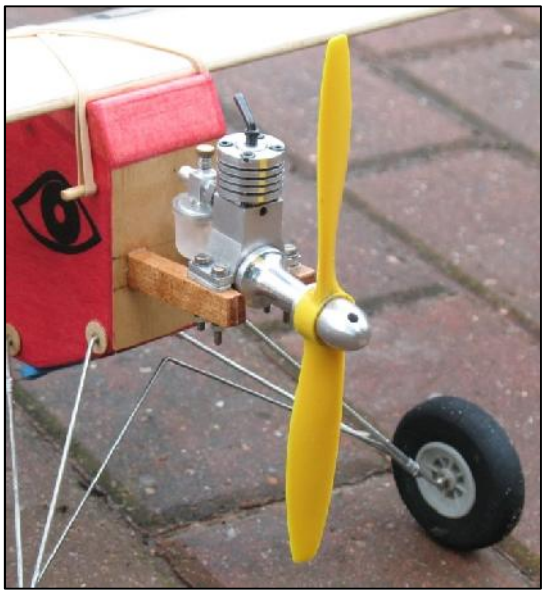
the same as a Dart and I already had a suitable reamer for this. The crankshaft was internally threaded to take 4BA studding with which to attach the propeller.

Bore range for the reduced scale engine would be between 7.12mm for 0.35cc capacity and 8.9mm for capacity of 0.55cc. I simply chose a bore of 7.5mm out of convenience as I was also making another, different engine, with this bore size, With bore of 7.5mm and stroke of 8.9mm the capacity worked out at 0.39cc. I have also reduced the length of the prop driver to make the overall engine length the same as a Dart. My Midge 89 weighs 44 grams, which is only about 5g more than my Dart without it's fuel tank. A side valve engine obviously won't produce the same power or approach the high revs.

Was it all worthwhile? Well, I decided to make up my own, sheet fuselage model with some chopped down wings from a West Wings Merlin glider that were surplus to requirements. Wing span ended up at 31.8", area 118.1 sq in. All up weight was 135 grams. Design features were lifted from various other model plans and lashed on. The result, at the December 2012 Middle Wallop winter coupe event, was more than pleasing to me - the engine behaved as a Midge should. Following minor trimming, some quite respectable flights resulted! At the end of flying, I was relieved to find the front bearing still firmly attached! A performance was kindly recorded on video, by Steve Roberts and can be viewed in the middle of the following You Tube link. Incidentally, please also look out for the magnificent four stroke engine featured (not mine!):

http://www.youtube.com/watch?v=zsQVHUZ9fVk&feature=youtu.be





My engine was made on a Myford ML 10 lathe with some operations performed in a small vertical milling machine. I now feel enthused to perhaps make another Midge 89 with a larger bore to bring the capacity nearer to the 0.55 maximum.
If you are interested in making IC engines, there is much information to help you on Ron Chernich's web site. He can also supply the Midge 0.5cc plans along with many others: http://modelenginenews.org/index.html

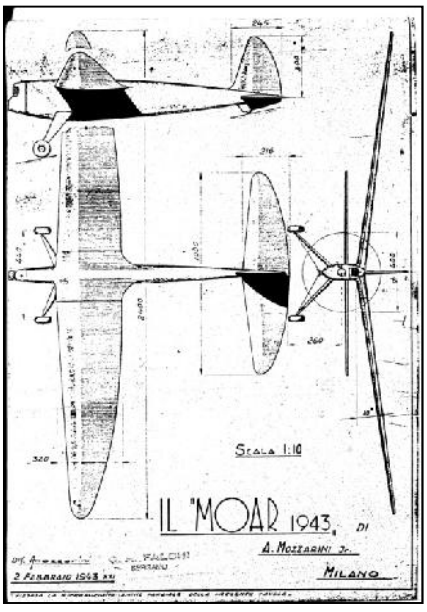
Thanks to John Carter and Derek Collin who also gave me the fuel tank, for encouragement with the engineering issues. Also to Mr Lubbock for a nice engine design. Thanks, Roger, for the encouragement to design the model. Please let me know if you need further information.

Regards Mark

Note: for those of you who are keen on engines, I recommend you look at the Ron Chernich site that Mark has mentioned in his letter.

A Challenge!

Gianni Lofredo from Rome & I keep in regular contact on topics concerning aeromodelling. He has just sent me a pristine plan of an old (1943) Italian power model – Il Moar, inclusive of mods for radio assist. This was a favourite of Ninetto Ridenti, who used to fly it superbly well – modified for radio assist. We have this model listed in the DBHL but not yet scanned – if anyone is interested, I'll see if it can be done.



In a later dialogue with David Parker, he very kindly provided a link regarding the history of this model & its designer – well worth a look.

http://www.rcgroups.com/forums/showthread.php?t=1407324

A Query

What happened to the collection of plans of the late Keith Harris? Someone requested a plan which we don't have in the DBHL but mentioned that it was in Keith's collection?

Last but not least (for this month)

The subject – once again - of **trophies!**

Sorting out various boxes in my garage to create a bit of space revealed several trophies – some of which should have been awarded during the year, others that are now redundant as we no longer have comps for them & some that should have comps plus one quite unique one.

The unique one is available to anyone who would like it – a 66" full size propeller entitled the "Towner National Trophy 1952" & originally given to the Eastbourne Model Flying Club by Harold Towner – as the name implies. Awarded twice only to A R T Stokes in 1952 & 1953. I can bring to MW meeting if required – bit on the large side to post! Given to me by Harold Towner's daughter a couple of years ago for disposal. Alternatively, suggestions for a good home would be nice.

Those trophies that should have been awarded include Albert Judge 4oz Wakefield (glass vase), Small Vintage Rubber (large silver cup), Pre-4oz Wakefield, Phineas Pinkham Cup, Bill Daniel A-Frame – these should all have been given at our SAM Champs – which of course were cancelled this year.

Others for which there seems to be no longer any comps include Reg Roles SAM 1066 Glider Trophy (glass vase) - maybe it could go to a Bungee Glider comp?, MW Eagle for gliders up to 44" (needs repair), Bill Lewis Waterplane Trophy, Jumbo Scale Rubber (glass eagle), Ian McDonald Trophy (what was this one for?), Douglas Tennant Memorial Plate (ditto), Jaguar Memorial Trophy, Nuts & Bolts Trophy for meritorious deeds in SAM 1066 – methinks this should live with our esteemed Editor!

Ian McDonald Trophy

Douglas Tennant Memorial Trophy

It would nice (pipe dream?) for someone to take on the task (?) of managing our trophies – any willing volunteers can make themselves known to me at any time!

Roger Newman

Wakefield Winner 1991 - Charles Dennis Rushing

1991 Alexander Andrjukov, 36, USSR

Indicative of Rudyard Kipling was his opening statement "There will be trouble in the Balkans." Thought of today as a given when predicting the future troubles in the world. In this case after warring with each other for centuries, the Serbians and the Croatians were again at the doorway of civil war near Zrenjanin, Yugoslavia. The same place where twenty eight nations were about to compete in the Free Flight World Championships. Flying as it were "between the guns" Here to defend his title was the 1989 WC Eugeniusz Cofalik (Poland). Also present was Alexander Andrjukov (CCCP) who was second to Cofalik last year, and who was the almost perennial European Wakefield Champion. With Alex was another veteran Eugeny Gorban, and Stephan Stefanchuk. Flying this year for team USA were R Maves, G Xenakis on the team beginning in 1967 (?), and N Furutani. The Democratic Peoples Republic of Korea team was here after an absence since the Livno WC in 1985. The flying field was superb, a flat plain of low grass, with unlimited visibility, and importantly, an environment well known for its meteorological stability of clear skies, and calm windless weather patterns.

The FAI/CIAM had rescinded the "...Builder of the Model Rule" (they mean "Maker," don't they?) in 1988, and even now this action was having significant reactions in the form of technological, construction, and production of Wakefield models. Balsa wood construction was now considered obsolete, and impractical for high production. Remember back in 1930, Joe Ehrhardt won the Wakefield Cup using an all balsa wood aeromodel. Ehrhardt's competition at that time believed that balsa wood was not structurally sound to resist aerodynamic stresses. They depended upon hard woods, and steel wire, covered with fabric. Composite materials were now replacing balsa wood because of their stable characteristics in all temperatures, light weight, strength, and production capabilities. These composites: carbon fibre, Kevlar, and fibreglass could be moulded, and vacuum formed by production processes to make components for motor tubes, tail booms, wings, stabilizers, rudders, and propellers. Although now a speciality of a small group of manufactures in the Eastern Block nations, the techniques of production would spread world wide, to absorb the total production of Wakefield aeromodels. To remain "competitive" by 1995 a person flying in any of the Wakefield contests in the world, would have to be flying a composite

constructed model, even with the most simple controls, such as a dethermalising device. By 1995 a whole Wakefield, with every conceivable control system on board, i.e. DSP, VP, AR, VIT, WW, and DT could be purchased, pre-adjusted, ready for competition, from "Starline", a distributor for Ukrainian and Russian Wakefields. Now a person so inclined could purchase a Wakefield from "Starline", load it with good prestreched "FAI" TAN rubber, wind-it-up, run (if you can) forward, and javelin launch it into the air. Well almost, even these Wakefields require a lot of practice, but to the determined, it is easy. Are not "... the ghosts of Wakefields past..." calling out? To all of us? Probably not.
Turn with me now, back to the contest at hand, The 1991 WC Wakefield International Cup event. Turn back to the "results", which are after all, the most important part of this tale to many now, especially if you are selling "Winning Wakefield's!" Friday July 7, was Wakefield Day!

ROUND 1-7: The first round would be 210 second max, following the rule introduced before the 1989 WC. The weather at the 7:30am start was just perfect, fair skies, no to low winds, and scattered clouds. Round 1 ended not as expected, not all 65 contestants maxed the round! In fact 17 missed a max, including Xenakis (USA). By the end of the routine seven rounds, fifteen contestants had perfect scores, including the WC Eugeniusz Cofalik.
ROUND 8: The 240 second fly-off round. One contestant failed to max this round: Myong Sam Han (North Korea) was short by 37 seconds. What happened to the infamous "Thermister Man"? Who was picking air for Korea?
ROUND 9: The 300 second fly-off round, two more dropped out.
ROUND 10: The 360 second fly-off round, lopped off all but Tony Matthews (Canada), an Alex Andrjukov (CCCP) The Cup would go to one of these two. Tony's Wakefield was simple, but unlike Bob White's "Twin Fins" No. 22, it was a new composite, silver mylar covered high tech aeromodel. Alex flew a Wakefield that he was still developing, using all the bells, and whistles that were currently available, including VP, DPS, AR, VIT, WW, and DT, all driven off of a clockworks timer, which was set to go off precisely. This was not a new aeromodel, it had been successfully campaigned in contests throughout Europe.
ROUND 11: The 420 second fly-off round. Maybe this round should have started with "...GENTLEMEN START YOUR MOTORS!" The sun was going down, visibility was becoming poor, it was 8:55pm for God's Sake! We have been flying for twelve hours and twenty-five minutes! Alex wasted no time, he was ready to go before the horn sounded to open the round! He was hooked on, and simply began winding at the signal, putting 450 knots onto his "FAI" TAN. Now he moved to the line, all the while ratcheting-in another twenty-five turns, to keep the crystals active. Alex was ready, launching his Wakefield straight up in a "javelin" throw, that would fold a balsa wing! At 20 feet the DSP kicked in with a snap, he was away! Cheers from throng!
Tony was ready now. He launched by releasing his propeller with his left hand, the climb looked good! Cheers went up again. Now all watched, and waited. At 401 seconds, Tony was down. He would be second today. Alex's aeromodel DTed at 430 seconds. Alexander Andrjukov would be the first, and the last member of the CCCP team to ever win the Wakefield International Cup!

Individual Placings

Place	Name	Country	Round 1-7	Round 8	Round 9	Round l0	Round ll
1	A Andrjukov	CCCP	1290	240	300	360	420
2	T Mathews	CAN	1290	240	300	360	401
3	D Russell	CAN	1290	240	300	353	
4	E Cofalik (1989 WC)	POL	1290	240	300	336	
5	S Stefpanchuk	CCCP	1290	240	300	297	
6	I Izawa	JPN	1290	240	300	289	
7	V Kubes	CS	1290	240	300	247	
8	A Siefert	GER	1290	240	300	230	
9	K Rozycki	POL	1290	240	300	208	
10	E Gorban	CCCP	1290	240	300	204	

1991 Team Results for Penaud Cup						
Place	Country	Abbreviation	Total	Team member places		
1	USSR	USSR	3870	1	5	10
2	Poland	POL	3870	4	9	11
3	China	CHN	3778	12	21	32
4	Yugoslavia	YUG	3766	16	18	40
5	Italy	ITA	3722	14	19	47
6	Czechoslovakia	CS	3720	7	17	52

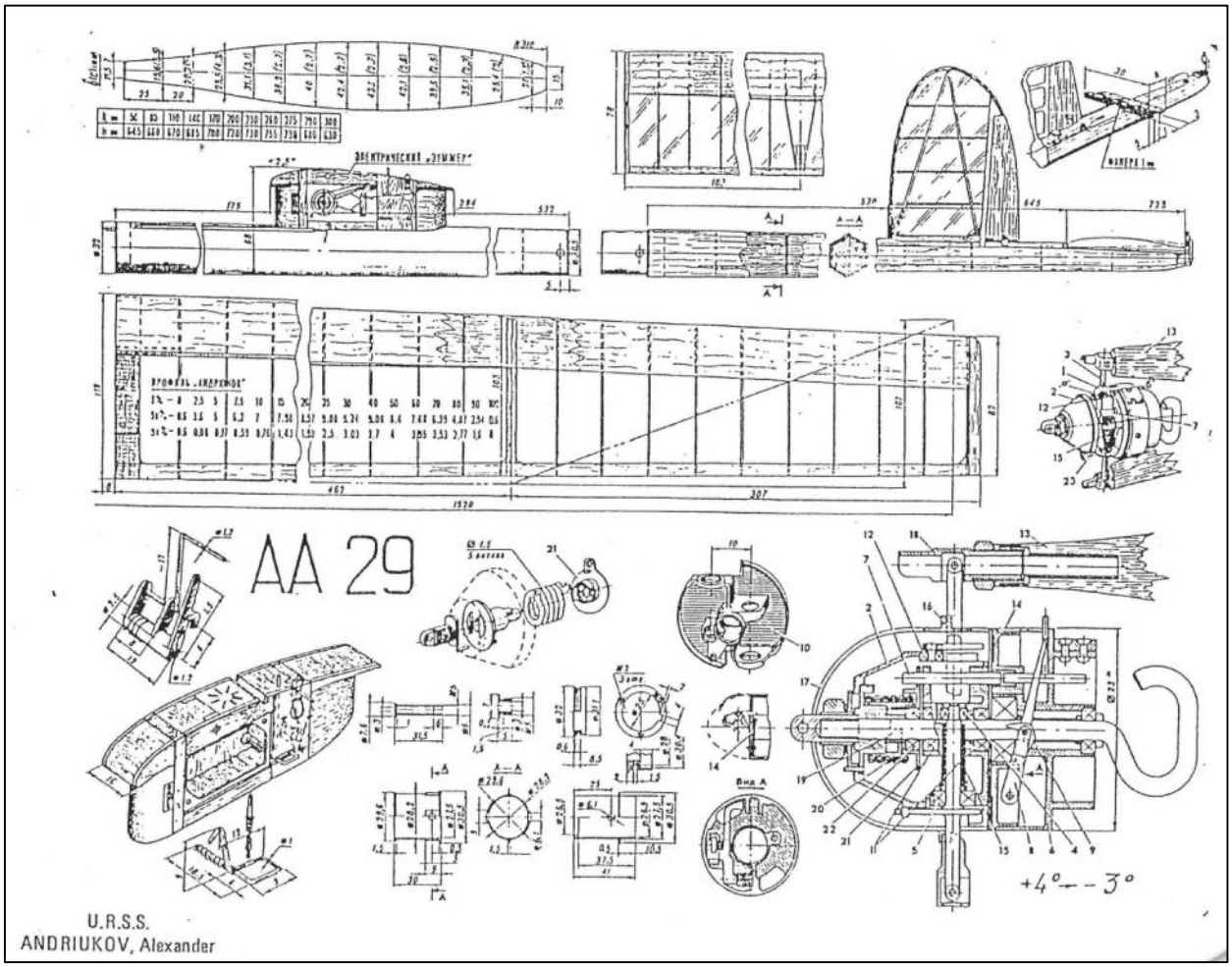
Charles Dennis Rushing

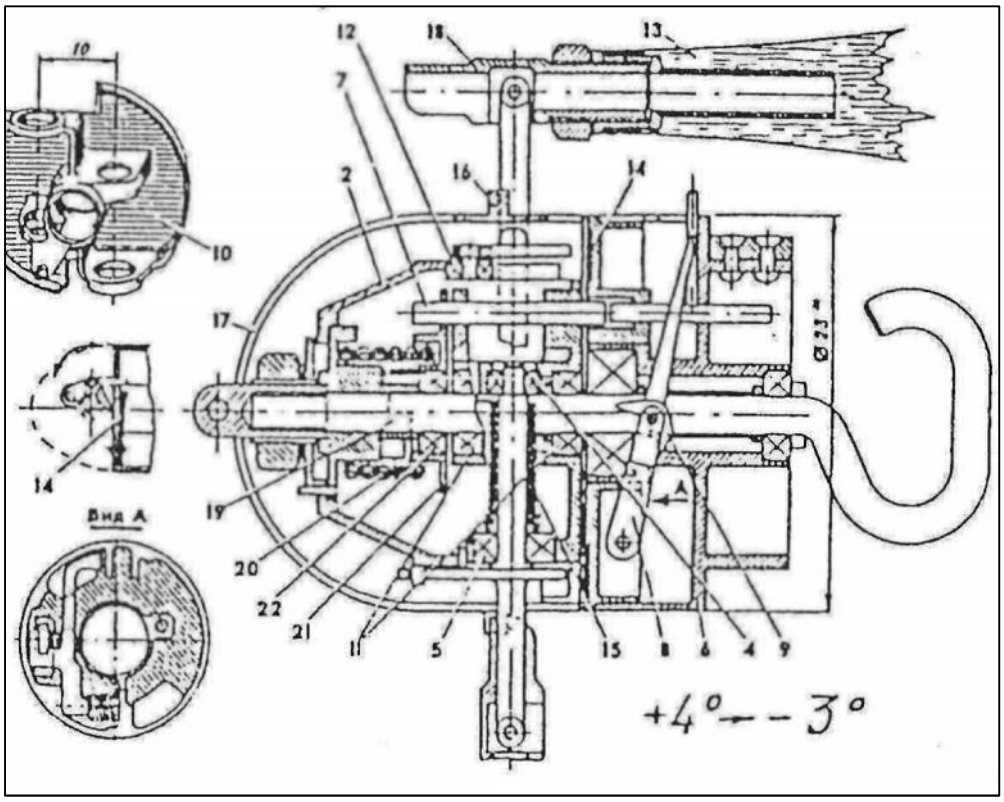
The following images are Courtesy of Roy Tiller and the DBHLibrary:

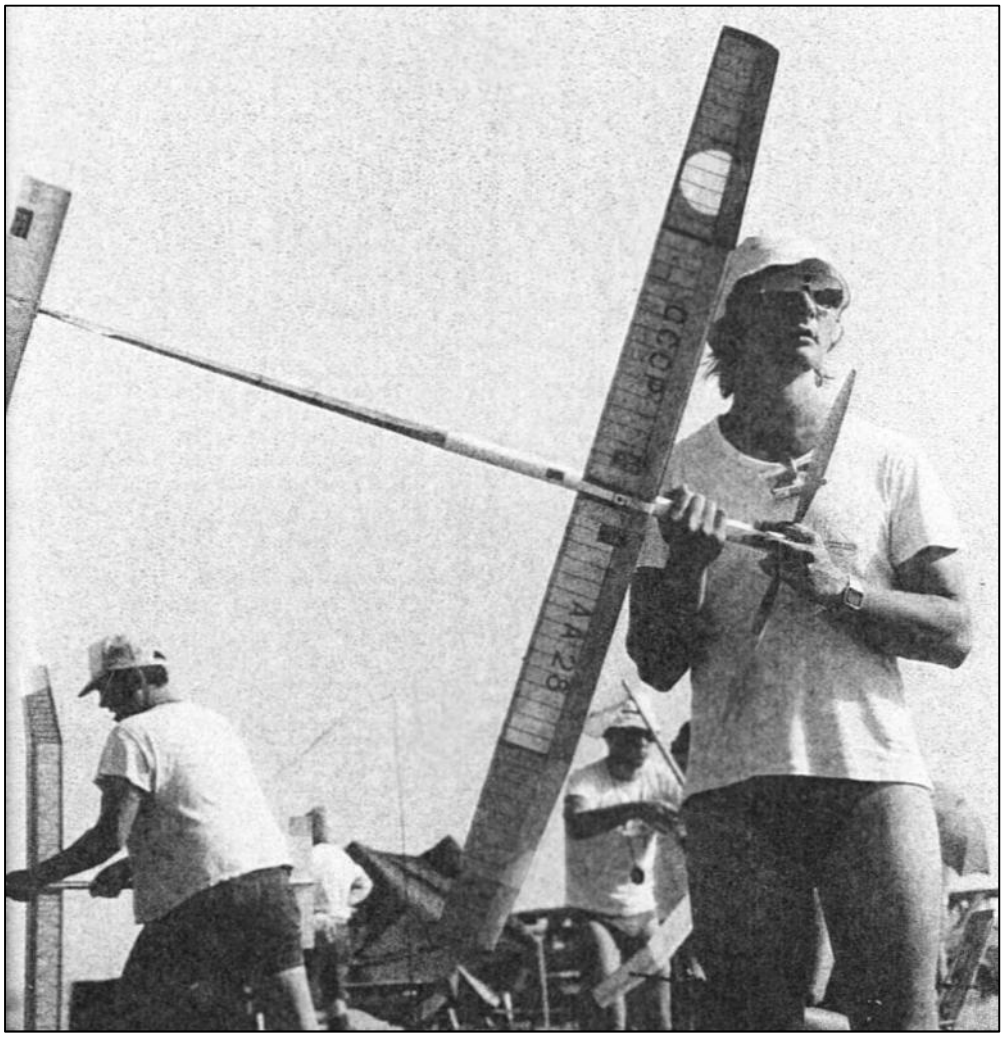
The event was not covered pictorially too well in the British nor continental magazines. The plan, AA29 is from Free Flight NZ June 1989, Modelismo Italy has the same plan in its July issue, so we might assume that Andrjukov was still flying this model.

By the year 2000 in Vol Libre France we have a plan of Andrjukov's model AA30, so he did not appear to change models too often.

The only photo of Andrjukov found was in Vol Libre 2000 This photo is obviously not from 1991 but it is all we have found.





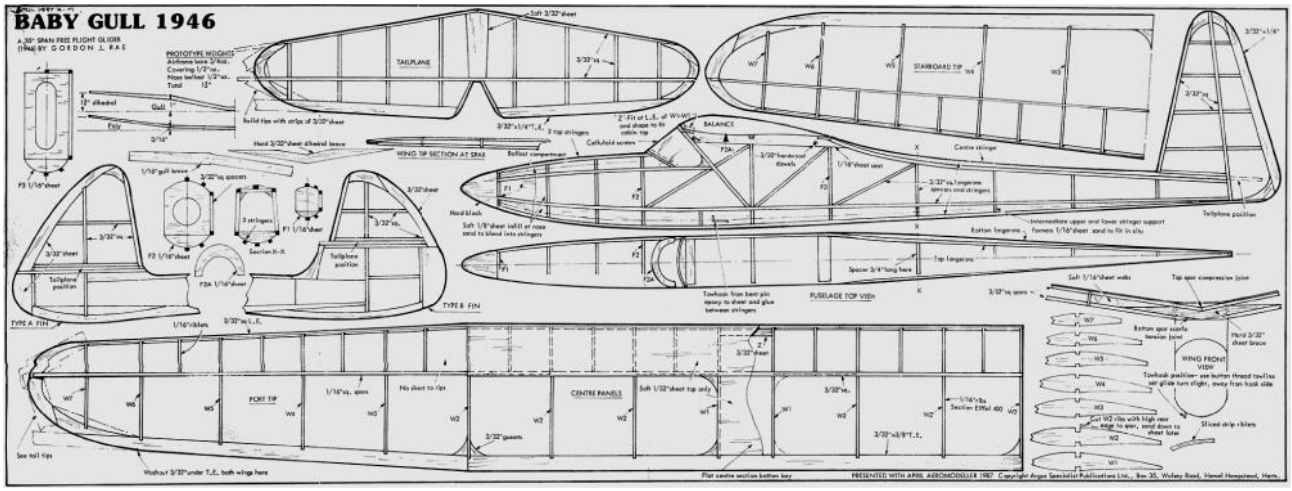


Roy Tiller

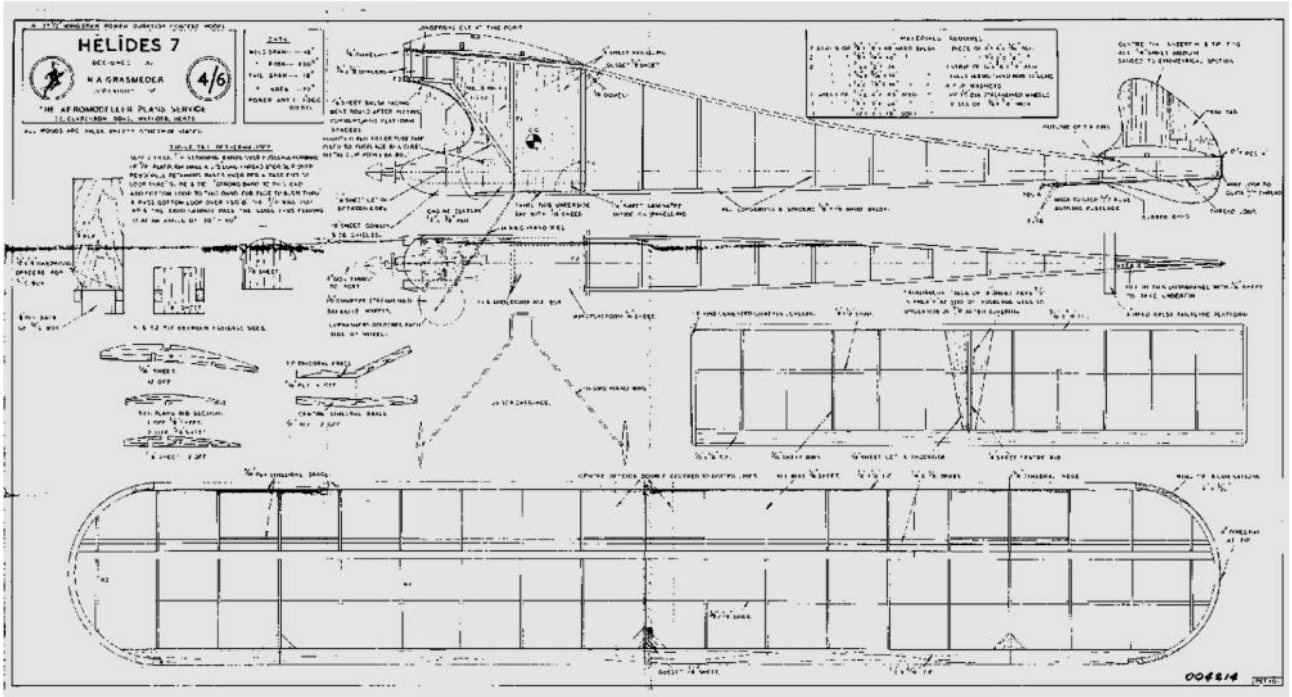
Plans from the Archive - Roger Newman

Notwithstanding the lures of things like Il Moar, we come back to earth with a few "build it this winter" models!

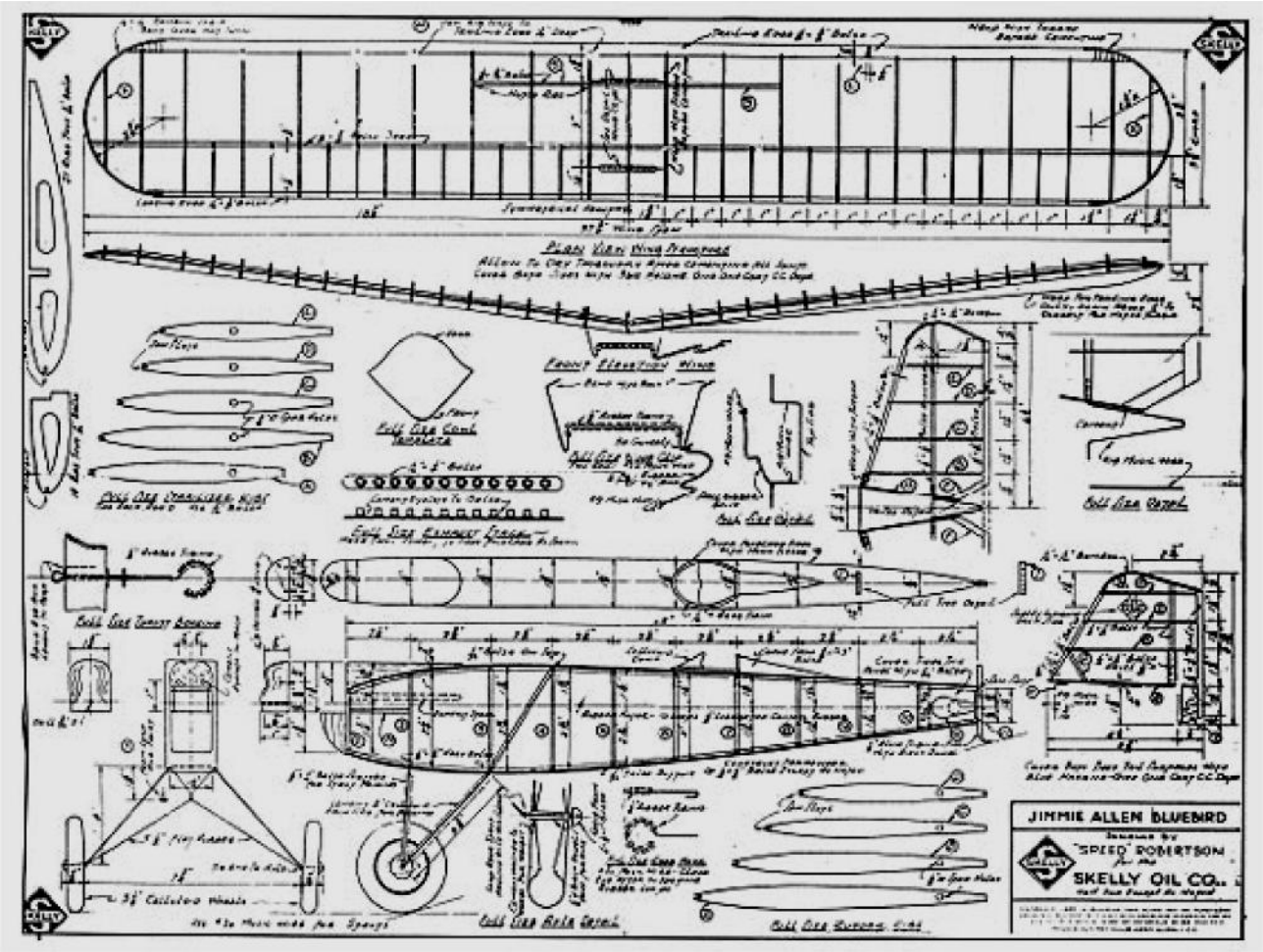
First up has to be a candidate for Bungee glider: an elegant post war small model by Gordon Rae, republished by the Aeromodeller in the late 1980's.



Next – Andrew Longhurst was observed flying this power model at the December MW meeting & proceeded to max out together with Tony Shepherd, who was flying electric – briefly reported elsewhere. Not Andrew's usual scene but still the same high class flying!



Finally, supporting Roy Tiller's push for more Jimmy Allen mass launches, here is one from the Jimmy Allen stable. We have several Jimmy Allen designs listed in the plan library that are already scanned – some are originals & some are redraws.



Roger Newman

Letters to the Editor

John, **'A Holey Tip'**

A little while ago a modeller friend, who was about to build a Pzaz P30, asked for help in making the holes in the ribs for the carbon tube spar. He found that using an ordinary drill produced a ragged hole and tended to break the rib which is thin section.

I made him a special tool from a piece of thin wall brass tubing, of the correct diameter, sharpened inside on a lathe or held in an electric drill, that produced a very clean hole. The discs that collected in the tube could be easily pushed out.

Regards *John Worsley*

Hi John

On behalf of Peter Carter & myself we would like to thank you for all your hard work in editing and producing the New Clarion for without your dedication and drive we may not have our favourite magazine to look forward to every month, so thanks again. Further, Peter & I, (and we're sure that all the FF modellers' who use the area 8 site on Salisbury Plain will agree) would like to say a very big thank you to Bernard Aslett,

for the organization and issuing of our season ticket passes each year, this is really appreciated. Also thanks to Peter Tribe who advises us on the availability of area 8 for the weekend flying on the Friday by E Mail or by phoning him. We are grateful for all their help, for without them we would possibly loose this FF site. Although the weather in 2012 was very poor to say the least for FF flying, let us hope that 2013 is very much better.
Peter & I would also like to wish all Sam 1066 members and their families very happy & healthy New Year.

Syd Hylan Sam 1066

A Technical Analysis of Rubber Strip - Carl Bakay

Courtesy Indoor News and Views Editor

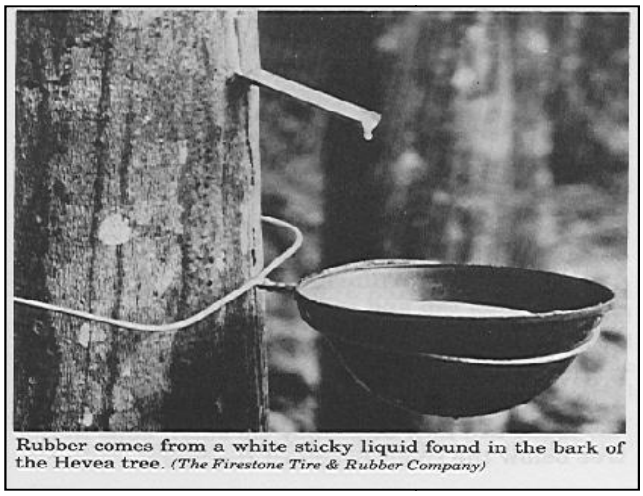
To start with a little background, I was working at Union Carbide Corporation in the 1960's as an organic R&D chemist at their Silicones Division in Sistersville, West Virginia. Although it was not my assigned area, many of my friends were involved in the new field of synthetic silicone rubber, as were our counterparts at General Electric and Dow Chemical, now Dow Corning. The task was to find a way to make uniform batches of silicone gum feedstock, and use it to make silicone elastomers for demanding environments such as aircraft window and door seals, engine o-rings, and the like. You have seen the gum sold in a slightly doctored form as Silly Putty, and it is also spread on paper as a non-stick backing for peel-off postage stamps and address labels everywhere.

Well, as you might expect, not only did the silicone gum come out of the extruder in a wide range of viscosities, but when blended with fillers and catalysts, the resulting rubber it produced had properties all over the scale. One batch of rubber would be outstanding, and the next would have to be burned. No one could explain it. We liked to relate a similar tale of woe in the paper making industry. The paper mill once made an outstanding roll of card stock for IBM cards, and the foreman wanted to know if he should ship it. The quality control guy said no, destroy it, because IBM would want more of the same, and they could never make it that good again. Although my friends at Union Carbide worked on the problem for years, to this day, synthetic rubber manufacturing is more an art than a science. This is true even more so for natural rubber products.

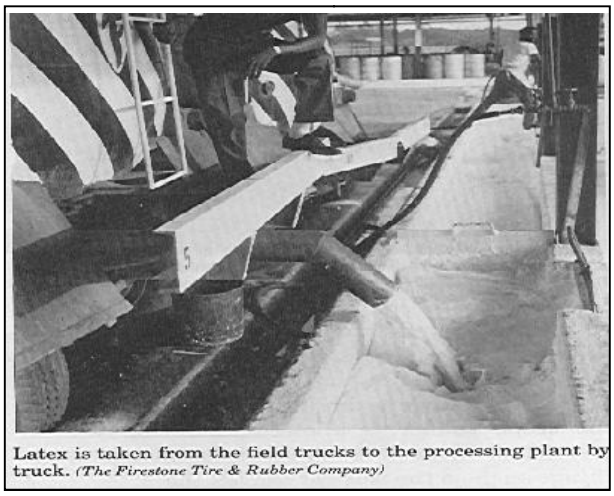
FROM SAP TO STRIPS

We rubber fliers find ourselves in an even greater dilemma than the stories told above. Tan II is a natural rubber product that relies on tree sap as a raw starting ingredient. And as John Clapp said, like wine made from grapes, some years are better than others. As you will see, adding in the variable of manufacturing just compounds this problem (a little pun, that).

Most of today's natural rubber comes from the sap of the Hevea tree, growing within 15 degrees of the equator. Its bark contains a milky fluid called latex, from the Latin lac, meaning milk. From the time the tree is six years old until it is about thirty-six, it can be counted on to produce about four to fifteen pounds of latex a year. As shown in the photos, this is collected from each tree in cups, and taken by truck to a processing plant. There it is mixed with acid causing it to curdle and separate into rubber and water.



Rubber comes from a white sticky liquid found in the bark of the Hevea tree. *(The Firestone Tire & Rubber Company)*



Latex is taken from the field trucks to the processing plant by truck. *(The Firestone Tire & Rubber Company)*

The Dry Process

This crude product is then squeezed, dried, and formed into bales for shipment all over the world. Most natural rubber products are made overseas in countries such as Taiwan and Malaysia. This puts the whole operation economically close to the equator where the hevea trees grow best. But when a bale of rubber is shipped to another country, it may have all manner of animal and plant contamination from the dock and the cargo hold. So first it is sliced into small pieces, washed and dried to get rid of impurities, and sent to a compounding room. Here, strips of crude rubber are fed through rollers which heat and soften it. As shown above, vulcanizing agents such as sulfur and charcoal, accelerators, pigments, fillers and antioxidants are added as specified by the laboratory.

In the mixing operation, rubber, carbon black, sulphur, and other materials are carefully measured into a large machine. *(The Firestone Tire & Rubber Company)*

After the final mixing, the rubber is rolled into a continuous sheet ready for further processing. *(The Firestone Tire & Rubber*

It is now combined with about an equal amount of reclaimed or synthetic rubber, and fed into a Banbury mixer, which has grooved rollers and can do a better job of mixing than a smooth roller mill. At this point, it is still a crude, workable mixture, and what happens to it next depends on its end use. If it's going to be made into rubber bands, the mix is fed through an extruder which forms a continuous rubber tube. I have visited one such domestic producer called Alliance Rubber in Hot Springs, Arkansas. The president, Richard Spencer, developed and patented a continuous extrusion process using a 460 degree salt bath curing system that produces rubber tubes of about 45 mils wall thickness in minutes. These are usually chopped into rubber bands of all kinds. But the continuous tube is very high in quality and made from 100% latex with little or no filler, and can be slit into a sheet and then strips for model airplane use.

For more conventional rubber strip, the slabs are heated on a warming mill and passed through a calender, which has a series of rollers adjusted to turn out a sheet of any thickness. For Tan II, it is calendered into sheets 0.021" thick, and two of these sheets are then pressed together and vulcanized to get a 0.042" thick finished rubber sheet. A more uniform product can be made in this way than by rolling one, thicker sheet. This is treated with talcum powder and fed through slitters to get $^1/_8$" and ¼" Tan II rubber strip.

As far as size goes, this customer can testify that quality control is very good. FAI Supply says the thickness is 0.042 $\pm$ 0.005", and I've seen a range from 0.0415 to 0.0433 by measuring 6 to 8 strip stacks with a micrometer, which is considerably better than claimed. As for the width, my 1/8" strip samples are always exactly 0.125" with no discernible variation.

The Wet Process, or Look Out Tiger Woods

If the reader is looking for a good source of high quality indoor modeling rubber, already in the small sizes used by these flimsy creations, here is an idea. Cut open a Titleist brand golf ball of the 'DT' series, and inside you will find 18 to 25 yards of high quality elastic thread just under the cover. This is the same thread used in elastic underwear, socks, bathing suits and stretch pants, but of a much better quality. (Mostly because it has little or no cheapening filler). Let it 'rest' overnight in a cool place, tie some in a loop the next day, and you will put up some acceptable flights.

Rubber thread is made by something called the Wet Process. This means that, rather than starting with blocks of coagulated latex and dry additives, it starts with the latex still in solution as it comes from the tree. In a large vat, sulfur, zinc oxide, accelerators and pigments are added to the milky fluid and mixed thoroughly. The advantage here is that batches can be very large in volume and properties of the finished product held very constant. The disadvantage is that it is prohibitive to ship tanks of watery liquids any distance, so the manufacturing plant must be near the plantations to be cost effective.
Now the solution is allowed to run by gravity from little nozzles into an acid coagulating bath, where it hardens from a into thread, then it is water washed, dried, and steam oven cured continuously.

You see, there are two kinds of golf balls, and you will find this out for yourself if you cut open as many as I have. The solid-core ball preferred by Tiger and others has a hard polyurethane filling, often around a hard rubber center. This gives the ball great distance and predictability. In the other pocket of the golf bag are often the 'wound' balls, as they are called. They are springier and provide more hook and slice, if you have the skill and that is what you want. The rubber thread for the wound version can be made by slicing rubber sheet into strips, but is more economically and uniformly made by the wet process.

This thread is very tough and elastic, with energy storage similar to the Italian Pirelli rubber strip of the 1970's (see the table at the end). This is because it is all natural rubber, with only about 1 to 5% filler, and is slow-cured in a steam oven. Two other advantages make it unique. With the large batch sizes possible in the wet process, the properties can be held very uniform. Also, the thread can be made as a composite, with a highly elastic soft rubber core, and a thin coating of tougher, oxidation-resistant material.

A HISTORY LESSON

Years before I was around, the earliest Comet 'dime scale' rubber model kits were put out in the 1930's and were called that because they sold for either 10, 15 or 25 cents. For power, the instructions showed how to cut thin strips from an inner tube, and tie them together. During the Depression, this was a cost-effective way for a kid to obtain rubber strip.

Model Aircraft Labs, or MAL, in this country sold rubber in the 1930's and 40's with marginal energy. Some years later, J. H. Maxwell of Scotland was cutting balsa sheets specifically for indoor models, and was one of the first to offer rubber for them from a catalog in 1954, but the source and quality are not mentioned. One supplier in the 1950's was Dunlop, with it's T-56 product. Move ahead twenty years to the 1970's. Now, there were two main sources of contest material available. One was Italian and called Filo Elastico, known in America by the more common name of Pirelli. The Italian product was originally sold as an elastic strip to tie up grape vines without damage, so the story goes, when it was discovered by modelers to have an excellent energy storage and release. But it was very prone to breakage on hot days in the hangar, and just about useless for outdoor flying in the 110 degree sun of the California desert. The other was a darkish stuff supplied by Ed Dolby called FAI Gray rubber, after the international aeronautical federation in Europe. The supply of both was as irregular as the quality. Pirelli could vary from 1800 to 3900 ft-lbs/lb, when one could get it, and the more available gray FAI from 2700 to 3600 ft-lbs/lb. The year 1981 saw the last of Pirelli shipped here, leaving only the FAI Gray.

Being a pro-active kind of guy, past NFFS president and champion indoor flier Tony Italiano went to his family homeland in 1985 on a fact-finding tour. He found at that time a Pirelli factory at Milan made the rubber sheet, and the stripping was done by Filati in a town called Gergamo. But the supply of rubber strip was an experimental affair, and the gentleman who had been making it had grown tired of risking hundreds of kilos of raw material on something that might turn out to be scrap. Since Tony took his trip, the gentleman has died, and the rubber has all but vanished.

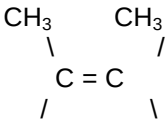
Then, in June of 1993, Ed Dolby of FAI Supply introduced a new cream-colored product that took our hobby by storm, which some call Tan I. More stretchy and less prone to breakage than the dark gray FAI material, it had energies from 4200-4500 and set all sorts of new indoor records. Today's competition Tan II rubber supplied by John Clapp, who took over the business from Ed, is now the only available, but still holds the high quality standards of the original material introduced in 1993.

THE CHEMICAL SIDE OF RUBBER

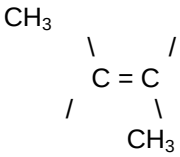
Natural rubber is a unique material. It is malleable and can be extruded and molded like a liquid, yet it is elastic and retains its shape like a solid. What modelers like is its ability to absorb energy in the form of stretching and twisting, and then give back most of that energy in returning to its original shape. (If it is of poor quality and loaded with fillers, it won't spring back at all, and retains a "set".) It is able to do this because rubber is a matrix of long polymer chains. "Poly" means many and "mer" means units, so these long chains are made up of many, repeating, units.

The monomer is called isoprene, and is made up of four carbon atoms, with what chemists call a "double bond" in the middle. On either side of this bond are two methyl, or CH_3, groups, large and bulky.

"Cis" Configuration



"Trans" Configuration



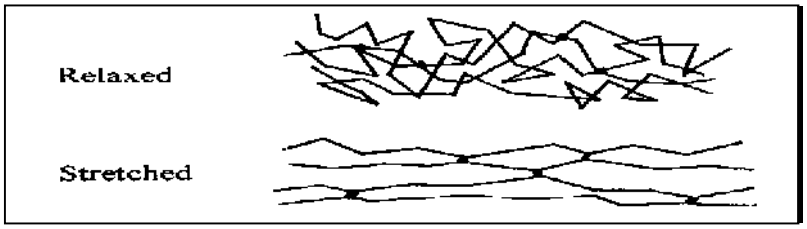
As latex forms in the bark of the hevea tree, the monomer units join up to make a rubber polymer. The size of the molecules are determined during the growing season, and change from tree to tree. Since the double bond holds the two central carbon atoms rigidly in a plane, the methyl groups can either be on the same side of the rubber chain (cis), or on opposite sides of the rubber chain (trans) as it forms. So, aside from the molecule size, or molecular weight, the cis-trans ratio is determined at this time. This is because the molecule is never all of one or the other, but a mixture of the two configurations.

This is not so important to us while the latex is in a watery solution, and the long chains are just floating about in a dissolved state. But as the latex is coagulated, dried, rolled, and generally beat to death, the molecules fold into an ordered, elastic mass. If there are a high proportion of Cis units in the chains, the bulky methyl groups prevent folding, and the final vulcanized product will have one set of properties. If there are a higher proportion of Trans units, the chains are more flexible and can fold easily into a more ordered solid. This final product will have a different set of properties.

What is known at this point is that the "cis-trans ratio" in rubber is very important in determining, and eventually predicting, its properties. What is also known is that a more highly folded solid has the best elastic properties, but will crystallize more easily, and then break under high stress. This has been born out by experience with the best batches of Tan II. They would take many turns and store lots of energy, but had a tendency to shatter, often in flight, and destroy a model. Sport and scale fliers would not notice this, because they would wind to 70 or 80% of the breaking point. But the competition fliers going for maximum duration would wind to 95 or 98%, and do so only with great care.

THE ENGINEERING SIDE OF RUBBER

Engineers have long known of elasticity when measuring the strength of materials – it can be measured in the form of a stress-strain curve. An applied stress, or pulling, yields a resulting strain, or elongation or twisting. This is reversible, so all solids are elastic to a certain degree, until the stress exceeds the strength of the material, and it breaks. This is called the yield point. Vulcanized rubber is a tremendously strong material, but it doesn't give much warning of its yield point - it just breaks.
As shown in the sketch at below, in its relaxed state, the chains are folded and entwined around each other. They are also crosslinked, or joined to other chains by linkages in the sulfur atoms formed during the vulcanization (or curing) step in manufacturing. But when stretched, the coils unwind and absorb energy. If kept lined up at the right temperature for too long, crystallization and breakage can occur.



An important feature of a reversible stress-strain chart is that the stretching and relaxation curves don't lie on top of each other. In other words, you never get out what you put in. This is due to hysteresis, a French word meaning 'to fall short'. In the case of rubber, it is energy lost. Pull on a rubber band and press it to your skin; it will feel warm. This is stretch energy lost in the form of heat. Pull very hard on it and hold it for a long time, and it may turn brittle and snap. This is energy lost in forming brittle crystals and the failure of weak crosslinks in the rubber matrix.

We see an extra variable when using inexpensive rubber bands and other products. The chalk filler added to lower cost also has a tendency to 'pop out' of the matrix when stretched or when rubbed by the friction of knot formation, leaving weakened voids that won't return to their original shape. So, in general, the less the fillers, the higher the natural rubber content, giving the least hysteresis loss, and the most energy.

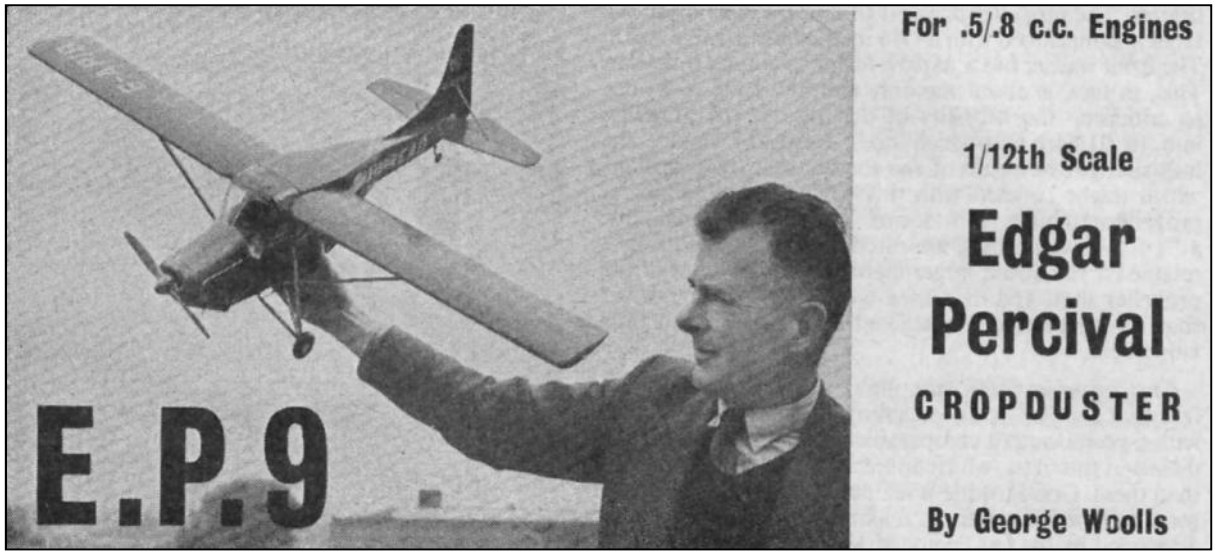
Continued next month – Energy levels – Testing – housekeeping *Carl Bakay*

Aeromodellers Departed

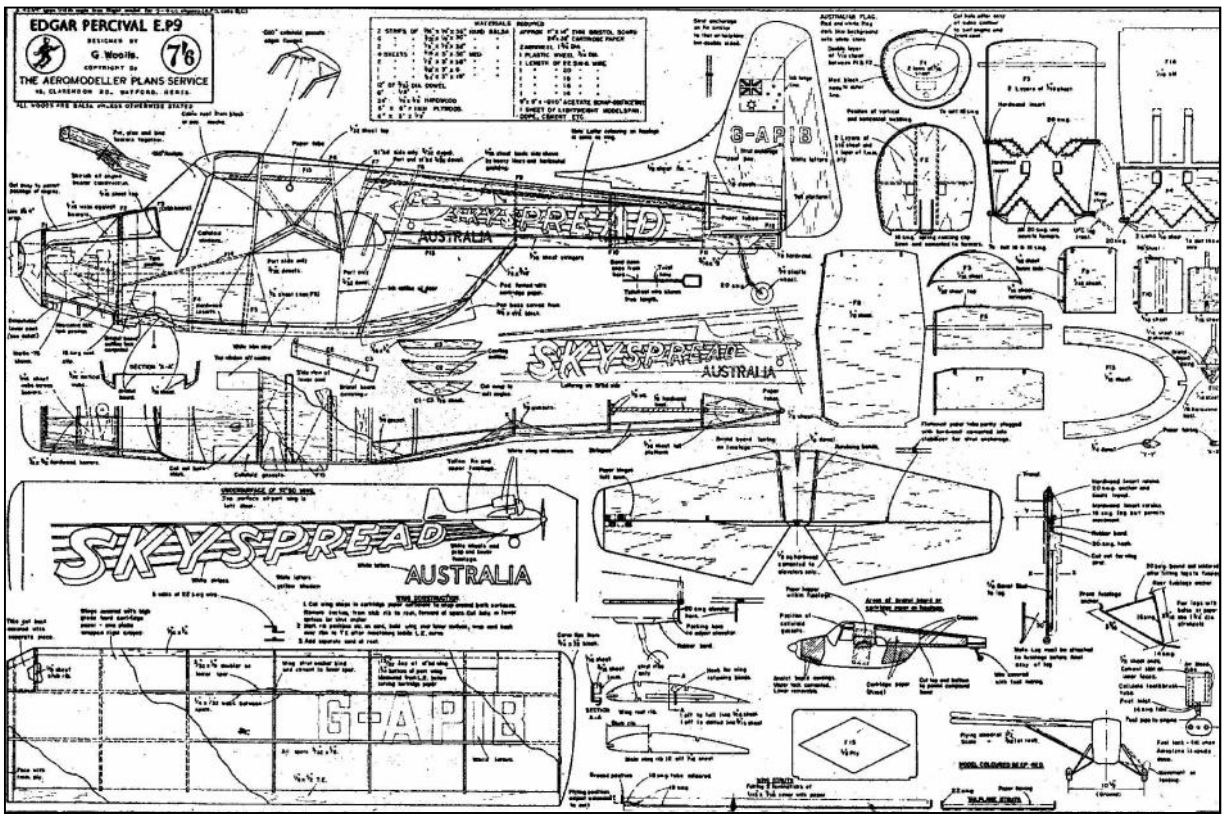
Sal Taibi: With deep regret we report the passing of one of the big names in the Vintage Movement. Sal was one of the original 'shakers & movers' of the Antique Model movement, especially through the SCAMPS Club in Southern California USA of which he was a member. He passed away in his sleep on 14th December 2012.

Jane Howick: One of our own, best known in recent years as the organiser of the Lulu Postal. Jane's passing is unexpected by most, she will be sorely missed. Her tall athletic figure and flying abilities will be a great loss to our flying fields.

Report No. 26 - George Woolls, the last of the plans.

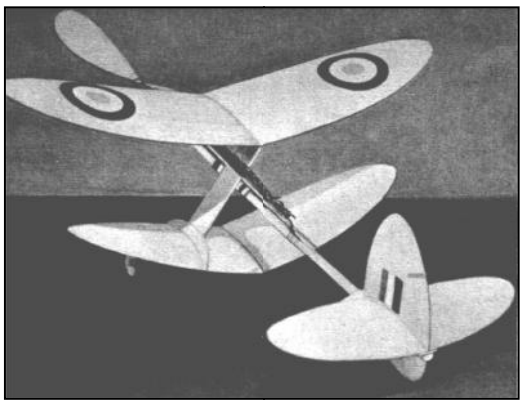


Aeromodeller March 1959 published plans for George's Edgar Percival EP9 Cropduster, 44" wing span, powered by a Merlin 0.76cc diesel engine. The wing struts have an ingenious sliding hook system to give 3/8th dihedral at rest and 1 ½ inch dihedral when flying. Much of the model is covered in cartridge paper to facilitate sign writing of the "SKYSPREAD AUSTRALIA" logo.



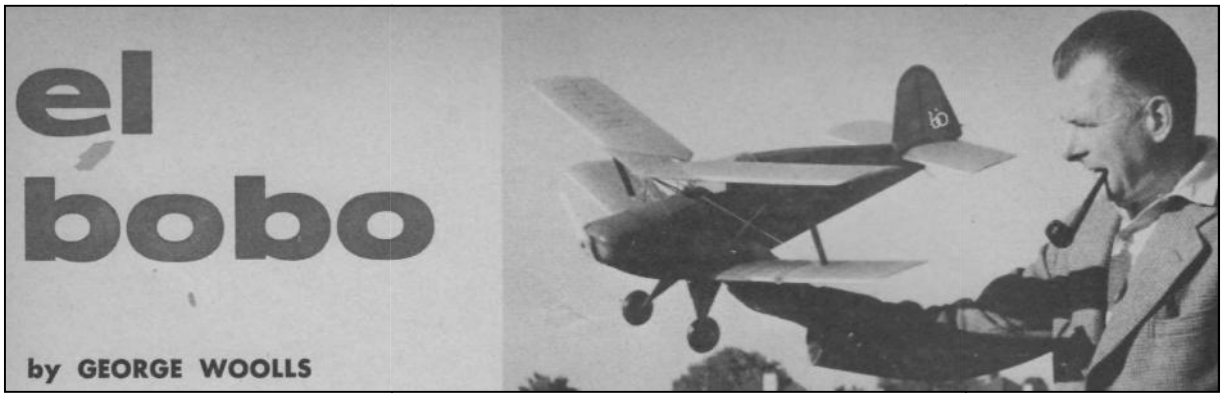
Then George is across the pond again to U.S.A.

Flying Models February 1960 has his Bi-Playne, a 28 inch wing span biplane powered by a .049 glow engine such as a Cox Pee-Wee. George writes "The Bi-Playne is a scaled up version of a little 10inch span all balsa rubber powered bipe that, despite being built some 3 years ago, still provides a lot of fun". Here is a picture of the little rubber job which was published in Flying Models Dec 1957 and featured in NC Nov 2012.

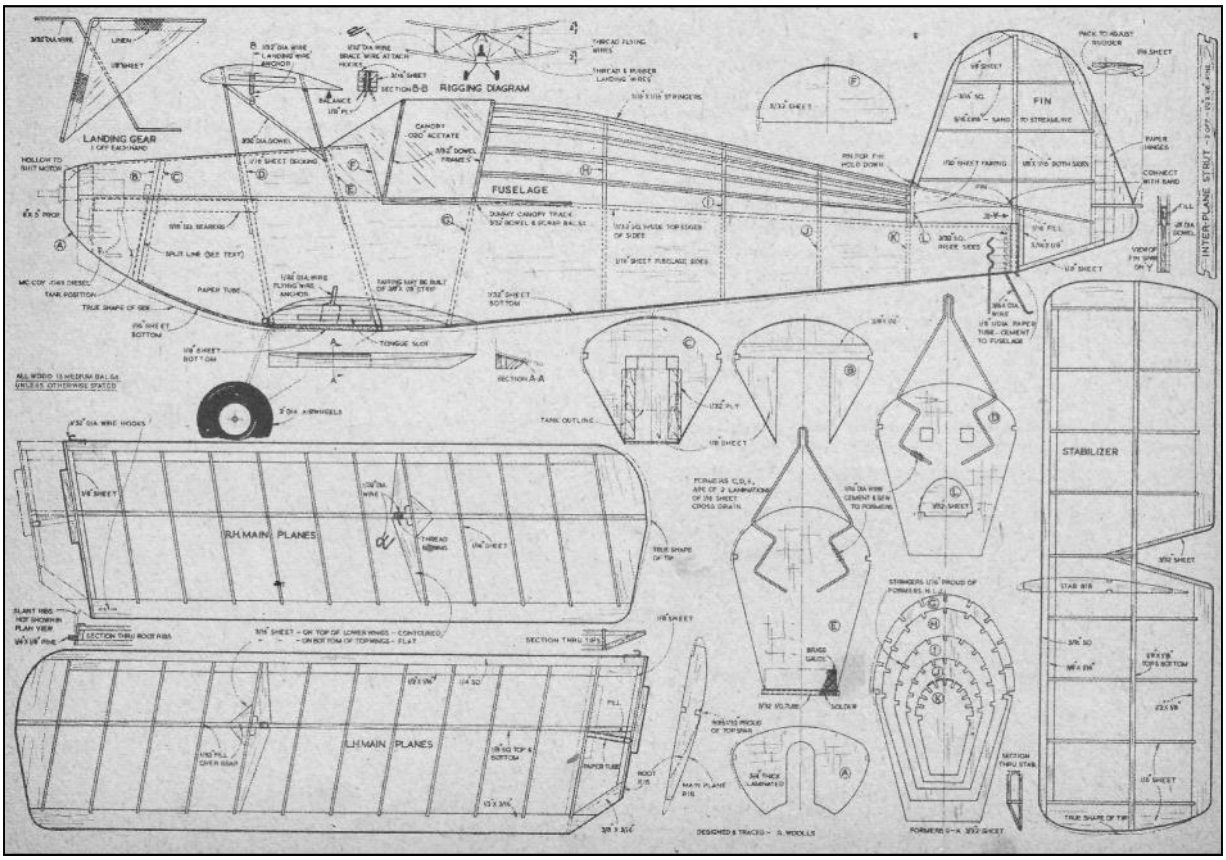


The plan is published full size over many pages widely spread throughout the magazine to make sure that you see plenty of the published advertisements.

Still in the USA, George's next published plan was in Model Airplane News March 1960 and is another biplane.



The heading photo shows George smoking his pipe and holding "el bobo" (all lower case) his 34 inch span free flight biplane powered by a McCoy .049 diesel. George says that it is not scale but a mixture of Pitts Special, Great Lakes Trainer and Bucher Jungmeister. The article has a cut away drawing and reduced plan. The full size plan is available as Set 68 which includes not only "el bobo" but also a Nordic glider and a scale U/C model (C/L to the Brits) all for 50cents P.P. which I assume meant post paid.



That was the last of George's models found in magazines in the library.
From March 1950 to March 1960 we have 18 published George Woolls plans. These include one glider, one indoor, five power and eleven rubber powered models. There were four tailless models, four biplanes, three Warren Young wings and two Wakefields.

George was clearly an experimenter and innovator with plans published throughout a decade but after March 1960 we have nothing. Did his interest move to RC or boats or trains? Was he lured away to a good job in USA leaving little time for aeromodelling?
If you know anymore of George and his models please e-mail your info.

<u>Wanted</u> to add to the DBHL collection.

Flying Models April 2007

I thought that we had all the Zaic Yearbooks but no, we still need Zaic68, comprising material that Frank Zaic collected but never published. Finally issued by NFFS (National Free Flight Society) in the U.S.A. in 1985 as the 1968 New Model Aeronautical Yearbook.

Contact, Roy Tiller Tel: 01202 511309, e-mail: **roy.tiller@ntlworld.com**

Roy Tiller

James May's Toy Stories - Editor

Over Christmas Top Gear's James May presented a TV program in his series 'James May's Toy Stories' in which he proposed to set a new cross channel record for the first flight by a model glider. For those who may have missed it, it can be viewed on the internet by clicking on the link:

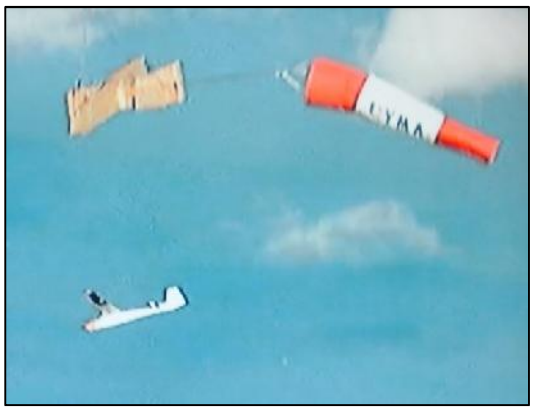
http://www.bbc.co.uk/iplayer/episode/b01pmbmx/James_Mays_Toy_Stories_Flight_Club/

James May with the Glider

The initial premise boiled down to dropping the glider from below a helicopter at 8,000 feet altitude over Dover, and then gliding to Calais in so called free-flight.
Free-flight in our sense of the word it certainly was not. The model was stuffed with electronics. A GPS guidance system for certain and I am convinced that it had full R/C control system to boot, for emergencies should it stray.
The French authorities put the Ky-Bosh on a channel crossing by declaring the model a drone and drones were not allowed in French airspace.
The exercise was then modified to be a crossing of the Bristol Channel, a flight of a similar distance. Release of the aircraft from below the helicopter was solved by a suspended box with glider inside until altitude was reached.

The flight release box suspended below the helicopter' stabilised by the airfield windsock

The attempt was a dismal failure, why they bothered defeats me. The helicopter could only reach 2 or 3 thousand feet altitude due to cloud and the subsequent flight, if memory serves, only lasted a few miles before terminating in the sea.



A perfect release but too low and the need for recovery at sea was inevitable

A second attempt was made on the next day but the goal posts were changed again due to wind direction *(boy does that ring a bell),* the flight now was from Illfracombe to Lundy Island. A release at 10,000 feet followed by a flawless flight to arrive over Lundy at 2,000 feet. The model then circled under its own GPS control as the chase group were not able to keep up on land as there are no cars on Lundy. The model landed 20ft from the programmed grass airstrip.

The model passes over Lundy's lighthouse

First on the scene, a passing family

First at the landing sight, seen through the onboard camera, were a passing family and the comment made by the child was the highlight of the programme for me. The model had been fitted with a model pilot in the likeness of James May and the young lad looking in the cockpit and seeing model pilot said:

"It's the man from Top Gear, the stupid one".

The initial object was not achieved, the attempt at the Bristol Channel was unrealistic on the day but the final trip to Lundy was a brilliant achievement.
The programme is well worth a look, but I cannot see it being declared a record.
I invite comments on the programme for next month's issue.
(pictures are less than perfect as they are from a TV screen) *Editor*

Crookham Gala 2013

The 2013 Crookham Gala will be held at Middle Wallop on

Sunday 27 January (Provisional).

Contests start at 1000. All contestants must be BMFA members, cards will be checked at the gate. *An* airfield entry fee will be payable at the gate. The following competitions will be held:

Combined Power to BMFA rules
(Note: no electric classes from 1 Jan 2013);
Combined Glider to BMFA rules plus tailless on 100m line;
Mini Vintage to BMFA rules; FIG to BMFA rules
(number of rounds to be decided on the day);
E36 to the rules shown below.
Contact Roy Vaughn on 01344 779071 or
roy.vaughn@btinternet.com

N.B. The competition may be flown in some form of rounds in order to make best use of the field in changeable weather conditions. It is therefore important that competitors plan to arrive at the airfield promptly for the 10am start. This applies to all classes.

E36 at the Crookham Gala

The removal of BMFA Electric and F1Q from Combined Power leaves a gap for electric flyers in this year's Gala. To redress the balance, it has been decided to run the UK's first E36 event enabling us to gauge what appears to be a significant level of interest for this embryo class. If there is a healthy level of enthusiastic entrants it is hoped that Middle Wallop event days during 2013 will have further E36 competitions whilst other clubs will be contacted with a view to encouraging them to feature E36 in their own club contests. The competition will be flown to the following rules:

- 36 in. maximum projected wingspan allowed
- 120 gm minimum weight ready-to-fly.
- No auto surfaces allowed.
- Any type electric motor allowed.
- Nickel or lithium batteries allowed, 2-cell lithium limit or 6-cell nickel limit. Gearing and folding props allowed.
- The competition will normally comprise three flights each to a 2 minute max and 15s motor run. However, the CD will have the discretion to decrease the max by 30s steps and motor run by 5s steps to suit conditions on the day.
- If a flyoff is required it will be flown with a 5s motor run and unlimited flight duration.
- The motor run is to be verified on the ground before flying (it is only required that ground timing is carried out before the first flight).
- The motor run will be deemed to begin when the motor timer starts and end when the propeller ceases to rotate. In addition the motor run shall be checked visually during each flight and a clear overrun will constitute an attempt.
- Flights of less than 20s will be treated as an attempt and one reflight will be allowed.
- Safety locks must be used to prevent unintentional restarting of motor(s) after the motor(s) have been stopped.

Contact Tony Shepherd 078 118 75207 or tonvshepherd50@hotmail.com

Croydon Wakefield Day

Saturday, March 30th 2013

Middle Wallop, SO20 8DY 51° 08' 59.18"N, 1° 34' 25.15"W

F1B, for the Thurston Trophy
4oz Vintage Wakefields for the Fairlop Cup
8oz Vintage Wakefields for the Ted Evans Trophy
SAM-eligible models will be allowed.
10 second bonus for r.o.g. in the Vintage classes.
Marcus Lightweight Challenge,
for the four Marcus lightweight designs
Raff V, Supa Dupa, Dynamite and Bazooka.

The start is 10 a.m.
F1B contest will be flown in rounds starting at 10.00.
The airfield is available for free-flight trimming & Fun Fly.

Contact : martindilly@compuserve.com or call 020 8777-5533

65th Southern Area Rally

RAF Odiham 21st July 2013

Provisional

RAF Odiham have given permission for the 65th annual Free Flight Rally
To be held on July 21st 2013
This is a change to the date in June previously asked for
which is not available due to operational requirements.

Once the Licence arrangements are in place
I will give full information of Events to be held and cost etc.
John Thompson CD.

DBHL Plan Service: IMPORTANT:

The rules for obtaining plans have changed.

If you want a copy of any plan from our library, please read the following:

As from 31st July 2011 only digital files of plans from the DBHL will be available. It is up to the recipient of such files to get them printed, as my local Copy Shop has closed & at present there is no alternative source for me to get plans printed at an economic rate.

The process for obtaining a digital file of a plan is:

Email request to rogerknewman@yahoo.com,
quoting Plan Name & I.D. number (1st & 2nd Cols respectively in the list).

If the plan has already been digitised, the requester will receive an email with an attachment of the plan in a digital format that can be printed at a local Copy Shop. The easiest ways to do this is either to download the plan from your PC to a memory stick & take the memory stick to your copy shop (but check with them first that they can handle digital files!), or – if your copy shop accepts emails, send them an email with the attachment, asking them to print the attachment. Scaling is automatic.

If the plan has not yet been digitised, a scan of the paper plan has to be done but this could take up to two weeks, sometimes longer if a clean-up is necessary. Once I have received the digitised file back, the requester will receive an email with an attachment of the plan.

This service is provided at no charge.

You are reminded that many more plans are available through our cooperative venture with partners in the USA, New Zealand & Slovakia. The combined list of these plans can be accessed via www.co-op-plans.com. Any plans requested via the Coop incur a small charge – see the web site for details. Exactly the same principle applies in that only digital files of plans are available.

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: martindilly@compuserve.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 on 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.

MSP PLANS PRESENTS

Vintage, Classic, Sport and other Duration Designs

MSP PLANS drawn by Martyn Pressnell, offer a collection of model aircraft designs selected for their aesthetic qualities or unique origins. 'Popular Plans' are stocked, the more complex 'Collectors Plans' are printed to order including Historic Notes. All drawings are AO size, some as twin plans.

The list below includes Vintage Models generally pre 1951 and Classic Models 1951 to 1961.
Photos of most models can be seen on my website - www.msp-plans.blogspot.com

POPULAR PLANS • £7.00 EACH INCLUDING UK POSTAGE. FOLDED FOR POSTING

MICK FARTHING 1942	The 40 in span Lightweight Contest rubber model with a diamond fuselage.
MICK FARTHING'S THE PAPER BAG'	Mick Farthing's last lightweight rubber model of 1946.
RAFF V *1947*	Designed by Norman Marcus who was National Champion in 1946.
ODENUAN'S 1950 *NORDIC A2*	Swedish Championship glider, placed second in the first World International in 1950.
SENATOR 1950	RUBBER Designed by Albert Hatfull and kitted in 1950. Twin plan with Ace
ACE 1950 RUBBER	Designed by Bill Dean and kitted in 1950. Twin plan with ***SENATOR.***
ENGLISH VIKING *1953 A2 GUDER*	Designed by Bill Farrance twice winner of the SAM Radislav Rybach trophy.
CRESTA	A 38 in wingspan low-wing design for small diesel or electric motor installation.
FRED BOXALL'S 1956 OPEN RUBBER MODEL	Twin plan with Boxall's ***SEAPLANE.***
FRED BOXALL'S SEAPLANE (1965)	Twin plan with the 1956 *OPEN* ***RUBBER MODEL***
LAST RESORT 1956 CLASSIC RUBBER	Open Rubber Model designed by Jim Baguley, Twin plan with ***FIRST RESORT.***
FIRST RESORT 2006	by Martyn Pressnell for the BMFA Rubber Class. Twin plan with ***LAST RESORT.***
WINDING BOYII 1956	by Urtan Wannop, 38 in.span, Twin plan with ***McGILLIVRAY's LIGHTWEIGHT.***
JACKMcGILIVRAY's LIGHTWEIGHT 1958	36 in. span lightweight rubber model Twin plan with ***WINDING BOYII.***
CAPRICE 1959 GLIDER	The renowned lightweight glider of 51 in span. Twin plan with ***GAUCHO.***
GAUCH01960	power duration model for 1.5 cc engines. Designed in 1959 Twin plan with ***CAPRICE.***
VAKUSHNA1959 A2	Designed by Brian Dowling this glider won the 1960 Richer Cup

COLLECTOR'S PLANS - £10.00 EACH FOLDED OR ROLLED. WITH HISTORICAL NOTES

JUDGE *1945 WAKEFIELD*	by Bert Judge to the 1945 rules as a direct descendant of his 1936 Wakefield Cup winner,
HERMES MAJOR	A 150% enlargement to 61% in span, of the 1949 *HALFAX* ***HERMES***
FRANK LOATES' 1949 WAKEFIELD	Canadian Wakefield 5th in the World Championships at Cranfield, England, in 1949.
BORJE BORJESSON'S 1949 WAKEFIELD	Swedish Wakefield 6th in the World Championships at Cranfield, in 1949.
GHOST WAKEFIELD 1951	John Gorham's 1951 Wakefield, a successful rubber model from the early 1950's.
RON WARRING'S 1952 WAKEFIELD	The geared geodetic model, developed by Ron Warring for twin motors,
NIGHT TRAIN Mk I 11960	George French's Night Train which pioneered the use of VIT systems in the UK

To order plans for UK delivery please write with cheque (£ sterling) made payable to
Martyn Pressnell, 1 Vitre **Gardens, Lymington, Hants,** S041 SNA.
For overseas delivery of Popular Plans send local bank notes equivalent to £10.00.
Enquiries: please write or email martyn.pressnell@btintemetcom

MSP-PLANS ARE PLEASED TO PRESENT A NEW BLOGSPOT

This has just been produced to replace my former website which BT have declined to support and which I am now unable to maintain The new address is; www.msp-plans.blogspot.com
This identifies the collection of plans that I have produced for aeromodellers together with the rules for the Bournemouth Club Classic Rubber class. There is also a sample of the publications produced over the years with 'Rubber Motors - Maximum Turns' as the current offering.
I hope you find this a useful website which will be updated with more information from time to time. Martyn Pressnell

Indoor Flying with the South Birmingham MAC

Free Flight Only

Thorns Leisure Centre.

Stockwell Ave.

Off Thorns Road - Quarry Bank - West Midlands - DY5 2NU

Saturdays 1pm until 4pm

15th Dec. 2012

2013

5th Jan. – 9th Feb. – 9th Mar.

6th Apl. – 11th May

Admission - Flyers £5.50 - Spectators £2.00

For further information phone Colin Shepherd 0121 5506132

or e-mail colin@colinwilliam.wanadoo.co.uk

Brownhills Indoor Flying – Free Flight

Brownhills Community Association,

Deakin Ave. Brownhills WS8 7QG

Just off the A5

Saturdays 1-15pm until 4-15pm - £6

Dec 8th

Jan 12th – Feb 2nd – Mar 2nd

Apl ? – May 4th – Jun 1st

Contact:- Tony Eadon-Mills

Tel: 01952 240451 - e-mail: tonyeadonmills@gmail.com

BMAS

BOURNEMOUTH MODEL AIRCRAFT SOCIETY

INDOOR FLYING

TUESDAY 25TH SEPTEMBER 2012

TUESDAY 23RD OCTOBER 2012

TUESDAY 27TH NOVEMBER 2012

TUESDAY 22ND JANUARY 2013

TUESDAY 26TH FEBRUARY 2013

TUESDAY 26TH MARCH 2013

7pm to 10pm

ALLENDALE CENTRE

HANHAM RD. WIMBORNE BH21 1AS

FREE CAR PARKING IN PUBLIC CAR PARK IN ALLENDALE RD

FREE FLIGHT ONLY

COMPETITIONS incl GYMINNIE CRICKET LEAGUE

ALL FLYERS MUST HAVE BMFA INSURANCE

FLITEHOOK NORMALLY IN ATTENDANCE

Adult Flyers £4 Accompanied Juniors & Spectators £1.50

CONTACTS:JOHN TAYLOR TEL.No 01202 511502
ROY TILLER e-mail roy.tiller@ntlworld.com

BMFA South West Area

Indoor Flying

organised by

Cornwall Vintage Aeromodellers

at

Saints Health and Fitness Centre
St Austell Rugby Club
Tregorrick Park, St Austell
Cornwall, PL26 7AG

Flying from 1200 to 1600 on the following dates,

Sun. 16th Dec. 2012
Saturday. 19th Jan. 2013
Sun. 10th Feb. 2013 - Sun. 17th Mar. 2013

Mainly free flight but some micro R/C (fixed wing & helicopters)

Admission: Flyers £7 Spectators £3

Contact:
Cornwall - David Powis on 01579 362951
(dave_powis@hotmail.com)
Devon - Roger Bellamy on 01752 311786
(rogerbellamy9@hotmail.co.uk)

Provisional Events Calendar 2013

With competitions for Vintage and/or Classic models

January 27th	Sunday	Middle Wallop – Crookham Gala
February 10th	Sunday	BMFA 1st Area Competitions
March 3rd	Sunday	BMFA 2nd Area Competitions
March 29th	Good Friday	BMFA Northern Gala – TBD
March 30th	Easter Saturday	Middle Wallop – Croydon Wakefield Day
March 31st	Easter Sunday	Middle Wallop – SAM35 Gala
April 1st	Easter Monday	Middle Wallop – Sam35 Gala
April 14th	Sunday	BMFA 3rd Area Competitions
April 28th/29th	Sunday/Monday	BMFA London Gala - Salisbury Plain
May 5th	Sunday	Middle Wallop - competitions
May 25th	Saturday	BMFA Free-flight Nats, Barkston
May 26th	Sunday	BMFA Free-flight Nats, Barkston
May 27th	Monday	BMFA Free-flight Nats, Barkston
June 16th	Sunday	BMFA 4th Area Competitions
June 29th/30th	Saturday/Sunday	BMFA East Anglian Gala – Sculthorpe
July 14th	Sunday	BMFA 5th Area Competitions
July 21st	Sunday	65th Southern Area Rally – Odiham
July 27th	Saturday	BMFA Southern Gala – Salisbury Plain
August 10th	Saturday	Middle Wallop – SAM 1066 Championships
August 11th	Sunday	Middle Wallop – SAM 1066 Championships
August 11th	Sunday	BMFA 6th Area Competitions
September 15th	Sunday	BMFA 7th Area Competitions
September 21st	Saturday	Middle Wallop - Competitions
September 22nd	Sunday	Middle Wallop - Competitions
October 6th	Sunday	BMFA 8th Area Competitions
October 20th	Sunday	Midland Gala - Luffenham
October 26th	Saturday	Middle Wallop – Competitions
October 27th	Sunday	Middle Wallop – Competitions & **AGM**
December 1st	Sunday	Middle Wallop – Coupe Europa

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 Middle Wallop 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.com
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.martyn.pressnell.btinternet.co.uk
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
John Andrews -	www.freewebs.com/johnandrewsaeromodeller
Wessex Aeromodellers -	www.wessexaml.co.uk
US SAM website -	www.antiquemodeler.org
Peterborough MFC -	www.peterboroughmfc.co.uk/index-old.htm

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).

Happy New Year to One and All

I would like to take this opportunity to thank all the contributors to our newsletter, without your input it would not exist. Please keep the articles coming.

That's all folks! *John Andrews*