

NEW Clarion

SAM 1066 Newsletter

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Editorial

Here we are again and it's halfway through the year, the August Championships will soon be upon us so now is the time to get your trophies polished and engraved to avoid a last minute rush. It will not take long to do mine.

The current hot topic seems to be Radio DT and following an uninspiring report on my BMFA Nationals we have an in depth discourse on subject of RDT by David Brawn. David also supplied an article by Gordon Warburton on his own version of a system that he put together.

I have done quite well for content this issue and I have a significant amount of held over material to start the August issue. For the record I have set myself a limit of 50 pages for each issue as I understand that exceeding this brings difficulties to a number of people who print and post on copies to non internetted members. I have been looking at condensing the Events & Notices pages but as yet do not have a readable solution.

I have refrained from writing a report of my own on the June Wallop event, but I will report that I did receive a bottle of wine for 5th place in Small Rubber. It is significant to note that the Saturdays of the two day weekends do not seem to attract the number of flyers as in the past. Although numbers for the Sundays have also declined to a degree the lack of modellers on the Saturdays is disconcerting. Weather forecasts have been a deterrent of late but if interest is not there for whatever reason maybe we should look at a revised approach to our flying meeting calendar. If anyone has any thoughts on the matter please communicate with the secretary or myself. Personally I prefer two day or even three day events but I am over 100 miles away from Wallop so longer events means less travelling for me and more hotel time for my fetcher-mite.

Our chairman John Thompson is back with yet another of his power model reviews. It would appear that rumours leading us to believe that he had run out of models were false and I'm assured that there are more to come.

For sale & Wanted is once again back, don't be shy, if you have anything to dispose of or have a requirement, I am more than pleased to put in the adds.

E36 electric models are getting a following and John Richards in Canada reports on a conversion that he has performed on a $\frac{1}{2}$ A 'Dynamo'.

Spencer Willis, now the Wallop meetings are confirmed, has dived into results to produce current standings in the 4oz, & 8oz wakes and Tailless leagues.

Roy Vaughan has provided similar details for the Southern Coupe league, together with a report on Andy Crisp's Oxford event

A simple request concerning the 'Bell's Lightweight' caused a bit of a furore amongst the powers that be. I report on the facts, it was quite an amusing case of miss-information.

I wound up this issue with an indoor model by Impingtons Ray Malstrom, using details from the book 'Ray Malstrom's 60 years of IVC MAC' supplied by Chris Strachan.

Editor

Rachel and I stayed in the Ancaster B&B together with the Pike family and Rene & Peter Jackson.

Unfortunately the Ermine pub next door was closed so, on the Friday evening, we and the Pike family partook of a Chinese meal in the Railway pub down the road.

This turned out to be somewhat of a disaster of my making, I ordered the meal for the Pikes and ourselves and neglected to say we were eating in. The result being that when the meal arrived it was boxed and bagged as a takeaway. We were unable to get plates and all we had were little plastic forks to eat with. We each took a page from Rory Pike's A3 drawing book and dished out some rice etc. on those. As you may imagine the paper did not last long so we supplemented with dish lids. All in all a real mess, when we left it looked like a bomb had hit the table and I'm certain that there was a good meal for two left splattered about.

Thereafter we ate in the Plough Inn in the village of Wilsford, the owner of which is an ex landlord from a pub we used to frequent regularly in our home town of Rugby. So much for our solution to the requirements of the inner man.

Day one: 1st flight in BMFA Rubber, out with good old '0-3', wind it up, sniff the air and put it in lift. I actually did it and, with the model way up, I was patting myself on the back for a job well done as we waited for the DT. We waited and waited and waited, after 6mins-40secs '0-3' was clocked off as it disappeared from the binoculars high in sky.

2nd flight with '0-4' not up to requirements, I had not noticed the tight climb turn on the test flight and the comp flight failed to gain sufficient height nor find any lift so I was down the pan again, one of the few. It's embarrassing to see your black ink flight time in a sea of red maxes on the score board.

3rd flight, just to complete the card, was OK after a side-thrust adjustment.

After a brief fruitless search for '0-3' in the country lanes we gave it best, ate our evening meal in the Plough and retired back to our digs.

A point of note, I had soldered mating attachments on my Spencer Willis torque meters and was using them to get some idea of the readings for motors, problem was that when motors were fully wound the nervous tension of handling the blast tube extraction and prop assembly hook-up made one forget to record the readings. Still first stage is over, I am using them and perhaps next time I might remember to observe readings and write them down.



I rest comfortably, admiring Martin Pike's latest scale model whilst he beavered away on his Spitfire.

Day 2: was vintage for me and, as it was quite windy, I did not want to risk my wakefields so I opted for token flights with my old, now very heavy, 'Hep-Cat'. Usual performance, one max and a couple of duffers, if I don't find lift its $1\frac{1}{2}$ minutes or so.

Day 3: a much better flying day all around. I reeled off 3 of the short maxes in Classic with my 'Last Resort' then spent time with Martin's children as they dipped their toes in the competition water for the first time.

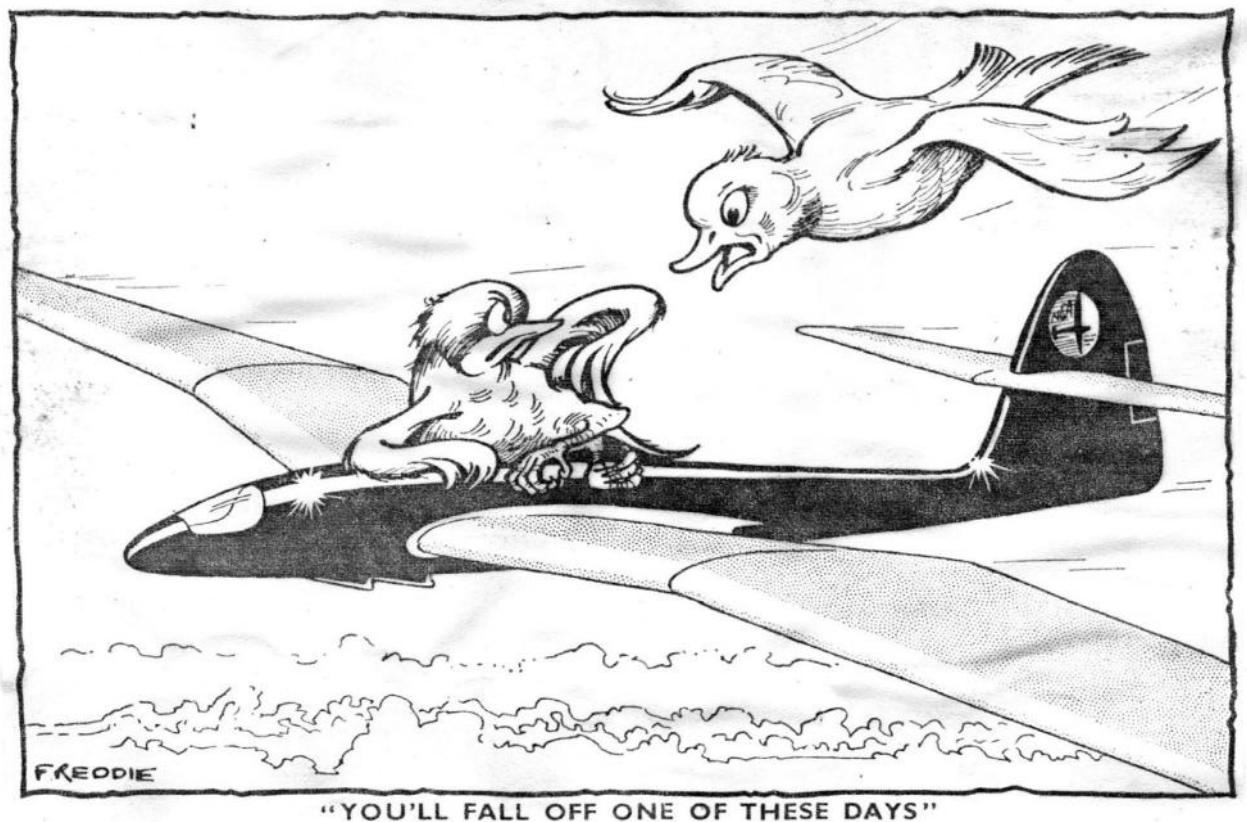
The amount of assistance 4 year old Catlin required to launch 'Dusty', the semi-scale crop-duster, was considerable and, although she could release the propeller effectively, the release of the aircraft required more than a little help from Dad. Over on the right we see Catlin standing by ready for winding as Dad sorts out the propeller assembly used on 'Dusty'.

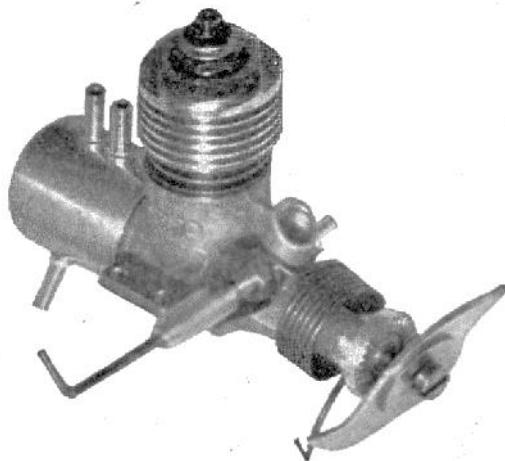
6 year old Rory fared much better and, although living dangerously, he managed to get the model away. In fact he progressed to using an 'Ajax' for his third flight.

I decided not to bother with Mini-vintage and, as there was the prospect of no fly-offs as on day two due to farmer intervention, we decided to pack up reasonably early to give plenty of time for a shower and change of clothing before going to the Plough for our evening meal. We then heard that there would be unlimited fly-offs but knowing the large number of qualifiers in Classic I chickened out and decided not to wait to compete. Taken all round it was a good Nationals but I really did miss the evenings in the Hanger which was not available to us this year. I had even brought a couple of chuckies especially for it.



John Andrews





D-C Bantam

SPECIFICATION

Displacement: .762 c.c. (.0465 cu. in.)
 Bore: .410 in.
 Stroke: .352 in.
 Bore/stroke ratio: 1.17
 Bare weight: 1.3 ounces
 1.5 ounces (with tank)
 Max. power: .053 B.H.P. at 15,000 r.p.m.
 Max. Torque: 4.5 inch-ounces at 10,500 r.p.m.
 Power rating: .07 B.H.P. per c.c.
 Power/weight ratio: .035 B.H.P. per ounce

Material specification
 Crankcase: light alloy pressure die casting
 Cylinder: leaded steel
 Cylinder jacket and head: turned dural
 Piston: hardened steel
 Crankshaft: hardened steel, 6BA propeller shaft (bolt)
 Connecting rod: light alloy forging
 Bearings: all plain
 Plug: KLG Miniglow X, short reach, 1.5 volt
 Spraybar assembly: light alloy
 Propeller driver: dural
 Manufacturers: Davies-Charlton, Ltd., Hills Meadows, Douglas, Isle of Man

Smallest in overall size, and lightest of the current spate of British "049" glow engines, the "Bantam" offers exceptional value for money and a remarkably high specific power output of .07 B.H.P. per c.c. Handling characteristics, too, particular starting, are very good and the matching range of accessories include two sizes of moulded propellers in a soft grade of nylon, the "Quickclip" for easy attachment of the starting battery, a matching spanner, and "Quickstart" glow fuel specifically blended to give top performance with the "Bantam"—a complete outfit for less than the price one has become accustomed to paying for a baby diesel.

The Bantam is, of course, "tailored" around the Davies-Charlton coil spring and cam starter—a simple and effective device which is easy to use. The manufacturers recommend a set starting technique, using the "Quickstart" which is just about as foolproof as can be and really does produce instant results, if followed faithfully. Once familiar with the setting for any particular propeller size, however, flick starting is just as easy. Needle valve adjustment is not critical and allows considerable latitude in arriving at an optimum setting.

Whilst the "Bantam" will run quite happily down to 9,000 r.p.m. on the larger propellers it is definitely sweetest and happiest running really fast, achieving nearly 18,000 r.p.m. on the 5 x 3 DC nylon propeller, for example. Peak power appears to be developed around 15,000 r.p.m. and so with this propeller size the Bantam is probably over-speeding, but the power fall-off is not abrupt past the peak. Some slight loss of power was experienced on warming up at all load speeds, but this was not significant.

In appearance the "Bantam" follows the familiar "Dart" layout. The original "Dart" crankcase die has been reworked to give a large crankcase diameter, but otherwise is identical. A finer thread is, however, used for holding the bottom of the cylinder (40 t.p.i.) and transfer passages are milled down each side of the crankcase unit.

The cylinder itself is turned from leaded steel, un-hardened and seals on a copper gasket when screwed in place. Three transfer ports of relatively shallow depth are cut in the cylinder walls immediately below the exhaust flange and three exhaust ports in the flange itself. The pillars of the exhaust ports come over the centre of the transfer openings. The upper cylinder is completed by a turned dural jacket screwing in place, giving a flat head into which the KLG plug screws. Check that both head and cylinder are screwed up tight if running is erratic, or starting difficult.

The piston is of hardened steel, of substantial wall thickness and rather nearer "diesel" standards for fit than glow motors. The floating gudgeon pin is 3/32 in. diameter and the big end bearing 1/8 in. diameter. Connecting rod is a light alloy forging.

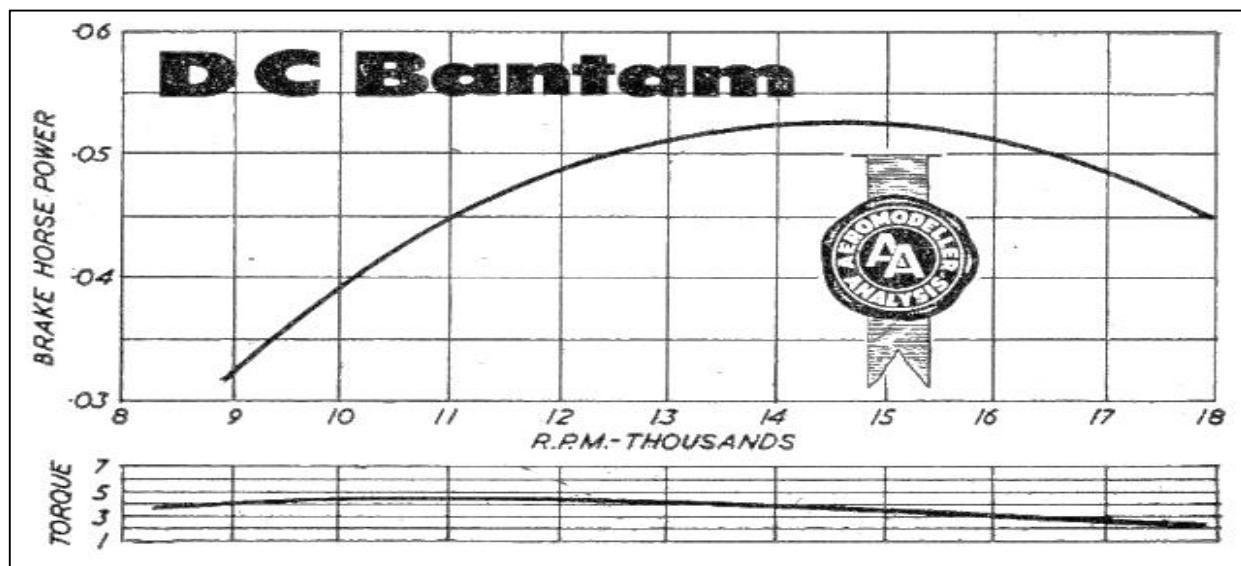
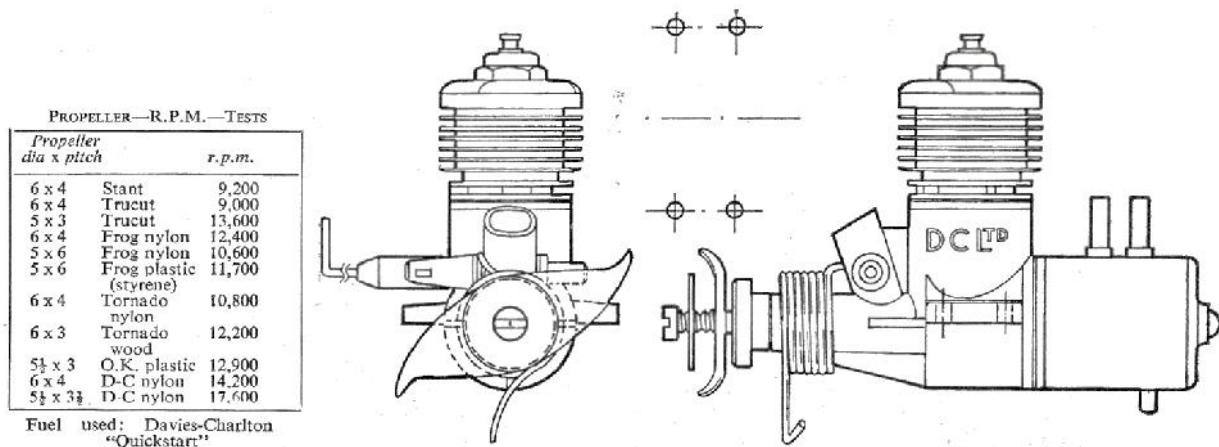
The hardened steel crankshaft is 13/64 in. diameter, terminating at the propeller driver. The latter is turned from dural and driven on. The centre of the shaft is drilled and tapped to take a 6 BA screw which forms the propeller shaft. Thus the clearance hole called for in the propeller hub is

only 1/8in. diameter. The "Quick-start" cam and front washer also assemble on the shaft screw and give sufficient clearance to accommodate a 3 in. minimum pitch hub thickness.

The integral fuel tank is turned from solid stock, mounted by a central fixing screw. Vents and feed pipe are angled to give satisfactory flow in a variety of positions—e.g. sidewinder mounting—and, in fact, the standard tank proved quite satisfactory on a small control line model for consecutive loops and bunts. Davies-Charlton are also producing a radial mount adaptor for the "Bantam" in line with current American practice where radial mounting of small engines is almost universally preferred.

Effective suction is quite good, the fuel line readily filling on finger choking. An additional moderate prime through the exhaust is, however, also called for as excessive finger choking will invariably result in flooding. The KLG plug is specifically recommended for use with 1.5 volts, i.e. a dry battery—the Ever Ready A.D.4 being particularly suitable and matching the two-pin plug on the "Quickclip" lead.

Besides being compact and light, the "Bantam" is also extremely rugged for a baby glow motor. Costs must have been cut to the bone and yet there is nothing at all that suggests a cheap production. Throughout, it is a quality job—the only criticism we would think of offering being that the end of the "Quickstart" spring would be better ground smooth rather than cropped off. As it is, the sharp end can at times be painful when locating the end of the spring on the cam. The "Bantam", too, should convince even the most "diesel minded" fan that baby glow motors are easy to start—and can give diesels a run in the matter of performance!



'To RDT, or not to RDT' that is the question.

Free Flight is great fun given good weather and a flying field. But, like many 'good things' it can have its downside such as the '4 Banes' of Free Flight:-

'Getting treed' - I carry a 10 metre fishing pole for low trees and at Lodge Farm rely on Walt Hodkinson's double pole set gaffer taped together for the high trees.

'Landing off-field on private property' - my diplomacy skills at explaining my model retrieving to potentially hostile landowners improves with each flying season.

'Retrieving over-long competition flights' - in competition it is a crime to DT short of the max so we all set max+ DT times. Models booming away in big thermals can take minutes to descend on DT involving long retrieves - I estimate 1 minute of flight time results in 10 minutes of retrieval time, meaning I have spent many hours in over-long flight retrieves.

'Untrimmed Model Syndrome' - it looks all right, hand launches OK, so now for the 1st flight at which point my careful constructed model aircraft is at risk of being crunched. Just looking around at the 2015 Nats I see many flyers also experiencing '1st Flight' problems often resulting in crunched models.

If only I had a system where I could DT my models 'When I want' and 'Where I want' I could eliminate those '4 Banes', adding a motor cut-off/stop to the DT function would then make trimming power models a doddle.

Well that system is here and now in the form of stand-alone RDT.

Originally rdt was an added function to the electronic timers (e.g. Ken bauer's Blackmagic) used by top competition flyers, you simply upgraded your timer along with getting a transmitter mounted on a bicep strap. While these elite flyers got the benefit of rdt the rest of us (99%) had to make do with the old methods of fuse, KSB/Tomy (clockwork) or gel/button (drag) timers to dt our models.

Now we can all dt our models 'When we want' 'Where we want' thanks to the development of stand-alone rdt systems. We can all get the benefit of 'no trees' 'no off-field landings' 'no overlong retrieves' and 'safer first flight trimming'; I am in the process of converting all my free flight competition models to rdt including my 'Morris Man' and 'Disco Stu' chuck gliders.

If rdt eliminates the '4 Banes' of free flight you have to ask yourself - 'Why aren't we all using rdt?'

I think the answer lies in the misconceptions (modern myths) most free fighters have about rdt - 'It's expensive', 'It's heavy', 'Is it reliable?'

Looking at two systems; Gordon Warburton's (GW) home built system described in Biggles News 2015 see:- <http://www.bigglesleague.highsociety.org>

And follow the pages to the 'Links' to read or download Biggles News 2015 as a pdf file.

Leo Bodnar Electronics (LB) produce 'Stand Alone' rdt systems at £100 see:-

<http://www.leobodnar.com/shop/>

Then go to Products - Model Aircraft Accessories; Peter Brown F1B & F1G flyer works with Leo Bodnar on these projects and they are made just down the road from me in the village of Silverstone.

'Expensive' - What have you already paid for the dt systems on your models?

What would you pay for an rdt system?

I looked through my stock to find I had 12 gliders with timers, 10 KSB and 2 gel, plus 7 spare KSBs and 2 spare gel timers; roughly £400 of clockwork and gel dt timers. Compared to this all rdt systems look cheap.

Gordon's transmitter tx system will cost about £45-50 plus you will have to put it together, an Orange 2.4Mhz rx will cost approx £7-10. Add single cell 1S lipo batteries at £1-5 each and servos at £3-10 each, plus you will need a lipo charger £10-20.

LB 'Stand Alone' system comes with a micro servo wired to the receiver rx, 50mah 1S lipo battery, a neat transmitter tx frequency matched to the rx, plus a special lipo charger, for £100. They also produce 'Host' and 'Custom' rxs that they match to your LB tx system frequency. 'Host' and 'Custom' rxs (£50 each) mean that you can use any 1S lipo battery and servo with the system (so long as your lipo and servo have Futaba plugs).

For both GW and LB systems you will need a stable 12V supply to power the lipo charger. I've bought a 12V 7.2ah sealed rechargeable battery from Amazon for £14.99 which I will recharge monthly on my electronic car/bike battery charger.

Whichever system you choose you can juggle the £s and it is easy to see that I can eBay my present timers for more than the rdt system that replaces them so I will have money left over to invest in some rounds at Biggles HQ.

'Heavy' - think of the word 'battery' and we all think of 'car battery - very heavy', 'AA battery - quite heavy', but the 1S lipo to power rdt on your model is just 2.6grm for 70mah, a bit lighter for 50mah, and a bit heavier for the 100mah I plan to use on my towline gliders.

LB's 'Stand Alone' system of tx and wired nano servo weighs 2.7grms! With its 50mah lipo you are looking at a total of 5grms. Gordon's system is about 6.7grm plus the wires. By comparison my KSB timers weigh in at 25grms so even with the larger servos and lipos I will use I will be adding noseweight to my rdt equiped gliders to bring the CG back to its correct position! Noseweight + rdt weighs less than the KSB so I will also check that my F1As/F1Hs are up to weight.

'Reliability' - Looking at my fellow flyers, with the exception of Sam Heap (Roger's grandson), we all grew up in a mechanical age where we expect to see how things work through the movement of their parts. It is reassuring to see that our DT is working, the fuse is burning, KSB disc rotating, Tomy waggler wagging. With electronics and rdt this visible movement is replaced by visual lights and audible beeps and squawks. If it lights up as expected or squawks as expected then the system is working, we just have to believe it.

To Rdt, or not to Rdt?

While your jury might still be out, mine has delivered a 12-0 unanimous verdict. No more ruined A2 wings (Lodge Farm tree, Luffenham tree), 15kms retrieve London Gala (Trevor Payne's 2nd power flight), or 4 fields off Barkston retrieve for Mike Evatt's 4th round F1B flight at the Nats, and no more vagaries of gel timers on my discus launch gliders, instead in comes 'When I Want' 'Where I Want' rdt.

Leo Bodnar Electronics RDT Systems

'Stand Alone' system of tx, tx charging lead, rx with wired nano servo, 50mAh 1S lipo, micro 1S lipo charger £100.00

If you believe that with something new 'What can go wrong, Will go wrong.' Then you will want to select the system with the least chance of error so the 'Stand Alone' option is for you. When you receive your bag of rdt bits all you have to do is plug the lipo onto the rx/servo so that you can test the system. Unfortunately there are no instructions with the pack (I have

mentioned this to Peter & Leo so maybe instructions will appear in the future) so go to their website <http://www.leobodnar.com/shop/> then to 'Model Aircraft Accessories' then 'RDT System' then 'More Info' for the RDT Starter Kit Stand Alone, then 'Instructions' - best to print out these Instructions for reference.

The 1S 50mAh lipo has a 3 way plug even though there are only two, +ve & -ve, leads so it is a 50/50 chance of plugging it onto the rx the wrong way round. To avoid this error make sure the red lead on the lipo plug goes on the centre rx pin and the black lead goes on the other longer rx pin.

Now put the tx near the rx/servo/lipo set up and arm the system by pressing and holding the little black button on the tx until red tx button lights up showing your rdt system is armed. Pressing the tx red button you get a trio of squawks from the tx and two seconds later the servo arm moves through 90 degrees; your system works.

Now you simply need to mount your rx/servo/lipo set up on a model.

As my rdt is to replace KSB timers in my gliders (F1A/F1H/Brit) I draw up a ply plate that fits the KSB mounting holes and mount the nano servo on the ply plate. The rx and lipo fit in the space vacated by the KSB. On the ply plate I mount a 'rat trap' style dt release arm to reduce the stress on the tiny servo.

I put some thin foam in the timer compartment to cushion the rx and lipo, and rdt being lighter than the KSB I add nose weight to bring the glider's cg back to its correct position. I now have an rdt system that I can swap between all of my gliders that have/had KSB timers.

Chris Redrup has produced an excellently compact 'Stand Alone' set up for his models that was first seen in June 2015 Clarion.

Advantages of the Leo Bodnar Electronics 'Stand Alone' rdt system

- Simple, minimal risk of anything going wrong.
- Very light - 6grms.
- Micro charger prevents 'overcharging' problems.
- Can be transferred between models by using a standard mounting plate.
- If you want to rdt equip more models you simply buy more rx/servo units at £50 each which LB will match to your tx frequency.



Stand Alone system with nano servo and rat-trap dt release on mounting plate.



Host system components

My only criticism of the LB 'Stand Alone' system is that if they had fitted a servo plug, in place of the hard-wired nano servo, you could add your own choice of servo. Also the tx charger lead is a tight fit on the tx board needing careful disconnecting.

Converting my Gliders to RDT

Having 12 gliders with KSB or gel/button timers for conversion to RDT I opted to buy three 'Custom' receivers that would allow me to have my choice of servos and lipos to suit each model and have up to 3 RDT equipped models ready to fly at any one time; important for FAI competitions flown in rounds. Servos, with a rat-trap dt release arm, are to be permanently mounted on the models with just the rx/lipo being transferred between models.

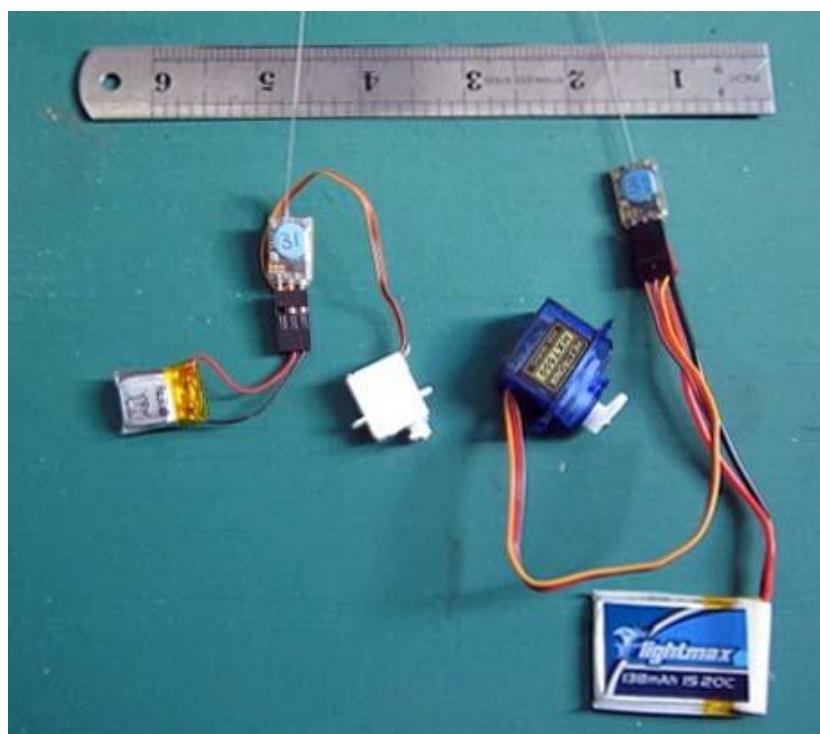
Flying mostly F1A/Brit Glider I feel that the tiny nano servo of the 'Stand Alone' system looks a bit lightweight compared to the KSB timers I am replacing so I opt for the beefier HTX500 Hextronic servos at a mighty 6.2grms. Bear in mind that F1A gliders are 2+ metres span and weigh 410+ grms so having all that model controlled by a tiny 1.7grms servo didn't seem logical when my whole beefier system will still weigh in well below the KSB timers I am replacing.



'F1A front end with original KSB



after installing servo and rat-trap dt release, receiver and lipo fit in the timer space behind a faceplate



Stand Alone system on left compared with my F1A Host system with larger servo and lipo; still much lighter than a KSB.'

For my F1H and Lulu gliders I opt for the smaller SO631 servos at 3.6grms while on my Disco Stu and Morris Man disco launch gliders I will be using the tinyHK5320 mini micro servo at 1.7grms.

Lipos will be 50mAh for disco launch, with 100mAh at 5.1grms or 138mAh at 9grms for towline gliders. While 50mAh is adequate for a day's flying larger lipos will allow, with a futaba y-lead, a tracker to run off the single 1S lipo with your rdt system; see Leo Bodnar 'trackers'.

To go with my Leo Bodner RDT set up I make a bulk order for servos and 1S lipos. By the time I add it all together I have spent about £230 for a system that will equip over a dozen models of which up to three can be flown before I need to retrieve one of my rdt equipped gliders. Compared to a dozen (plus spares) KSB timers and half a dozen gel/button timers that looks good value to me.

Advantages of the Leo Bodnar 'Custom' RDT system

- Reasonably simple once you have the instructions from the website.
- Lighter than the KSBs, even with beefier servos and lipos than used in the 'Stand Alone' system.
- Micro charger prevents lipo 'overcharging' problems.
- Rx and lipo can be transferred between models.
- Cheaper than clockwork and more accurate than fuse, clockwork or gel/button timers.

'Custom', and 'Host' receiver setups require more care than the foolproof 'Stand Alone' system. LB assume you know what you are doing, though in my case it was more by trial and error so learn from my experience.

- Lipo batteries with Futaba connectors are two pin, not three pin as on the LB 'Stand Alone' system. It is all too easy to connect your lipo the wrong way round resulting in your 'Custom' rx getting VERY HOT, VERY QUICKLY!!!!!! Facing the rx with your frequency number towards you the +ve red lipo lead needs to be on the top centre pin and the -ve black lipo lead on the top right pin - get it wrong and you have a very hot rx! Your servo plugs onto the lower rx pins.
- On my 'Custom' rx it was necessary to slightly bend the upper pins for the lipo away from the lower pins so that the futaba plugs fitted correctly; be careful if you need to do this.
- Also the tx charger lead is a tight fit on the tx board so take care disconnecting to avoid accidental damage.

Now with 3 'Custom' receivers frequency matched with my tx, tx charging lead, and a shed full of servos (fitted to models) and lipos, not forgetting that 12v 7ah rechargeable battery, I am all ready to enjoy the benefits of RDT - just so long as I remember the key rules of RDT:-

- Charge lipos and Tx before going flying.
- Always check I am plugging my lipo into the rx the correct way.
- Check the system is armed before each flight.
- Remember to take the 12v battery and micro charger with me so that I can recharge on the field.
- Fit 'corn plaster' over red button on tx ----->
- to avoid accidentally pressing the button; it now needs quite serious downward pressure to activate.
- At the end of flying unplug the rx lipos.

So it's goodbye to Trees, overlong retrieves, first flight crashes, and a reduction in my contact with the private landowners surrounding our flying sites.



David Brawn

Unlike many free flight flyers, I didn't start flying free flight aircraft until later on in my modelling life. I wanted to fly electric powered radio control models and taught myself to fly R/C in a local park. My electric models moved from small hand-launched sports models up to a quarter scale radio controlled Sopwith Pup; that was 20 years ago.

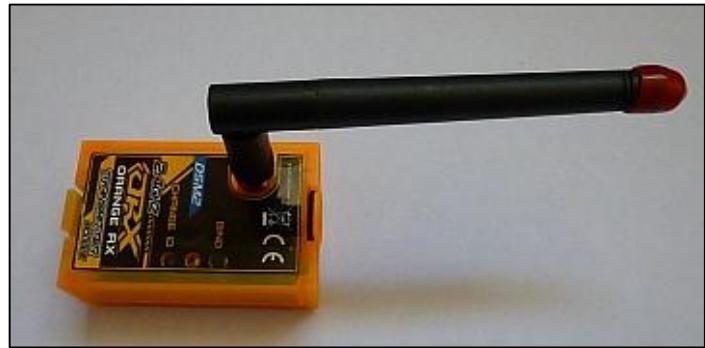
My free flight modelling was mostly small rubber - mini-vintage - but when the FFTC announced that radio DT would be allowed in all free flight classes I immediately became interested. But, I didn't feel like paying out the prices being asked for commercially made equipment!

Having a background in electronics, I wasn't daunted by the challenge of producing my own system. Some flying friends in one of the clubs I belong to had already started experimenting converting old single channel radio equipment to 2.4 GHz so enabling more than one model to be flown at a time - something not possible in the old single channel days.

I started by using an idea they came up with, modifying a commercially built 2.4 GHz module intended to convert a 35 mHz transmitter to 2.4 GHz, and making a unit to add to a module that would provide the necessary signal to operate a servo on the aircraft.

The heart of the transmitter is an 'Orange' 2.4 GHz transmitter module sold to convert Futaba 35 mHz transmitters to 2.4 GHz. The module is available from Hobby King, part number SKU:917000069 with a price that seems to vary between £17.00 and £25.00.

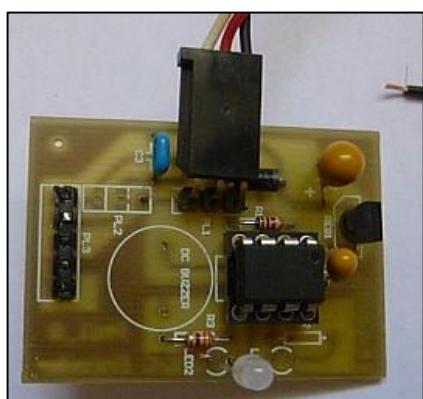
Using this module means there is no problem with frequency clashes.



The 2.4 GHz module.

The next thing required is something to send pulses to the transmitter module to operate the DT servo. I have produced my own boards but fortunately, the person who produces the single channel equipment is offering to make these boards specifically for radio DT. These are complete with all components and the programmed PIC (micro processor) for approx. £15.50. The only extras to buy are - a push button, an on-off switch and a battery. Two LiPo cells or one 9 volt PP3 battery will do

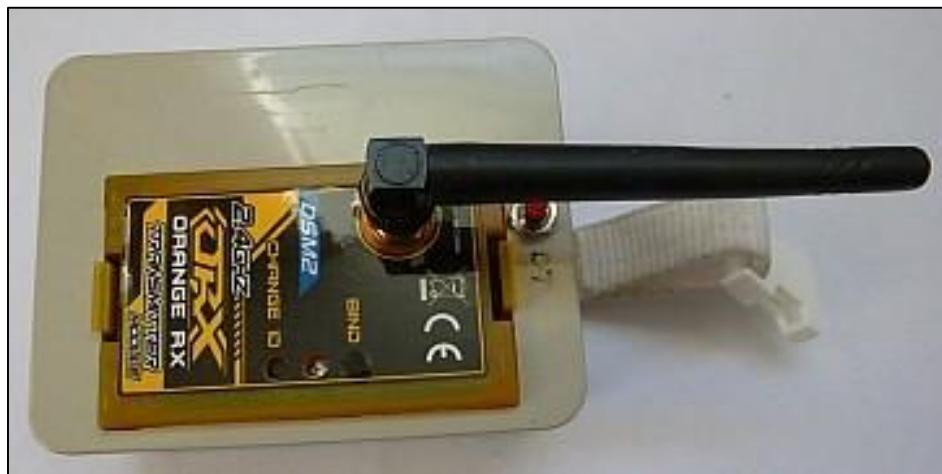
- all obtainable from Maplins. The 'single channel unit' just plugs into the back of the TX module.



The board complete with the programmed PIC. The three connections are red/black - supply voltage, and white/black - connected to the push button. (To operate the DT.)

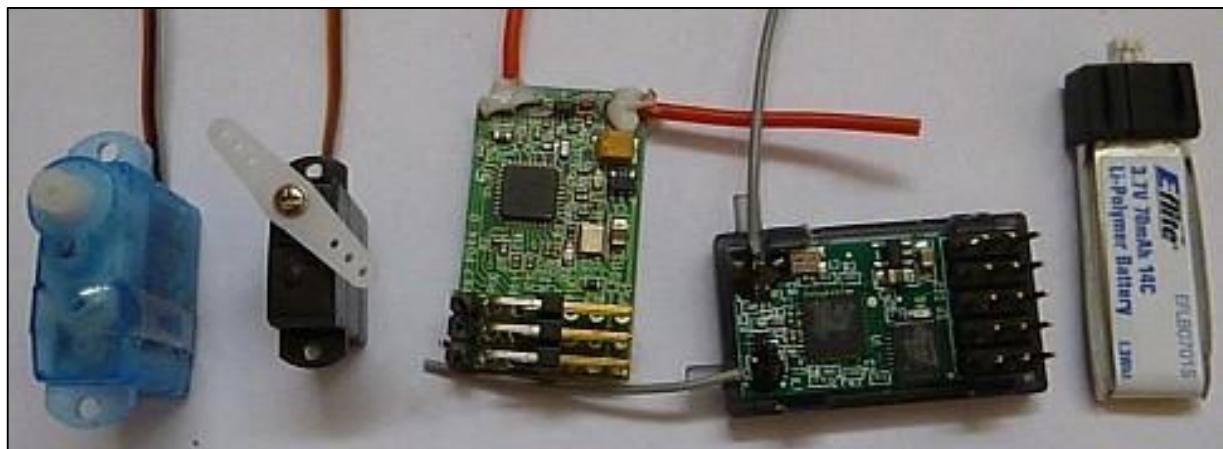
All the parts (less case and battery) to complete a transmitter. 2.4 GHz module, PIC board, power switch and push button.

Here is the boxed DT transmitter unit, made up of the 2.4 GHz transmitter module and the 'single channel board'. The box is obtainable from Maplin. (Project box - 80x60x40 - code N23HG.) I just had to add the on/off switch and the (DT) push button, plus a battery and wiring.



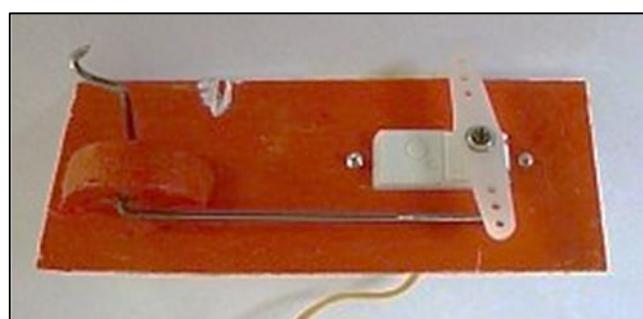
Any Spectrum/Orange receiver DSR compatible receiver will be suitable for the airborne equipment. I have found the 'Orange' RX 410X receiver has given me sufficient range and with the case removed weighs only 2.7 gr. The receiver will work on a single cell LiPo. The servos I use are lightweight (1.7gr). There are many available but beware that the socket might not be compatible with JR/Futaba plugs. Either an adaptor will be required or the socket changed and slightly heavier servos can also be bought..

Items for the airborne RDTsystem



7 grm servo, 1.7 grm servo, 'Orange' receiver 2.4 grm, Spectrum 5 receiver 2.8 grm, 70 mAh lipo cell 2.6 grm.

Using the 1.7 grm servo and 2.4 grm receiver the weight with battery is 6.7 grm plus wire. Because lightweight servos do not have much torque, I use a 'mousetrap' system (below) to release the DT cord. Simply looping the DT cord over the servo arm means the servo is constantly trying to work against the pull, so drawing a much higher current than the 'mousetrap' release. It's not much of a problem with an electric model and high power batteries.



The simple 'mousetrap' system on a plate – very little force is placed on the servo.

The PIC can be programmed to provide motor stop plus DT for E36 and BMFA/F1Q models. For example, on the first press, the servo is programmed to move 45 degrees one way for motor stop. On the second press, the servo moves 45 degrees the other way and releases the DT arm.

On the right is a DT/motor stop method



I used in my E30 model. The motor microswitch is released and locked in the 'off' position by the servo arm. When the servo cycles in the other direction, the 'mousetrap' DT is released. Once stopped, the motor cannot be reset to run again without using the transmitter to reset the servo arm.

Some words of caution.

The receiver and transmitter need to be 'bound' together - where the 'bound' receiver can only respond to signals from its own transmitter. Full instructions are included with the transmitter module. Do this binding at home; it is just possible that while binding your receiver on the field someone else could be doing the same thing and the things get mixed up!

It is worthwhile to do a range check before launching your prize model into the air. Instructions for range checking are also included in the module instructions.

There is no indication on the transmitter for when the battery is getting low - make sure the LiPo's are fully charged before flying and/or check the PP3 battery voltage is OK.

The small servos have delicate interiors and the servo arm should not be turned by hand. Some suppliers of radio equipment and electronic components are:-

hobbyking.com - radio equipment. esr.co.uk - electronic components. cpc.co.uk - electronic components.

If anyone has experience of producing their own printed circuit boards I can let them have details of my smaller transmitter - it does mean removing the case from the transmitter module and also making your own board for the PIC.

Gordon Warburton (Biggles News 2014)

Letters to the Editor

Peter Michel - RDT:

I frequently read about the merits of radio DTs. And when a model of mine is in a boomer, with the DT seemingly taking for ever to kick in, I convince myself that RDT is a must. Now I know nothing about electronics, so a starter kit containing the lot - transmitter, receiver, battery, servo and charger - is what I would need. That costs around £100. (Ouch!) But it would be acceptable as the price for setting out on the RDT path - except for one thing. It seems you can't transfer all the in-flight gear instantly from one model to another on the field. Or can you? Like many others I have quite a fleet of vintage and classic free-flight models, so equipping each with a stand-alone RDT system would be out of the question. A few words by one of our chums who has been along this road would be greatly appreciated. But if there's no answer to the problem I'm going to have to stick to my faithful Tomys.

(Editor: perhaps the articles above may shine a light on the problem)

Peter Michel

Mike Woodhouse - Teal/Frog 80:

A couple of things came together for me in the Clarion. The Frog 80 and the Mercury Teal. The Frog 80 diesel version and the Mercury Teal arrived at the same time in Charlie Willement's shop. I bought them both with my pocket money and got it altogether over the Easter school holiday. The Teal had a blue colour doped fuz and yellow Aerolac finished wing and tail.

It flew across our local park for the rest of the holiday.

It was easily trimmed and made umpteen flights. Eventually over enthusiasm and a thermal and was last seen heading across the Wensum river valley. Not far from where we now live so after the best part of 60 years and that last flight, I can still see it.

Any chance of a copy of the plan as I might one day want to try again. This time with RDT!

Michael Woodhouse
mike@freeflightsupplies.co.uk
<http://www.freeflightsupplies.co.uk>

Dick Twomey - Space Debris:

Did you know that our unfortunate human habit of leaving rubbish and debris all over the Earth is being replicated in Space? Sad to say, this is true, with the phenomenon looking all set to match Global Warming as the next serious crisis for humankind, if we do nothing about it!

It is estimated that "there are some 25,000 larger pieces of debris, plus millions of smaller pieces of debris orbiting our planet", says a recent article in the Royal Aeronautical Society's "Aerospace" magazine. The writer goes on to warn that collisions can occur, and indeed have already occurred, and we are informed that the International Space Station (ISS) has had to alter its orbit on an average of twice every year in order to avoid trouble.

Taking up the challenge to clean-up, systems are now being built into the more recently-designed satellites which will enable them to be moved more easily out of orbit. "we have a deployable drag-foil on board", says one expert, "which releases at the end of the satellite's life" - much like the "dethermalizers" which are fitted to high performance model aircraft!

More international legislation is also afoot, which must mitigate the debris problem before Space becomes altogether too dangerous to navigate.

Dick Twomey

Marc Croome - Tomy Timer:

(Editor, ref. my Tomy construction method in May issue)

A word of warning on putting hot wire into the Tomy rattler. The old ones had little pins either side, and the hot method works.

The recent ones I have are made with a pin moulded into the case and a hole in the rattler. Pushing a hot wire into one of these just welds it up solid!!!.

What I do is to carefully saw a shallow slot along the length of the rattler with a razor saw. It will also cut into the casing at either end of the rattler but that does not matter. You then fit a wire balance arm with a tiny spot of cyano.



Mark Croome

Dave Pymm's 1970 1/2A Model

Gavin Manion

Amongst the late Tony Hall's stuff were these 2 pages of notes on Dave Pymm's 1970 model. I remember it as being beautiful, Dave was an immaculate builder with a fine eye for proportion. Where Tony copied the pages from I have no idea, though one of your keen readers (step forward JO'D) will no doubt know.

So, some neat mechanism ideas from a master builder and a pretty 1/2A model in the Ray Monks/ George French style."

It is interesting to read the small piece from the preceding article regarding radio DT, there is nothing new under the sun...

--continued from page 2--

With this system all present free flight model designs and competition rules would remain unchanged. And no one would have to have the equipment to compete on an equal basis with those having the unit. For small field flying the "max" flight limit could be reduced to fit the site and conditions to keep the models on the field. Being able to "DT on command" would solve the problem we have when we set our DT for the "max" flight limit in effect and then launch into a very strong thermal and watch our model achieve such height that when it finally does DT the wind drift takes it far off the field. (The flyer always has control over the DT and can bring his model down whenever conditions warrant.) Small field competition could take other directions, of course, such as permitting the contestants to make as many flights as they wish and the winner is the one who can make the longest flight and still keep his model on the field. This could be real fun.

I think "DT on command" would be an acceptable idea to free flighters. I would expect that the "DT module" could be built small enough to be practical for power models, gliders and even for the larger rubber models. (Maybe the unit with the recovery feature would be heavier and only suitable for power models. Certainly a unit with only the DT function could be very light and less expensive.) ~~With transistor radios selling for \$3.99 and kid's walkie-talkies for less than \$10 I fail to see how such a simple "DT on command" unit would be priced out of the market when we are already paying \$4.50 for a clockwork DT timer.~~ I think the commercial possibilities would be attractive and the potential future market very exciting.

Dick Lyons

♦ Radio Control in Free Flight has hit the California Contest Circuit. And it took an out-of-towner to show us the advantages of RC in Free Flight. Whatever the motive behind Wes Morris, of Phoenix, in putting RC in his models he certainly deserves an "A" for his effort.

Radio Control in Free Flight is one solution to those anxious first flights under power during test flying. If things go bad, just punch the button and kill the engine. Or, if you are concerned about losing your model in a Taft Trash Mover, again, just punch the button BEFORE the fuse would pop the DT.

It's as simple as that. RC is practical and possible, and we can expect to see more of it in the near future.

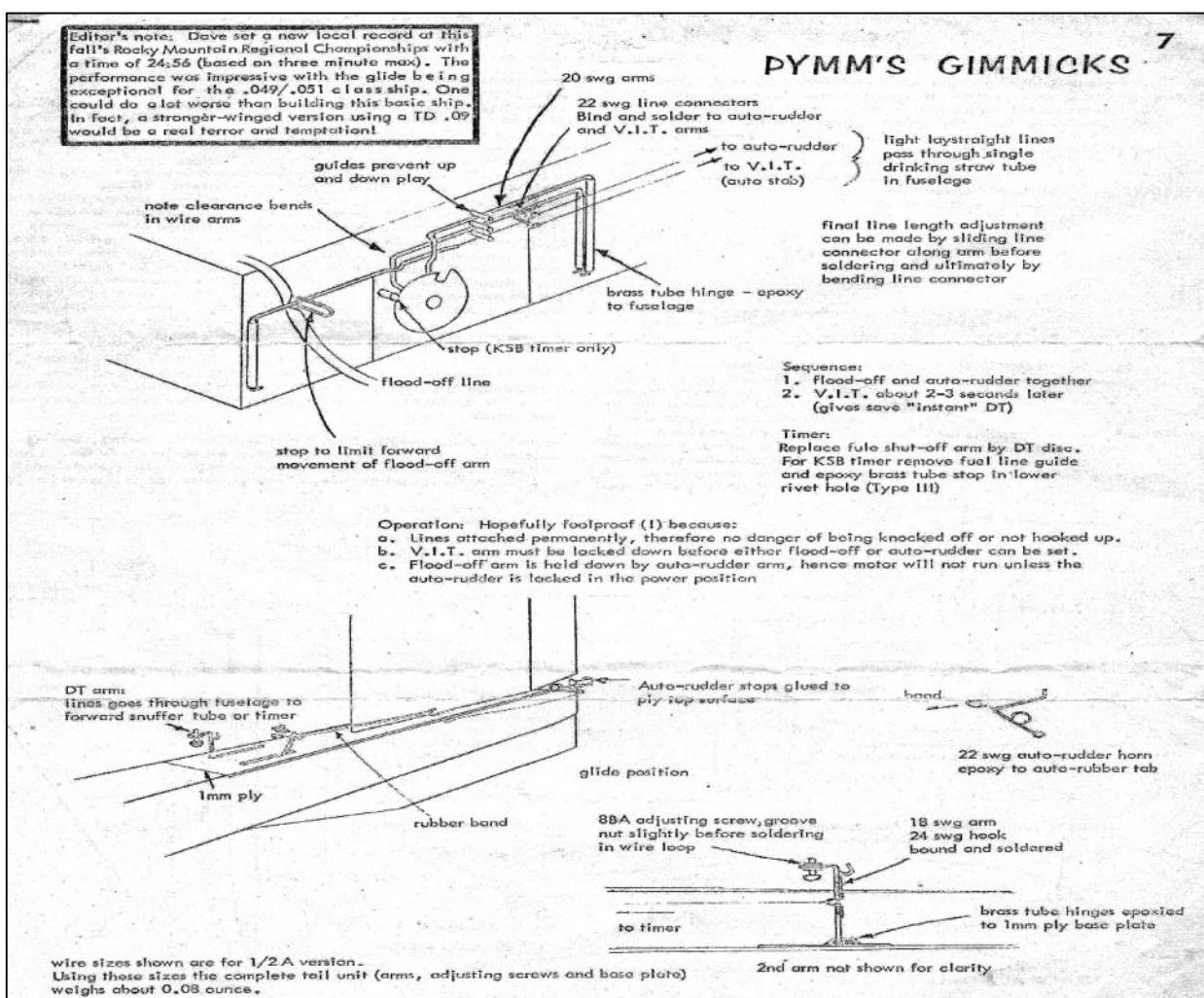
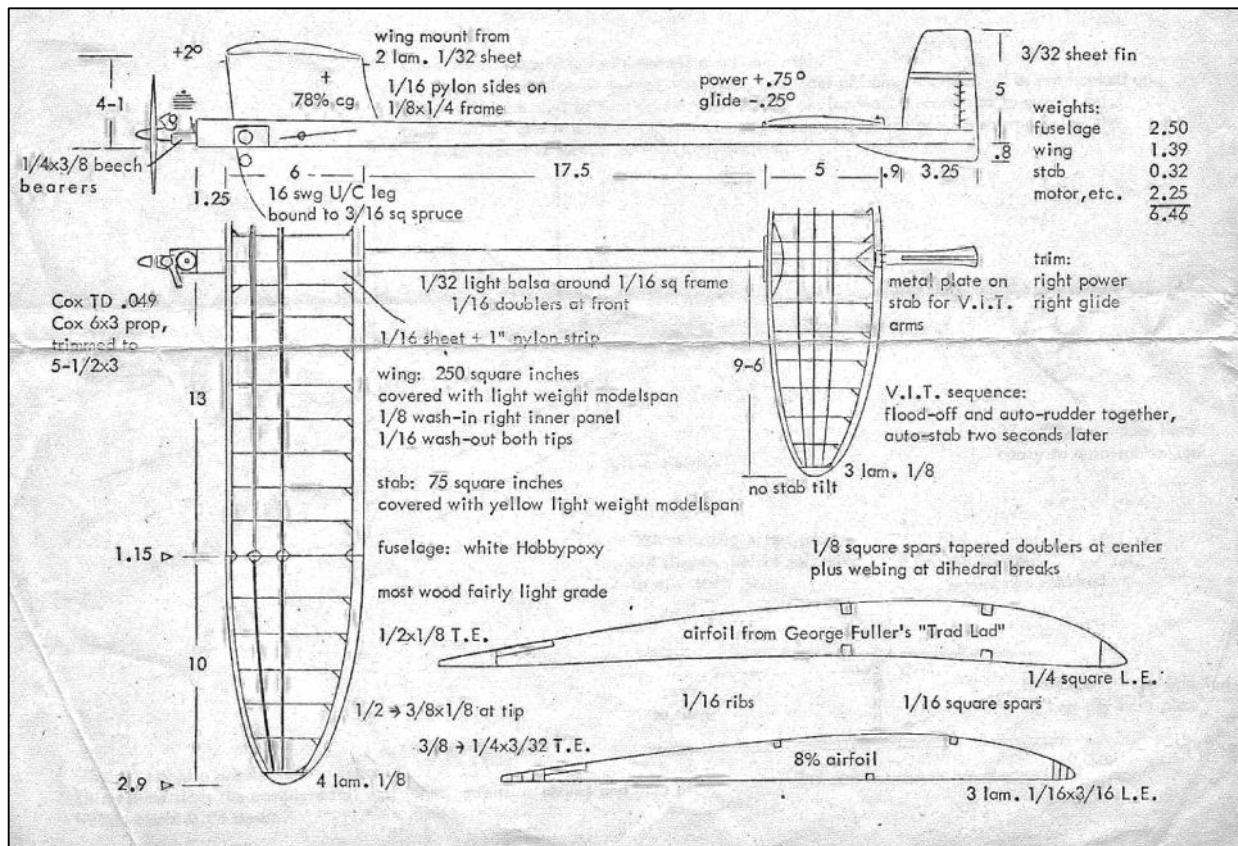
(Wes used it for testing only.)

San Valeers "Satellite," July 1970
Ralph I. Prey, editor

1970 1/2 A

Dave Pymm

1. It was designed for a reasonably fast rate of climb compared with the extremely large American designs (Starduster X, Pandemonium).
2. General layout has been influenced by English design trends, in particular that of Ray Monks.
3. The airfoil was cribbed from George Fuller's "Trad Lad." While I am happy about the climb performance it gives I am not yet convinced that the glide is all it should be.
4. Some people might query the value of using V.I.T. on a 1/2A but I have found it well worthwhile.
5. I have been running the Cox TD .049 on pressure but have found the needle setting to be extremely sensitive. Possibly the answer is to use a pen bladder tank.
6. Trimming the Cox 6x3 (silver) prop down to 5-5/8x3 gives an appreciable increase in thrust.



Gavin Manion



(*Model Aircraft March 1959*)

Pot Luck

As all you beginners know, the model movement is suffering from an acute expert shortage. There are shoals of us obtuse beginners floating around—in fact, we're two a penny, with some desperate club secretaries prepared to take even less—but the number of experts on the balsa market, acute or otherwise, are so few they can be counted on the fingers of one hand and still leave sufficient digits for a cub salute.

This state of affairs doesn't worry us beginners unduly. As far as we're concerned the fewer the experts the better - might give us a chance to win a comp if ever their car happens to break down. But some people find the shortage disagreeable. Model editors are not finding those six-page articles on rubber motor torque curves so readily forthcoming, and the V.I.P.'s who hand out the prize hardware must get tired of looking at the same old faces—

Perhaps the people most to be pitied are the contest organisers, with huge masses of pots and plaques to dispose of. Stocks have accumulated during the shortage period, and, with too many pots chasing too few experts, a spiral has been set up, even more vicious than a beginner's

power model. Anxious to whittle down the surplus, officials are constantly on the alert to heave a few chunks of hefty hardware at any expert who comes within-range.

But the pot-happy expert is getting cagey. The odd silvery pot or two on the family sideboard might boost morale and help to liven up the home decor, but when the influx of pottery begins to encroach on valuable building space by overflowing onto the kitchen table, it is time to call a halt. For one thing it's lowering to the prestige of the movement to have the Wake-field Cup used as a mixing bowl, although some of the smaller pots make useful dihedral jigs. Then, of course, there is the weekly Brasso bill to contend with, and care must be exercised in closing the front door, as with all that jangling pottery lying about, a hearty slam causes the neighbours to run to their doors to look for the fire. And, worst

of all, there is the nail biting job of keeping tabs on the return date of each pot as it nears its annual sideboard stint. All in all, the pot saturated expert can be excused for shying at the sight of another metallic intruder.

One way out of his dilemma would be to give up entering contests, but this would hardly be fair on the officials who like to know that their pots are going to a safe home. And, in any case, no self-respecting expert could stand by and watch some thermal-lucky beginner win one of their contests—that would be sacrilege.

No, the only pot dodging tactics he can reasonably employ is to win the contest and then disqualify himself on some technicality. This leaves him minus the onerous pot but with honours—easy. But the officials are not so easily deluded. They immediately present him with another pot by way of compensating him for his bad luck.

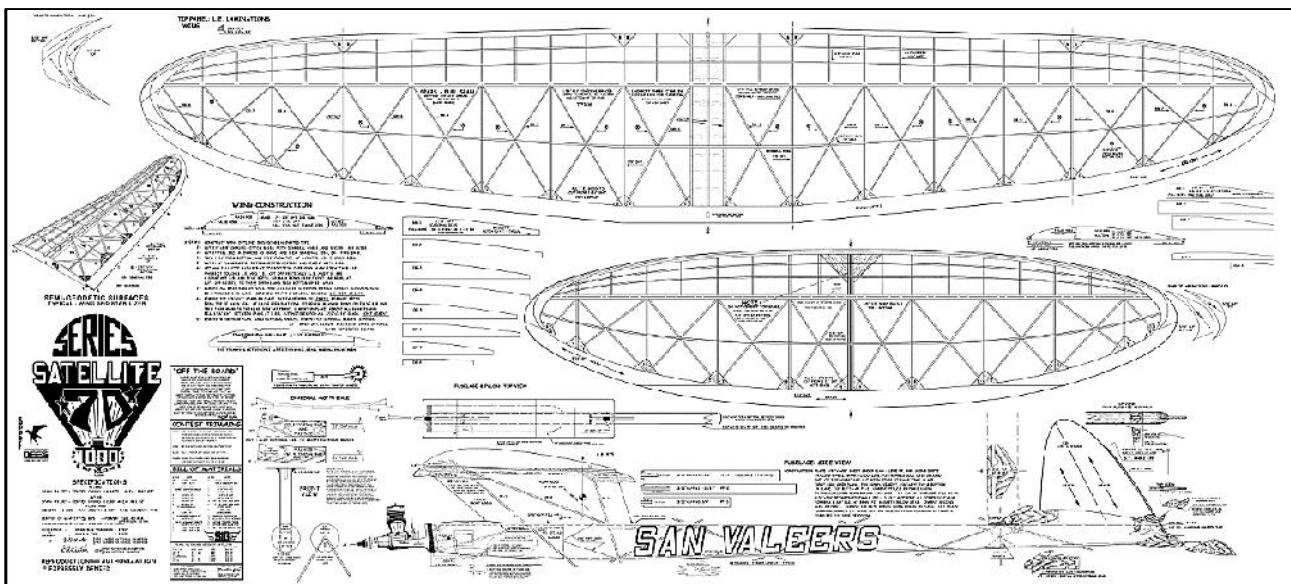
Certain people, with a sympathetic feeling towards the expert, are objecting to some over-eagerness on the part of the pot disposers. They feel that the poor old expert is being imposed upon in being presented with pots which he never knew he had won. This is taking unfair advantage. They should stick to the rules and give the expert time to duck.

To my way of thinking the only way to end this unwanted pottery campaign is to follow the example of our American friends and substitute chromium plated cars for ditto pots. This would at least ensure that our experts could reach the contest field in comfort.



Pylonius

I was encouraged by Bob Owston to build this model, I have yet to see his, Grrrrrr!! This Satellite 1970's version by Bob Hunter, he of Hotstuff cyano glue, has been very popular in the USA. I have yet to see it on this side of the pond. It is built in a variety of sizes, with short kits available I believe.



(Plan download from 'Outerzone' will give clean copy)

I had recently obtained one of the AP Hornet 2.5 cc very inexpensive engines (£19.95), but with a Nelson/Dixon head, very impressive, 24k with 40% nitro on a 7x3 APC. This is around 0.6bhp and it only weighs 120gms, say about the same as a 1.5cc engine.

One regular version of the model in the US is 450sq inch. I decided that with the light engine I could go slightly smaller at 420sq in and see how it would handle the power available. So I scaled the plan to give about that size.



Construction followed the same style except I used an 'I' spar with 3mm square spruce spars webbed with 1 mm balsa sheet grain vertical. I did not follow the flat fuselage style, in my book this can easily result in a whippy and twistable frame. I normally try to taper the fuselage from the round RC style mount back to reasonable thickness at the rear. In fact in many cases this can result in a lighter and more rigid frame. Also I do not like thin pylons for the reason that they can twist in flight, an added advantage of a thick pylon, it gives you more space to put an RDT.

I laminated the LE and TE of the tips, much stronger and if built upon a former cut from blue foam allows one to build in washout easily. The tailplane I built with multispars this results in a light and warp free frame which only needs to be covered in mylar, thus saving weight. The wing section is pretty slick, but with geometrics and the tapered plan form, it results in a strong rigid warp resistant frame.

The plan indicated a *CG* of 80% of root chord, (this to me, despite the success of the model in the past, looked a trifle too far back with the relatively short moment arm, although the low aspect ratios at the root do increase this.) this equates to around 100% of the mean average chord.

I started with 80% of *MAC*, ie much further forward, after initial trimming I moved this to 85%, approximately 75% of root chord. This trimming required 11 grams of lead in the extreme end of the fuselage. This was subsequently removed and an Aeris RDT installed. Alright it does not look too pretty being Sellotaped on to the top of the fuselage but it does work very well. See photos of the setup, the servo is an Hightec 35.



Initially the wing and tail were set at 3 and 1 degrees, this was finally changed to 2.5 and 0.7. On occasions, I do alter the wing rather than the tail plane as I proceed with trimming. Gut feeling can push me in this direction. Thrust line was 10 degrees down and 4 left, this latter was subsequently changed to 6.



I did have some trouble trimming, in that the model was over elevated and wanted to glide left - I have not found any reason for this latter. I tried more tail tilt and nearly wrecked the model on the climb, this was unusual for its *CG* position, being so sensitive to this change. Eventually I solved the problem with more left thrust and a small amount of right tail tilt. Launched vertically the model gets to around 800 feet in 10/11 seconds, in a super slow two turn spiral which is a delight to watch, with excellent transition into quite a bouncy glide. The light weight of the model I believe enhances the glide.

Compares well with other models of its ilk, but is certainly more trouble to build with its tapered surfaces, but there again it does look nice.

A word on RDT this helps enormously when trimming on smaller fields, allowing full runs and some safe glides, which one would not dare to try with a preset clockwork time DT. It also allows for old legs especially, to DT on the nearest part of the glide circle!

A word of caution with an RDT, if using it when first trimming a model for its first flights, do not become transfixed with watching the model and forgetting to press the button. This has not happened to me, but only because of my skilful use of it (?) but I witnessed case of it happening only the other day at Middle Wallop. So please do practice, the best place for the

transmitter is on one's forearm for a power model, as one can hold your left arm up in front of your eyes and see the model and also know exactly where the button is. The bigger versions of this model must very exciting to fly, but I believe that a 2.5cc is about my limit to be able to hold safely.



Weights.

Wing	118g,	Tail/Fin	33g,	Fuselage	78 g (inc pylon 22g),
					Engine /timer / Rdt etc. 181g,
Total 410g (14.5 ounces)					

Set up etc.

CG - 85% MAC,	Wing - +2.5 deg	Tail - + 0.7 deg.
Thrust line - 10deg down, 6deg left.		
Motor - AP Hornet 2.5 40% nitro APC 7x3 24 k.		

Interestingly, Ray Elliott has built a 36 inch version for E36 which flies a beautiful pattern with higher power than many, and the model stays in pattern for both the 10 and 5 second run. this is actually more difficult than you may imagine as one starts to increase the power on these little models.

I will twist Ray's arm to get him to do a brief write up.

John Thompson

Report No. 54. Plans from Kits, British made, excluding scale, cont.

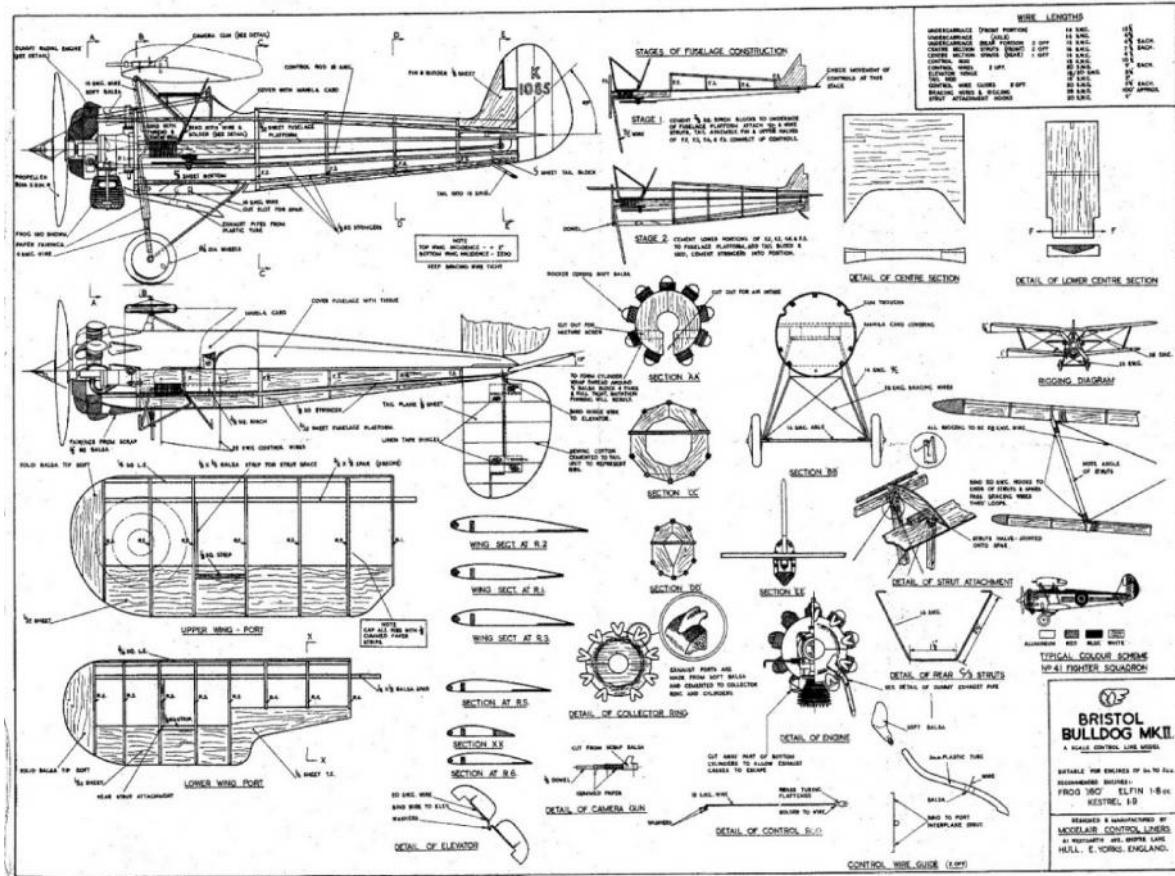
This month's offering is somewhat different from my norm in that it is not free flight, possibly not vintage and it is a scale job, BUT it is a kit and as the box proudly proclaims "MADE IN ENGLAND", it is a British kit.



Simon Rogers brought the kit to Middle Wallop and has kindly loaned it to me until the next Middle Wallop get together.

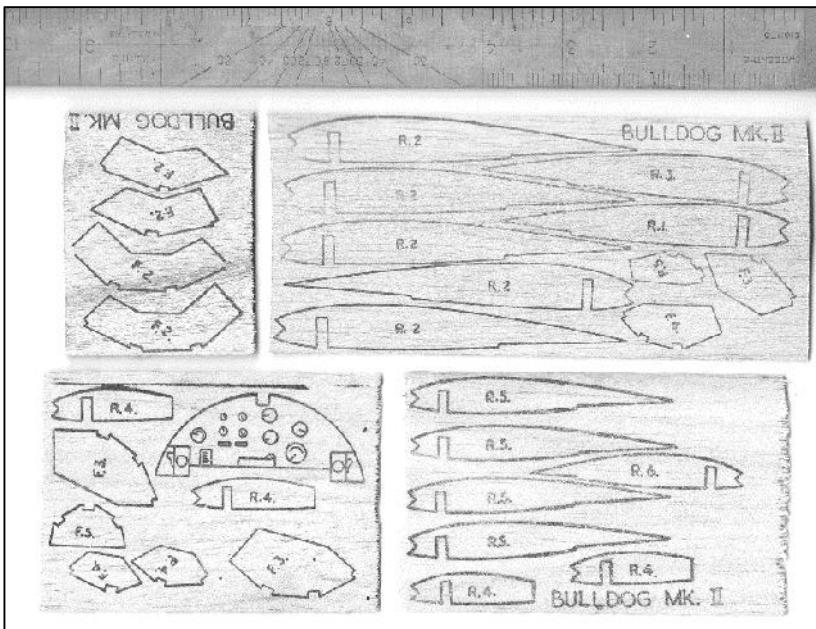
The Bristol Bulldog Mk II Control Line Model Kit is by Modelair Control Liners of 61 Westgarth Avenue, Endyke Lane, Hull. If you search google maps for the address and look at the street view you will see an avenue of very nice houses and bungalows, surely not half the age of the kit. Does anyone remembers Westgarth Avenue before the redevelopment? Was there a model shop? Who was their designer?

As regards the date of the kit, I do not know, but perhaps you might speculate given that the specified engines are Kestrel 1.9, Frog 160 and Elfin 1.8, email me your thoughts on this.



The kit claims to contain "all the necessary parts to construct this fine replica of a famous fighter. Wood parts are cut to shape from the finest materials available. Printed ribs. Cement. Wheels. Transfers. Fully detailed plan. Building instructions. All special parts".

The box listed contents are all still there and probably only the balsa cement would be considered unusable. The quality of the box, plan, print wood, cut wood parts, transfers and pack of small parts are all first class. The nuts supplied are real original style lock nuts with a collar split from one side for locking, none of your modern plastic inserts. Only the strip wood could be criticised as a little furry by today's standards but a sheet of sandpaper is included so what's to complain about. Sufficient piano wire is included, a little rusty now, also the 33 s.w.g. rigging wire for interplane bracing. This last item is particularly mentioned in the instructions and must be kept in tension in order to avoid "wing flutter resulting in structural failure".



The plan, printwood, cut wood parts and instructions have all been scanned and are on their way to Roger for the SAM 1066 plans library.



One other kit was handed to me at Middle Wallop for sale for club funds.

This is a kit of the Airflo Baby, a 44" span power model designed by Ron Warring and kitted by Precision Aircraft, Model Division, London. The box is somewhat tatty and the contents comprise about 20 sticks of balsa wood and five sheets of printwood. One sheet of printwood has a piece missing from one corner, about $1\frac{1}{2}$ " x $\frac{1}{4}$ ". Two ribs have been cut out and are in the box, one of them being broken. I have added a copy of the plan to the box. Should this kit be of any interest to you, see me after school, or rather better at Middle Wallop to examine the goods, or send me an email. A modest donation secures.

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

For Sale & Wanted

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" will make it yours.

Please contact: Martin Dilly

Email - martindilly20@gmail.com or Tel - 0208 777 5533.

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

Converting The Dynamo 1/2a Power Model To Electric

I was surprised to see the article and plan of Tony Young's Dynamo 1/2A Power model in the May edition of the NC as this is the model I have been converting to electric over the past year. This model I built about three years ago with then a Cox .049 up front but never got around to flying it. Having built two E36 models the electric bug had bit me hard so I wanted to build a model with a larger wingspan. After considering a few options the Dynamo came to mind so rather than build a new model thought it would be quicker to convert this model to electric.



This conversion did not turn out quicker or as easy as I expected. The wing seemed a little flimsy with the jap tissue I had originally covered it with, so I decided to recover the wing and tail in Polyspan. Removing the tissue was to say the least a nightmare with having to soak the tissue in thinners a small area at a time then peeling off the tissue in strips. Came off the wing ribs okay but hard to get off the TE & LE, in fact could not get it all off but as the Polyspan was going to be sprayed with Krylon paint was not to concerned.

With the wing now uncovered I decided to add a 1/32 balsa sheet web between the two front center spars of the center panels. Also 1/8 x 1/16 cross pieces between the rear spar and TE and carbon fiber cap strips to the top and bottom of the ribs also top and bottom of the front center panel spars. Not having any carbon fiber sheet I used some carbon fiber tow that I already had, this I applied using thin cyano, not easy to do and took a long time to remove the cyano off my finger tips.



Covering the wing and tail with Polyspan went very well and was easy using glue stick to apply Polyspan to the wing and tail surfaces. After giving three coats of 50/50 dope thinners, pinning down to a board and leaving to dry well between coats, the covering tightens up very nicely. Although there were still several areas where the covering was slack but after going over them with a heat iron they magically disappeared to give a nice tight covering. The only problem was that as the Polyspan is only white I had to give the wings and tail four light coats of Krylon orange spray paint to fill the pours and get a reasonable look, which added to the weight. During this procedure I made sure that the wash-in on the RH center panel remained at 2mm and that the wash-out on the tips remained at 1.5mm

As for the fuselage, removing the engine bearers and fuel tank was not easy as I had epoxied them in. So once they were removed I was left with very little ahead of the pylon. Problem was

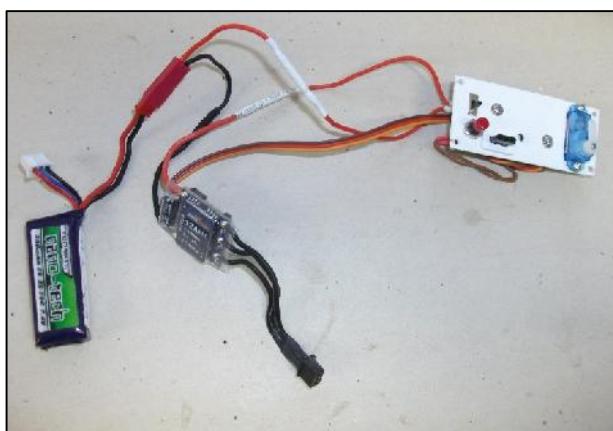
now I had to decide how I was going to rebuild the front end for fitting the electric motor, battery, ESC and connectors, not to mention the timer and servo which I decided to leave until latter. Must mention that I was using a Dan Kennedy timer the one without the RDT function which I find flawless and gives me no problems and like the ease with which they can be programmed. I do have another two of these timers, which have the RDT function on them, but as I do not have an RDT system decided to just use the DT timer



After many days spent thinking about the best ways to fit it all in, unfortunately the Dynamo fuselage is quite narrow, I managed to build up the front end with balsa sheet and formers. The front formers were both 1/8" ply glued together with the rear former being smaller so that it fitted between the fuselage sides. Holes were drilled through these ply formers to except four blind nuts for the screws to hold the motor mount, not easy when you have to make sure the holes line up with the motor mount. I had left the bottom sheeting off so that I could make a hatch cover from 1/16 ply with a tab at one end and a hole at the front for a small screw to hold the hatch cover in place. I chose 1/16" ply as this matched the thickness of the bottom sheeting. Once again after many days thinking, my brain was starting to hurt, I decided to mount the timer, servo, start push switch and a small on-off switch all onto a 1/16th ply face plate. This way, with connectors for on-off switch I would be able to easily remove as a complete unit if I ever needed to put it into another model.

I cut out a face plate from 1/16 ply and cut all slots for the servo, switch, motor start button and drilled holes for mounting the timer servo and timer face plate, also a slot for the programming connector. I sprayed the face plate with Krylon white spray paint and after soldering all the electrical connectors mounted all the items onto the face plate. After cutting out a hole in the the side of the fuselage sheeting to take the timer unit I found a former in the way so had to cut part of this away to allow the timer unit to fit. Having no black heat shrink covering I covered the front end in Polyspan, thought it would be stronger anyway, and sprayed it in Krylon black spray paint to match the heat shrink covering that the rest of the fuselage was covered in.

After the paint was dry I screwed the motor to the front end, installed the timer unit, ESC and battery to make sure everything went in. It was awkward getting these items in with the connectors and wires but after a while I had it all in.



After programming the timer for a 10 sec motor run and 2 sec DT, to see if all worked okay, I found the motor only ran for about 2 sec then stopped and no DT. After trying a few more times I tried changing the battery with no luck, so I read Dan's timer instructions and reprogrammed the timer again without any luck. Now I panicked as I was not sure what the problem was and even thought it might be a problem with the new 12A ESC that I had installed. After looking at the programming instructions for a while I still could not figure it out until one evening I was sitting on the couch going over the instructions, once again, when I realized what was wrong. I had set the motor run for 10 sec and the DT for 2 sec so the motor would only run for 2 sec. What I should have done was programmed the motor run for 10 sec's and the DT for 12 sec so the DT tripped 2 sec after the motor stopped. Tried it and it worked great, it was totally a seniors moment but at least now sorted. The model, ready to fly at this point was 195 gr (6.88) oz. On checking the CG I found that it was on the TE so unfortunately had to add 42.5 gr (1.5 oz) of lead to bring the CG as per the plan. After weighing the model it now weighed, to my dismay, (240 gr) 8.5 oz ready to fly. My only hope is that it will fly okay with this weight and after trimming I will be able to remove some lead. Have thought about making lead circles and bolting them behind the motor to bring the weight forward and use less weight, but will try trimming as is it first, wish me luck and will let you know how things go.



Pictures show model before trimming just in case it's not in one piece after its first flight.

Electric Details: **Motor** - E-MAX CF2805-2840 Kv

Timer - Dan Kennedy multi function programmable, only motor run and DT functions used

Battery - Turnigy Nano-Tech 300 mAh 2S 35-70C, **ESC** - HobbyKing 12A

So that was how I converted the Dynamo, which I have called Dynamo-E, to electric. It took me quite some time to do this conversion, hope it's worth it, and I think it may have been easier to just build a new model

John Richards (Canada)

Wakefield & Tailless League

Spencer Willis

Because of the uncertainty surrounding Middle Wallop early in the year I forgot to post the eligible events for these leagues. The remaining comps will be any 8oz, 4oz and tailless run before the end of August, so that the winners can be announced at the Sam Champs.

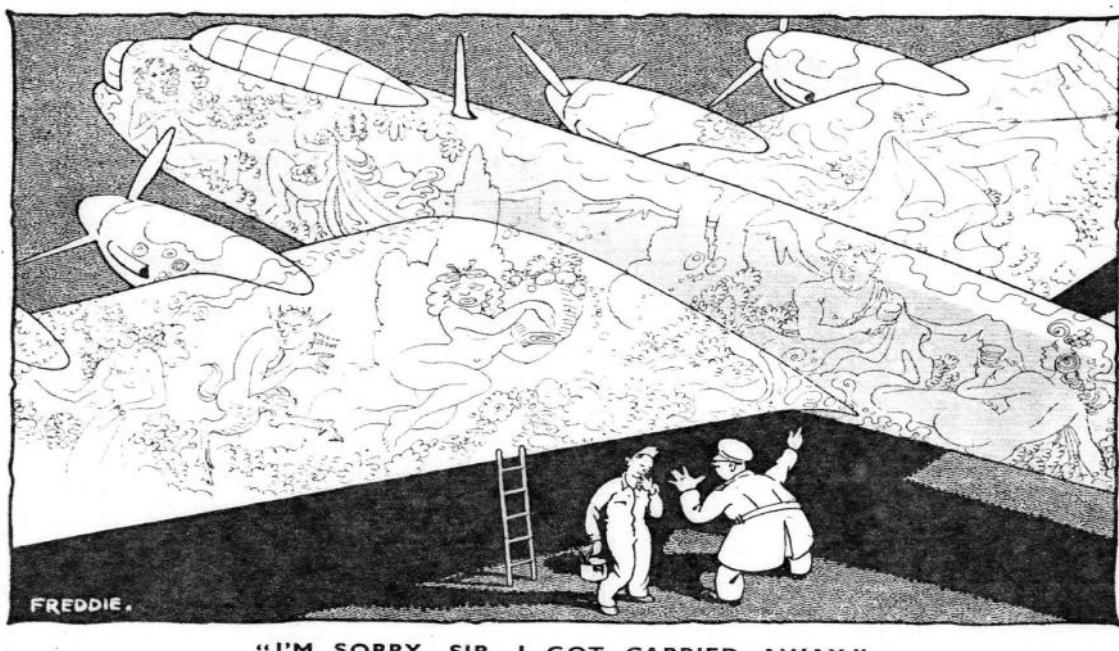
As with previous years the best three scores only will count. There will be a bottle of wine and a Tomy timer for the first three plus the Halcyon trophy for the winner. The points so far are as follows.

8 oz Wakefield		
Place	Competitor	Points
1 st	P Jackson	23
T2 nd	P Brown	11
T2 nd	D Beales	11
T2 nd	R Kimber	11
T2 nd	M Sanderson	11
6 th	J Andrews	10
T7 th	P Michel	9
T7 th	C A Rushby	9
9 th	M Gillam	7
T10 th	R Bubblecombe	5
T10 th	B Owston	5
T12 th	S Fielding	3
T12 th	M Hollamby	3

4 oz Wakefield		
Place	Competitor	Points
1 st	P Hall	9
2 nd	J Paton	8
3 rd	N Peppiatt	5
T4 th	M Hollamby	3
T4 th	P Jackson	3
T6 th	S Fielding	1
T6 th	M Gillam	1

Tailless		
Place	Competitor	Points
1 st	E Challis	23
2 nd	P Woodhouse	17
3 rd	D Taylor	15
T4 th	M Marshall	13
T4 th	E Stevens	13
6 th	R Elliott	7
7 th	J Close	5
8 th	R Mosley	3
T9 th	G Hart	1
T9 th	D Powis	1

Spencer Willis



June meeting at Middle Wallop

Another two day event. Attendance was poor on Saturday - most people must have looked & decided that Sunday would be better! Nevertheless, some good flying for those who did take a chance. Max set at 2 mins other than Ryback glider, reduced to 100secs.

Saturday 13th June

Weather not bad considering the forecast. Wind from SSW down the length of the field. Overcast in the morning & brighter later. Initially around 10 - 12 mph, dropping to around 6 - 7 mph.

Results Saturday

Vintage/Classic HLG/CLG:

1st - Ted Horsey (Heave-Ho) 116 secs; 2nd - John Lancaster (?) 74 secs.

Ryback Glider:

1st - Vic Driscoll (Flamingo) 5.00; 2nd - Dave Cox (Hyperion) 4.09;
3rd - Dave Etherton (Seraph) 4.01.

Good effort from Dave Cox with brand new model, trimmed on the day.

Vintage Middleweight:

1st Ted Challis (Korda C) 4.00

Small Vintage Rubber:

1 st - John Thatcher (Senator)	6.00 & 1.17 f/o	2 nd - Chris Redrup (Dyna Mite)	6.00 & 1.16 f/o
3 rd - John Lancaster (?)	4.59;	4 th - Jim Paton (Buckeridge)	4.15;
5 th - John Andrews (Hepcat)	3.45.		

Sunday 14th June

Wind from NNW around 7 - 8mph all day other than an hour when it veered N. Max set at 1min 40 secs. More people attended - probably around 100 or so. Not a good direction, particularly as we had received notification from the Farmer not to enter his fields. However, with the lower wind speed & people co-operating by walking out, we managed another good days flying without any catastrophes'.

Results Sunday

Jimmy Allen Mass Launch:

1st - Nick Peppiat (Skokie) 1.12; 2nd - Roy Tiller (Skokie) 0.57;
3rd - John Russell (Skokie) 021;

Barbara suffered the unfortunate mishap of losing the prop in flight & was disqualified. In the interests of FoD recovery, she later found the prop & was awarded a consolation bottle of wine for devotion to duty by our Chairman!

Combined Vintage & Classic Power

(motor runs - Vintage 10 secs, Classic 8 secs):

1 st - Colin Shepherd (Dixielander)	5.00;
2 nd - Dave Cox (Dixielander)	4.48;
3 rd - Fred Chilton (Dixielander)	4.36;
4 th - Bob Owston (No 18)	4.26;
5 th - Andrew Longhurst (Jimp)	4.06.

Power winner Colin Shepherd, right, launches his 12oz PAW 1.5 Dixie for his first premature D/T no flight.



36" Combined Vintage/Classic Bungee Glider:

1st Peter Michel (Corsair) 3.16; 2nd Geoff Smith (Corsair) 2.53; 3rd Bob Taylor (Marauder) 0.53.

Combined Vintage/Classic Glider off 50m towline:

1st Vic Driscoll (Mads Dream) 5.00; 2nd Dave Etherton (Nord) 4.54; 3rd Dave Cox (Inch Worm) 4.12;
4th Chris Strachan (Caprice) 4.04; 5th Geoff Smith (Meanderer) 2.28.

Combined 10g rubber – P30 & Vintage Coupe:

1 st - Ted Horsey (O/D)	5.00 & 2.01 f/o	2 nd - Chris Redrup (O/D)	5.00 & 1.45 f/o
3 rd - Peter Hall	5.00 & 1.19 f/o	4 th - Ted Challis	5.00 & 1.04 f/o
5 th - Robin Kimber (Dore)	5.00;	6 th - Martyn Presnell (Altair)	4.47;
7 th - Don Thomson (O/D)	4.35;	8 th - Ted Stevens (Bagatelle)	4.00;
9 th - Jim Paton (Altair?)	1.40;	9 th - Peter Tolhurst (Etievre)	1.40;
11 th - Brian Stichbury (Square Eagle)	1.17.		

E36 Electric – 8 secs power run & 5 secs for fly-off:

1 st - Trevor Grey (O/D)	5.00 & 1.51 f/o	2 nd - Jim Paton (Eureka)	5.00 & 1.25 f/o
3 rd - Peter Tolhurst (Sunstroke)	5.00 & 1.15 f/o	4 th - Chris Strachan (Starduster)	5.00 & 0.59 f/o
5 th - Graham Williamson (?)	1.02.		

Post event thoughts: are we suffering from having too many two day events? Be interested to get some feedback - I usually apply for the licence in October, so plenty of time to voice your comments before the calendar for next year is compiled. Options are: (i) stay roughly with current event schedule i.e. similar number of days; (ii) reduce the number of two day events & try for additional one day events keeping similar number of days; (iii) reduce the number of total days & just have one day events.

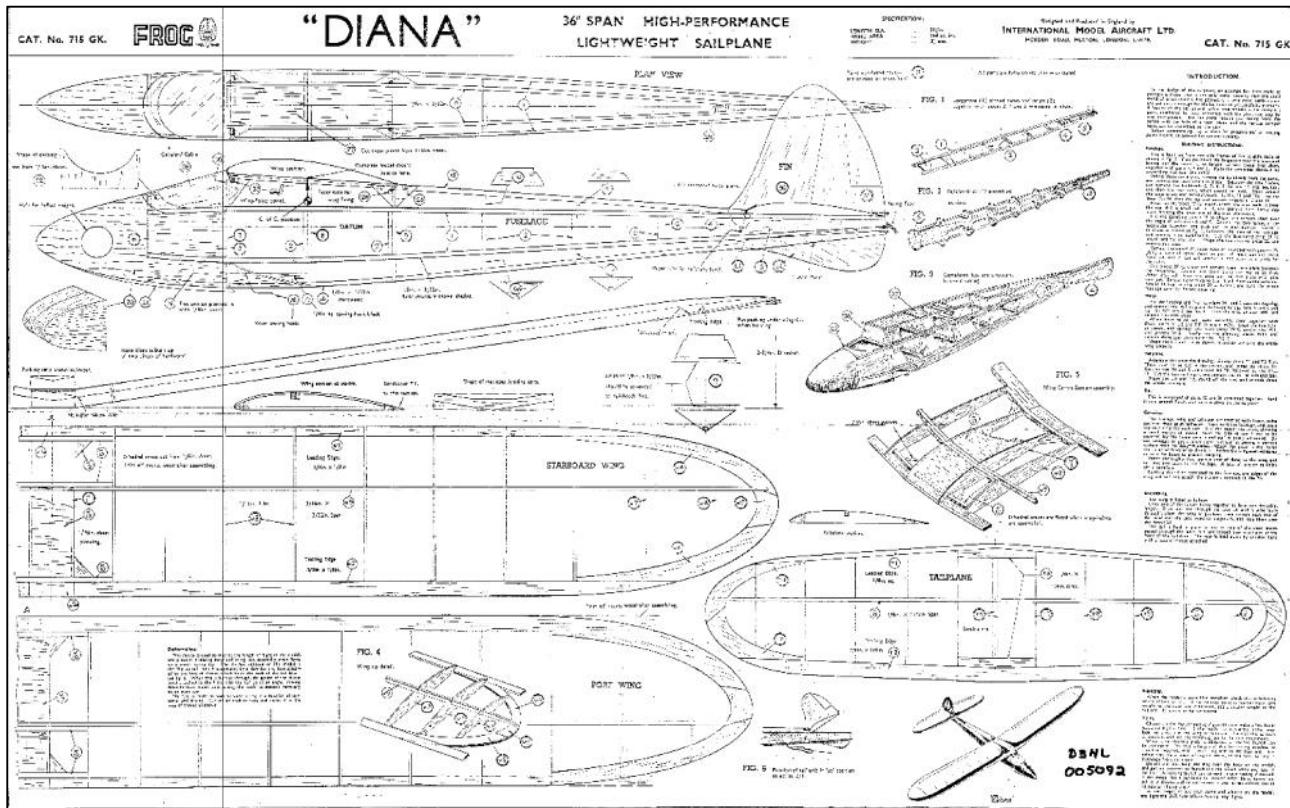
Static Display at Museum D-Day Event: 6th June

A combined effort from SAM 1066 (me) & the Southern Area of BMFA (Tony Butterworth, Dave Burstow & Terry Weekes) displayed some 25 plus free flight & R/C models at this event. Around 250 people attended & we had quite a few interested folk drop by for a chat. The Museum was very pleased with the overall event & have requested a repeat for next year.

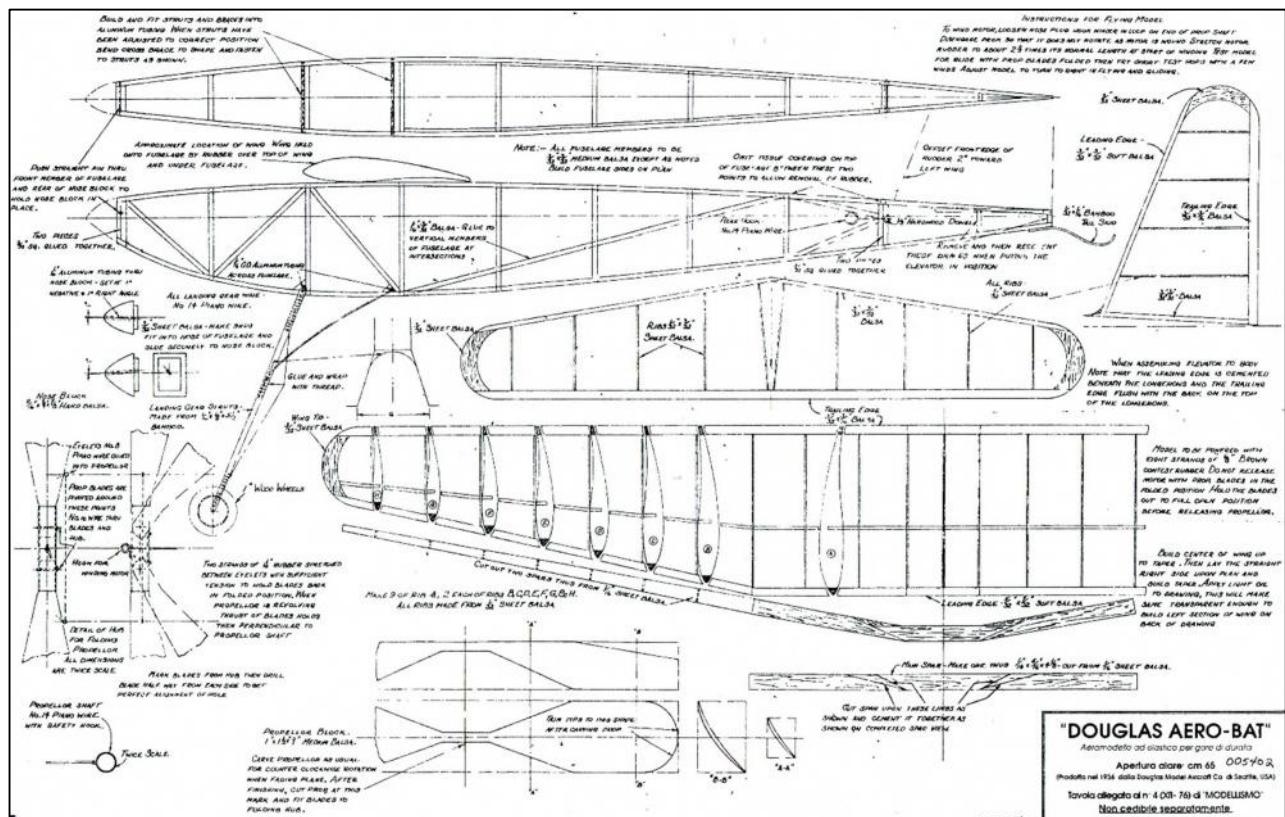


Roger Newman

Glider: One for 36" bungee class - Frog Diana

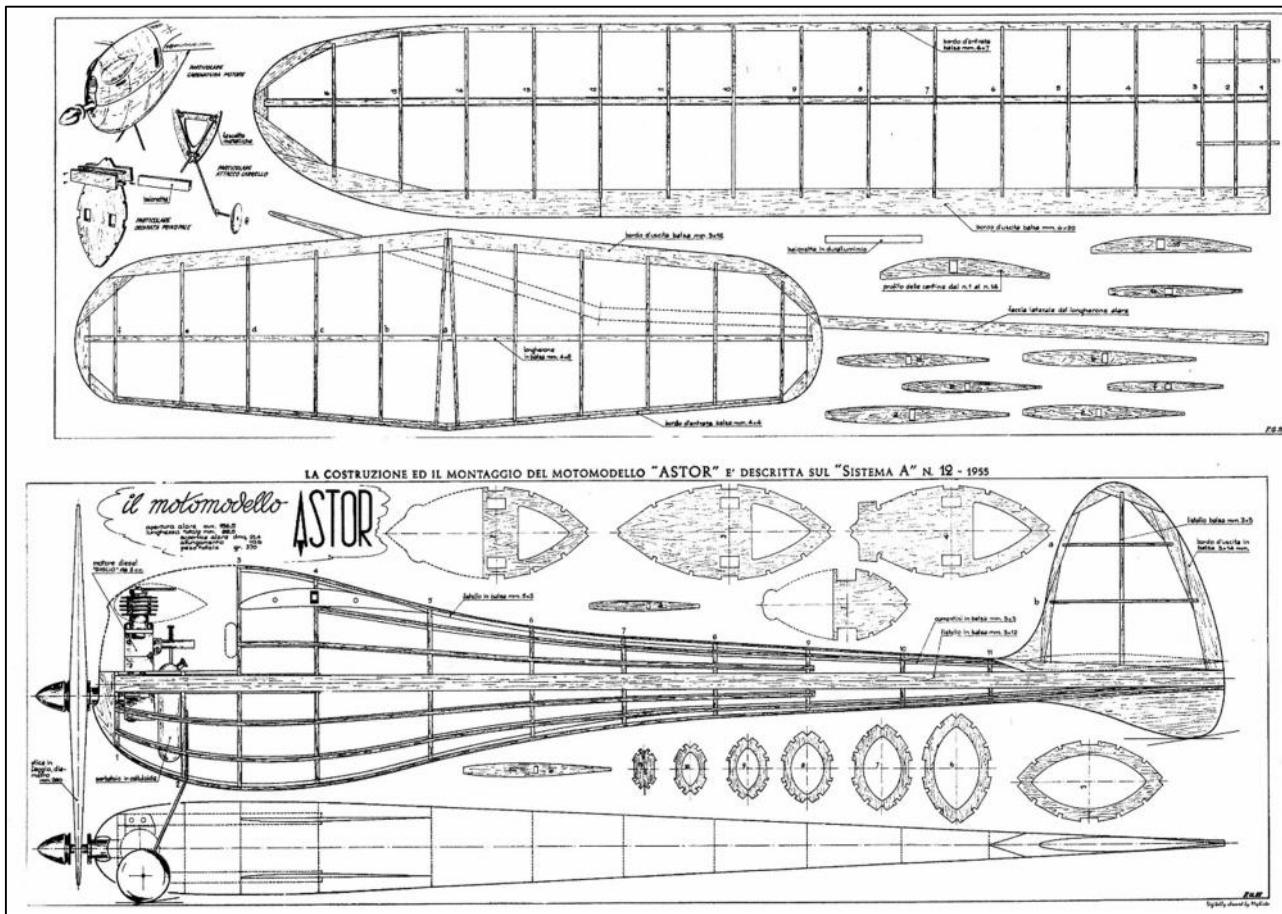


Rubber: An Italian plan of an American small rubber model - Douglas Aero-Bat.



Power:

Another Italian plan that looks to be remarkably like a "lift-off" of the Megow Wog-Astor



Roger Newman

Southern Coupe Lg. Oxford

Roy Vaughan

At Andy Crisp's Free Flight Rally Oxford Jun 21st.

With the wind blowing at 10-15 mph from the river toward the railways and canal, Andy Crisp set a 90 second max for all classes and 5 rounds for Coupe, two to be flown in separate slots before lunch and the rest before 5 o'clock. Lift was present throughout the day with relatively few boomer.

Unfortunately your stand-in scribe suffered from excess lift during the second round and an out of field landing meant missing most of the action during a three and a half hour retrieve. It was a surprise on return to control mid-way through the afternoon to find so few maxes amongst the scores despite the relatively benign conditions.

Chris Redrup's third place was achieved using his trusty Etievres. The runner-up was Paul Lagan, visiting from New Zealand, who dropped a single second using his Vivchar ready-built. The winner was your scribe flying his electronic model (and wishing he had used its RDT on his second flight) for a full house.

The next round of the Southern Coupe League is at Odiham on the 18th July where the result will no doubt be decided using the newly-popular DT flyoff.

Oxford Rally				
Place	Entrant	Club	Maxes	Score
1	R.Vaughn	Crookham	5	17
2	P.Lagan	N.Zealand	4	13
3	C.Redrup	Crookham	3	11
4	P.Tolhurst	Crookham	1	8
5	J.Paton	Crookham	3	9
6	D.Thomson	Croydon	0	5
7	J.White	Croydon	1	5
8	P.Gibbons	Peterborough	1	4
9	R.Kimber	SAM35	0	2
10	R.Fryer	SAM35	0	1
11	G.Jones	Epsom	0	0

Southern Coupe League League Table to Date										
Place	Entrant	Club	First Area	London Gala	Oxford Rally	Odiham	Southern Gala	Crookham Gala	Coupe Europa	Total
1	A. Brocklehurst	B&W	10	16						26
2	P. Tolhurst	Crookham		13	8					21
3	M. Stagg	B&W	15	4						19
4	R. Vaughn	Crookham			17					17
5	J. Paton	Crookham		6	9					15
6	P. Lagan	N.Zealand			13					13
7	D. Greaves	B&W	12							12
8	P. Hall	Crookham		11						11
=	C. Redrup	Crookham			11					11
10	D. Neil	B&W	8							8
=	D. Thomson	Croydon	3		5					8
=	A. Moorhouse			8						8
13	C. Chapman	B&W	6							6
=	M. Marshall	Impington		6						6
15	P. Seeley	B&W	5							5
=	N. Allen	E.Grinstead	5							5
=	J. White	Croydon			5					5
18	P. Gibbons	Peterborough			4					4
19	K. Taylor	E.Grinstead	3							3
20	R. Kimber	SAM35			2					2
21	T. Winter	CVA	1							1
=	R. Fryer	SAM35			1					1
23	G. Jones	Epsom								0

Roy Vaughan

'Bell's Lightweight'

Editor

It all started with an email from Stephen Fielding to our chairman enquiring if the 'Bell's Lightweight', which he was thinking of building, was eligible for 4oz wakefield events although it was not a wakefield. He had been informed that it was OK.



John Wingate's version of the model used to good effect at Sculthorpe in 2012, flown in Vintage.

Stephen's simple query resulted in an absolute avalanche of emails to and fro amongst the powers that be in SAM1066. Chairman, Secretary, Archivist, Rules aficionados all copied to yours truly the editor.

All agreed that the 'Bell's Lightweight' was not a wakefield, and our archivist Roy Tiller pointed out that its wing area was not up to the required 200sq in. but felt that our rules might require some clarification.

Stephen pointed out that the model had been flown in 4oz events, however our secretary Roger Newman advised that these events were under SAM35 control and were 'Combined' events for Middleweights and 4oz Wakes. SAM 1066 normally runs separate events for the two classes. Roger did state that, if there was a desire for such a combined event, SAM1066 would consider combining the two classes particularly if competition entries continued to decline.

Rules man Andrew Longhurst confirmed the opinion that the 'Bell's' was not a wake, being too small, and that it should fly as a Flight Cup Vintage Middleweight. The class being for any model designed for rubber power with wingspan over 34" and wing area up to 190sq ins, from the Vintage period.

Andrew then threw a red herring into the plot by highlighting the 'Northern Arrow' which has been accepted as a 4oz wakefield although the wing area on the plan is too small. It is alleged and has been accepted by CD's that the 4.5 in chord shown on the plan is not correct as the original model had a 5 in chord

Our Archivist Roy Tiller's research revealed details as follows:

The Bell Lightweight Model detailed in Model Aeronautical Digest 1944 page 40 is specified as having a wing area of 170sq.in. This fails to comply with the Wakefield requirement of wing area 200 sq. in. + or - 10sq.in..

On page 42 of the same book will be found Bell's Wakefield specified as 204sq.in.

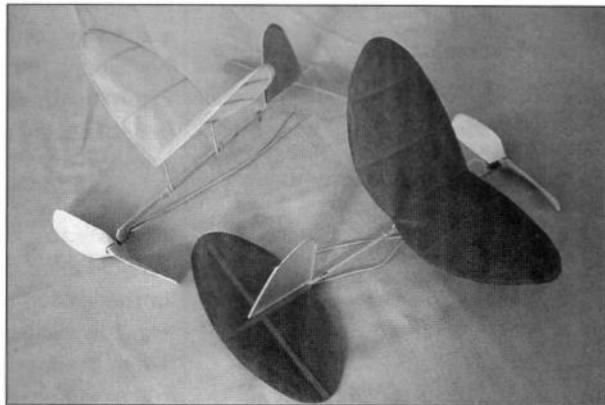
A simple query resulting in a lot of communication activity, where would we be without the help of tinternet.

Editor

From the book: Ray Malstrom, 60 years of IVC MAC

THE PEE WEE

Designed by
RAYMOND MALMSTRÖM



ALTHOUGH primarily designed for the beginner, the performance of this diminutive little 'plane should recommend it to all those who enjoy indoor flying in their own homes, and who have not, as yet, mastered the advanced technique of microfilm. The leisurely way in which it flies round even the smallest room makes the two or three hours spent in its construction more than worth while. The plan is full size, and can be worked from directly.

Fuselage.

The "fuselage" is simply a stick of medium hard balsa $\frac{1}{8}$ in. by $\frac{1}{16}$ in. by $6\frac{1}{4}$ in. A block of balsa $\frac{1}{2}$ in. by $\frac{1}{4}$ in. by $\frac{1}{8}$ in., shaped as Fig. 1, and through which a hole has been carefully bored with a fine needle (noting slight down-thrust), is cemented to one end of the stick. The other end is notched. Into this notch a piece of $\frac{1}{32}$ in. sheet is cemented to carry the tail-plane. A small rear hook of '014 gauge wire completes the motor stick.

Wing.

Trace off the rib and cut 5 from $\frac{1}{32}$ in. sheet. The ribs are shortened by cutting the trailing edges. The tips are 1-64 in. sheet. The leading and trailing edges are $\frac{1}{32}$ in. square. The wing is built up on the plan, and when dry cracked in the centre, and the correct amount of dihedral given, the crack then being recemented. A strip $\frac{1}{32}$ in. square joins the leading and trailing edges of the centre rib, and to this strip the two upright pieces, $\frac{1}{16}$ in. by $\frac{1}{32}$ in. are stuck. The lower ends of these two pieces are then stuck to another strip, $\frac{1}{8}$ in. by $\frac{1}{32}$ in. by 8 in. The wing is then attached to the motor stick by means of two pieces of $\frac{1}{32}$ in.

square rubber, tied as shown in Fig. 2. The wings are covered with superfine tissue.

Tailplane and Fin.

The tailplane is simply cut from tissue (with no framework), and reinforced by the two pieces of 1-64 in. strip. The fin is a framework to which is stuck a piece of sharpened reed, and then is cemented into the motor stick. It should be set at the angle indicated.

Propeller.

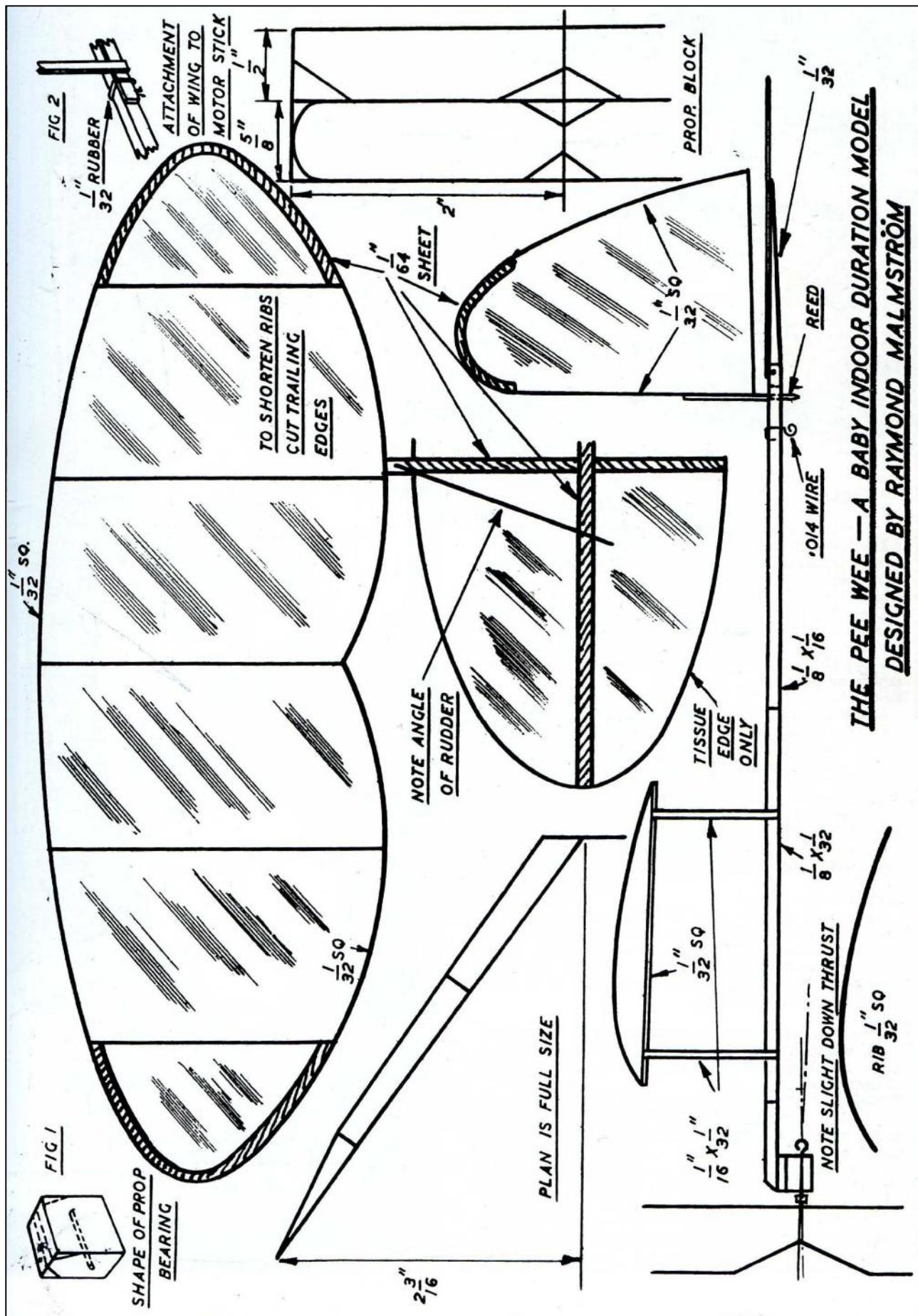
This is one of the most important parts of the model. A 4 in. machine-cut balsa propeller, well sanded down to a light weight, will prove very satisfactory. The block measurements for those who wish to carve a propeller are furnished on the plan. A piece of '014 wire is used for the shaft, and a tiny bead, with a washer cut from '005 sheet aluminium, completes the propeller assembly.

For power the most suitable rubber is $\frac{1}{2}$ in. square. Of this you will need a loop roughly $10\frac{1}{2}$ in. long. Fold this in half, making 4 strands, approximately $5\frac{1}{4}$ in. in length. Smear with lubricant lightly, and put on to model.

Flying.

Before actual flying it is important to note that the leading edge of the port wing should be warped *up*, and that of the starboard wing warped slightly *down*.

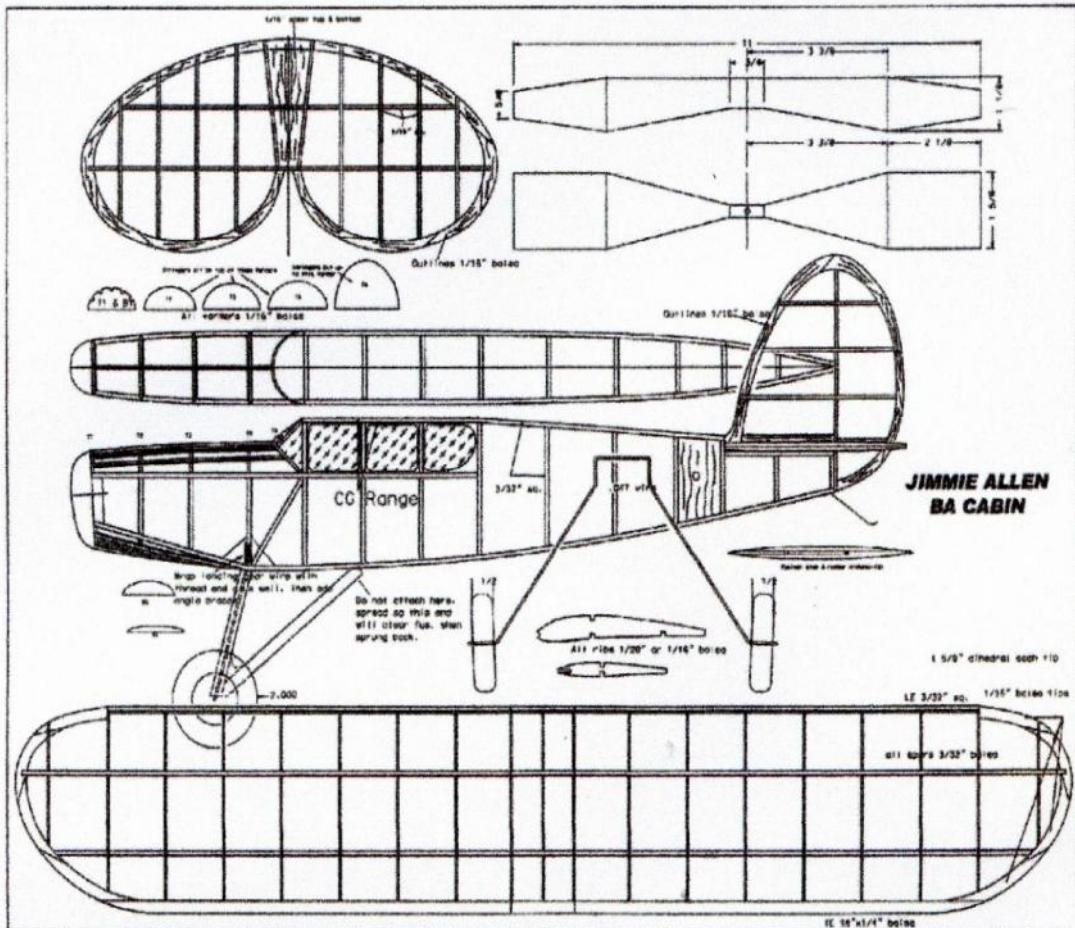
Although of such a small size, the Pee Wee will take 250-270 turns with complacency, and on this will turn in delightfully slow and stable flights of 30-40 seconds consistently, the flight path being circle to the left.



Chris Strachan

JIMMIE ALLEN 2015

Four Jimmie Allen Competitions again this year at
Middle Wallop Army Airfield, Stockbridge, SO20 8DY
 The dates are 5th April, 3rd May, 14th June, and 30th August.
 They are all Sundays, after lunch, mass launch at 2pm



E-mail rogerknewman@yahoo.com for plan files of the following models:-

J.A. BA Cabin aka Skokie 25" span	J.A. Bluebird 38" span
J.A. BA Parasol aka Racer 28" span	J.A. Special 20" span
J.A. Monsoon Clipper 29" span	J.A. Sky Raider 26" span
J.A. Silver Streak 32" span	J.A. Thunderbolt 24" span
J.A. Yellow Jacket 26" span	

There is even a pack of all the above plan files available by e-mail,
 check them out on your computer, decide which to build,
 and take the file to your local print shop for a full size paper plan.

The competition is a one flight mass launch, last model down wins.
 Any queries or should you need printed paper plans please contact
 Roy Tiller, e-mail roy.tiller@ntlworld.com tel 01202 511309

Oxford MFC Dreaming Spires Gala

5thJuly, 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 1.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

Proposed
Timperley Free Flight Gala
North Luffenham
Sunday 16 August 2015

Subject to MoD granting a Licence for use of the airfield.
 Traditional club organised Gala
 Trophies, prizes, magazine report, etc.

Combined Contests
 for
 Rubber, Glider, I.C.power, HLG/CLG, & Mini-vintage.

Contact : John O'Donnell. 01942 211742

Southern Area BMFA Rally
RAF Odiham Saturday 18 July 2015

This event is possibly the longest continuous free flight event at the same venue in the UK,
 this being the 67th year.

We continue to be grateful that permission to use the site has been granted at this very much active airfield.
 The intent is to run the event at a surplus which will be donated to the RAF Benevolent Fund as a small
 thank you.

In the case of the event being cancelled all proceeds less any incurred expenditure will similarly be donated.
 Sports Flying for Glider, Rubber & SMALL Power models.

Competitions;

A : Vintage Wakefield (4 & 8 oz. combined)	B : Vintage Lightweight Rubber	C : Tailless
D : Vintage & Classic Glider Combined	E : Vintage HLG/CLG combined	F : CdH combined
G: AI Glider	H : E36	
Events; A,B,D,H to Sam35/1066 rules C,E,F,G to BMFA rules A for SAM Wakefield League		
A DT Fly Off may be used dependent on conditions.		

IMPORTANT NEW!! As we are not sure where (wind direction) we will be located , because of possible construction works being carried out on the airfield , NO repeat NO, stakes, pegs of any sort are permitted to be placed in the ground . Rubber stooges and thermistor poles may be attached to cars.

Please note;

All those flying model aircraft or operating associated equipment on this site must be current members of the BMFA.

Model flying may be interrupted during the day by aircraft movements. When the red runway lights are showing no one may cross the runway.

The only entry and exit is via the airfield main gate. No other boundary is to be crossed on foot or by motorized transport.

Pre-registration is required for this event and must be received by Monday 14 July.

All registrations are subject to approval by the RAF authorities.

We will have access to toilets.

To register please send;

Your vehicle registration number, the vehicles occupant's names, addresses together with their BMFA numbers (if applicable) and the non-returnable registration fee of £12 per flyer (sport or competition) with a SAE. Cheques to be made payable to Southern Area BMFA. Please include email and telephone details to enable us to contact you in the event of last minute changes.

TO;

John D Thompson Beechmede, Meadow Lane, Hartley Wintney, Hants, RG27 8RF .
 Tel; 01252842471 email; johnd.thompson@btinternet.com

Full details including the entry registration number will be sent to registrants prior to the event.

NOTE, the CD reserves the right to amend the above should circumstances warrant it on the day.

ANGLIAN SUMMER GALA



1st/ 2nd August 2015. Sculthorpe Airfield,

Sculthorpe airfield offers the largest unobstructed flying site in the UK set in the heart of the Norfolk countryside. Camping nearby at:

Fakenham Race Course, 01328 862388;

The Garden Caravan Site, Barmer Hall, Syderstone, 01485 578220

Fakenham Camp Site, fakenham.campsite@gmail.com

Saturday 1 August	Sunday 2 August
BMFA Rubber	BMFA Power
Vintage Rubber/Power	Combined Electric
Classic Glider	BMFA Glider
Tailless	Mini Vintage
E36	Classic Rubber/Power
P30	CO2
HLG-CLG.	Vintage Glider
	Bowden

BMFA rules and Senior Championship points for above events except P30. Start time each day 9.00 am, finish 6.00 pm. Competition entry £10.00 all classes or Season ticket for each day. Bowden registration before 10.30 am on Sunday.

Location. Sculthorpe airfield, OS Map reference TF 852300. 100 Metres in a NE direction along the B1454 from its junction with the A148 road from Kings Lynn to Fakenham. No refreshments on the field this year but there is a cafeteria close to the entrance. BMFA membership essential.

For safety reasons no motorised retrieval and no dogs.

Fliers not taking part in BMFA events, fun flyers and engine runners must pay £6.00 site fee at control.

For further information on this event contact:

Michael Marshall 01223 246142

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 CO2 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 <http://www.houseoffrog.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

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

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: stuardarmonf1a@yahoo.com

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

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" WINGSPAN - I.C. Engines:

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

Electric Motors:

Any electric motor is admitted with direct drive; - The 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 the flight.

Awards :

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

Results

Results, address, photos and technical specification about model must be forwarded to the Organization by 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 5th 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

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@ntworld.com Details on our website: www.wessexami.co.uk

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

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 21st – 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

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 Gymminnie 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**

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

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.



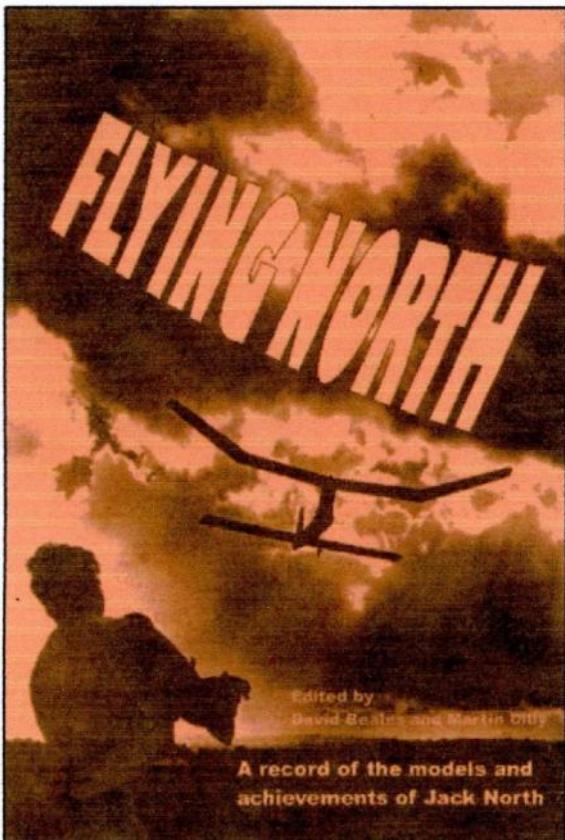
**The UK price is £12.00 including postage; to Europe it's £15
and everywhere else £17.**

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 0QW

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



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

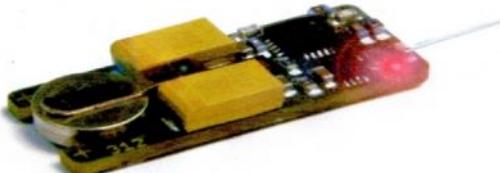
Contact: Martin Dilly on 020 8777 5533 or write to:
20, Links road,
West Wickham.
Kent BR4 0QW or e-mail:
martindilly20@gmail.com

The price in the UK is £18; airmail to Europe £20 or to anywhere else £22. Cheques should be payable to BMFA F/F

Team Support Fund, in pounds sterling only, and drawn off a bank with a branch in the UK, you may also order by credit card, all proceeds help to fund the expenses of those representing Great Britain at World and European FF Championships

BUGS

Free Flight Model Tracker



£50.00 - each including 6 batteries

Ready to use radio tracker

Suitable for most handheld receivers

Powered by one 312 ZincAir hearing aid battery

27mm long, 11mm wide, 5mm thick 3 grams
including battery

Run time around 10 days

Red LED flashes when transmitting

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or contact Peter Brown 07871 459291 for options

Michael Woodhouse

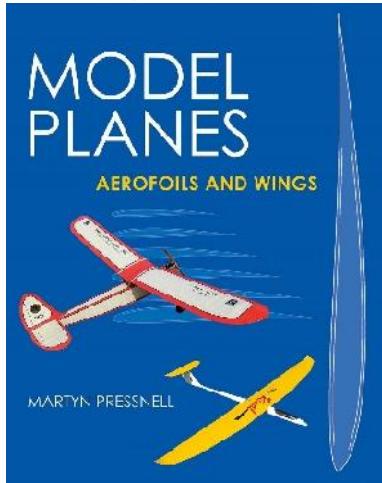
mike@freeflightsupplies.co.uk & <http://www.freeflightsupplies.co.uk>

Plans of models designed by Geoff Lefever

47.	OTTAIR 80gram Wakefield flown in the 1956 Championships	£5.00
48.	FEVAIR 50gram Wakefield flown in the 1958 Championships	£5.00
49.	1963 Wakefield Team place 1965	£5.00
50.	1967 Wakefield first of the "long" models	£5.00
51.	ALTAIR 1955 A/2 team qualifying glider	£5.00
52.	MANTIS A 9 foot span vintage glider	£5.00
53.	OPEN RUBBER MODEL Mid 1960's model, a simplified Wakefield	£5.00

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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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.
JACK MCGILLIVRAY'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.
GAUCHO 1960	power duration model for 1.5 cc engines. Designed in 1959 Twin plan with CAPRICE.
VAKUSHNA 1959 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 HALIFAX HERMES
FRANK LOATES' 1949 WAKEFIELD	Canadian Wakefield 5 th in the World Championships at Cranfield, England, in 1949.
BORJE BORJESSON'S 1949 WAKEFIELD	Swedish Wakefield 6 th in the World Championships at Cranfield, in 1949.
HOST 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 Waring for twin motors,
NIGHT TRAIN Mk I 1960	George French's Night Train which pioneered the use of VIT systems in the UK

MSP PLANS PRESENTS NEW PLANS

AVENGER 1952	HI-START GLIDERS 2013 - 36 in span
CAPRICE 1959	John Gorham's classic A2
VINTAGE A2 1950	Neville Willis' classic lightweight glider
SATU 1950	Odenman's.
PETREL 1964	HI-START GLIDERS 2014 - 36 in span
MAD'S DREAM 1959	J Bennett's vintage A2
	Frog's beginner's kit glider
	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, SO41 SNA.

For overseas delivery of Popular Plans send local bank notes equivalent to £10.00.
Enquiries: please write or email martyn.pressnell@btconnect.com

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

Provisional Events Calendar 2015

With competitions for Vintage and/or Classic models

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

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.hampshire.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 still 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