NEW Clarion

SAM 1066 Newsletter

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Editorial

This edition of the New Clarion will probably hit the web whilst many of us are down, or up as the case may be, at Middle Wallop for the August Championships. The weather forecast looks reasonable as I write, if a little breezy, so fingers crossed and I may get a few flights in.
After my layoff from personal articles last issue I regret to inform you that I'm back with a vengeance and have penned two articles this month.

A new member, Alan Sitton, has taken the bull by the horns and written an interesting piece for us on RC and FF. Alan expects to be at Wallop on Sunday probably flying RC over with the radio gang but his companions should FF'ing with us our side.
I've slipped in a little piece on bending bamboo & balsa by Lindsey Smith, to date I personally have found it impossible to bend balsa and have resorted to bamboo in all curved cases but I may give balsa another go although I avoid designs with round wingtips if I can and I certainly never design any into my own models.

I had a nice long email from John Richards in Canada together with a few pictures and have put it together with a few tweeks to make another overseas insight.

There are a couple of photographic sections, one from the black and white archive of Keith Miller and the other from a file in my Clarion bits and bobs labelled 'unused pics' some are late ones from Keith taken with his last new camera and they came with an apology for quality, if you can see anything wrong your eyes are better than mine. Having said that the reduction of the New Clarion master file to pdf format severely impacts on picture quality any way. Keith always was a perfectionist.

I think you will be amused by Roy Tiller's article on his lost 'Condor'. Rewarding the finder seems to compound the loss, you'll see what I mean when you read the piece.

The subject of drones again is reported by Roger and highlights some futuristic wishful thinking by Amazon hoping to deliver? Packages. We may well get someone else's package dropped on our doorsteps in the future, I don't think. I wonder what their returns policy will be if it ever happens.

I found a patent for the 'glow plug' in an old Aeromodeller Annual, have you ever wondered who invented it, it certainly never crossed my mind.

David Brawn reports on the invasion of France by our E36 electrics FF gang, it would appear that a beachhead has been consolidated.

Round 5 of the Southern Coupe League is reported by Peter Hall and Roy Vaughn, it would appear from Peter's comments that the 5 round format may be causing problems and maybe would benefit from a serious review.

Please do not let your current busy flying activities stop you from writing a few words for this magazine of ours otherwise content will dwindle. Reports on any event from your personal point of view are always well received by readers, particularly those who can, for whatever reason, no longer do it themselves.

I've repeated the World Wide Postal Comps add, so record scores and have a go.

Editor

My Sculthorpe Gala - John Andrews

Saturday 1st August: When Rachel and I came down to breakfast at our overnight accommodation in Fakenham, we found ourselves in the company of non-other than Phil Ball and his lady. A good start to the weekend, it was not long before Rachel was talking genealogy to Phil, but he managed to escape and set off for the airfield, shortly followed by ourselves. After inspection of my BMFA membership card at the one and only entrance we drove onto the airfield and round to the control area.

We set up shop on the runway and my winding jig set up from Odiham, where we were not allowed to use pegs, came in handy. I have a camera tripod and one restraint which I tied to the car boot catch bar. Picture shows the rig and contest CD Malcom Marshall posing after welcoming me to the event, he normally tours the line passing the time of day with most contestants.

I entered BMFA Rubber and after some deliberation I decided to use 0-3 which had been repaired after the loss and broken wing at the Nationals. Although it was quite breezy I decided that a test flight was needed due to the scale of the repairs that had been necessary.

On half turns the model stalled a couple of times on the climb and also on the glide which was straight and without turn. I decided that, as more test flying would be required, it would be safer to use 0-4 whose trim had been OK at the Nats. I put 0-4 together and made my first comp flight, unusually for 0-4, it maxed OK unlike many previous occasions when it had let me down.

On the second comp flight I managed to put 0-4 into an absolute boomer of a thermal and, as we waited for the DT, it was very high. The DT went and 0-4 continued to rise in spite of it. The model was clocked off at 6.57 and was way up in the blue when it faded from view in the binoculars. Fetchermite Rachel set off on the bike down the two mile runway following the compass bearing but there was no signal from the Bodnar tracker when she reached the airfield fence. Knowing Phil Ball had had a 6+ flight down to the ground and was only just in the field we assumed that 0-4 would be well out in the sticks when it lost the lift. I decided that recovery would have to wait until after the contest and put 0-3 back together for my third flight.

The wind was now quite strong making any further test flying hazardous and time consuming so, using the wet finger technique, I stuck a fair sized piece of 1/8th square on the fin hoping to get some glide turn and cure the stalling. I cured the stalling alright as on launching 0-3 did a couple of hair raising circuits at low level before climbing away in a tight circle. The model got fairly well up but no boomer this time to help and 0-3 was down 7secs short of requirements. That was me, bottom of the list again but only one second behind Andrew Moorhouse.
One bit of good luck was a phone call from another competitor asking if I had lost a model and should he bring it back. "Yes please" says I and 0-4 was duly safely returned. It had been found on the airfield way off the line that Rachel had followed, how it finished up there is anybody's guess. We would never have found it ourselves as we were sure it was way off the field. We had borrowed a map from Pete Watson and would have been searching at least a couple of miles away. Thus we finished the day in a reasonably good mood.
After the prize presentation we went back to our digs, changed and ate in the local Thai restaurant. We had eaten in the local Indian restaurant the night before and in conversation with the owner it transpired that his brother kept an Indian restaurant in our own home town centre. Small world.
Sunday 2nd August: I was feeling confident as I had my 'Last Resort' to fly in classic, the best performing model in my stable. Having entered and a check flight looking good I prepared for my first comp flight but the gods were not with me as, whilst Rachel was chatting round the back of the car instead of holding the wing tip, a strong gust of wind picked up the models wing and snapped it into two. 'Knickers!!!'. Having no reserve model that was me out of classic.

It was now mini-vintage time and I readied my Pinochio. A check flight looked OK so on with the first comp flight. The model climbed away well but, although very high, it developed a stall and I was a few seconds short again. Carried on making poor adjustments and consistently finding no lift so all flights were a few seconds short.
Phil Ball (right) won the contest flying a 'Dynamite' which I believe is Norman Marcus's development of the 'Bazooka', it is rumoured that Norman may have published the design having not built one. One of Ron Warring's traits I understand.
A new event this year was a Bowden contest run by the enthusiastic Peterborough Club, although not a large entry the New Trophy is well worth more Bowdenites competing next year.

Results: BMFA East Anglian Gala Saturday 1 August 2015.

P	BMFA Rubber	BMFA	Club	1	2	3	Total	F/O
1	Phil Ball	57180	Grantham	2.30	2.30	2.30	7.30	**8.30**
2	Ian Davitt	69793	Morley	2.30	2.30	2.30	7.30	**4.34**
3	Derek May	56714	Timp	2.30	2.30	2.30	7.30	**2.59**
4	Andrew Moorhouse	63373	Vikings	2.24	2.30	2.30	7.24	
5	John Andrews	31216	Timp	2.30	2.30	2.23	7.23	
	Vintage R/P							
1	Colin Foster	17203	Morley	2.30	2.30	2.30	7.30	**6.07**
2	Spencer Willis	34982	Croydon	2.30	2.30	2.30	7.30	**5.00**
3	David Cox	73114	Crookham	2.30	2.30	2.30	7.30	**4.50**
4	Frank Rushby	52558	Cleemac	2.30	2.30	2.30	7.30	**3.47**
5	Jamie Mosley	177198	Cleemac	2.30	2.30	1.55	6.55	
6	David Beales	81957	Croydon	2.13	2.30		5.43	
7	Adam Beales	81598	Croydon	0.48	2.30		3.18	
	P30							
1	Steven Fielding	67400	Morley	2.00	2.00	2.00	6.00	**4.18**
2	Dennis Davitt	63260	Morley	2.00	2.00	2.00	6.00	**2.54**
3	Peter Adams	107883	Peterboro	1.40	2.00	2.00	5.40	
4	Peter Gibbons	76597	Peterboro	2.00	2.00	1.31	5.31	
5	Derek May	56714	Timp	1.28	1.44		3.12	
6	David Bent	113861	Peterboro	2.00	0.43	1.28	3.11	
	Classic Glider							
1	Gil Hart	54609	Vikings	2.30	2.30	2.30	7.30	**4.51**
2	Colin Foster	17203	Morley	2.30	2.30	2.30	7.30	**3.04**
3	Roger Heap	13338	Biggles	2.30	2.30	2.30	7.30	**2.33**
4	David Truluck	51147	Vikings	2.30	2.30	2.30	7.30	**1.56**
5	David Cox	73114	Crookham.	2.30	2.30	1.32	6.32	
6	David Brawn	52517	Biggles	1.14	2.30	2.30	6.14	
7	Chris Parry	63525	Biggles	2.30	1.36	1.45	5.51	
8	Terry King	70303	Impington	2.30	2.30		5.00	
9	Phil Ball	57180	Grantham	1.21			1.21	
	E36							
1	Dennis Davitt	63260	Morley	2.00	2.00	2.00	6.00	**1.35**
2	Trevor Grey	33877	Crookham	2.00	2.00	2.00	6.00	**1.30**
3	Peter Watson	62397	MFFC	2.00	2.00	2.00	6.00	**0.49**
4	Adam Beales	81598	Croydon	2.00	2.00	2.00	6.00	
5	Chris Strachan	33623	Biggles	2.00	2.00	1.49	5.49	
6	Gordon Warburton	58428	Morley	2.00				
7	Steve Philpot	64218	Birm'ham	2.00				
	Tailless							
1	Spencer Willis	34982	Croydon	2.30	2.30	2.30	7.30	**2.44**
2	Chris Strachan	33623	Biggles	2.30	2.30	2.30	7.30	**2.23**
3	Colin Foster	17203	Morley	1.58	2.08	2.30	6.36	
4	David Taylor	4788	Grantham	2.30	1.30	2.06	6.06	
	HLG/CLG							
1	Ivan Clark	41712	C/M				6.22	
2	Mick Page	1364	Peterboro				6.15	
3	Phil Ball	57180	Grantham				6.12	
4	Sam Heap	175489	Biggles				4.14	
5	Graham Percival	31494	Grantham				4.11	
6	Ken Bates	51145	Cleemac				4.02	
7	Ian Middlemiss	84962	Peterboro				3.22	
8	Chris Parry	62525	Biggles				3.02	

Results: BMFA East Anglian Gala Sunday 2 August 2015

P	BMFA Glider							
1	Chris Parry	62525	Biggles	2.30	2.30	7.30	7.30	**6.25**
2	David Brawn	52517	Biggles	2.30	2.30	2.30	7.30	**3.18**
3	David Oldfield	31734	Vikings	2.30	2.30	2.30	7.30	**2.37**
4	Sam Heap	175489	Biggles	2.30	2.30	2.30	7.30	**1.15**
5	Roger Heap	73338	Biggles	1.50	2.30	2.30	6.50	
6	Gil Hart	54609	Vikings	2.30	2.30	1.40	6.40	
7	Rodney Mosley	100178	Morley	2.30				
8	David Truluck	51147	Vikings	1.29				
	BMFA Power							
1	Frank Rushby	52258	Cleemac	2.05	2.30	2.30	7.05	
2	Adam Beales	81598	Croydon	1.10				
	Combined Electric							
1	Trevor Grey	33877	Crookham	2.30	2.30	2.30	7.30	**6.31**
2	Peter Watson	62317	MFFC	2.30	2.30	2.30	7.30	**5.05**
3	Tony Shepherd	14221	Crookham	2.30	2.30	2.30	7.30	**3.55**
4	Chris Redrup	34557	Crookham	2.30	2.30	2.30	7.30	**1.21**
5	Chris Strachan	33623	Biggles	2.30	2.10	2.28	7.08	

	Vintage Glider							
1	Gil Hart	54609	Vikings	2.03	2.30	2.30	7.03	
2	Graham Percival	31494	Grantham	2.30	1.58	2.30	6.58	
3	Colin Foster	17203	Morley	2.30	1.32	2.30	6.32	
4	Terry King	70303	Impington	2.30	2.30	1.23	6.23	
5	Barry Halford	31735	Vikings	1.44	1.35	1.46	5.05	
	Classic R/P							
1	Andrew Moorhouse	62373	Vikings	2.30	2.30	2.30	7.30	**3.12**
2	Spencer Willis	34982	Croydon	2.30	2.30	2.30	7.30	**2.51**
3	Adam Beales	81598	Croydon	2.30	2.30	2.30	7.30	
4	Frank Rushby	52558	Cleemac	2.30	1.50	2.09	6.29	
5	David Beales	81597	Croydon	0.58	2.30	2.30	5.58	
6	Derek May	56714	Timperley	2.30	2.30	0.50	5.50	
	Mini Vintage							
1	Phil Ball	57180	Grantham	2.00	2.00	2.00	6.00	**6.59**
2	Tony Shepherd	14221	Crookham	2.00	2.00	2.00	6.00	**4.21**
3	Frank Rushby	52258	Cleemac	2.00	2.00	2.00	6.00	**3.45**
4	Ian Davitt	669793	Morley	".00	2.00	2.00	6.00	**3.04**
5	Jamie Mosley	177198	Morley	2.00	2.00	2.00	6.00	**1.51**
6	Colin Foster	17203	Morley	2.00	2.00	2.00	6.00	
7	Steven Fielding	67400	Morley	2.00	2.00	2.00	6.00	
8	Tony Rushby	52557	Cleemac	2.00	2.00	2.00	6.00	
9	Barry Halford	31735	Vikings	1.44	2.00	2.00	5.44	
10	John Andrews	31216	Timperley	1.53	1.59	1.52	5.44	
11	David Taylor	4788	Grantham	2.00	2.00	1.16	5.16	
12	Brian Lavis	72364	Biggles	1.55	1.54		3.29	
13	Ken Bates	51195	Cleemac	0.56	1.02	1.26	3.24	
14	Derek May	56714	Timperley	2.00			2.00	
	CO2							
1	Chris Strachan	83623	Biggles	2.00	2.00	2.00	6.00	**3.36**
2	Ian Davitt	69793	Morley	2.00	2.00	2.00	6.00	**2.49**
3	Gordon Warburton	58428	Morley	2.00	2.00	2.00	6.00	
4	Peter Ingham	81467	C/M	1.36	1.50	1.47	5.13	
5	Trevor Grey	33877	Crookham	0.38	2.00	2.00	4.38	
6	Steven Philpot	64218		2.00	2.00		4.00	
7	Steven Field	67400	Morley	2.00			2.00	
	Bowden							
1st	Brian Waterland		Peterboro					
2nd	David Clark		Peterboro					
3rd	Bernie Nichols		Peterboro					

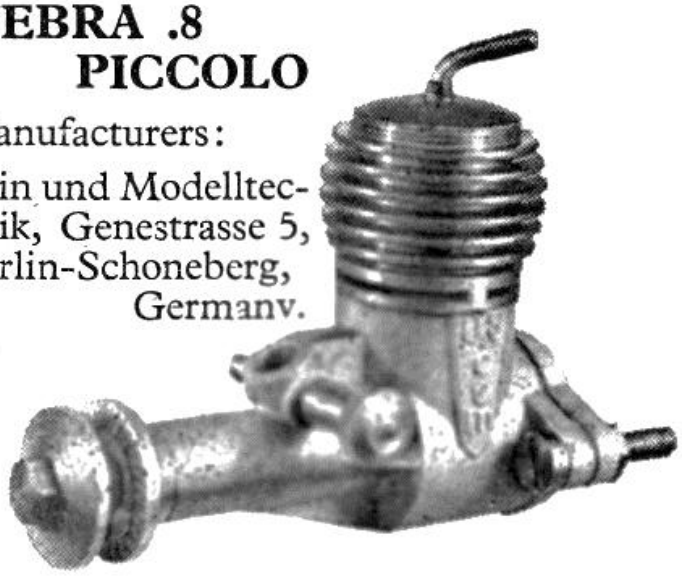
The organisers stand behind the prizes ready for the Saturday presentations, a similar well laden table was also there on the Sunday including the new Peterborough Bowden Trophy in memory of the late Stan Horne.

As always a pleasant meeting on one of the best airfields in the country, with comps for most classes and well run to boot, I'll be there again next year for sure.

John Andrews

WEBRA .8 PICCOLO

Manufacturers:
Fein und Modelltechnik, Genestrasse 5, Berlin-Schoneberg, Germanv.



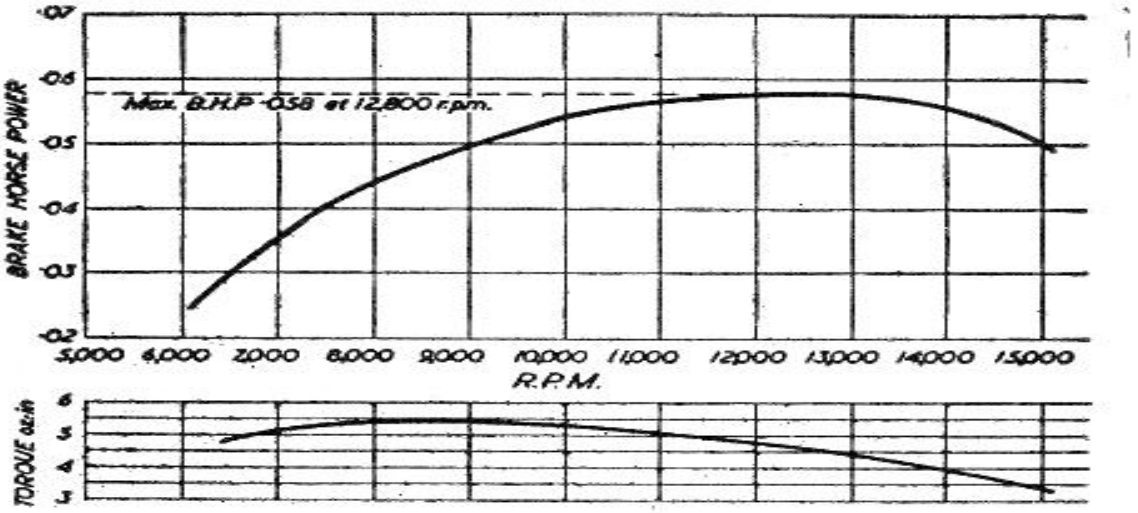
Retail price in U.K. £2 15s. (for export only)

Displacement: .78 c.c. (.047 cu. in.)
Bore: 10.5 mm. (.415 in.)
Stroke: 9 mm. (.354 in.)
Bore/stroke ration: 1.17
Max. B.H.P.: .058 at 12,800 r.p.m.
Power rating: .075 B.H.P. per c.c.
Bare weight: 2⅞ oz.
Power/weight ratio: .024 B.H.P. per oz.

Material Specification:
Crankcase: Light Alloy pressure die casting
Crankcase bearing: Plain
Cylinder: Steel
Contra-piston: Steel
Cylinder jacket: Aluminium alloy
Crankshaft: Hardened steel
Con. rod: Dural

PROPELLER dia. pitch	R.P.M.
8 × 4 (Stant)	7,200
7 × 4 (Stant)	8,700
6 × 4 (Stant)	11,250
6 × 6 (Stant)	9,300
6 × 4 (E-D plastic)	12,250
5 × 5 (CGP)	11,800

Fuel: used Allbon diesel fuel



From RC to FF & Back - Alan Sitton

I am a new member to SAM 1066 and joined up after making a few trips over the last couple of years to Free Flight events with my good friends Vernon Bright and Mario Gandolfi. We generally visit either Old Warden or Middle Wallop for these events and now attend as many of these meetings as we can.

Vernon and I are die hard R/C flyers and Mario is totally a Free Flighter. Mario has gifted both Vernon and myself several aircraft which he has built over the decades. These are precious and quite old built by Mario's fair hand from scratch, not from any kit. Among these a Sunduster, HV 450 and a beautiful Fiesler Storch. All of these were Free Flight models. However the urge has been irresistible to turn them into R/C and that has been successfully accomplished with all of these three aircraft. They have been test flown successfully but lose nothing of their original charm and characteristics in the air apart of course from providing extended flight under (reasonably!) full control.

But Mario's determination to stick with Free Flight is infectious. I must say, as a R/C flyer and being a member of two other flying clubs, I never thought I could get "hooked" into this Free Flight business. At first it all seemed a bit pointless. But Mario always said when you think you have reached a level of proficiency in general R/C flying prepare yourself for another more challenging dimension with Free Flight because trimming a model for as near perfect and stable flight under power and then achieving an equally smooth glide back to earth with no external control is surely a piece of artistic achievement. Both Vernon and I now love it. We will not de - modify the aircraft we have turned into R/c as detailed above but we are both hooked and determined to succeed in this graceful art form of Free Flight.

With this in mind for the past half dozen or so visits to these meetings with my friends I have been just a "helper' watching the Master – Mario – who has been pursuing this sport for 60 years or more. I have watched him trim, start and fly his other models some of which are possibly as old as I am and thoroughly enjoyed the bonhomie among friends and other flyers on the field and waiting for an opportunity to present itself to get into Free Flight.

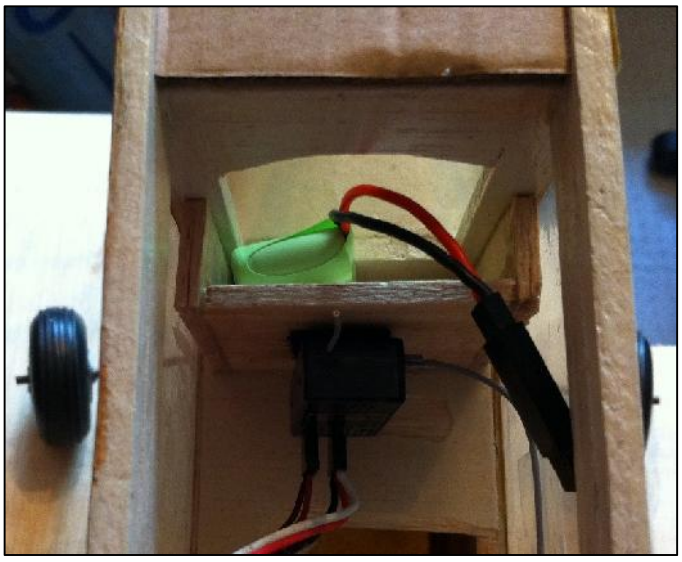
And then that opportunity presented itself. At the last Middle Wallop meeting I managed to acquire not one but two models which other flyers wanted to sell at very reasonable prices. They were both just airframes, well used, but I judged could be put into flying nick quite easily. One was a little plane called The Madcap. The other is a well tried and trusted Deacon. As I said, neither had engines but I knew I had an old Frog 100 from my control line days as a kid which everybody said would be perfect for the Deacon and Mario said he could furnish something suitable for The Madcap. The engine he lent me for that is a 0.4 cc Mills, new and unrun. Both were duly installed into their respective airfames and I took them out to fly at the last Old Warden meeting on 25th July. Mario had provided a small quantity of his diesel fuel but I also had an old can (maybe 50 years old) of Keil Kraft diesel which I took along. We had terrible difficulty getting the engines to start on Mario's stuff and in desperation decided to try some of the "vintage" Keil Kraft stuff. Unbelievably both the Mills and Frog loved the old stuff and we had no further trouble. I think Mario's fuel has to be binned or a touch of ether added to restore it. Amazing though that 50 years old Keil Kraft fuel is still so potent.

Several flights, all quite successful were made but judging the engine run time appears to be crucial. While the 0.4 cc mills has a tiny fuel tank which gives no more than 20-30 seconds of run time the Frog 100 integral tank allows running for some 2 minutes or more.

I remember using that engine in my very early days of control line flying and now seem to remember getting several circuits on the line before the engine cut. Obviously filling it with less fuel is the answer but on the last two of the flights with the Deacon even a frugal quantity of fuel and sensible amount of right rudder did not avoid the plane being blown in the relatively light breeze to the extremity of the field, quite a long way away and requiring one of us (and Vernon volunteered on both occasions) to go take a substantial hike to retrieve it.

This was no good and something would have to be done. I want to preserve the charm and integrity of Free flight but we came too close to the losing the Deacon. A tighter turn might have provided the solution but I'm not sure. She flies so beautifully that a tight turn would lose its characteristics and limit its glide time and I thought it would be worth seeing her in the air for longer and under some degree of control. The Madcap meanwhile can remain totally Free Flight as the engine run time can be judged more easily and she seems to descend quite quickly even though she is light as a feather. But the Deacon seemed an obvious contender for Radio Assist.

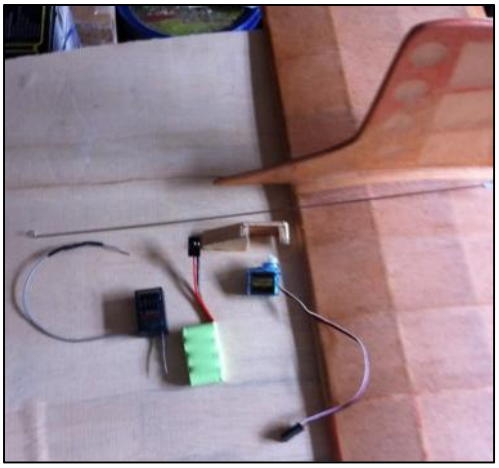
In the attached photos you will see how I achieved this. First, a small reinforcing plate was glued to the inside sidewall of the fuselage to accommodate a switch harness. Then a small battery compartment made of some very light balsa glued inside as far forward as possible north of the CG as the weight of the battery in such compartment would be a challenge but could maybe offset by the small added weight of components I would need to add to the rear of the plane. I chose the smallest Spektrum Rx I could find and this was the AR400 and managed to source a 4.8v battery made up of 4x half size triple AAA batteries which came supplied with the requisite JR/Spektrum plug. Actually even $\frac{1}{4}$ size triple AAA's are available but I thought the Deacon could handle the slightly larger ones which will provide sufficient power for a good number of flights providing 210mah of power. This Rx was attached with Velcro to the outside of the battery compartment.

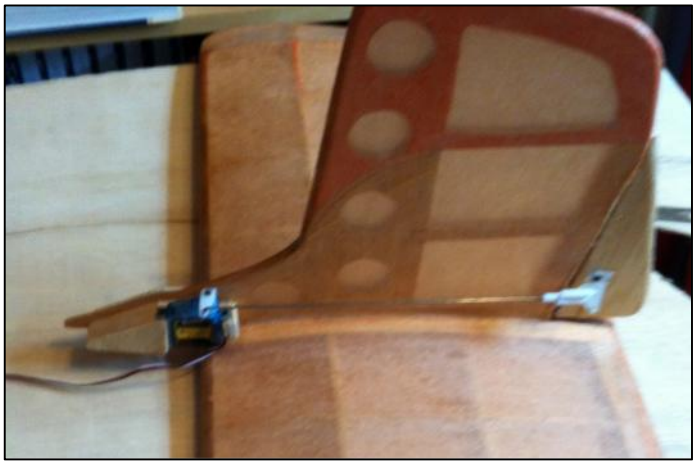


Turning attention to the rear of the plane the rudder was removed and another made to a shape in keeping with the general appearance of the fin and this was attached with some small hinges.

A 4.3g micro servo was sourced and I decided to make a small pod for it to attach to the dorsal fin by a couple of bolts so that it could easily be removed if I want to. That is linked with quite small gauge piano wire to the rudder. This layout enabled the whole tail/fin assembly including its actuation as integral and to remain removable and which therefore still allows for any packing trim that may still be required to the tail because the only control I am giving myself

is the rudder. A long servo extension cable was threaded through the fuselage connecting the Rx to the rudder servo which will have to be plugged in and unplugged to the rudder servo at each outing.





I figure that the additional weight of all these components to be very low indeed. The battery is always the biggest bugbear but sourcing this battery was a real advantage and placing it just forward of the CG by no more than an inch or so would do no harm to the flight characteristics and is compensated anyway by the micro servo, servo extension lead and piano wire installed at the rear. The whole tail still being available for trimming to achieve a suitable glide pattern. We shall see. Next outing is Middle Wallop at the end of August and both The Madcap and Deacon will be taken for an airing. I hope I will be able to fly the Deacon as a radio assist aircraft at Middle Wallop and will need to check that point with the organisers. If not my other R/C flying clubs have said while they do not allow any Free Flight they would welcome a radio assisted Deacon and I know I will be able to fly it at Old Warden where I have seen numerous radio assisted aircraft.

Alan Sitton

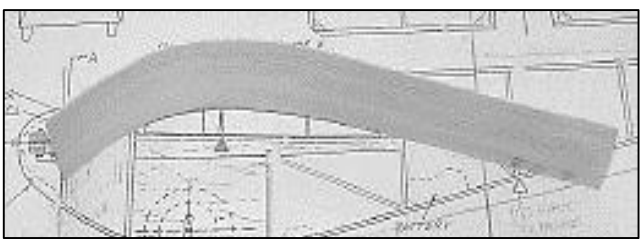
Bending Balsa or Bamboo - Lindsey Smith

Notes on how to put permanent bends in balsa or bamboo. While this technique is probably "old hat" to those highly experienced readers of this exciting newsletter, some of the less knowledgeable among us might get an idea from it.

When I want to make sliced ribs or to form balsa for any other purpose, I place a candle inside a metal can which has one end open as shown in the photo to the right.

You can also make quite complicated double curvature panels if you beat a dome shape into the can. You dampen the underside of a piece of balsa of suitable width and thickness then hold it in contact with the hot can to create the required curve, it will sizzle and when dry it will hold the curve. You can also bend bamboo on the same gadget but the bamboo must be dry.

If you are allergic to fire, put a light bulb in the can.

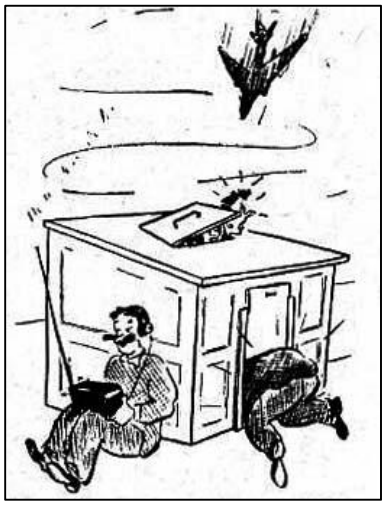


Lindsey Smith

Model Aircraft April 1959

Take Cover

It seems only fair to me that model insurance premiums should be graded according to what and where you fly. As a gentle sort of character who flies the odd, inoffensive rubber models far from the "madding" crowd, I resent having to whack out the same as some misanthropic type who unleashes a twenty pound, escapement sticking, radio job into a crowded car park. With such a model extra cover should be demanded—a concrete shelter, for instance.



The modern trend is for the fly-for-cover modeller to make full use of his insurance. After all, it's a cruel waste to have umpteen thousand pounds of insurance if you don't intend to use it. So, for all you novices who haven't yet bashed in the front of a Bentley or notched up a couple of spectator badges on the side of your radio cabin, here are a few handy tips on how to make next year's premium a really healthy one:

Never fly an untrimmed power model unless there is a sizeable audience immediately downwind.

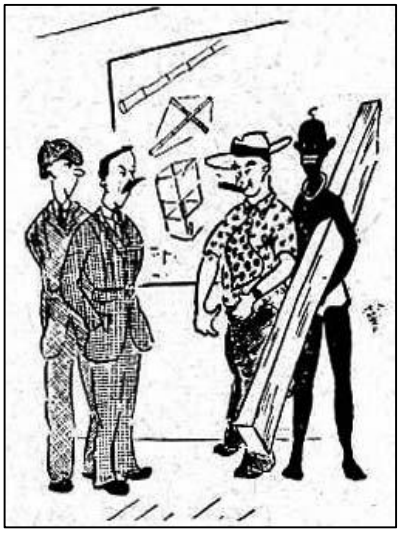
Always use full power, particularly for your first flight.

Spiral dive your radio job where everyone can see it—right overhead. If it hits anyone it's their silly fault for getting in the way.

Never attempt to fly in a quiet corner of the airfield. If the model crashes on open ground no claim can be made against you.

West Goes East

The latest modelling fashion is to go oriental. This does not mean you have to go flapping around the flying field in a people's boiler suit or a flowery kimono—nothing so elegant. All you have to do to keep up with the cha-cha-cha age is to slap a Jap engine on a Chinese model and you're right in the social swim.



But going oriental is nothing new. Back in the earlier modelling days construction was strictly on the eastern kite principle; all bamboo and Jap silk. We were only rescued from this fate by the arrival of American missionaries with gifts of balsawood to the backward natives. But prejudice dies hard, and there are still many British-to-the-bone modellers who regard balsa as the curse of modern civilisation. What lies behind the present yellow peril we hardly dare think. Already we've had a nasty foretaste of eastern building methods with the Russian spliced-reed torture. The very thought of that labour camp type construction was enough to send our plastic modellers to bed for a month. Now we all live in terror of the sort of fiendish building methods that the inscrutable Chinese are cooking up in their communal blast ovens. We might well wake up one morning to find ourselves threatened with a Wakefield made out of the flayed skin of a people's rice pudding by 5,000 part-time volunteers.

And we must never forget the biggest threat of all—the Chinese haven't got television.

A bit further east our Nipponese friends are crashing in on the engine market in a big way (they don't call their engines O.S. for nothing). Now, as you are all aware, what I know about engines can be written on the head of a 0.5 cc motor gudgeon pin, and, as they all look the same to me, I can't understand what these Jap units have that the others haven't.

Not so long ago the rev fiends were camping out on the western seaboard for the sight of a Yankee engine. When they got tired of this vigil they went off to hunt Tigres in darkest Italy, and followed this up with a few expeditions into the European hinterland. We can only hope that one of these days they'll run out of geography, and find that we make engines in this country. Or do we?

Pylonius

Letter from Canada - John Richards

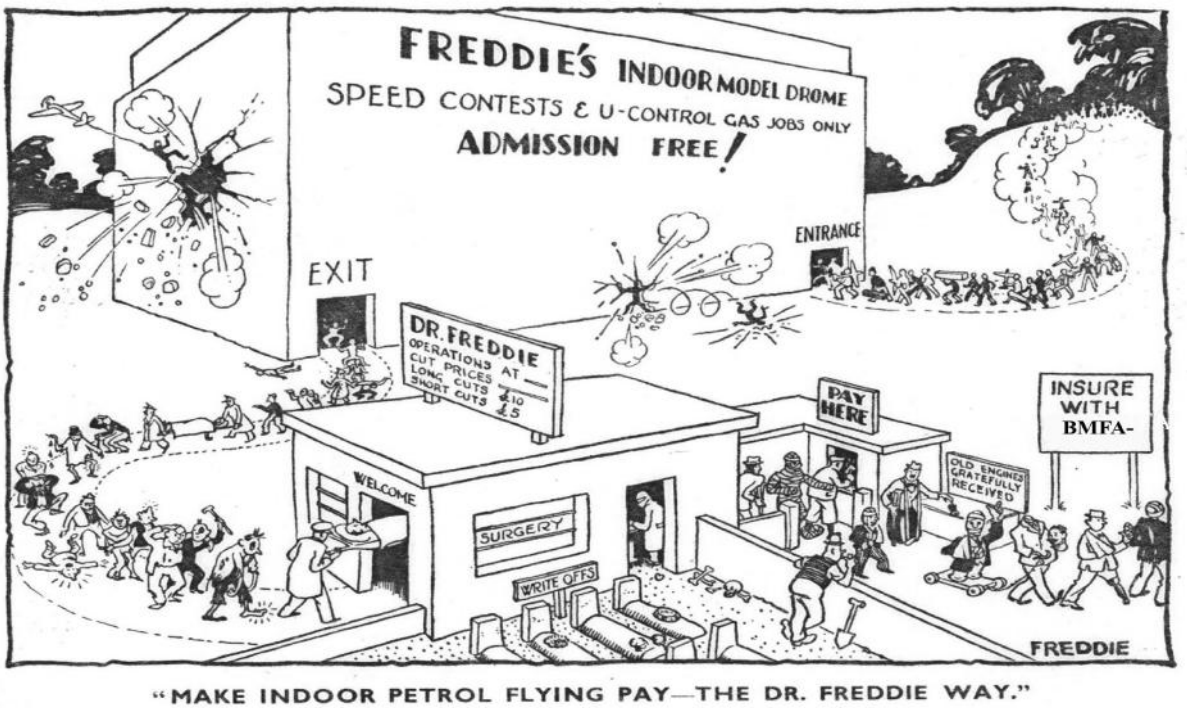
Went out to our sod farm flying filed on Saturday, have not flown there for several years and beautiful weather very calm, flew the Dynamo-E, July NC, but I only managed two flights the first was a slow climb out on a 5 sec motor run and 2 sec DT that got to a reasonable height.

The 2nd, after resetting the motor for 10 secs and a 10 sec DT to check the glide, was a mess. I completely miss launched it at a very shallow angle but luckily the model stayed at about 25 ft off the ground in a right turn slowly descending, I could not believe that it did not wingover into the ground, until it clipped the open hatchback door of a parked car then went into the ground.
Only damage was a cracked front end just in front of the pylon, giving quite a bit of right thrust, and both blades broken off. Repair has already been completed apart from some re-covering of the nose section, don't call me flash for nothing.

So flew my E36 Mutt from then on as I had lost my Super Pearl E36 at Shearwater a few weeks before when for some reason the DT did not work and it went OOS behind some trees. Tried to find it but the undergrowth and bushes off the runway is above waist high and very boggy, no luck. Have attached a couple of pictures from Saturday showing my Dyanamo E and E36 Mutt along with John O' Sullivans Blizzard and Executioner, all electric models.

John O" and another guy had organized a RC Glider/FF day at our field that is why you can see RC gliders in the pictures. This was the first time that any of us have used this field for some time, it really is a good field for FF, and the owners have no problem with us using the field whenever we want to, we first started using his field some 30 years ago.

John Richards (Canada)



"MAKE INDOOR PETROL FLYING PAY—THE DR. FREDDIE WAY."

Vintage in Black & White - Keith Miller Archive

John Knight (North Kent Nomads) & father in the 50's.on Chobham Common

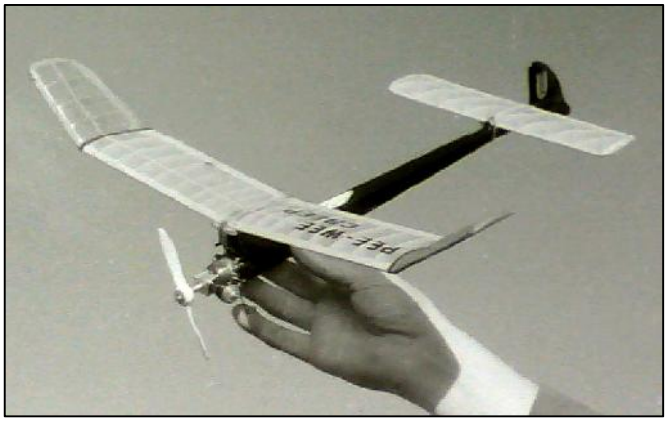
Pete Scarbrow (CDMAC) winds his "North Star" Wakefield Chobham Common in the 50's with designer, Jack North.

Mike Gaster (Surbiton) launches power model on Chobham Common in the 50's.

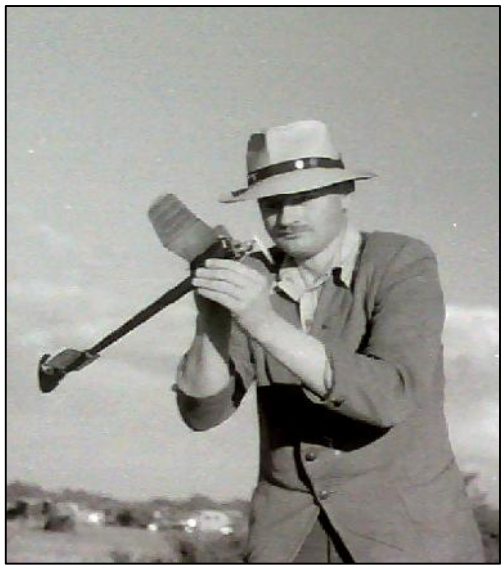
John Palmer (CDMAC) launches his Wakefield at Chobham Common in the 50's.

John Palmer (CDMAC) winds his Wakefield at Chobham Common in the 50's assisted by wife Sheila.

JL Pitcher (CDMAC) ROG's his O/D Wakefield at Chobham Common in the 50's.



Cox powered Mini Creep of the Surbiton club's Pete Muller, at Chobham Common in the 50's.



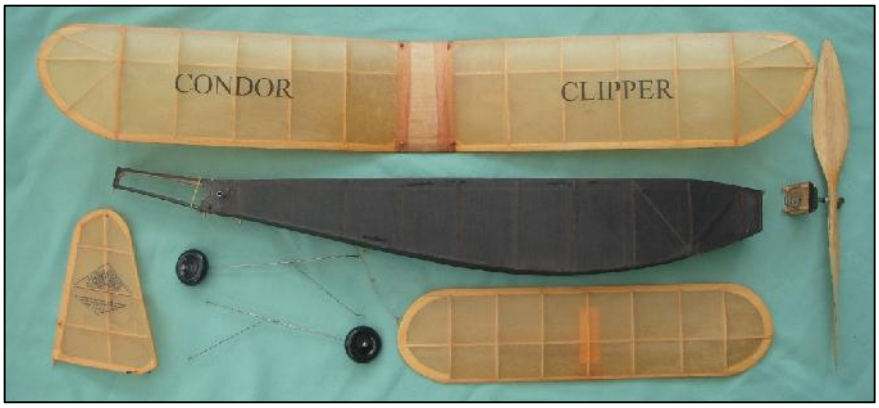
Pete Muller again

Unknown power modeller ROG's his model at Chobnam in the 50's.

Keith Miller Archive

A Pair of 'Condors' - Roy Tiller

Bournemouth M.A.S. announced two competitions for the 'Condor Clipper' vintage rubber model in 2001, first a Club Members competition to be run at Beaulieu Old Airfield on the 1st July 2001 and then an open competition at the B.M.A.S. Rally at Middle Wallop on the 4th Nov 2001.



Six B.M.A.S. members built Condor Clippers and entered the 1st July competition, which was run in the presence of our President and joint designer of the Clipper, Mr. Phil Smith. Three models got through to the fly-off but then the wind increased and changed direction causing us all to move around the perimeter track. A max of 2.30 was set for the fly-off to hopefully avoid lost models. Two models maxed, those flown by Ted Tyson and myself and whilst Ted found his model, mine, although almost certainly on the field, could not be found. Ted proved himself a "Sporting Gent" by declining to fly a further round and as a result we were declared joint winners.

The loss of my Condor Clipper was a bit of a blow in light of the upcoming competition at our B.M.A.S rally at Middle Wallop, so I promptly set about building a replacement. Six days after the loss a Bealieu radio flyer found my model, in good order just a little fading of the orange wing covering indicating where the retaining bands had been placed.

That is how I found myself with two Condor Clippers and unfortunately the reason for building the second one disappeared when the military decided that the security situation was severe enough to cancel the November 2001 meeting at Middle Wallop.

Jump forward to 2013 and I entered the second Condor Clipper, trimmed by then, in Lightweight Rubber at the Odiham meeting. The first comp flight caught good lift, DT'd on time, and looked to land on the field for a flight of 2.50. Barbara and I searched for an hour but the model eluded us.

Some four months later I received a telephone call from a farmer advising that he had picked up my model which was just inside the airfield. He said that he was happy to hold it until the next year's Odiham meeting, which in the end I could not attend, so another phone call set back the collection date to this year. I took a good bottle of red wine as a thank you gift and duly collected the model.

The photo shows the all-important label with name, address and telephone number, remember this for your models, it may well save you also from losing a fine machine.

Pass that BIG bottle of cyno, please.

Roy Tiller

Drones Again - Roger Newman

The media reports as follows

Amazon proposes: drones-only airspace to facilitate high-speed delivery

Ed Pilkington in New York

The retail giant's proposal carves out airspace from 200ft-400ft exclusively for autonomous drones, with a further 100ft above it declared a no-fly zone

Under Amazon's proposal, the airspace above cities and suburbs worldwide from 200ft-400ft would be for the exclusive use of any autonomous drone.

Photograph: ZUMA/REX Shutterstock/ZUMA/REX Shutterstock

Amazon is proposing that a pristine slice of airspace above the world's cities and suburbs should be set aside for the deployment of high-speed aerial drones capable of flying robotically with virtually no human interference.

The retail giant has taken the next step in its ambition to deliver packages via drone within 30 minutes by setting out in greater detail than ever before its vision for the future of robotic flight. It envisages that within the next 10 years hundreds of thousands of small drones – not all of them Amazon's or devoted to delivery – will be tearing across the skies every day largely under their own automated control.

The company's aeronautics experts propose that a 200ft slab of air – located between 200ft and 400ft from the ground – should be segregated and reserved for state-of-the-art drones equipped with sophisticated communications and sensing equipment and flying at high speeds of 60 knots or more. A further 100ft of airspace – between 400ft and 500ft – would be declared a no-fly zone to act as a buffer between the drones and current conventional aircraft such as passenger and cargo planes, thus mitigating fears about the impact on manned flight or dangers posed to people on the ground.

Amazon's plan, unveiled on Tuesday at a Nasa UTM Convention at Nasa Ames in California, sets out an audacious model for the unleashing of robots above cities and towns across the globe. At the heart of the proposal is the idea that access to the new 200ft slice of airspace would only be granted to those drones equipped with technology that allowed them to fly safely and autonomously.

"The way we guarantee the greatest safety is by requiring that as the level of complexity of the airspace increases, so does the level of sophistication of the vehicle," said Gur Kimchi, vice-president and co-founder of Amazon's delivery-by-drone project, Prime Air, who addressed the Nasa meeting. "Under our proposal everybody has to be collaborative – vehicles must be able to talk to each other and avoid each other as the airspace gets denser at low altitudes."

Drones: a force for good when flying in the face of disaster

At present there are about 85,000 conventional flights a day in the US involving commercial, cargo, military and general aircraft. Amazon believes that within a decade that number will be dwarfed in the US and globally by unmanned drones flying at low altitudes.

In two new position papers, the online retail company lays down the architecture of a new airspace for drones. It calls for a "paradigm shift" that will allow hundreds of thousands of small unmanned aircraft to fly under their own technological steam without the current involvement of humans through air traffic control.

To realize that futuristic vision safely, Amazon sets out five capabilities that drones must meet if they are to be allowed to fly inside the new 200ft high-speed corridor. They must have:

- Sophisticated GPS tracking that allows them to pinpoint their location in real-time and in relation to all other drones around them.
- A reliable internet connection onboard that allows them to maintain real-time GPS data and awareness of other drones and obstacles.
- Online flight planning that allows them to predict and communicate their flight path.
- Communications equipment that allows them to "talk" and collaborate with other drones in the zone to ensure they avoid each other.
- Sensor-based sense-and-avoid equipment that allows the drones to bypass all other drones and obstacles such as birds, buildings or electric cables.

Under this scenario, drones would take to the skies with virtually no human interaction at all. "We aim to have high levels of safe automation so that the only time intervention is needed is in emergency situations, national security crises and the like," Kimchi told the Guardian.

The image of the skies filling up with autonomous drones sounds like the script of a Hollywood sci-fi movie. But advances in GPS technology, sensors and internet-based communications are happening so rapidly that the concept is no longer in the realm of fantasy.

Before it is realized, however, pioneers like Amazon will have to assuage the doubts of privacy activists concerned about the impact on civil liberties and of government regulators worried about how flying robots would interact with manned aircraft. Amazon has been in a long-running tussle with the regulatory Federal Aviation Administration, which the company has accused of dragging its feet over drone innovation.

The other interested party that may take some convincing are amateur drone hobbyists and modellers. Under current rules in the US, they are allowed to fly their aircraft within line of sight up to 400ft as long as they stay away from airports and other out-of-bounds areas.

Under Amazon's proposals, by contrast, hobbyists would only be allowed to fly within the new 200ft-400ft corridor if their vehicles were equipped with the latest hyper-sophisticated gadgetry for autonomous flight. Otherwise, they would have their activities confined to geographically demarcated airfields in relatively unpopulated areas that would be set aside specifically for the purpose.

Brendan Schulman, who has been building and flying drones as a hobbyist for 20 years and is now a senior executive at the drone manufacturer DJI, said that by far the greatest use of unmanned aerial vehicles today was by amateurs. "That's currently by far the most common use of the technology, so before you disrupt their experience you want to think carefully about what slice of airspace would really be needed by these new technologies."

Kimchi said that Amazon did not envisage much change in the way modelers operate under the new proposal. "They will have low-risk areas in more rural areas where they can continue to fly safely to their heart's content."

(Amazon's Proposal)

Revising the Airspace Model for the Safe Integration of Small Unmanned Aircraft Systems

This paper describes Amazon's position on the design, management and operations of the airspace for the safe and efficient integration of low-altitude small unmanned aircraft systems. Amazon anticipates this model will be refined over time, and will work in close collaboration with public and private industry on the development of an approach that is safe and efficient for all types of operations.

Airspace Design

The development of an air traffic system that fully enables the safe operations of small unmanned aircraft systems (sUAS) in civil airspace, particularly highly-automated vehicles operating beyond line of sight (BLOS), is essential for realizing the enormous benefits of this technology in a safe and responsible manner. A good place to start in creating such a system is to clarify the use of the airspace.

The majority of airspace integration efforts over the past decade have focused on integrating medium or large unmanned aircraft systems into non-segregated civil airspace, i.e. airspace above 500 feet where most civil and military aviation activities occur. However, given the rapidly growing small unmanned aircraft industry, Amazon believes the safest and most efficient environment for sUAS operations—from basic recreational users to sophisticated BLOS fleets—is in segregated civil airspace1 below 500 feet. Segregating the airspace will buffer sUAS operations from current aviation operations. It will also buffer lesser-equipped vehicles from highly-equipped vehicles able to safely perform BLOS missions.

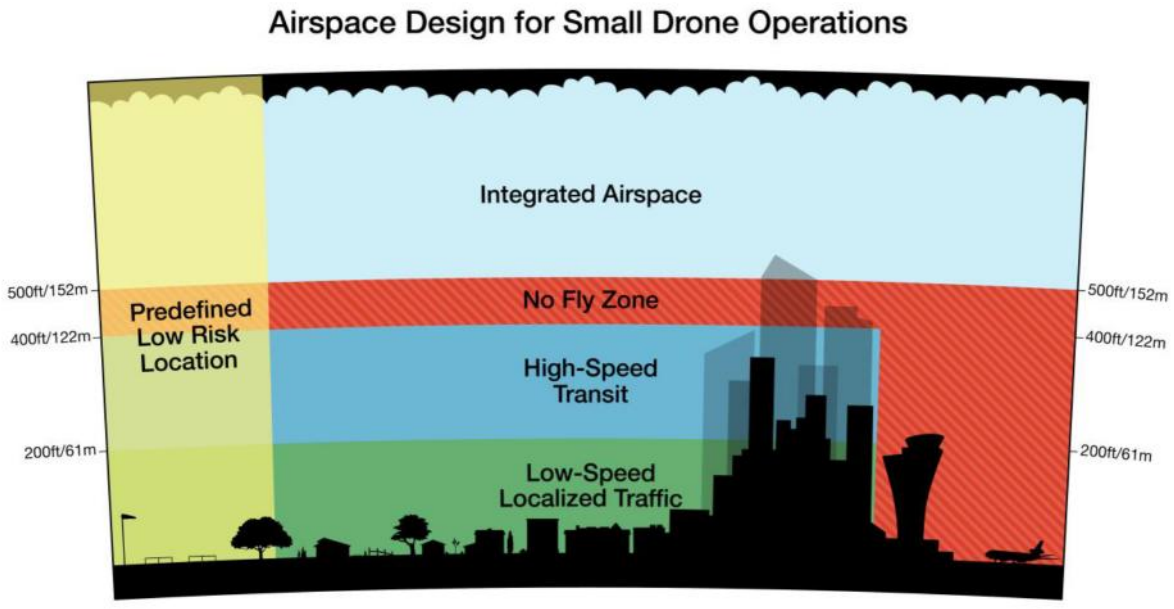
Segregated airspace is defined as airspace which is restricted to the exclusive use of specific users.

In this proposed model:

a. Airspace below 200 feet, or the 'Low-Speed Localized Traffic' area, will be reserved for (1) terminal non-transit operations such as surveying, videography and inspection, and (2) operations for lesser-equipped vehicles, e.g. ones without sophisticated sense-and-avoid (SAA) technology. Those lesser-equipped vehicles will not have access to certain airspace in this zone, such as over heavily-populated areas.
b. A 'High-Speed Transit' space, between 200 and 400 feet, will be designated for well-equipped vehicles as determined by the relevant performance standards and rules.
c. The airspace between 400 and 500 feet will serve as a permanent 'No Fly Zone' in which sUAS operators will not be permitted to fly, except in emergencies.
d. Finally, this airspace model will also encompass 'Predefined Low Risk Locations.' Altitude and equipage restrictions in these locations will be established in advance by aviation authorities. These Predefined Low Risk Locations will include areas like designated Academy of Model Aeronautics airfields, where members will meet pre-established parameters for altitude and equipage.

Amazon believes this segregated airspace model will enable safer overall operations by providing a framework where airspace access is tied to vehicle capability, and by buffering sUAS operations from current aviation operations.

Below is a visual representation of this proposed airspace design model.



Airspace Management & Operations

Revising the way airspace is managed is also a key factor in the development of a system that will meet future sUAS demands. Today, most of the world's airspace systems and related training are designed for a single pilot or flight crew per-vehicle concept. More so, in the United States and Europe, air traffic controller workload is the single-greatest functional limitation on airspace capacity 2 3 4. Workload is largely driven by airspace complexity, and controller workload increases linearly as the ratio of UAS to manned aircraft increases5. In the United States, for example, there are approximately 85,000 commercial, cargo, military, and general aviation flights every day. This number is likely to be dwarfed by low-altitude sUAS operations in the next 10 years.

2 Lishuai, L., Hansman, R.J. (2009), Experimental Studies of Cognitively Based Air Traffic Control Complexity Metrics For Future Operational Concepts, MIT International Center for Air Transportation, Cambridge, MA.

3 Hilburn, B. (2004), Cognitive Complexity in Air Traffic Control: A Literature Review, Eurocontrol Experimental Centre, Brussels, Belgium.

4 Majumdar, A., Polak, J. (2001), Estimating Capacity of Europe's Airspace Using a Simulation Model of Air Traffic Controller Workload, Transportation Research Record: Journal of the Transportation Research Board, 1744:30-43.

5 Helleberg, J., Maroney, D. (2010), UAS Operations in the National Airspace System: Human-in-the-Loop Simulation and Experimentation, The MITRE Corporation, Mclean, VA.

As a result of these factors, Amazon believes the current model of airspace management will not meet future sUAS demands, particularly highly-automated, low-altitude commercial operations. A paradigm shift in airspace management and operations is necessary to safely accommodate the one-operator-to-many-vehicle model required by large-scale commercial fleets.

While more research is needed to identify exactly how an air navigation service provider (ANSP) will evolve to support high-volume sUAS operations, it is Amazon's position that the projected industry growth also requires the delegation of responsibility for many traditional air navigation services, such as navigation and air traffic control and communication. There should be a controlling entity that serves a central, offline coordination and auditing function, however, many of these services will be handled in a more distributed and federated fashion where multiple operators cover overlapping areas, each managing their own fleet. Those operators would coordinate by following established protocols, using vehicle-to-vehicle, vehicle-to-service and service-to-service data communication and automation, to safely and efficiently manage the shared airspace.

Highly-equipped sUAS will be capable of navigation, merging and sequencing, communication, maintaining safe self-separation, collision avoidance and deconfliction in congested airspace without operator assistance. Again, while many of the traditional ANSP responsibilities may be delegated, the underlying authority will still reside with the ANSP and/or the civil aviation authority. To help move this model forward, Amazon will collaborate with civil aviation authorities like the Federal Aviation Administration, as well as NASA and others, on research related to delegation and federation.

Additionally, it is Amazon's view that air traffic management operations should follow a 'managed by exception' approach. This means operators are always aware of what the fleet is doing, yet they only intervene in significant off-nominal cases, e.g. emergencies and national security directives. Automation on the vehicles, e.g. vehicle-to-vehicle communications and SAA, and automation on the control structure, e.g. routing, separation management and optimization, will handle nominal and minor off-nominal cases. This approach will entail a distributed network comprised of local/regional air operations centres and remote vehicle operators. This new system is essential given the highly-automated nature of future sUAS, and it will result in a decrease in operator workload and an increase in both safety and capacity.

A Path Forward

Modifying the way airspace is used will require close collaboration with multiple stakeholders—aviation authorities, academia, the commercial and recreational sUAS industry, as well as the manned aviation industry. It will also require investment in advanced technologies, like the types of automation discussed above. Amazon believes NASA already has a solid understanding of these technologies through decades of experience in airspace automation, as well as a firm grasp on how they will be used for sUAS through its Unmanned Aerial System Traffic Management, or UTM, program. Amazon applauds NASA's efforts as the technological investment will result in a safer and more efficient use of the airspace, enabling innovation across a wide range of missions and scenarios. To help realize this new airspace model and bring the industry forward, Amazon will actively cooperate with other sUAS stakeholders—large and small, commercial and recreational—in developing equipage and performance standards for sUAS.

In summary, Amazon believes the safest and most efficient model for sUAS with mixed equipage and capabilities is in segregated airspace with a defined structure for operations below 500 feet, alongside federated, highly-automated, highly-available and secure air navigation services. The public and private sUAS industry should work together to realize this new concept of airspace operations if we are to bring the remarkable innovations of sUAS to bear in a safe and responsible way.

Roger Newman

Timperley Gala - John Andrews

Sunday 16th August saw the annual Timperley Gala held at the North Luffenham venue, one of the few, if not the only one, left in the Midlands.

I had been suffering from back trouble having been in bed most of the week prior and although pain had subsided I was still walking about wearing two body belts with my back stiff as a board. However the XC Weather forecast was so good I really had to turn up at the event particularly as I am a Timperley member.

Rachel and I arrived at Luffenham mid-morning and there was already a good turnout, the forecast bringing out most modellers within reach of the airfield and quite a few who had travelled a couple of hours to attend.

The wind, well drift is a better description, meant that retrieval was not going to be too onerous the only drawback being very long uncut grass on the entire site which hid the models unless you were within a few yards, this made following an accurate line essential.

The main competitions were all combined events and I entered open rubber using my repaired 'Last Resort' which had suffered a wind broken wing at Sculthorpe *(see my earlier epistle).*

Because of the long grass, I set up camp and winding jig on the runway again, alongside Noreen and Ken Bates. We met Noreen & Ken a few years back at the Indoor Nationals and have become good friends. Noreen had prepared good sandwiches with which she attempted to break my slimming diet. I politely refused her offering but then she produced some Fondue Fancies, bang went the diet.

Ken fettling his 'Senator'

Where was I? Ah yes, back to open rubber, a quick check flight revealed that the 'Last Resort' was still in trim so on with the turns and two maxes were soon in the bag and Rachel's socks were full of grass seeds. These were three minute maxes as CD JO'D had decided that the weather deserved the increase from 2 ½ to 3 minutes

Yours truly approaching full turns, tightens ones cheeks.

Third flight, I slipped into clanger mode. Having failed to take note of the slightly inferior climb rate of the model on the second flight, which was made using the same rubber motor, I still pressed on using it again. Perhaps if I had been using the torque meter, which was safely boxed in the back of the car, I might have noticed the lack of torque and piled on a few more turns, but no, still quit at 700 turns. The flight was a poor launch, a far from enthusiastic climb in indifferent air to an altitude insufficient to max. In fact the model was down in little over two minutes. John boy had done it again. I received little sympathy from JO'D when I took in my flight card to control and he commented that he would look forward to reading about it in the next Clarion, hence the blow by blow account.

I think it was Jim Moseley who advised me to change motors for each flight and suggested I used torque meters but, although I now carry a torque meter and three motors for each model, I seem too idle or dumb to use them. I may learn one day.
At the last Croydon Wakefield Day meeting I was talking with Peter Jackson, who was flying 8oz Wakefield and had forgotten his motors, he had bought a new box of rubber from our ever present John Hook and made up a new motor. I know that Peter normally has three motors and changes for each flight, then uses the first motor again for the fly-off. This day however he ran in his new motor with a couple of test flights then put up his three maxes and a DT flyoff all with the one new motor. It can be done, but not by me it would seem.

After some superb flyoffs JO'D rang the bell for the final time to summon us remaining flyers to the prize presentation.

Winners experienced difficulties handling their winnings which comprised of, a Permanent Trophy, a Memento Trophy, a bottle of wine and an envelope containing cash winnings.
All in all a first class meeting in unusually calm conditions which keeps you smiling whatever your trials and tribulations in the competitions of the day may have been.
After the meeting we went straight into the Wheatsheaf pub just down the road for our Sunday lunch and had the pleasure of dining with Phil Ball and Annette. Rachel once again addled Phil's brain with further genealogy research she had done on his family tree. I think she must have put a damper on Phil's building programme with all the data he's got to unravel.

Winners

GLIDER 3X3 mins 16 entries 14 scores 7 in flyoff
1st - J.Carter 9.00 + 14.23 **2nd** - R.Jack 9.00 + 4.31 **3rd** - C.Foster 9.00 + 3.45

RUBBER 3X3 mins 8 entries and scores 3 in flyoff
1st - I.Taylor 9.00 + 12.57 **2nd** - A.Moorhouse 9.00 + 6.51 **3rd** - D.May 9.00 + 3.30

HLG/CLG 7 X 1 min 9 entries 7 scores No flyoff
1st - M.Page 6.35 **2nd** - I.Clark 6.18 **3rd** - C.Parry 5.13

MINI VINTAGE 3 X 2 mins 13 entries All flew 1 disq. 5 in flyoff
1st - F.Rushby 6.00 + 6.02 **2nd** - R.Wykes 6.00 + 3.07 **3rd** - T. Rushby 6.00 + 1.52

POWER 3 X 3mins 12 entries and scores 6 in flyoff
1st - A.Brown 9.00 + 28.59 **2nd** tied - S.Barnes 9.00 + 9.06 **3rd** tied - P.Watson 9.00 + 9.06

Full Results Sheets

Rubber

NO	NAME	PAID	MODEL NAME & TYPE	FLIGHT 1	FLIGHT 2	FLIGHT 3	TOTAL	FLYOFF	POSN
1	I. TAYLOR	✓		3:00	3:00	3:00	9:00	12-5	7
2	T. BAILEY	£10	Last Resort	1:58	2:58	3:00	7-56		
3	R. WYKES	£10	50g	2:10					
4	M. MARSHALL	£10	~~Bit Bird Wobbe~~ 50g	3:00	2:25	3:00	8-25		
5	P. WOODHOUSE	£10	O/D 50 GRAM BMFA	3-00	3:00	2:45	8-45		
6	D. MAY	£10		3:00	3:00	3:00	9:00	3:30	
7	A. MOORHOUSE	10	50GRM.	3:00	3:00	3:00	9:00	6:51	
8	J ANDREWS	£10	LAST RESORT	3:00	3:00	2-01	8:01		

Glider

NO	NAME	PAID	MODEL NAME & TYPE	FLIGHT 1	FLIGHT 2	FLIGHT 3	TOTAL	FLYOFF	POSN
1	K BEST	✓		3:00	3-00	3:00	9:00	1:46	
2	S. DARNION	✓		3:00	3:00	3:00	9:00	~~2-37~~	
3	J. CARTER	✓		3:00	3:00	3:00	9:00	14-23	1ST
4	C. FOSTER	✓	Rubin	3:00	3:00	3:00	9:00	3:45	3rd
5	M. EDWARDS	--		3:00					
6	G. PECK	✓		3:00	1:32				
7	C. PARRY	£10		3:00	2:02	3:00			
8	R. HEAP	£10		1-36	2:45	1:45	6:05		
9	R. JACK	£10		3:00	3:00	3:00	9:00	4:31	2nd
10	J. COOPER	£10		3:00	3:00	3:00	9:00	TOO LATE	
11	G. MANSION	£10		3:00	3:00	2.50	8:50		
12	M. McHUGH	£10							
13	D. BROWN	£10		3:00					
14	N. PARRY	£10		3:00	2:55	0:00			
15	P. BALL	£10		3-00	3-00	3:00	9:00	2:22	

Power

NO	NAME	PAID	MODEL NAME & TYPE	FLIGHT 1	FLIGHT 2	FLIGHT 3	TOTAL	FLYOFF	POSN
1	C. FOSTER	£10		3:00	2:34				
2	D GINNS	£10		1-21	2-18	2.55	6.34		
3	J. PARTINGTON	10	Beaulik	1:07	3:00				
4	A. BROWN	✓	BMFA POWER	3.00	3:00	3:00	9:00	28:59	1ST
5	R WATSON	✓		3:00	3:00	3:00	9:00	9:06	2nd
6	S.BARNES	£10	BMFA - POWER	3.00	3:00	3:00	9:00	9:06	2nd
7	B. SPOONER	£10	SLOP	1:56	3.00	3:00	7:56		
8	M. SIBSON	£10		3:00	3:00	3:00	9:00	7:49	
9	T. PAYNE	£10		2:00	3:00	3:00	9:00	3:36	
10	F. RUSHBY	£10?		3:00	3:00	3:00	9:00	2:41	
11	D. CLARKSON	£10		1-24					
12	A. WOODHOUSE	✓	RAMROD 600	2.27	3:00	3:00	8-27		

CLG/HLG

NO	NAME	PAID	MODEL NAME & TYPE	FLIGHT 1	FLIGHT 2	FLIGHT 3	TOTAL	FLYOFF	POSN
1	I. MIDDLEMISS	✓	33, 38, 38	22	27	32	58	4-08	
2	P. GIBBONS	✓	15 28 18	23	15	34	21	2-34	
3	B COLLEGE	✓							
4	C. PARRY	✓	1:00 0.39 1:00	38	43	47	26 -	5-13	3RD
5	M. PAIGE	✓	60 60 60	60	56	60	39	6-35	1ST
6	N. PARRY	✓							
7	K. BATES	✓	32 24 8						
8	I. CLARK	£10	60 40 44	60	60	60	54	6-18	2ND
9	C. BREWER	£5	11 7 13	6	16	20	4		

Mini-Vintage

NO	NAME	PAID	MODEL NAME & TYPE	FLIGHT 1	FLIGHT 2	FLIGHT 3	TOTAL	FLYOFF	POSN
1	B. JACKSON	£10	DYNAMITE	2.00	2.00	1.41	5.41		
2	C. FOSTER	✓		2.00	2.00	2.00	6.00	1-16	
3	G WARBURTON	£10	HEDCAT	2.00	2.00	2.00	6.00	1-45	
4	D. GINNS	✓	P BANANA	1.49	2.00	2.00	5.49		
5	T. BAILEY	✓	SCRAM	1.27	1.48	2.00	5.15		
6	M. McCONNELL	✓	Vanquish	~~2.00~~	~~2.00~~	~~2.00~~	~~6.00~~	*	
7	S PHILPOTT	✓	High Interceptor	2.00	2.00	1-23	5.23		
8	T. RUSHBY	✓	SENATOR	2.00	2.00	2-00	6 00	1-52	3rd
9	D DAVITT	£10	SENATOR	2.00					
10	F. RUSHBY	£10?	TOP BANANA	2.00	2.00	2.00	6-00	6.02	1ST
11	K. BATES	£10	SENATOR	0.51	1.29	1.16			
12	D TAYLOR	£10	SENATOR BUCCANEER	1.29	2.00	2.00	5.29		
13	R. WYKES	✓	Senator	2.00	2:00	2.00	6-00	3.07	2nd

John Andrews

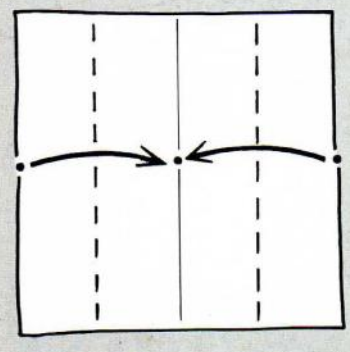
Paper Airplane: Tri-Plane - Nick Robinson

TRI-PLANE

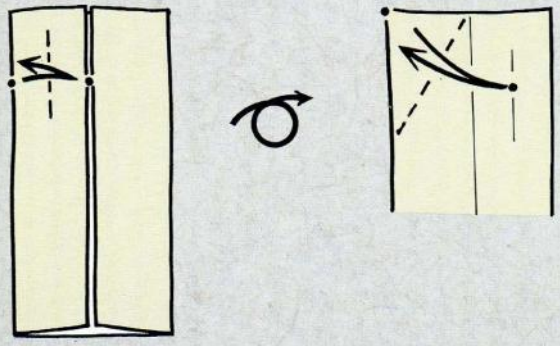
NICK ROBINSON

The "tri" in the name of this design refers not to the number of wings (there are two) but to the use of 60-degree geometry to produce a series of equilateral triangles. This is quite unusual; most paper airplanes are based around 45-degree creases, but a simple folding technique can also produce a perfect 60-degree angle. This is an area yet to be fully explored, so if you adapt this technique the chances are you will produce a truly unique design.

Start with a square, coloured side down. Crease the vertical centre crease and fold accurately.

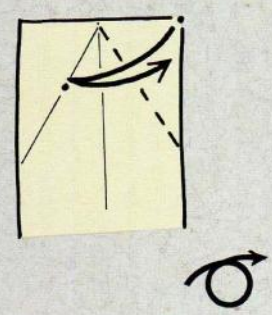


1 Fold either side to the vertical centre crease.

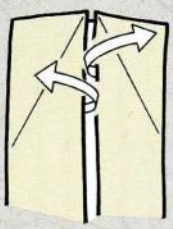


2 Make a location crease on the upper left-hand side, creasing quite gently and only where shown. Turn over.

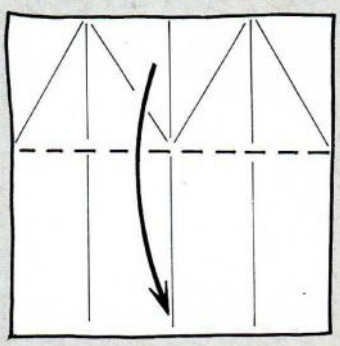
3 Fold the upper left corner to touch the crease made in step 2, making sure the new crease starts at the centre of the upper edge, then undo the fold.



4 You have produced a 60-degree crease! Fold the right-hand corner across to line up with it, repeating the fold in step 3 and then unfold. Turn the paper over.

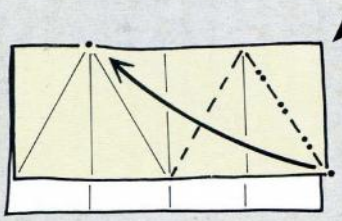


5 This is the crease pattern so far. Open out to a square again.

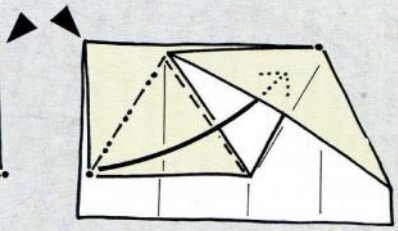


6 Using the 60-degree creases as guides, valley fold the upper edge downwards.

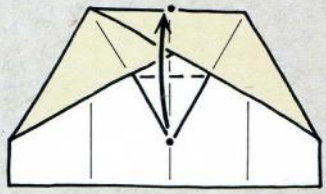
TRI-PLANE



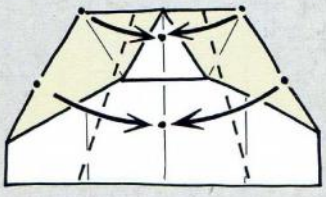
7 Use the creases to swing the right inside corner across to the upper left ¼ crease, pressing the small triangle flat as you do so. This is a very natural movement, but refer to the next diagram if you are unsure.



8 Repeat the move on the left, tucking the point within the pocket created in the last step.

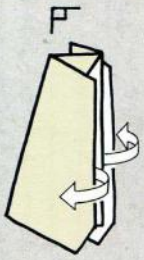


9 Fold the internal (equilateral) triangle upwards.

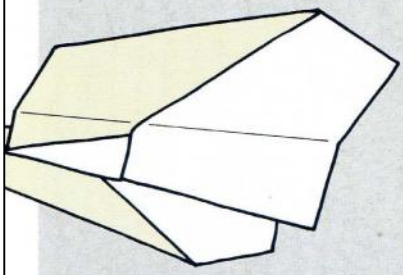


10 Take both outer folded edges to the centre crease, pressing firmly.

11 Mountain fold in half from right to left.

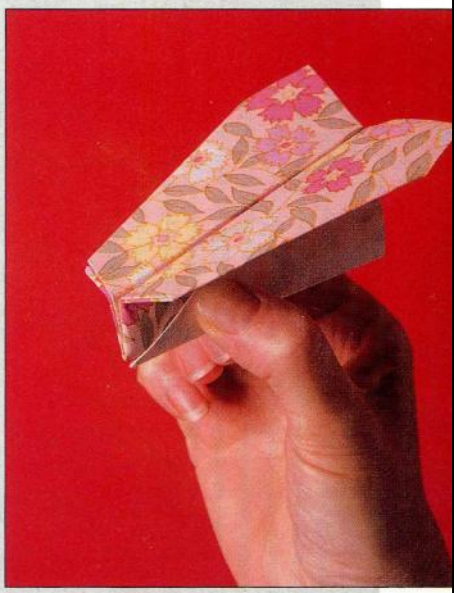


12 Open the wings out to right angles.



13 Finished.

VIEW FROM BELOW



LAUNCHING POSITION

FLYING HINTS

This is a stable glider, so launch in the normal way, checking the dihedral and the speed of launch to get the best results.

Secretary's Notes September - Roger Newman

Here's to hoping that we will have had a good attendance & fine weather for our SAM Champs at Middle Wallop by the time these notes are read!

Our next meeting details are given below. Note that Sunday is shared with the Croydon Club.

October Meeting Events

Saturday 3rd October:

Vintage/Classic CLG/HLG; E36 Electric Power; Combined 4oz/8oz Wakefield
Up to 50" Combined Vintage/Classic Bungee Glider; P30 Rubber;.

Sunday 4th October:

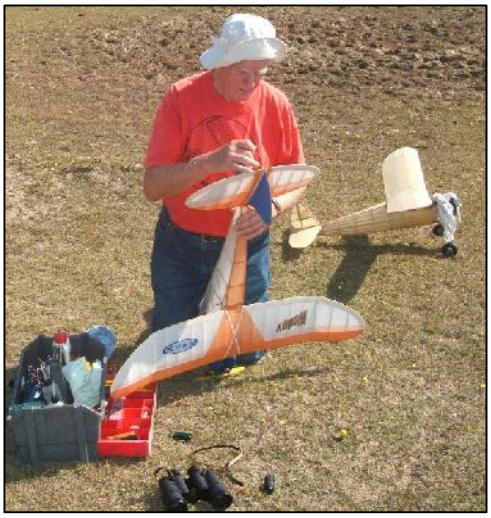
Croydon Coupe D'Europa Day: F1G; Vintage Coupe d'Hiver;
Flitehook Europa Team Trophy for F1G teams.

36" Combined Vintage/Classic Bungee Glider; Combined Vintage/Classic Power.

Sports flying & trimming both days.

Activities/Memories

Not a great deal of activity actually – recently missed some decent flying days at Beaulieu but have also caught a few as well.



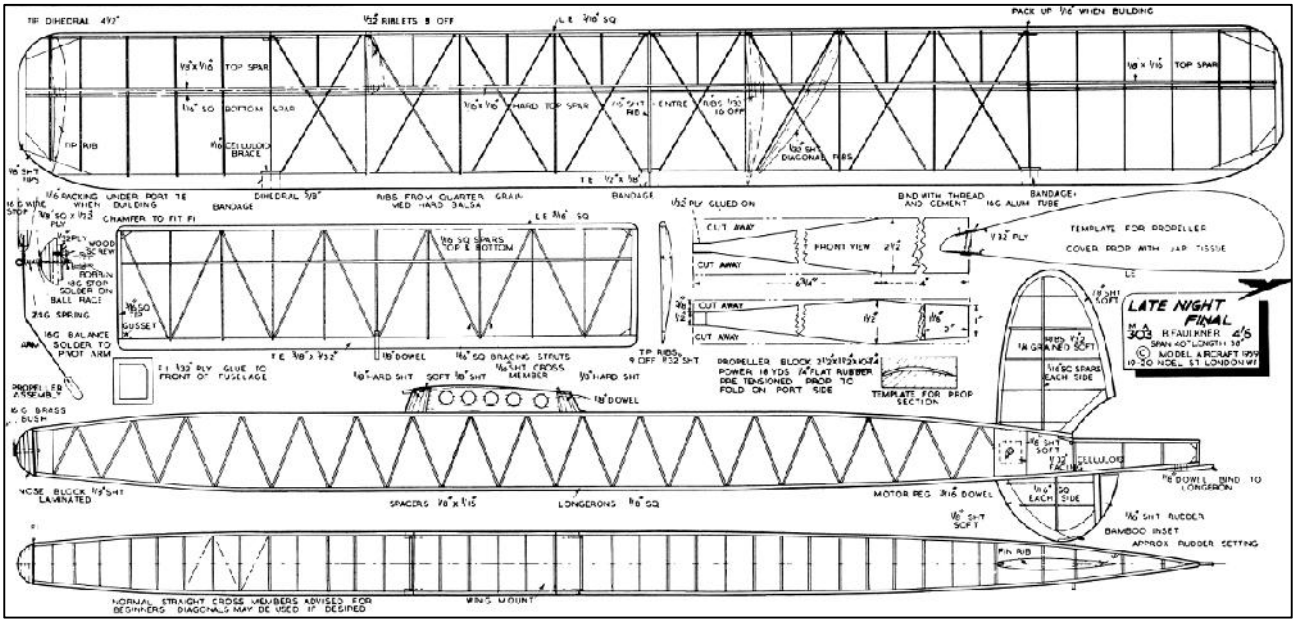
Last outing almost saw the loss of my faithful Wedgy. After 8 very decent flights all with fuse DT operating, the 9th flight ended with a lost model when the fuse didn't burn. I distinctly remember lighting it! Eventually out of sight at a great height in the sun & abandoned hope after timing for some 8 mins. Two hours later, mobile goes – "found a model" – to cut a longish story short, two walkers out on a long distance hike had spotted & retrieved it, about 1½ miles from where I was flying. Made arrangements to meet & duly got the model back, with profuse thanks & yes, the fuse didn't burn - aka I probably didn't do a good enough job lighting it! Great days flying, shame there weren't any others present. Typical 2 minute dt flight was drifting very slowly for about 250 yards.

Sorted out the garage, the model room & various boxes of wings, tailplanes & fuselages. Everything now identified & listed (some 50+ models but not all complete) so components can be seen & gathered together for a flying session without having to hunt high & low for missing bits. The use of three Wilko tension rods across the model room allows various wings to be easily stored & accessed – bargain at £3.90 each (100 – 150 cm). Should have done this ages ago. Amazing what turns up – another fuselage sans wings & tail with our old address from 19 years ago – this time for an

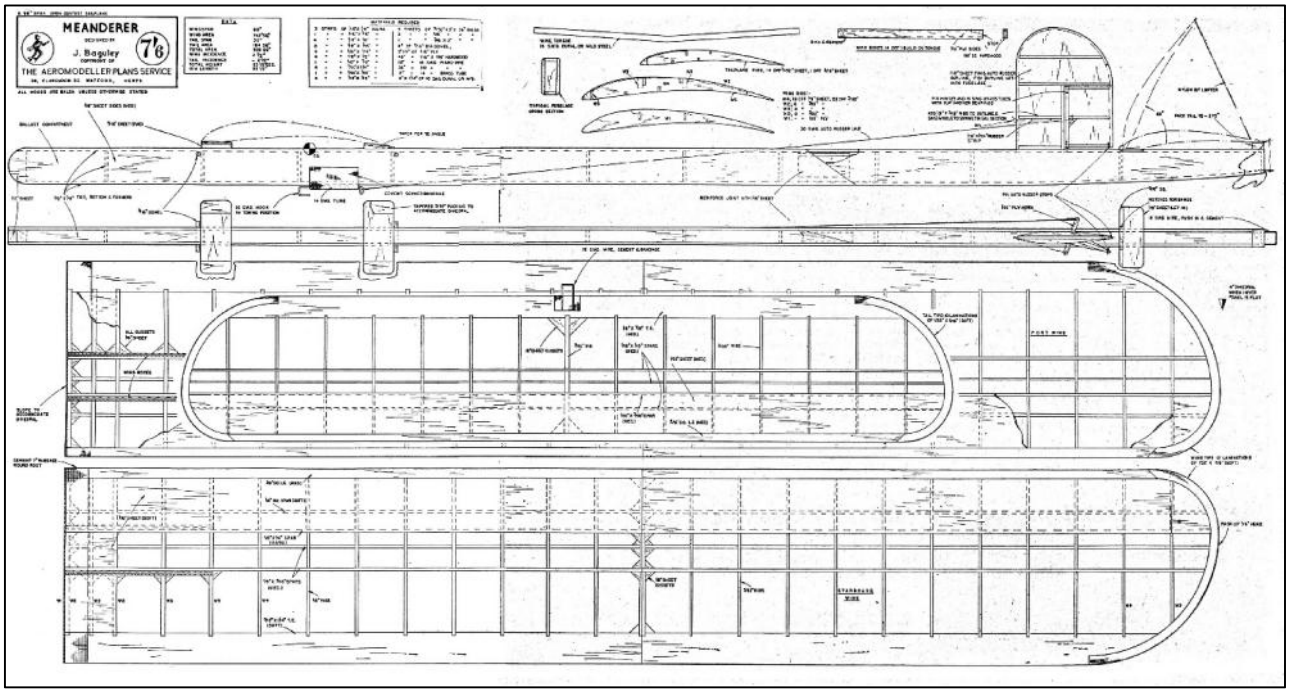
Asteroid A1 (a Jim Baguley design for St Leonards Models), so new wings & tail now under construction. Slicker Mite wings surfaced in excellent condition, but no fuselage or tail so another little project beckons. Flew the original at Middle Wallop many times in the '90's till it hit a dt pole, slid down & when recovered was found to have a broken crankshaft – Indian Mills of course!

Started clearing the loft over the garage as well – many old photos from early days at Middle Wallop to be scanned & sent to our Editor. One is below, taken by Ron Moulton of the second mass launch of 121 models in 1993. To be exceeded of course by similar activities in later years, I seem to recall the best recorded total ended up well over 300. I always positioned myself at the end of the line to avoid my power model ploughing through a cloud of rubber models!

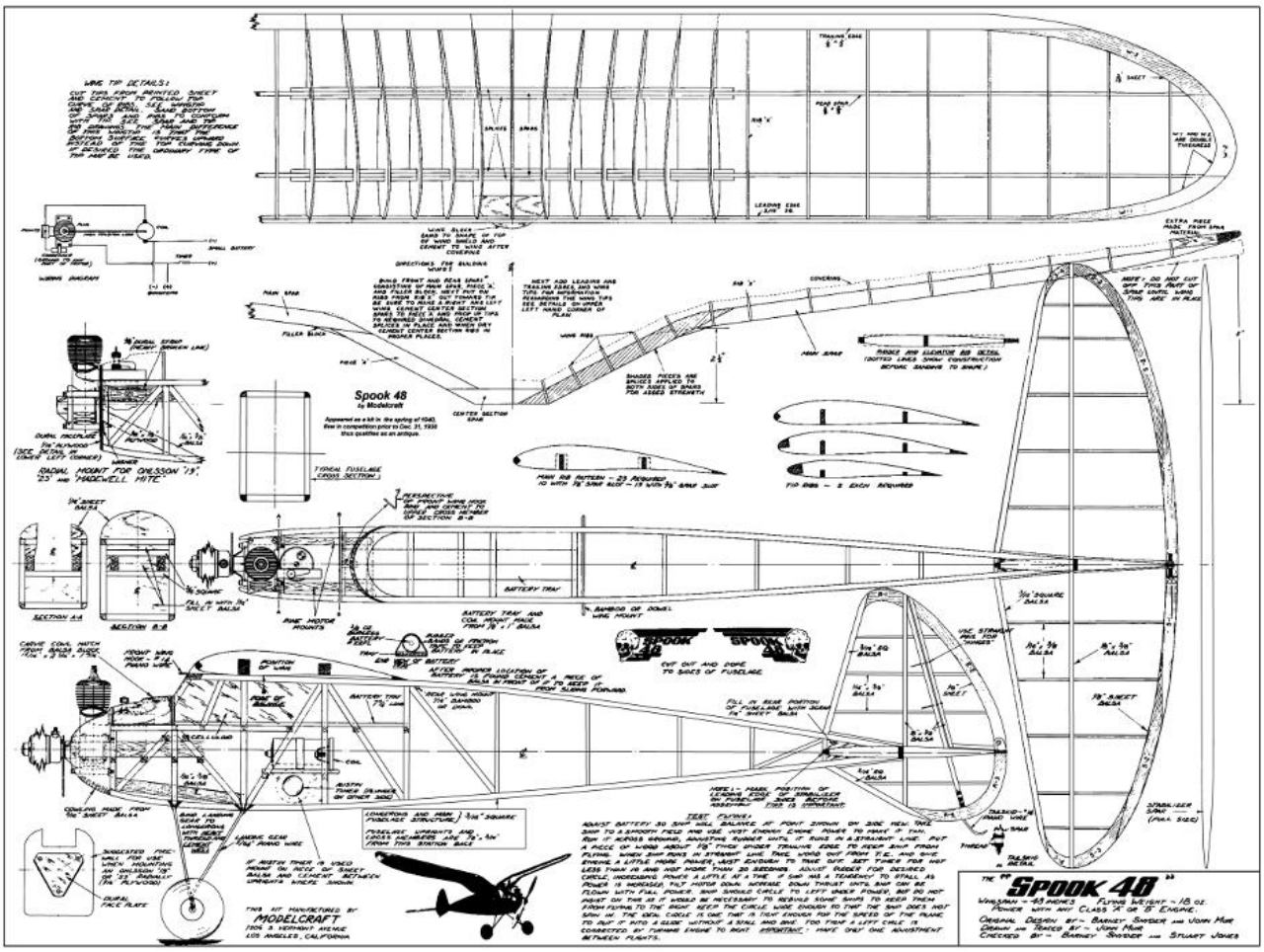
Plans for the month.



Rubber: Late Nite Final – contender for the BMAS Club Classic comp.



Glider: Meanderer – another Jim Baguley design.



Power: Spook 48 – ever present on my “to build” list, but haven’t got round to it.

Roger Newman

Glow Plug Patent - K Howie 1937

Fig. 1.

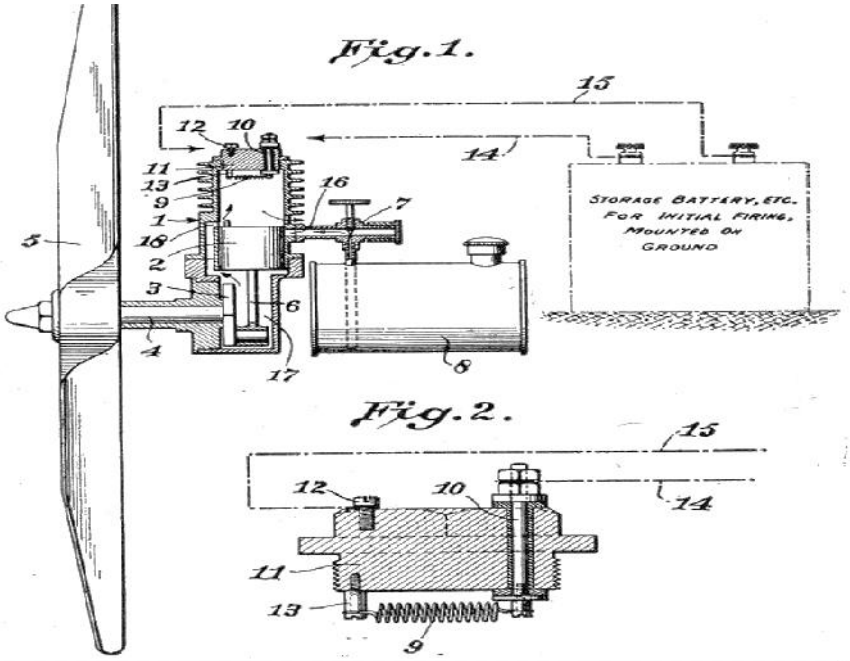


Fig. 2.

IMPORTANT PATENTS

2138301 K. HOWIE 1937

WITH THE RECENT resurgent popularity of the "glow-plug" this patent specification makes particularly interesting reading. When Howie invented this form of ignition in the miniature internal combustion engine he did in fact introduce a new kind of model aircraft. The post-war popularity of the European diesel obviously stole much of the glory of the glow plug engine but, significantly, it was not until 1948 — ten years after Howies' patent was granted — that the glow plug was introduced to the United Kingdom.

Even more significant has been the latter day tendency, in the U.S.A. at least, to return to the detachable cylinder head and glow element as proposed by Howie in *Figure* 2 of the specification drawings. It should be noted that the invention is not limited to the embodiment shown in the drawings, that construction is merely one preferred method of carrying it into effect.

The cylinder head includes two terminals marked as 10 and 12 and a smaller pillar 13. A coil 9 extends from the pillar 13 to the extremity of the terminal 10 which is, of course, insulated from the cylinder head. Material for the coil 9 is not specified, but suitable metals were available at that time and were known thirty years before; the fuel is not disclosed, but "dope" fuels were available and could have been used.

Howie claimed that his invention reduced the weight of the conventional power plant by 68 per cent. or 9·777 ounces derived as follows: dry cells 6·09 oz., coil 2·53 oz., spark plug and wires ·359 oz., timer (presumably this refers to contact breaker and not flight timer) ·242 oz. and condenser ·556 oz.

The second sentence of Howies' introduction in describing his invention is worthy of repetition, it is in fact prophetic.

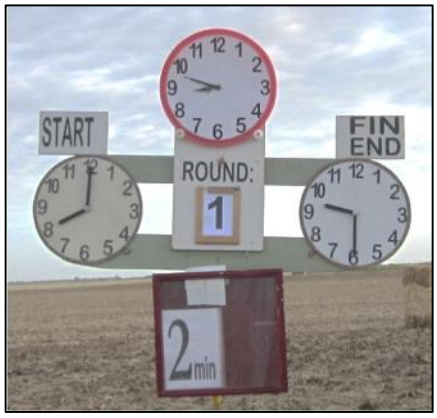
It reads: "Model airplanes at present have a wing spread of from five to thirteen feet, as compared with a desirable spread of two to three feet."

Thank you Mr. Kenneth Howie.

From Aero Modeller January 1960

Moncontour switches on E36 - David Brawn

6 August 2015, mark that date in Free Flight history as the day that E36 became an established international competition class. For those of you still abed in England you will rue the day that you missed history being made on a far flung foreign field – cropped fields in southern Brittany to the north of the Loire Valley where the Moncontour club organised the first E36 International under the directorship of Philip Dupuis.



In 2014 Moncontour held E36 demonstration flights, including our own Peter Tollhurst, to showcase the class. For the 2015 contest E36 was accorded the same status as the FAI F1G, F1H and F1J classes. While E36 has been around for a time, characterised by Don DeLoach's 'Super Pearl 202-E design published in 2011, the class has been slow to attract competition organisers and fliers in the European theatre. Moncontour (and Poitou) 2015 had depleted entries due to the World Champs in Mongolia, only kiwi veteran Paul Lagan managing both events (F1B in Mongolia, F1G at Moncontour) by skipping the WC banquet to jet back around the planet to Moncontour where he mentioned that jet-lag was a bit of a problem on that schedule but he still maxed out in F1G. For its first International E36 attracted a field of ten entries (5 UK, 3 French, 2 Danes) noticeably more than either of the established F1H or F1Q classes.

Thursday the sixth dawned to blue skies with the temperature quickly soaring above 30C making for hot conditions on the ammonite littered cropped field where the launch positions stretched SE from the control/refreshment encampment (hot coffee, chilled lager, croissants and baguettes all at pocket money prices) through the F1G and F1H positions before ending at the combined F1J/E36 launch points furthest from the shade and catering.

E36 has been dominated by the 'Super Pearl' slabsider approach of a 36 inch by 6 inch wing matched by a rectangular tail so it was interesting to see some more estetic approaches to model design at Moncontour. Peter Jellis had a Norman Marcus scaled Eureka, Ray Elliot a Satellite with balsa box fuselage and a mini Nig-Nog, along with Peter Buchwald's curved LE design, showing some style beside the slabsiders.

Ray Elliott 'Mini Nig Nog'

Gavin Manion & Ivan Taylor on the F1G flight line

It was a breezy day at ground level but up in the air, especially in the big thermals, the drift was very gentle. So while retrieving was a hot, dusty affair it was straight forward, unless you

were in the big thermals (without RDT) when you would be grateful for your tracker system to retrieve amongst the maize fields in front of the downwind village.

15 seconds engine run, 2 minutes max and a hot day would indicate plenty in the fly-off but the air could be treacherous. Tom Oxyger (Danish F1C/F1J flier) dropped 50 seconds on his first flight, while only Tony Shepherd and Peter Tolhurst maxed. Mike Evatt was an early off-trim casualty powering left into the field for a zero.

Tom Oxyger

Ray Elliot's fast open climb of his Satellite was not matched by the glide so after two drops and a max he changed to his mini Nig-Nog for his final two maxes. As the day progressed it became a battle between who had dropped least in the conditions. As we waited, cold Stella in hand, on the straw bale podium the final flights came in giving Ray Elliot a clear victory by thirty seconds, his elliptical winged models outclassing the slabsiders by a good margin – a victory for style in the first E36 International.

At the Poitou F1Q contest , just a few kilometres from the Moncontour field, the Brits flew their E36s against the modern F1Qs of Tom Oxyger and Peter Buchwald which only went to show that for sheer performance you cannot beat a modern VIT AR equipped power model – but who cares, we have E36.

David Brawn

Aeromodeller Departed

Jack Foster:

With regret we report the passing of Jack on Thursday August 20th

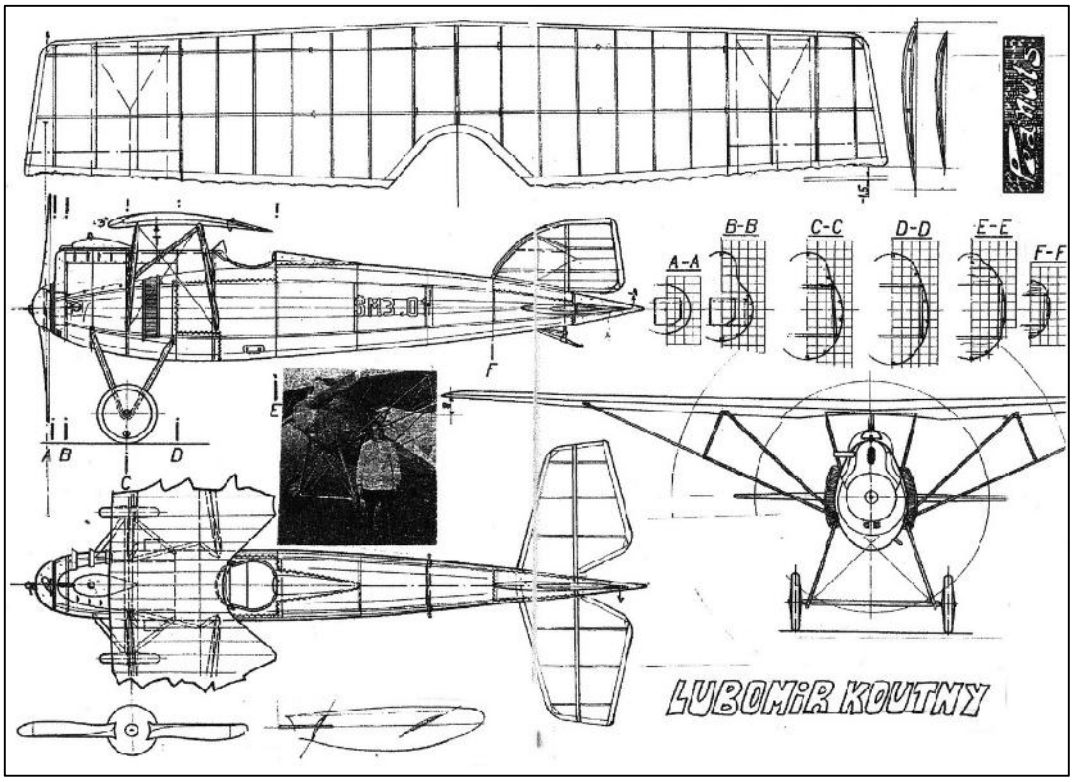
He was a well known and respected Morley flyer and producer the Northern Area Web News until his illness with cancer prevented him from continuing.

R.I.P.

For funeral arrangements email Colin Foster (colkate@btinternet.com)
Or Gordon Warburton (Gwarb@aol.com)

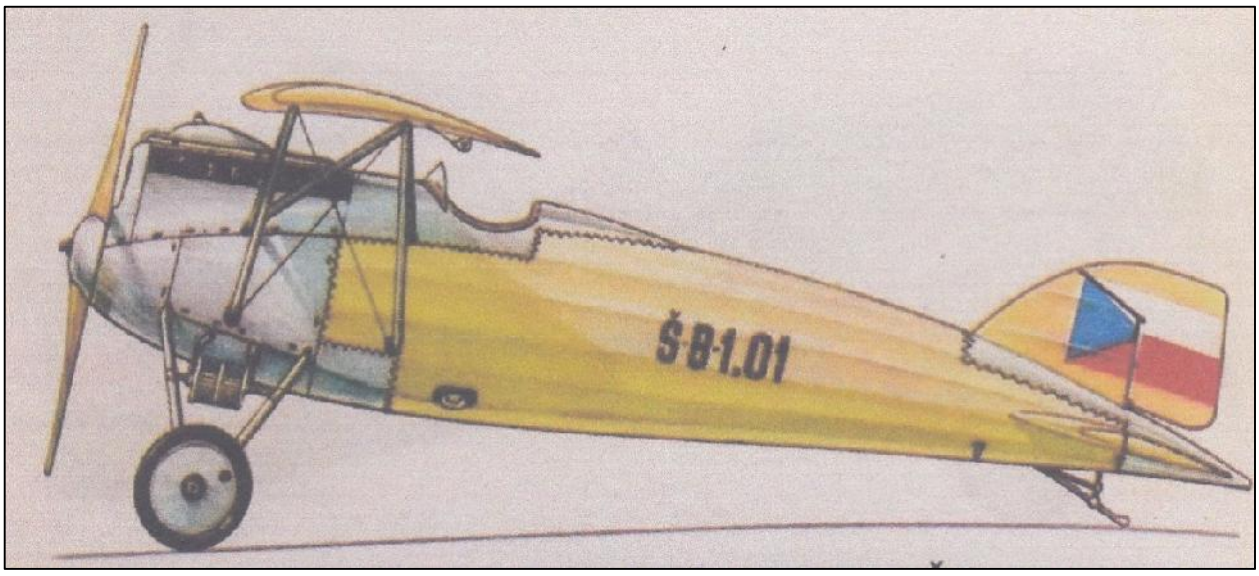
Report No. 56. All is revealed.

Last month I asked you the readers for help in identifying the prototype on which Lubomir Koutny's peanut plan, shown again here, was based.

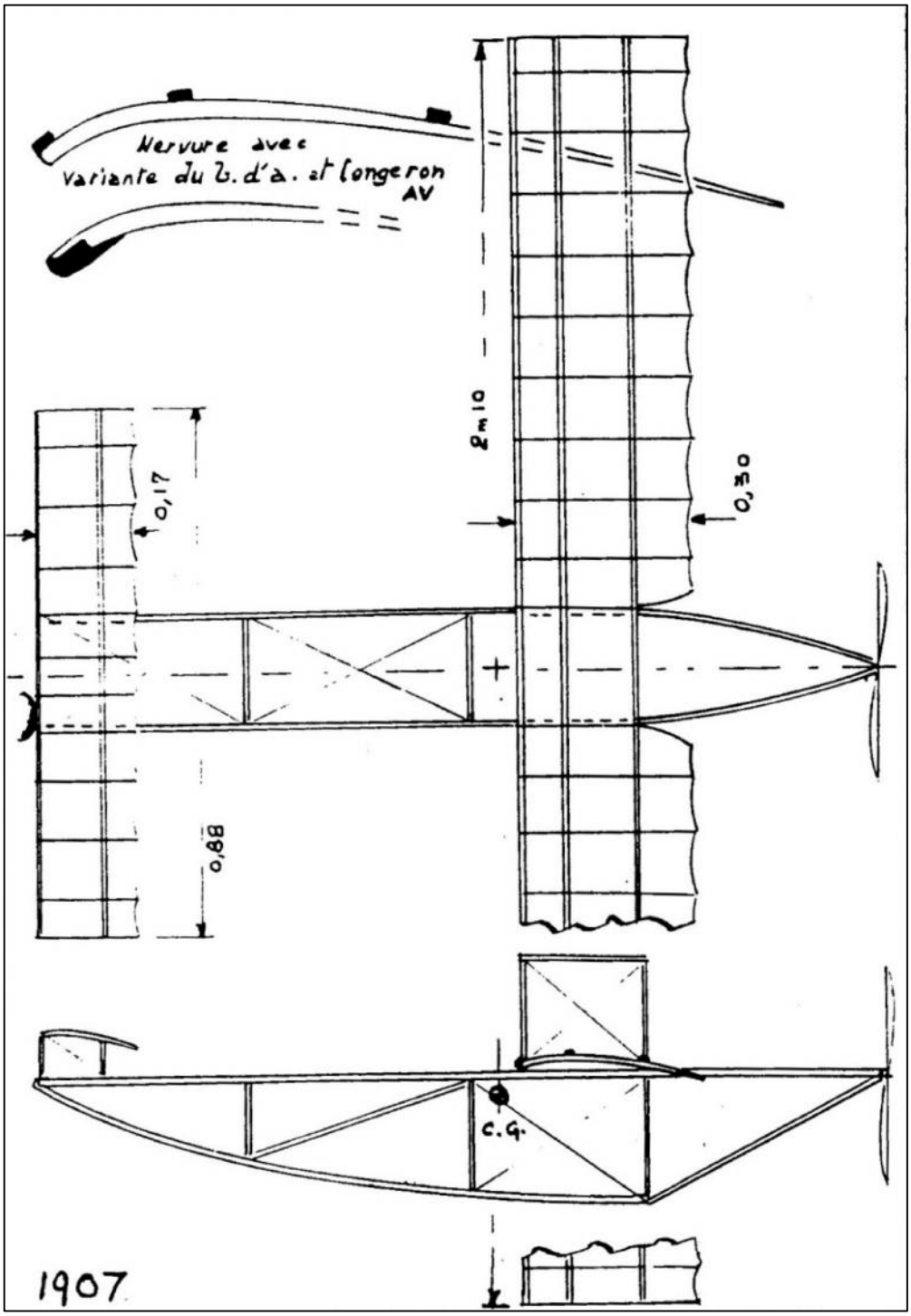


John Wilkinson promptly identified it as a LETOV Š3 and then Antonin Mejtsky confirmed the name, gave more information and supplied the colour side view.

This was the first fighter design from LETOV, originally known as the LETOV ŠB1 and then the LETOV Š3. The designer and main constructor was Alois Šmalik which probably accounts for the "ŠM3.01" on the fuselage side of the model. Antonin advised that the special letter Š is to indicate pronunciation as in shirt, sheep etc. The sole example was built in 1921/22 and whilst modestly successful the "Military Aircraft Works" decided to concentrate on the bi-plane LETOV Š4 and development of the Š3 stopped.



Thank you chaps, that reduces the number of "nk" i.e. not knowns in the plans in mags list to 14 off of which only one might just possibly be a scale model. The plan is from Clarion November 1991 and would seem to be a rubber powered canard of 2100mm (about 82") span. The notes are in French, which according to Google and guessing translate to "Ribs with variant of leading edge and spar" The date is given as 1907.



David Baker featured several other French designs in the same issue of Clarion, some of which carried the "4A" and/or "SAM 70" logo but the plan above has no clues as to origin.
Scale, admittedly a long shot, or not, can you identify the prototype, or supply any information

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

Roy Tiller

Articles for Sale & Wanted

MODEL DIESEL AND GLO-IGNITION ENGINES FOR SALE

These engines have been the property of the present owner for a considerable time and although used moderately they remain in good order (exceptions noted). Recently cleaned and lightly oiled all engines turn over freely. A good home is sought for this group of engines offered as three lots at the best offer price. A further group contains three models with engines installed, individual offers invited. Please email me with postal address for photographs or to arrange inspection. martyn.pressnell@btinternet.com

Engines for sale (Diesel engine lot)

1. Allbon Dart 0.5 cc
2. Mills 0.75 (Derek Giles)
3. Oliver Tiger Mk II No T3215 MOD (not with R/C carb)

Engines for sale (Glo-ignition engine lot)

4. Cox TD 049 with radial mount and spanner
5. Cox TD 049 with spanner
6. Cox TD 09 with radial mounts, spanner, heads
7. Cox TD 15 (with ball joint in piston), carb. body cracked
8. Cox Special 15 (with gudgeon pin), carb. body cracked

R/C engine lot

9. OS Max 20 FS (boxed with radial mount)
10. Cox OS FS 26 Surpass four-stroke

Other engines and models

(Offers invited for individual items)

11. Cox TD 051 mounted in ½ A pylon power model, timer & cut-out
12. Mills 0.75 cc Mk II mounted in KK Snipe cabin model for R/C, with three servos, battery etc.
13. PAW 1.49 cc tuned, mounted in aerobatic CL model

Martyn Pressnell

For sale:

REPLIKIT LADYBIRD: Among the effects of a recently-deceased model flyer was a Replikit Ladybird (full kit), with rolled plan, box opened but appears complete and un-started.
Listed at £54.95. Does £35 sound reasonable (given that the kit cost about a couple of quid 60 years ago…)? If so, a cheque payable to "BMFA FF Team Support Fund" and it's yours.

LITESPAN: The following packs of Litespan were also among the effects..
Red; Red (with a piece missing about 48 x 14cm); Black; Silver; Yellow; Cream.
Retail price seems to be around £3.50 per sheet. How about £2.00 per sheet + 54p postage, payable to BMFA FF Team Support Fund?

PLANS: The following plans were also in the collection; none appear to have been built from.
Offers please, with proceeds going to the BMFA FF Team Support Fund.
Veron Cardinal; Cheshire Kitten; Moonco + Crossbow; Sundowner; Miss 38;
Cherub; Tomboy; Coquette; Pinocchio II;
Terrier; Zeus; Roaring 20; Twosome + Fokker DVIII;
Microplan Veloz; Voommitt; Tri-Pacer (RC); Old Man Mose;
Southerner Mite; Debutante; Pee Wee Pal (Buckle); Pirate (Buckle);
Yeoman Dixielander + instructions; Yeoman Dixielander; Dixielander (Dick Johnson).

Please contact Martin Dilly on 020 8777 5533 or e-mail: martindilly20@gmail.com regarding the kit, the Litespan or the plans.

Martin Dilley

For Sale: Aviation Books
The late Keith 'Dusty' Miller's wife Rita has compiled a list of his aviation books which she is keen should be sold to those who appreciate them. A well-known aviation bookshop has offered a derisory sum for the lot. There are some rare gems in the list so if readers are interested in adding to their aviation libraries please contact:
Martin Dilly on Tel: 0208-7775533 or e-mail martindilly20@gmail.com.
Cheques eventually payable to Rita Miller please.

One Flight Too Many by Jimmy Taylor, signed by author (£45 on Amazon, un-signed)
Flying Start by Hugh Dundas
The Observer's Book of Aircraft
Aircraft Profiles 31-60 (not for re-sale)
The World's Vintage Sailplanes 1908-45 by Martin Simons +wall chart (£160 on Amazon)
The Book of Westland Aircraft by A.H. Lukins & D.A. Russell (£20 on Amazon)
The Illustrated Encyclopedia of Aircraft ed. David Munday
Aircraft of the Fighting Powers 1943 by O.G. Thetford & H.J.Cooper (£10 on Amazon)
Jane's All The World's Aircraft 1976-77, ed. J.W.R.Taylor ($18 on Amazon)
Fight for the Sky by D.A. Bader (£13 on Amazon)
Wings for the Fleet 1910-1916 by Rear Admiral G. van Deurs
The Observer's Book of Aircraft by William Green (£10 on Amazon)
The International Encyclopedia of Aircraft
The Smithsonian Book of Flight by Walter J. Boyne
Britain's Aviation Heritage – RAF Celebrating 90 Years (still wrapped, as new)
Flight – The History of Aviation by John Batchelor & Chris Chart
Soft Backs
Bent & Battered Wings by Jim Sullivan
Purnell's History of the World War Special – The First War Planes
Early Birds (Historic Sheppey series) by Bill Croydon
Target Germany – the US Army Air Force's story of the VIII Bomber Command's first year over Europe
Bomber Command
Aircraft Archive – Famous Racing and Aerobatic Planes ($13 on Amazon)
Proud Heritage – a pictorial history of British Aerospace aircraft.
Famous Flyers – Manfred von Richtofen by David Baker
World Aircraft – Origins – World War 1 by Enzo Angelucci & Paolo Matricardi

Martin Dilly

For Sale: Glider Winches and KSB DT Timers surplus to requirements.
As I convert my competition models to RDT (see SAMS1066 new Clarion articles) I am finding a number of items surplus to requirements.
Current surplus includes two glider winches with lines:-
75 metre Hercules braid (Dynema style) 80lb breaking strain on plastic geared winch with UK pennant, tow ring and dt release line. £25.
100 metre Hercules braid 30lb breaking strain on 'grinder' conversion winch with UK pennant, tow ring and dt release line. £20.
KSB DT Timers £15 each all in good condition.
Delivery to be arranged

David Brawn.

Wanted:
Complete Reliable tracking system including preferred Frequency 152.450
Please contact: Bob Owston, 20 Vernon Road, Bushey, Herts WD232JL
Tel: 01923234199 mob: 07736217373 email: owstonarch@aol.com

Bob Owston

Picture Gallery - Editor

These pictures are from my 'Unused' pictures file, I've had some of them quite a while.

Clive Metcalfe displays his mini "Eros"

John Hook and his F1A glider assisted by Bob Taylor

Lindsey Smith shows off "Mr Smoothie

Peter Michel with his "Stothers" glider

K.K Pirate, Spencer Willis built it a while back when he was twiddling his thumbs

Tomboy by Pete Smart from page picture in 1950 Nov Aeromodeller so it is only 9" span with minute Gasparin CO2 motor.

First 4 pics by Keith Miller - 5th Spencer Willis - 6th Lindsey Smith.

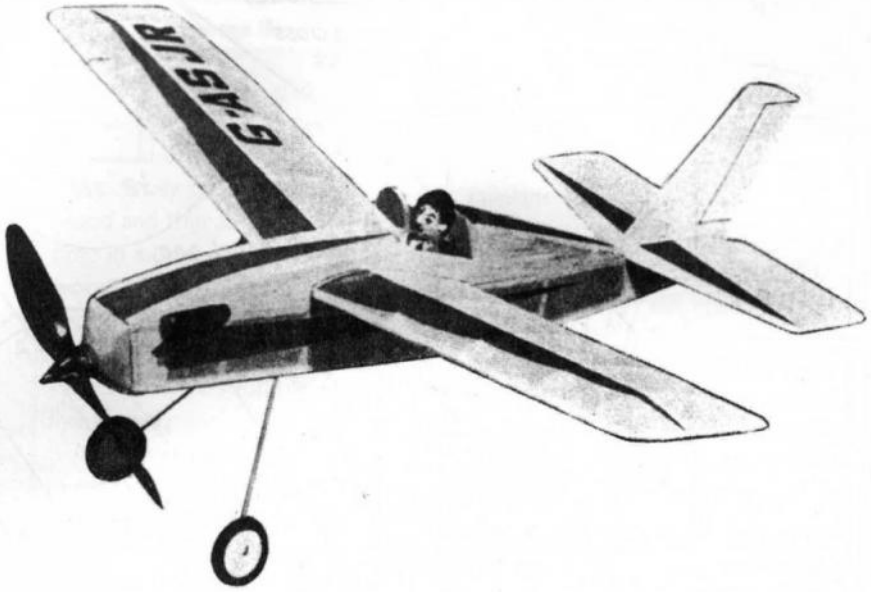
Editor

Ray Malstrom's Model of the Month - Chris Strachan

From the book: Ray Malstrom, 60 years of IVCMAC

'STARDUST'

Good flying and good looks can go together! Ray Malmström invites you to build this special M. M. model



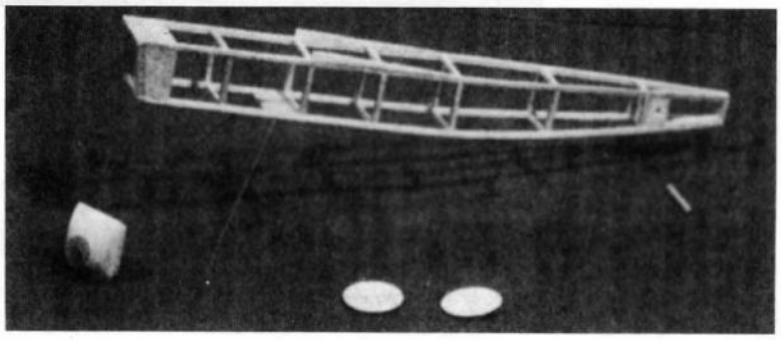
MODEL aeroplanes built for duration flying are often criticised for not looking very much like real aeroplanes. On the other hand, those that are faithful replicas of real aircraft are usually difficult to build and tricky to fly. However, 'Stardust' is a compromise between the 'duration' and 'scale' models, and is known to aeromodellers as a sport or semi-scale type model. It combines easy building and good flying qualities, with the look of a real, light aeroplane.

With a pilot in the cockpit, engine cylinders and the wing in the fashionable shoulder-wing position, you could easily mistake 'Stardust' for the real thing as it climbs skywards. If you wish to build this super little model, full plans and instructions are given here.

Build two fuselage side frames over the plan, one over the other. Use greaseproof paper between the frames and over the plan to prevent them sticking together. Remove the side frames from the plan and join with cross pieces A, B and C. Add reinforcing sheet pieces D at the nose and the rear peg anchorages E. Accurately cut out two incidence pieces and cement in position. This must be done carefully.

Bend the undercarriage wire in a vice and then cement it to piece X. Secure the wire in place with a piece of thin linen or silk cemented over the wire, then add the wheels. Next construct the nose block as shown in the 'easi-build' sketches. It should be a good push fit in the front of the fuselage.

The basic structure of 'Stardust'—simple and strong!



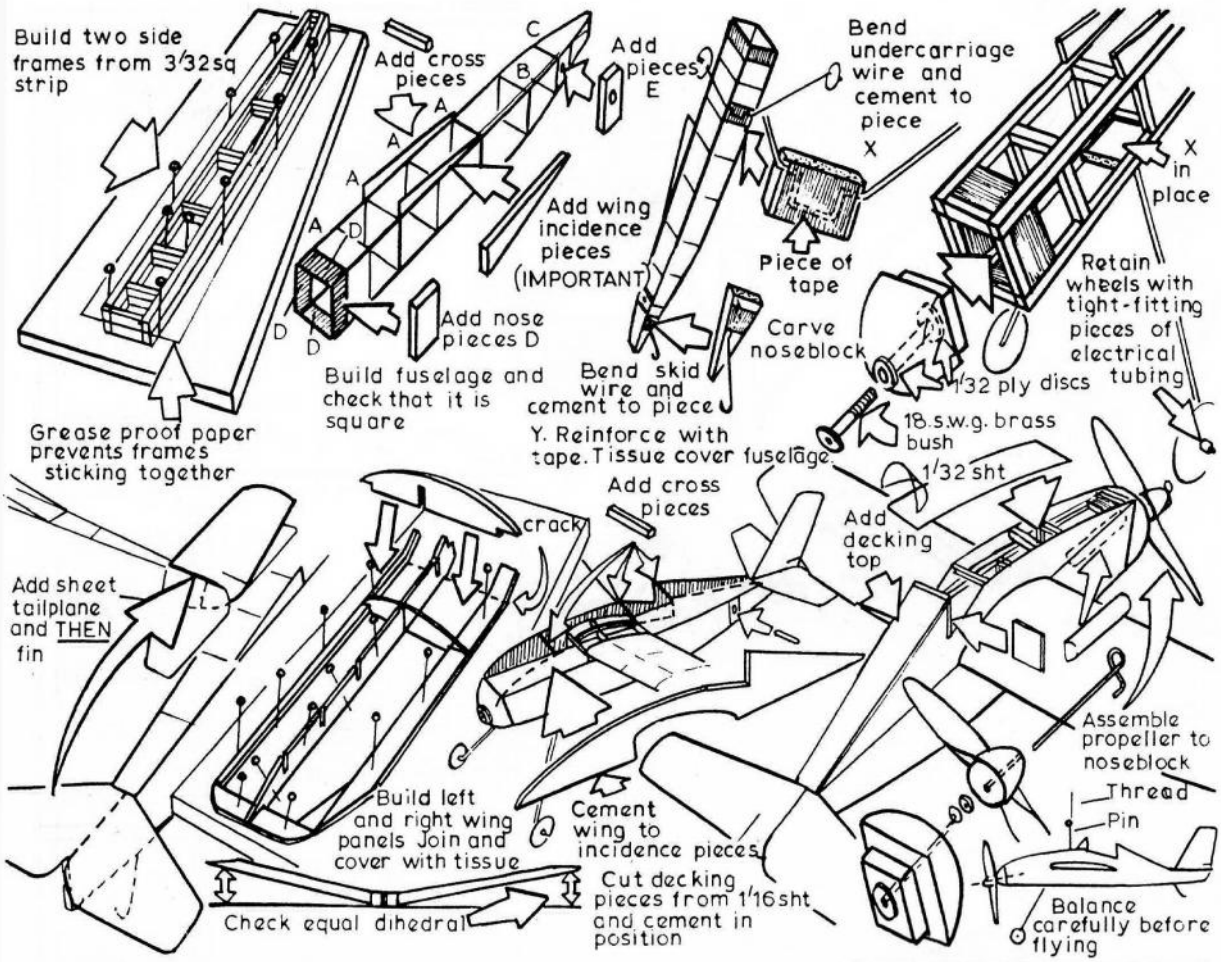
Now cover the fuselage with lightweight tissue, using balsa-cement as the adhesive. Spray on water and allow to dry and tighten, then give one coat of clear dope. Add the tailplane and fin in that order. These should have been given a coat of clear dope first. Pin all doped parts including the wing panels to a board, raised on small blocks of balsa to avoid sticking, while the dope dries. This avoids the possibility of warping.

Build the wing as shown. Join the two panels by the centre ribs. Cover with lightweight tissue, water shrink and give one coat of clear dope. The centre section is left uncovered. The wing is then firmly cemented to the incidence pieces.

Now cut out the two decking pieces from $\frac{1}{16}$th sheet and cement to the top of the fuselage. Add the cross pieces and cover the top with $\frac{1}{32}$nd sheet. Give the completed top decking a coat of clear dope. Put a small piece of $\frac{1}{8}$ diam. dowel rod through the holes in pieces E. Assemble the propeller on the driving shaft as shown, finally forming the driving hook. When the nose block/propeller assembly is in position, the propeller driving shaft should *point downwards* when viewed from the side. This is most important.

Add the cylinder blocks and windscreen. Trim your 'Stardust' with coloured tissue doped in position. Never

Continued on page 46.



use colour dope on a small rubber-driven model—it will increase weight far too much. Take 34 inches of $\frac{3}{16}$th rubber and tie into a 17 inch loop. Rub on some rubber lubricant (4d. a tube from your model shop) and install the motor in the fuselage. The rear end is held by the dowel peg and the front end is slipped over the propeller drive shaft hook.

Finally, carve a small pilot head and shoulders and paint with poster or powder colours. Cement the pilot to the wing centre ribs inside the cockpit. He really does add the final touch of realism to your model.

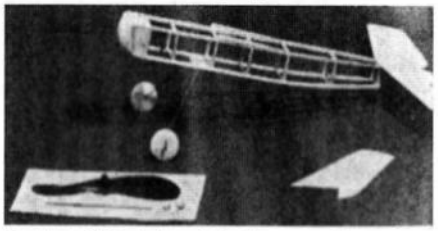
Materials required

6 strips $\frac{1}{16}$ in. by $\frac{1}{16}$ in. by 36 in. balsawood
1 sheet $\frac{1}{16}$ in. by 3 in. by 36 in. balsawood.
1 sheet $\frac{1}{16}$ in. by 3 in. by 12 in. balsawood.
1 strip 3 in. by $\frac{1}{4}$ in. by $\frac{1}{4}$ in. balsawood (soft).
1 block $1\frac{1}{2}$ in. by $1\frac{1}{2}$ in. by $1\frac{1}{2}$ in. balsawood.
1 block $\frac{3}{4}$ in. by $1\frac{1}{2}$ in. by 1 in. balsawood (soft).
Small piece of $\frac{1}{4}$ in. sheet balsawood.
Small piece of $\frac{1}{32}$ in. plywood.
1 Sheet lightweight tissue.
Coloured tissue for trim (to choice).
12 in. length 20 s.w.g. wire.
16 in. length 18 s.w.g. wire.
1 18 s.w.g. brass bush.
1 in. length $\frac{1}{8}$ in. diameter dowel rod.
1 small piece of thin celluloid.
Small piece of silk or linen.
1 K.K. 5 in. diameter plastic propeller.
2 cup washers.
2 1 in. diameter streamlined plastic wheels.
34 in. $\frac{1}{16}$ in. wide rubber strip.
1 tube balsa cement.
1 tube rubber lubricant.
1 bottle clear dope.

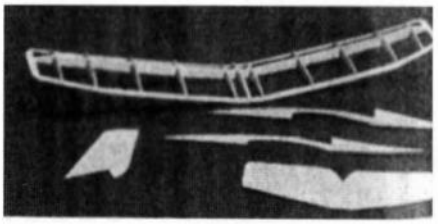
Flying the model

Balancing the model from the point shown is vitally important. Very small amounts of lead or Plasticine may be added to the nose or tail to correct balance. When properly trimmed, glide test the model over long grass on a calm day. Gently thrust the model forward from your hand and watch its flight path. It should glide straight and land about 12 to 15 feet in front of you. If it turns to one side or the other, bend the trailing edge of the fin *very* slightly in the opposite direction. You can now try a power-flight.

Put about 200 turns on the propeller and launch the model into wind. Do this gently and never *throw* it. If the nose rises and the model falls backwards on its tail and then dives (stalling) add a small strip of balsa ($\frac{1}{16}$th square) between the top of the nose block and the fuselage. If the model dives gently, bend up the trailing edges of the tail-plane about $\frac{1}{16}$th of-an-inch. Correct steep turns by bending the fin as described above. Maximum turns, with the motor in your 'Stardust' well-lubricated, are about 650. Take my word for it, 'Stardust' looks *and* flies well!

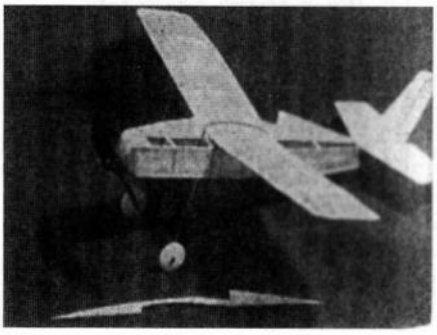


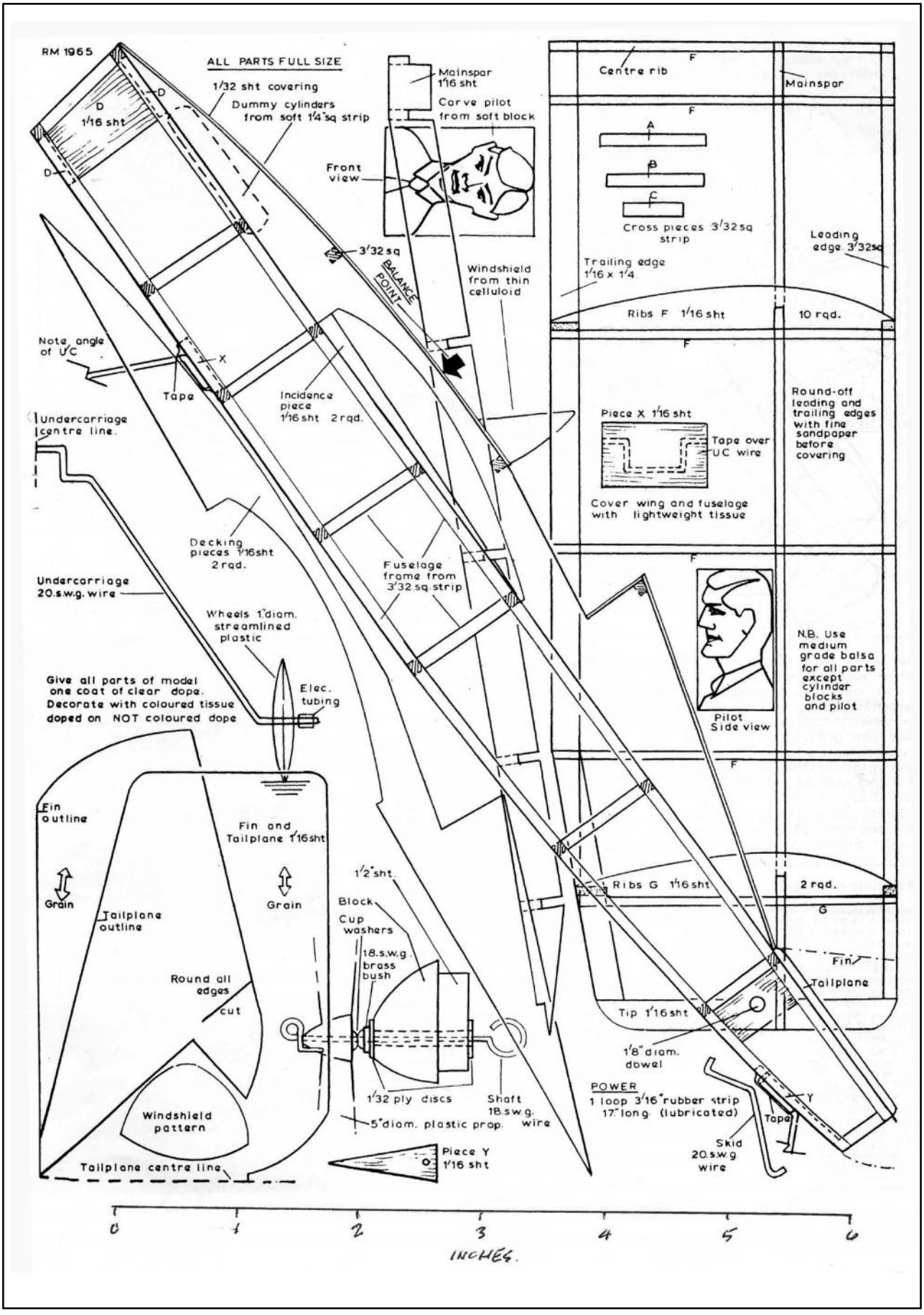
Fuselage of 'Stardust' ready for tissue covering



Above: The simple wing structure provides rigidity

Below: Wing positioned and one decking piece in place





Chris Strachan/Ray Malstrom

Southern Coupe League - Peter Hall/ Roy Vaughn

Round 5 Southern Coupe League
Southern Gala August 22nd '15 Salisbury Plain

There was a depressingly poor turnout for the coupe event, only four flew and only one maxed out. Paul Seeley only just fell short. Flying an Etienvre he dropped nine seconds off his first flight with a swoop on launch but maxed thereafter. He also flew two other classes, an impressive display of stamina given the retrieval conditions, but then, he has youth on his side. For the rest of us they were challenging. A hot sun and a south-easterly taking the models over the deepest part of death valley. Andy Crisp's new locked down model, low aspect ratio, boom and box fuselage, was not fully trimmed so his scores reflect his progress. Peter Tolhurst multi-tasking as usual, tried to squeeze his five rounds into the afternoon. Unfortunately a stop-watch malfunction nullified his third flight. He maxed his second attempt but then ran out of time. The only systems models were flown by Peter Hall. As the result of the successful application of his now celebrated 'No Mistakes Policy' only three minor lapses were recorded, a prop fold failure which very nearly dropped him and two shallow launches which fortunately found good air.

I draw two conclusions from Saturday's experience. The first is the importance of hydrationing, in the heat and on that terrain. The second is that the five round requirement for F1G is now seriously affecting participation. The competitor age profile and the wish of most to fly more than one class in the day means that increasingly the choice is for 2x3 round classes. We should adopt the three round format before F1G flying peters out.

The next round in the league is at the Crookham Gala , Sunday September 20th on Salisbury Plain. Both vintage and modern coupes can be flown and there is a prize for the highest-placed vintage coupe.

The Crookham F1G trophy will be awarded.

Peter Hall

Results – Southern Gala

Position	Entrant	Club	Maxes	Score
1	P.Hall	Crookham	5	17
2	P.Seeley	Bristol& W	4	13
3	A.Crisp	Biggles	0	8
4	P.Tolhurst	Crookham	1	8

Southern Coupe league Table to Date

Pos	Entrant	Club	1st Area	London Gala	Oxford Rally	Odiham	South'n Gala	Crookm Gala	Coupe Europa	Total
1	P. Hall	Crookham		11		15	17			**43**
2	P. Tolhurst	Crookham		13	8	9	8			**38**
3	A. Brocklehurst	B&W	10	16		8				**34**
4	R. Vaughn	Crookham			17	12				**29**
5	J. Paton	Crookham		6	9	11				**26**
6	M. Stagg	B&W	15	4						**19**
7	P. Seeley	B&W	5				13			**18**
8	D. Thomson	Croydon	3		5	6				**14**
9	P. Lagan	N.Zealand			13					**13**
10	D. Greaves	B&W	12							**12**
11	C. Redrup	Crookham			11					**11**
12	D. Neil	B&W	8							**8**
=	A. Moorhouse			8						**8**
=	A. Crisp	Biggles					8			**8**
15	C. Chapman	B&W	6							**6**
=	M. Marshall	Impington		6						**6**
17	N. Allen	E.Grinstead	5							**5**
=	J. White	Croydon			5					**5**
=	P. Jackson	Croydon				5				**5**
20	P. Gibbons	Peterborough			4					**4**
21	K. Taylor	E.Grinstead	3							**3**
=	B. Stichbury	SAM35				3				**3**
23	R. Kimber	SAM35			2					**2**
24	T. Winter	CVA	1							**1**
=	R. Fryer	SAM35			1					**1**
26	G. Jones	Epsom								**0**

Roy Vaughn

24th WorldWide Postal Contest 2015/2016

Flights may be made outdoors between **July 1st. 2015** and **June 30th. 2016** inclusive; it is not required that all flights in any event be made upon the same day but each is to be pre-nominated as 'official'.

A full report will be published in "Endless Lift" after the scores are received and compiled. To enhance the same, a brief account of weather, site, flying anecdotes, photographs, etc. would be appreciated when scores are submitted. Please ensure that all scores are posted there in **Comments** , under the **Leave a Reply** heading, below, by July 15th 2016; earlier submissions would be most gratefully received! Please provide clear notice as to which class/event they should be posted to. Reporting scores all along should stimulate participation. I welcome any comments regarding amendment to any event rules that might make same more attractive, or suggestions for other classes that might be considered of general interest in any future Contest.

http://www.endlesslift.com/24th-worldwide-postal-competition-2015-2016/

GOOD FLYING – GOOD LUCK – and ... above all ... HAVE FUN! - Gary Hinze

EVENTS:

20" Rubber – For any published/kitted outdoor designs not exceeding 20"/51cm span . Three flights to 60 second maximum followed by 30 second increments thereafter.
25" Rubber – Any published/kitted models up to 25"/63.5cm span. Three flights to 60 second maximum followed by 30 second increments thereafter.
30" Vintage/Oldtimer – For designs pre-1951, not exceeding 30"/76cm. Three flights to a 90 second maximum followed by 30 second increments thereafter.
42" Vintage/Oldtimer – For designs pre-1951, with spans greater than 30"/76cm but not exceeding 42"/107cm. Three flights to a 120 second maximum followed by 30 second increments thereafter.
P30 Rubber – Standard P30 rules. Three flights to 120 second maximum followed by 60 second increments thereafter. No gears or movable surfaces, other than for d/t operation.
Freewheel Rubber – Any published/kitted outdoor design with a freewheeling propeller is eligible, wing span not exceeding 36"/91cm. Three flights to 90 second maximum followed by 30 second increments
Unlimited Rubber – Any rubber model with wingspan not exceeding 42"/107cm. No auto surfaces. Three flights to a 120 second maximum, followed by 60 second increments thereafter.
KK "Senator" – A one-design class for this popular design. Three flights to 120 second maximum, followed by 60 second increments thereafter.
Cloud Tramp – Any version of the Cloud Tramp design as published, 8" prop (plastic OK), any type of prop bearing. Five flights, no maximum; longest and shortest will be discarded and balance totaled for score.
Towline Glider – Any glider, straight tow only with no moving surfaces other than autorudder. Maximum towline length 164'/50 metres; Equivalent high start launch systems permissible. Three flights to 90 second maximum followed by 60 second increments.
Small Towline Glider – Any glider to a maximum span of 40"/101.5cm, straight tow with no moving surfaces other than autorudder. Maximum towline length 164'/50 metres. Equivalent high-start launch systems permissible Three flights to 60 second maximum followed by 60 second increments.
6" Tiny Hand Launched Glider – For any glider with wingspan no greater than 6"/15.2 cm. Three flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Multiple entries permissible.
6" Tiny Catapult Launched Glider – For any glider with wingspan no greater than 6"/15.2 cm. Three flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Catapult – a 9" loop of ¼" flat rubber attached to a 6" handle. Multiple entries permissible.
8" Tiny Hand Launched Glider – For any glider with wingspan no greater than 8"/20.3 cm. Three flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Multiple entries permissible.
8" Tiny Catapult Launched Glider – For any glider with wingspan no greater than 8"/20.3 cm. Three flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments thereafter. Catapult – a 9" loop of ¼" flat rubber attached to a 6" handle. Multiple entries permissible.
Catapult/Handlaunch Glider (small) – For any glider with wingspan no greater than 12"/30.5 cm. Six flights, 60 second maximum (flights under ten seconds need not be reported). If six maximums scored, 30 second increments ereafter. Catapult – a 9" loop of ¼" flat rubber attached to a 6" handle. Multiple entries permissible.
Catapult/Handlaunch Glider (large) – For any glider larger than 12"/30.5cms. Rules as above.
Tip-launch Glider – For any size of wingtip-launch glider. Folding wings and R/C are not permissible. Six flights to a 60 second maximum, increasing by 30 second increments thereafter.
Peanut Scale – Any type, any period, 13" maximum wingspan *or* 9" maximum length. Total highest three of six flights for score.
Dimescale – Any type, any period, 16" maximum wingspan, no scale or bonus points. Total highest three of six flights for score.
Phantom Flash – Per kit or plan, plastic or wood prop. May be hand launched. Total highest three of six flights for score.

http://www.endlesslift.com/24th-worldwide-postal-competition-2015-2016/

The Crookham Gala

Sunday 20th Sept 2015

Salisbury Plain.

The following classes will be flown:

- George Fuller power for the George Fuller trophy. Any George Fuller design, 12 sec run without functions, 7 seconds with.
- Coupe d'Hiver, combined ancient and modern for the Crookham F1G trophy. Prize for highest placed vintage Coupe.
- Combined glider to BMFA rules
- E36 to BMFA rules
- Combined chuck/catapult glider

Coupe Europa

Sunday October 4th

at

Middle Wallop SO20 8DY

51° 08' 59.18"N, - 1° 34' 25.15"W

F1G and Vintage Coupe d'Hiver.
Flitehook Europa Team Trophy for F1G teams.
10 a.m. start. F1G in rounds.

Contact David Beales on +44 (0)1795 530656
e-mail; maureenbeales@googelmail.com

or

phone Ray Elliott on +44 (0) 20 8997 7745
e-mail: ray.elliott8@btinternet.com.

Peterborough Flying Aces Nationals

Sunday 6th September 2015

Ferry Meadows. Nene Park, Peterborough. PE2 5UU .

NOTE! All scale models, except Masefield entries, are judged for accuracy, workmanship and flight. Please bring the plan or, if scratch built, the 3 view.

Open Rubber Scale:- Masefield Rules ie NO FLIGHT JUDGING, just duration plus bonuses. Take model to control for bonus allocation.

Open CO2/Electric Scale: "Stand off' scale judged against plan/ three view plus judged flight profile of launch/flight/landing. Any C02 motor/tank permitted.

Kit Scale: ANY rubber powered kit model up to 36"span. Model judged against kit plan plus judged flight profile.

Jetex/Rapier Authentic Scale: Judged against model plan/three view and judged flight profile.

Jetex/Rapier Profile Scale: Judged against model plan/three view and judged flight.

P-20: 20"span and length. Max 8" plastic prop, 6 gram motors (may be external)

Cloud Tramp: 5 flights NO MAX. (best and worst times discarded, and the remaining 3 times totalled. Note! If fewer than 5 flights logged the best and worst are still discarded.

Jetex/Rapier Duration: Just as it says!

Frog "Senior" Rubber Duration (for plan go to htto://www.houseoffroq.co.uk/ or contact PMFC-

Catapult Glider Catapult: max 2 grams rubber on a 6" max handle. (This equates to 140mm of 3/16" in a single loop.) Any model permitted.

Duration Rubber Ratio: NO MAX. Any rubber powered model with wing span 16"-25" (tip to tip). Flight score is total time in secs (from 3 flights) divided by span in inches.

TableTop Precision: Precision flight time event for Rubber models. Models must Rise off Table.

Electric Precision: Precision flight time contest for any electric powered model. (Target times posted on the day at control.)

36 inch Hi-Start Glider: Any glider up to 36"span launched by the supplied "Hi start" bungee. Also includes prize for the best performance of a SCALE glider (proof of scale required)

Best Unorthodox: must be seen to fly.

NEW! Rubber Scramble: 20 minutes, use any rubber powered model that qualifies for one of the above events. Competitor must wind, launch and retrieve.

Flying Swarm: Mass launch for any non electric model that is eligible for one of the day's competitions. Last model down is the winner.

Concours: For the most impressive model flown on the day.

Young Flying Aces: Any entrant less than 18 years old on 31/08/14 will be awarded a 25% bonus in all non scale events except "Flying Swarm"

World War One Tribute event: Until 2018 we will award a prize for the best scoring model of a WW1 combat aircraft flown in any of the scale competitions.

Awards: Wine for 1st , Scrolls for 1st, 2nd, & 3rd.
Please Note: this is *a* Free Flight event: strictly no Radio Control.
Proof of Insurance required for all flyers.
Revel in the special atmosphere created at this unique event
Parking free before 10.00 am. Toilets, cafe, and Park Visitors Centre.
For more event details, visit the Peterborough MFC Website at www.peterboroughmfc.com
OR contact Brian Waterland on 01778 343722 or Bernie Nichols on 01780 765944

Impington Village College - Cambridge

Indoor flying on 1st November 2015 9 am to 5 pm

We will be using the large (100 x 50 x 28 ft) sports hall at the College. The only restrictions are no radio models in the main hall and no internal combustion engines, jets or catapults anywhere.
Also Round The Pole (4.5 metre lines) and small electric helicopter and fixed wing flying (X twin or Vapour type) in a separate hall (radio or infra-red).

SAMS MODELS will be in attendance to supply all your needs on the day.

Competitions:

There will be two, low key free flight (and one car!) competitions:

- A duration competition for Ray Malmström's Viking design – see plan on reverse of this flyer. Once more we feature one of Ray's designs and this is one of the best for simple fun and performance indoors and out. It was originally designed for a club competition and not published. We are using it for an outdoor club contest during 2015 but they go just as well indoors! Build as plan but you may omit the paper tabs if you like and also can use any commercial 6ins plastic prop or larger cut down to a maximum diameter of 6ins which may require a slight lengthening of the undercarriage leg for clearance on take-off . All materials as plan.
- The usual duration event for **Bostonian** models. Any design to the Bostonian formula (If you are unclear about the Bostonian formula rules ring or email the contact below).
- Both competitions will be for the total of best three flights. Get your flights timed and reported to control. As many attempts as you like. Awards in each event for overall winner and best junior (under 18). All flights to be flown ROG and Bostonians will be weighed (minimum 14 grams without rubber motor)! No builder of the model requirement in any competition. Build one for your wife (or husband), child or grandchild who has to wind and launch.
- We will also feature the racing car event as usual. This is a fun event for rubber powered cars. We vary the distance to be covered, number of heats etc depending on the entrants on the day! Ring or email below for any further information and for plans of suitable vehicles.

Exhibition

We would like models of all types in the exhibition, even models other than aeroplanes are more than welcome. Bring whatever you like but please bring something (don't be shy) as this is a feature much enjoyed by our visitors - both flyers and spectators. It is also a good way of showing our kind of modelling to the public.

Seminar

The seminar will feature a talk by Clive King on building and flight preparation of his Indigo indoor duration model which will have appeared in Aeromodeller magazine before the date of this meeting. Clive's talk will prepare and encourage you to build the design ready for competition during the winter months

Round the Pole and Small Radio Models

David and Will Beavor will be bringing their equipment, using Ballard's 4605 connectors at the model and will share the second hall with small R/C helicopters and fixed wing models.

Refreshments:

We are sad to report that we are no longer able to keep up our catering. The Sports Centre has coffee machines and confectionary and will be happy to serve you but I am afraid that, for a number of reasons, the all-day breakfasts and sitting out area are a thing of the past.

Cost of admission: Indoor Flyers - Adults £6.00, under 18s £1.50, Spectators and Chatters - £1.50

Directions to Impington Village College:

Leave A14 at the first junction East of M11 J14, signed Cambridge B1049. At the roundabout take B1049 to North signed Cottenham, Histon. In ¾ km at 2nd lights turn right into New Road. Pass hospital entrance on right. Village College is next on right (two entrances, 1/3 and 2/3 km). Entrance to be used and car park will be signed.

Contact:- Chris Strachan Tel no: 01223 860498 Email: chris.strachan@btinternet.com

Oxford MFC Dreaming Spires Gala

5th July, Port Meadow, Oxford

Vintage L/W Rubber, Classic Glider, Vintage Glider, Silent Open Tail-less, E36, Rapier R30 Duration, & All-in F/F Scale.

New Events:

HLG/Catapult, Cloud Tramp. Duration Rubber Ratio (16 -25 inch), Table Top rubber precision, Hi-Start Glider (36 inch), FROG Senior Duration.

Duration 10am start. Scale 1.30pm.

No poles or thermisters.

Duration 3 x flights (except HLG, x 5). No rounds.

Notes:-

Oxford MFC has been running the Dreaming Spires Gala on the wonderful site at Port Meadow since 1985. We have made changes from time to time, but this year's event will be revised. Vintage HLG has been dropped, replaced by an open HLG event, and to broaden out the menu on the day and encourage the fun element, the following new classes have been added: Cloud Tramp, Duration Rubber Ratio, Table Top Precision Rubber, Hi-Start Glider, FROG Senior Duration.

In addition, flying will not be in rounds, with only three required in all classes apart from HLG. This has partly been introduced to take into the increasing age of competitors plus the desire of many to fly in lots of different classes on the day.

NEW EVENT

Oxford MFC September Scale-Fest

20th September 2015. Port Meadow

Classes: Power Scale, CO2/Electric Scale, Rubber Scale, Outdoor Kit Scale (all to BMFA rules), Jetex/Rapier Authentic Scale, Jetex/Rapier Profile Scale (both to Peterborough rules). Scale Glider. 10am start. Documentation required to BMFA specification, BMFA events, Jetex/Rapier models judged against plan/box art. Glider-flying only. Ic engines l.Scc max, not to be run before 1.30pm

Notes:-

The F/F Scale competition run as part of the Oxford MFC Dreaming Spires Gala has been well-supported over the years, and with Port Meadow being such an ideal site for scale, combined with the strong support that there currently seems to be for F/F Scale models, we have decided to try running a scale only F/F event. Something of an experiment but the intention is to make it an annual meeting if adequately supported.

The Club has tried to select a range of competitions from regular BMFA classes though to lighter, less serious events such as the Kit Scale and Jetex/Rapier classes. This is very much a 'first go' at a Scale only competition day and the Oxford team will be prepared to 'tweak' rules/classes for next year to make it attractive to scale flyers. If you fly F/F Scale models, even if you have never competed *before, make* a point of getting along to Port Meadow on the 20th September.

Contact:- Charlie Newman, charlie.newman737@yahoo.co.uk, Tel: 01865 426129, 07833 775994

LA GRANDE COUPE de BIRMINGHAM 2015

(part deux)...

Sunday December 6th

The Birmingham club once again plans to run the winter Coupe d'Hiver event at North Luffenham pending confirmation of the field booking.

for the F1G (Aeromodeller Trophy) and Vintage Coupe (Boutillier Trophy)
Format is planned as last year (but with better weather, well you can plan...) and will include prizegiving and social at the Golf Club.
Full details to follow.

Contact Gavin Manion email: gavin.manion84@gmail.com
or Stuart Darmon email: stuartdarmonf1a@yahoo.com

2015 WESSEX AERO. LEAGUE

600RES + C/LINE + Ebeneezer + 36" FF glider events

March 2015				
Saturday 7	*600RES*	*Practice day*	*DMFG*	*Blandford*
April 2015				
Sunday 12	*Control line only*	*Open*	*Wimborne MAC*	*Cashmoor*
Sunday 19	*Only C/L + Ebeneezer*	*36" FF glider ONLY*	*DMFG*	*Blandford*
Sunday 26	*Wessex Aero. League*	*600RES R 1*	*Wimborne MAC*	*Cashmoor*
May 2015				
Sunday 10	*C/L + Ebeneezer*	*36" FF glider ONLY*	*DMFG*	*Blandford*
Sunday 17	*Wessex Aero. League*	*600RES R 2*	*DMFG*	*Blandford*
Saturday 23	*Only C/L + Ebeneezer*	*36" FF glider ONLY*	*DMFG*	*Blandford*
Saturday 30	*Scale + Vintage r/c*		*DMFG*	*Blandford*
June 2015				
Sunday 7	*Wessex Aero. League*	*600RES R 3*	*Salisbury MFC*	*Flamstone Farm*
Saturday 20	*Only C/L + Ebeneezer*	*36" FF glider ONLY*	*DMFG*	*Blandford*
July 2015				
Saturday 25	*Wessex Aero. League*	*600RES R 4*	*DMFG*	*Blandford*
Sunday 26	*Alex Perkins Memorial*	*Scale + Aerotow*	*DMFG*	*Blandford*
August 2015				
Sunday 16	*Wessex Aero. League*	*600RES R 5*	*Marlborough MFC*	*Collingbourne Kingston*
Sunday 23	*Electric day*			*Throop*
Sept 2015				
Sunday 6 reserve	*Wessex Aero. League*	*600RES*	*Marlborough MFC*	*Collingbourne Kingston*
Sunday 13 reserve	*Wessex Aero. League*	*600RES*	*Wimborne MAC*	*Cashmoor*
Sunday 27	*Only C/L + Ebeneezer*	*36" FF glider ONLY*	*DMFG*	*Blandford*
October 2015				
Sunday 4 reserve	*Wessex Aero. League*	*600RES*	*or Gala*	*Blandford*
Sunday 11	*Control line only*	*Open*	*Wimborne MAC*	*Cashmoor*
Sunday 25 reserve	*Wessex Aero. League*	*600RES*	*or GALA*	*Blandford*
Saturday 31 or later....	*Wessex end of season day & pub day*	*600 RES*	*Fly'n'Feast'n' Freeze'n'Prize giving*	*Blandford*
Nov 2015				

WAML Low-Cost 600RES League: Best 4 scores to count.
WAML Monthly postal events, Low-Cost 600RES: April to September. Best 4 scores to count.
36" FF glider: Events are weather dependent and extra dates may be added at relatively short notice. The provided bungees will be used for the competition (7.5m of rubber + 22.5m of line). Any 36" span (maximum tip to tip) built-up FF glider (no foamies or larger models), D/T is advised.
Contact **John Bainbridge (01258 458 749)** or **James Parry (01202 625 825)** or email: Christopher.hague@ntlworld.com Details on our website: www.wessexaml.co.uk

R/C VINTAGE & C/L EVENTS 2015

DATE	MEETINGS	CONTACTS
03.05.2015	Middle Wallop, Hants *	R/C T. Tomlin C/L J. Parry
10.05.2015	Nr Blandford Forum, Dorset *	J. Parry
23 + 24.05.2015	Shilton, Oxfordshire	N. Blackwell
14.06.2015	Middle Wallop, Hants *	R/C T. Tomlin C/L J. Parry
12.07.2015	Cocklebarrow Farm *	P. Howkins * T. Tomlin
23.08.2015	Cocklebarrow Farm *	P. Howkins * T. Tomlin
30.08.2015	Middle Wallop, Hants *	R/C T. Tomlin C/L J. Parry
12 + 13.09.2015	Shilton, Oxfordshire	N. Blackwell
4.10.2015	Cocklebarrow Farm *	P. Howkins * T. Tomlin
	NOTES	
* *Tomboy comps will be held at these events*	*Please check before travelling as circumstances can cause events to be changed at short notice*	*MIDDLE WALLOP Dogs are NOT allowed on the airfield at any time*
	CONTACTS	
	Tony Tomlin 02086413505 pjt2.alt2@btinternet.com	James Parry 01202625825 jamesiparry@talktalk.net
	Paul Howkins 02476405126 howkins776@btinternet.com	Nick Blackwell nick@nickblackwell.co.uk

Bournemouth MAS
Indoor Flying Meetings
at the Allendale Centre,
Hanham Rd,
Wimborne,
Dorset, BH21 1AS,
7.00 p.m. to 10.00 p.m.
Free Flight only.

Competitions including Gyminnie Cricket League.
Flitehook normally in attendance.
Free parking in public car park in Allendale Road.
Contacts John Taylor Tel. No. 01202 232206
Roy Tiller e-mail roy.tiller@ntlworld.com

2015 Tuesdays
27th Jan - 24th Feb - 31st Mar - 28th Apr
22nd Sept - 27th Oct - 24th Nov

BMFA South West
Indoor Flying
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,

2015	2016
Sunday 27 September	Sunday 17 January
Sunday 25 October	Sunday 14 February
Sunday 22 November	Sunday 6 March
Sunday 13 December	

Mainly free flight
some micro R/C (fixed wing & helicopters)
Admission:
Flyers £10 **Spectators £3**

Contact:
Cornwall - David Powis on tel: 01579 362951
Email: dave_powis@hotmail.com
Devon - Roger Bellamy on tel: 01752 257826
Email: randmbellamy@gmail.com

Flitehook
Indoor Free Flight Meetings
West Totton Centre, Hazel Farm Road,
Totton, Southampton. SO40 8WU

11th Oct 2015, 8th Nov 2015
27th Dec 2015,
7th Feb 2016, 6th Mar 2016

Sundays 10.00a.m. to 4.00p.m.
Flyers **£6**, Spectators **£2**
Café on Site
Contact Flitehook
E-mail flitehook@talktalk.net
Tel. No. 02380 861541

Indoor Flying with the South Birmingham MAC
Mainly Free Flight
Thorns Leisure Centre.
Stockwell Ave.
Off Thorns Road - Quarry Bank - West Midlands - DY5 2NU
Saturdays 1pm until 4pm

2015
Sep 26th – Oct 24th – Nov 28th – Dec 19th

Admission - Flyers £5.50 - Spectators £2.00
Ultra-light R/C models may be flown for the first 15mins of each hour (quad copters or heavy fast flying models not accepted)
For further information phone Colin Shepherd 0121 5506132 or e-mail colin@colinwilliam.wanadoo.co.uk

Bloxwich Indoor Flyers
Free Flight
Sneyd Community School
Vernon Way, Sneyd Lane,
Bloxwich, WS3 2PA
Saturdays 2pm until 5pm
Flyers - £8 Spectators £2

2015
Sep 5th; Oct 6th; Nov 7th; Dec 5th.

Contact:- Allan Price
Tel: 01922 701530 - e-mail: montrose32@btinternet.com

2015 FREE FLIGHT FORUM - CALL FOR PAPERS

Depending entirely on whether enough free-flight enthusiasts offer to contribute papers to discuss and to be published, November 22nd 2015 will see the thirty-first BMFA Free Flight Forum. That's the intention anyway. Without your help with offers of papers to present and topics to cover it just won't happen. The Forums always try to cover as wide a range of free-flight topics as possible, - FF scale to FAI duration, theoretical or practical, building and flying techniques or what we do and how we do it in free-flight

Please contact:
Martin Dilly (martindilly20@gmail.com), phone 020 8777 5533,
or Mike Evatt (mikeevatt@hotmail.com), phone 01327-842746
before Oct. 1st with your offers; better still, do it now, while you think of it.
The continuing success of the Free Flight Forum depends on you.

2015 FREE FLIGHT FORUM

The thirty-first BMFA Free-Flight Forum will start at 10 a.m. on Nov. 22rd, the day after the AGM, at the Hinckley Island Hotel, A5 Watling Street, Hinckley, LE10 3JA. Once more we have found speakers to make it an interesting day so you can catch up on the developments, techniques and aerodynamics of today's free-flight.

Among the topics and speakers will be:
Andy Sephton on Indoor Scale Free Flight Gliders and on Basic Propeller Theory,
Mick Lester on New Ideas for Carbon F1C Wing Structures,
Stuart Darmon on Making Extreme Wing Skins in Foam/Composite Female Moulds,
Mark Gibbs on Juniors in Free Flight,
Alan Brocklehurst on Computations at Low Reynolds Number and
a New Aerofoil for F1G (Coupe d'Hiver) Models, as well as A Quick-Look at LDA Performance
and **Phil Ball** on Simple Tooling for Moulded Propellers.

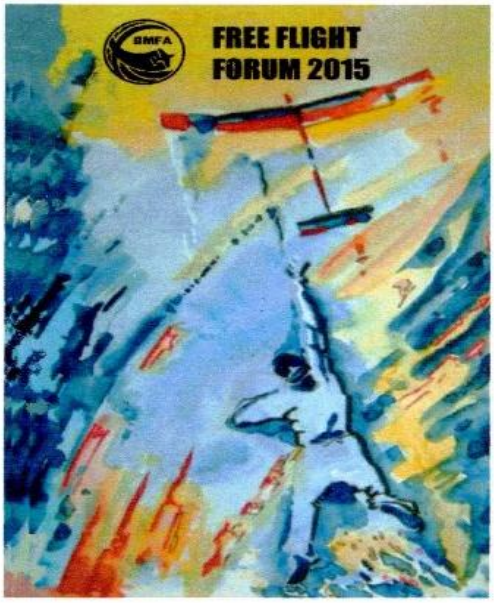
Lunch will be available and the finish will be at around 5 p.m. The cost for the session will be just £9, with proceeds going towards the expenses of the teams that represent us at World and European F/F Championships. Pre-booking will ensure that you get a seat,
so send your cheque, payable to 'BMFA F/F Team Support',
to the BMFA office at 31, St. Andrews Road, Leicester LE2 8RE.

HOT OFF THE PRESS

THE 2015 FREE FLIGHT FORUM REPORT

For thirty-one years the BMFA Free Flight Forum Reports have provided information on new developments in a wide range of free-flight activities.
This year is no exception, as the following contents list shows.

Recent F1D Developments - Tony Hebb;
Electronic Timers for F1B - Mike Woodhouse;
Personal Observations on Classic Power
- John Thompson;
The F1Q Mystery - Trevor Grey;
Experiences with Electronic Timers
– Roy Vaughn;
Free Flight, Flying Sites & the BMFA
- Dave Phipps;
The Cursed S - Why Won't It Keep Going Up?
- Alan Jack ;
Rubber- Powered Kit Scale Competition
- Andy Hewitt;
New Ideas for the F1 Rules
- Mike Woodhouse;
Revisiting Rubber Scale 55 Years On
- Ivan Taylor;
Some Interesting & Successful Models
from 2014,
which include includes Andy Hewitt's
Fokker D-VII Nats Rubber Kit Scale winner,
Ed Bennett's Thin Man Classic Rubber model,
Frank Rushby's 1/2A Mini Creep,
Chris Redrup's BMFA Rubber model;
Andy Crisp's Blue Note F1A for BMFA Glider
and Trevor Grey's Kaon E-36.



The UK price is £12.00 including postage; to Europe it's £15 and everywhere else £17.

Sales of the Forum Reports help to defray the heavy expenses
of those representing Great Britain
at World and European Free-Flight Championships.
Cheques should be payable to 'BMFA F/F Team Support Fund'
in pounds sterling, drawn on a bank with a UK branch;
you may also order by credit card, which is a lot easier (and cheaper).

Copies are available from

Martin Dilly
20, Links Road,
West Wickham,
Kent,
BR4 OQW

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

L'AQUILONE SAM 2001
TOMBOY RALLY INTERNATIONAL POSTAL CONTEST
01/06/2015 – 31/05/2016

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

Model

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

Engine/motors

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

36"/44" WINGSPAN - I.C. Engines:

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

Electric Motors:

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

48" WNGSPAN - I.C. Engines:

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

Electric Motors:

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

Flights and results

Each competitor may fly as many flights as wished during the admitted period but only the best flight will be considered for the final result; - Hand launches are admitted; - The flight time start when the model is released or takes off. The flight time ends when the model lands or hits a fixed obstacle. In case the model flies out of sight the timekeeper will time for 10 seconds after losing sight of the model . Timing will continue if model is seen again or stopped after 10" deducting this time from the total time of theflight.

Awards :

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

Results

Results, address, photos and technical specification about model must be forwarded to the Organization by 15th June 2015
Curzio Santoni cusanton@tin.it or to Gianfranco Lusso gfl@orange.fr)
Many pleasant flights and happy landings to ALL !!!!

SPECIAL PRIZE VIC SMEED

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

Good ROW and flight

SPECIAL PRIZE DAVID BAKER Free-Flight

The 2012 was the 5° edition of SAM 2001 Tomboy Rally and we have scheduled a special prize for the three best flights obtained with 36" Tomboy F/F. Only engines diesel max 0.75 c.c. shall be used. The other rules are the same for 36" or 44" wingspan type. It is possible to use a R/C Tomboy, however, being this a free-flight contest,the time must be stopped when transmitter is used, since the aircraft model should fly freely from any control from the ground.

Good thermals

DBHL Plan Service

The rules for obtaining plans.

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.**

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

MSP PLANS PRESENTS NEW PLANS

HI-START GLIDERS 2013 - 36 in span

AVENGER 1952	John Gorham's classic A2
CAPRICE 1959	Neville Willis' classic lightweight glider
VINTAGE A2 1950	Odenman's.

HI-START GLIDERS 2014 – 36 in span

SATU 1950	J Bennett's vintage A2
PETREL1964	Frog's beginner's kit glider
MAD'S DREAM 1959	Brian Dowling's classic A2.

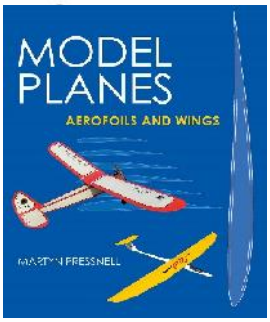
To order plans for UK delivery please write with cheque (£ sterling) made payable to Martyn Pressnell, 1 Vitre Gardens, Lymington, Hants, S041 SNA.
For overseas delivery of Popular Plans send local bank notes equivalent to £10.00.
Enquiries: please write or email **martyn.pressnell@btintemetcom**

Check my website : **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

MODEL PLANES

by Martyn Pressnell



ISBN: 978-0-7198-1540-9
Publication Date: 30 June 2015
~~RRP: £20.00~~ **£15**

Model flying is a challenging and exciting hobby as well as a recognized international sport. The broad principles of flight as applied in full-size aviation are just as important to flying models, but these principles are not always recognized or understood fully by aero-modellers.

Written specifically with aero-modellers in mind, *Model Planes: Aerofoils and Wings* is a practical guide to the aerodynamic principles of the 'aerofoil' and the way that wings produce lift, which is vital to establishing flight. Included are over forty ready-to-use aerofoil sections in a range of typical sizes, together with a detailed method of plotting these sections on a home computer, using Excel or a similar software.

Written by a distinguished aerospace engineer with a passion for modelling, this comprehensive volume is perfect for the enthusiastic aero-modeller, whether starting out or looking to hone their craft.

Martyn Pressnell has been an aircraft enthusiast since childhood, becoming an experienced model designer by the age of eighteen. On graduation, he joined Handley Page to train as a professional airframe structures engineer. He went on to work at what is now the University of Hertfordshire, becoming Group Head, Aerospace Engineering, in 1992. For a time he was a CAA-designated Chief Stress Engineer in the airship business. Now retired, Martyn is as busy as ever pursuing model aircraft technology and acting as a consultant in airframe structures to the Engineering Sciences Data Unit, providing information to the aerospace industry worldwide.

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www.halebooks.com

Provisional Events Calendar 2015

With competitions for Vintage and/or Classic models

February 8th	Sunday	BMFA 1st Area Competitions
March 1st	Sunday	BMFA 2nd Area Competitions
March 22nd	Sunday	BMFA 3rd Area Competitions
April 3rd	Friday	Northern Gala – North Luffenham
April 4th	Saturday	Middle Wallop – **SAM1066** competitions
April 5th	Sunday	Middle Wallop – **SAM1066** competitions
April 6th	Monday	Middle Wallop – **SAM1066** competitions
April 18/19th	Sat/Sunday	London Gala
May 3rd	Sunday	Middle Wallop – **SAM1066** competitions
May 4th	Monday	Middle Wallop – **SAM1066** competitions
May 23rd	Saturday	BMFA Free-flight Nats, Barkston
May 24th	Sunday	BMFA Free-flight Nats, Barkston
May 25th	Monday	BMFA Free-flight Nats, Barkston
June 7th	Sunday	BMFA 4th Area Competitions
June 13th	Saturday	Middle Wallop – **SAM1066** competitions
June 14th	Sunday	Middle Wallop – **SAM1066** competitions
June 28th	Sunday	BMFA 5th Area Competitions
July 12th	Sunday	BMFA 6th Area Competitions
July 18th	Saturday	BMFA Southern Area Gala – Odiham
August 1st & 2nd	Saturday/Sunday	East Anglian Gala - Sculthorpe
August 22nd	Saturday	Southern Gala
August 30th	Sunday	Middle Wallop – **SAM1066** Competitions
August 31st	Monday	Middle Wallop – **SAM1066** Competitions
September 13th	Sunday	BMFA 7th Area Competitions
October 3rd	Saturday	Middle Wallop – **SAM1066** Competitions
October 4th	Sunday	Middle Wallop – **SAM1066** competitions
October 18th	Sunday	BMFA 8th Area Competitions
October 24th	Saturday	Midland Gala – North Luffenham
November 15th	Sunday	Middle Wallop – **SAM1066** Competitions & ***AGM***
November 22nd	Sunday	2015 FF Forum – Hinckley Island Hotel, LE10 3JA

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.msp-plans.blogspot.com
X-List Plans - www.xlistplans.demon.co.uk
National Free Flight Society (USA) - www.freeflight.org
Ray Alban - www.vintagemodelairplane.com
David Lloyd-Jones - www.magazinesandbooks.co.uk
Belair Kits - www.belairkits.com
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).

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

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

Your editor John Andrews