

Sticks and Tissue No 46 – September 2010

I'd like to thank all the contributors, without whom this newsletter would not be possible.

If you can contribute any articles, wish to make your point of view known etc please send to or phone 01202 625825 JamesIParry@talktalk.net

Thanks to Mark Venter back issues are available for download from <http://www.cmac.net.nz/>

Writings and opinions expressed are the opinion of the writer but not necessarily the compiler/publisher of Sticks and Tissue. The content does not follow any logical order or set out, it's "as I receive and put in".



Photo from Jim Beale, Kennebec Valley Model Aviators, fellow club member Paul Flohn's Wright Flyer.

BOURNEMOUTH CLUB CLASSIC RUBBER AT SAM 1066 CHAMPIONSHIPS Middle Wallop August 2010 from Martyn Pressnell



Chris Strachan with his winning Strato Hawk

Great expectations prevailed judging by the numbers assembling for the event. Sunday proved the most unkind day weather-wise, with a strong and strengthening west wind cutting across the field, with damp overcast conditions. Turbulence from upwind trees and obstructions was more or less unavoidable and persisted across the airfield and to significant heights. Equally very strong thermals could snatch up the models and carry them high into the cloud and well outside the field. The maximum was set at two minutes for all events, just achievable within the boundary of this large aerodrome.

There were eight entrants willing to pit their models against the elements comprising 3 Urchins, 2 Mentors, and one each: Last Resort, Boxall and Strato Hawk. The latter model was the first appearance of this newly approved model from the USA and significantly it won the event in the capable hands of Chris Strachan. Very worthy runners up were previous winners: John Minshull and Jack Forster.

My function as CD was made very easy by the good humour of all entrants, not being brave enough to fly I was very content to take photographs. Many thanks for your participation; we must look forward to the events of next year and the super weather we all deserve.

- 1 Chris Stachan Impington Strato Hawk 6.00
- 2 John Minshull Brighton Boxall 5.55
- 3 Jack Forster Morley Urchin 5.53
- 4 James Osborne CVA Mentor 3.48
- 5 Tim McLaughlin Paisley Urchin 2.14
- 6 Jim Arnott Scotia Urchin 1.31
- 7 John White Croydon Last Resort 0.46
- 8 P Norman Crawley Mentor –

Martyn also sent in these photos taken at Middle Wallop on August Bank Holiday Saturday



THE S.M.A.E. specification for a team racer holds that models shall be either scale or semi-scale. How we digress from that elementary requirement in our class "A" racers of today! Any rule-abiding jury with the fortitude to withstand the abuse of would-be competitors might be fully justified in eliminating 25 per cent. of the entry in some of our contests.

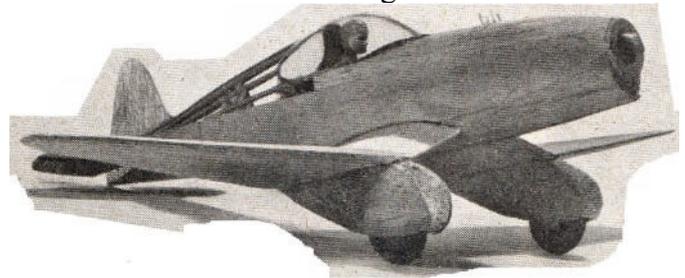
Let's get away from the dangling undercarriage, external fuel filter, postage stamp fin, ruler winged, short fuselage, pimpled canopy Class "A" monstrosities that appear with depressing monotony, and take a leaf out of the Don Walker Class "B" racer book. His designs, flown so successfully with Ray Tuthill engines, have shown the way to win with the fastest—and realistic models.

Speed is not necessarily a function of how small one can reduce a chord or fuselage—it is derived from practical streamlining and we hope that in the newly-instituted Class "1/2A" consideration for appearance and streamlining will stem the degeneration which has overtaken the 2.5 c.c. class.

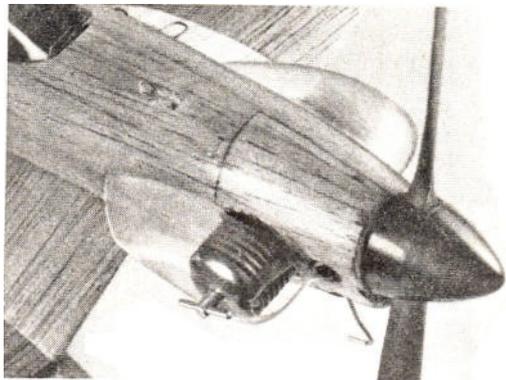
The structural specification for 1/2 A calls for a 1.5 c.c. engine, 55 sq. in. (including the area within the fuselage) projected wing area, 10 c.c.

fuel tank, 1 1/4 in. x 2 1/2 in. cockpit, 1 1/2 in. wheels and 38 ft. 2 1/2 in. lines (110 laps equals 5 miles). From experience we can expect an ultimate performance of 70-80 laps at 75-85 m.p.h., but that is looking perhaps- two seasons ahead when development is butting its never-satisfied head against the tough barrier of purchasing power and who can afford the fastest engine. For the moment let's enjoy life with a healthy, cheap, plain bearing 1.5 and be satisfied with loads of fun and a range of 30-40 laps at 70 m.p.h. That's the figure we claim for Cupid, not unnoticeably derived from Neil Loving's wonderful little homebuilt, and as snappy a model to fly as is the full size.

Scale has to suffer (shame!) with the 1 1/2-in. wheel requirement and the need for prop clearance and ground stability with a forward centre of gravity— here we must also pen the advice of using one of the new B.M.A. (Skyleada) solid dural spinners to take the occasional landing tumble when the wind gets



under the tail. The original had an A.M.15 and straight from the first flight it was obvious that little Cupid was a fast piece of work. Clocked at 65 m.p.h. with a 6 x 9, it held the flight straight and level as though in a groove, and with a minimum of line tension (weight is only 8 ounces—with fuel). Using 6 x 6 or 6 x 8, speed improves to 70 m.p.h. plus. Our only word of caution calls for full-up elevator to keep the tail down during take-off and landing, and if your building has made the model excessively nose-heavy, drag the C.G. back to F4 position prior to the covering stage, by adding ballast in the space over the tailplane. All set? Cupid needs only four sheets of 3-in. balsa



and three pieces of strip plus sundry scrap and ply, so it's a cheap good-looker that can be ready for test flights in remarkably little time.

Construction details are included on the plan and it is recommended that one starts right at the heart of the model—the engine. This will determine your mount spacing so the first thing to do is to cut the bearers to length, bolt them to the engine and make the two ply bulkheads fit over them. Assembly of the fuselage sides, bulkheads and addition of the tail assembly follows, as detailed, in logical sequence, and the wing is added prior to fuselage planking. The fact that the wing has gull dihedral makes it an "off the board" assembly, but by making up the spar over the plan and sighting the ribs one to the next as they are added to the spar, one encounters no difficulty. Because the centre section is not sheeted the complete wing has a novel



appearance prior to joining with the fuselage for it is simply a pair of gull halves—joined by the u/c wire and a plywood spar C.S.1.

Slow-drying glues of the new PVA types are particularly recommended for this form of construction, and were used for everything on the original except the stringers on the rear fuselage which call for the fast drying property of cellulose cement.

Before covering, and after the engine has been installed permanently, don't forget to check the balance and avoid nose heaviness with tail ballast. This will pay off in reducing line tension and give better ground stability.

From John McKenzie

(John sent in lots of fascinating photos etc so will be spread out over next three months)

As an ex-modeller of many years agoI would like to correct a mistake regarding an item of news about the FE2b aeroplane at RAF museum at Hendon ..This FE 2b was NOT made or restored by Guy Black ...His firm only "finished off " a virtually complete machine.

The machine was recreated almost entirely from scratch, incorporating "only" a very basic, original nacelle frame, over a period of many years, SINGLE HANDEDLY by myself, JOHN McKENZIE in my very "small" workshop, here in Southampton.

As had been agreed at the start of this project :-... Due to the size of this machine, the assembly, fabricing and painting, would be carried out under my supervision /consultation, by staff at RAFM Cardington where there was sufficient space to assemble this huge machine.....This had been done successfully with the BE2b, which I also built for the RAFM some years previously ...(Again single-handedly).

Apart from this very basic FE2b Nacelle frame and a few very MINOR components, ALL the structural work done, in order to turn this relic into a complete machine, was carried out by myself (John McKenzie), without ANY help or back up, or photographs etc. from anyone, incl RAFM.....in my own small workshop, with finished components stored in the house!

You can see the components now shown, as they were made by me at the time, on "The Aerodrome forum " website, under " My FE2b ReproductionAlso see "My BE2b reproduction".

With the closure of Cardington, and under a new & revised agreement, (which caused some resentment on their part), the components were transferred to and stored at the new multimillion £ RAFM facility at Cosford However, there, they lacked anyone there with any experience of this type of work,... all the old "Cardington" people having either left or retired (the location was now too far to travel for me also, to consider).

Consequently, after the passage of some time, the RAFM decided to contract out to tender the completion of the machine which essentially consisted of fabric covering, painting and assembly,.....This is where Guy Black s firm entered the picture and the machine components were fabric covered and painted, and the machine assembled finally at Hendon.

For your interest. I am sending a few photos of my work over the years since I started some 35 or so years agoI started on Full size reproduction MG's for aircraft, as I was trying to get into the making of full size replicas at the time



BE2b ..After fabric covering and painting at Cardington, Prior to its trip down to Hendon for permanent display (Note . The then Director Fopps policy was such that, "...because they had paid for the reconstruction",... then my name was NOT to be included on the podium informationonly a brief reference to ".... a contractor."

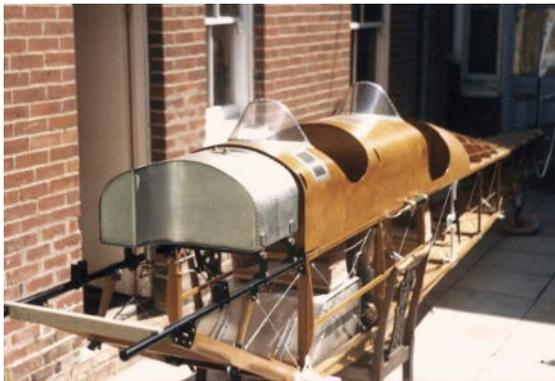
BE2b outside my workshop, prior to its trip to Cardington >>>



<< This is a Vickers Mk1 that was made, which, along with other parts, for a Sopwith Pup, that was being made for Guy Black by Tim Moore's firm, long ago.



This is a repro "Spandau LMG 08/15", all steel >> replica

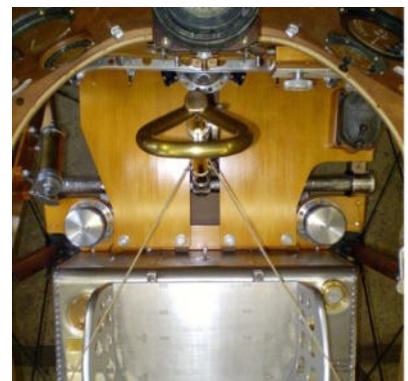


BE2b Fuselage, just prior to being collected to go to Cardington

BE2b under construction in my workshop >



<< FE2b cockpitI did not make the original instrumentsJust all the rest!.....



Cockpit of my FE2bin my workshop ...No control cables fitted yet >>>>>



<< FE2bView inside the "Nose" shell of the Gunners compartmentFor this part I had to first make up a former of the inside shape, then 3, diagonally crossing layers of (each) .

025" thick veneer wood were laid up over it (making up to a total thickness of .075")....The outside I then covered, in 3 pieces from glued on Cotton fabric .

Auxiliary Petrol tank ...This I made of Tinned steel & bronze fittings all hand formed and copper riveted and soldered up. The pilot's seat sits on adjustable seat rails and is also hand formed ...In this case from aluminium & dural sheet.

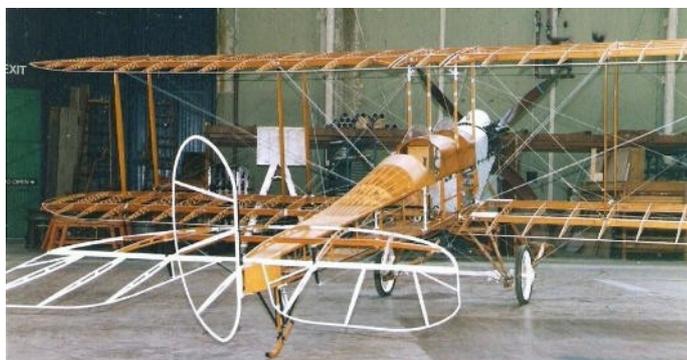
All materials were as per original and the original factory drawings were followed precisely in the manufacture of all of these parts. >>



<< The radiator that I made for the FE2b....Honeycomb type with brass tanks, bronze fittings and copper pipes



Exhaust pipes / collector assy. ...in the making >>



BE2b after preliminary erection (To check fit of components etc.) at Cardington, by myself and JohnChapman (of RAFM) prior to covering etc(Note "White" is "Dope proof Whitelead paint "on the empennage to prevent fabric sticking to structure.)

" In the Making of ..".....John McKenzie >>>

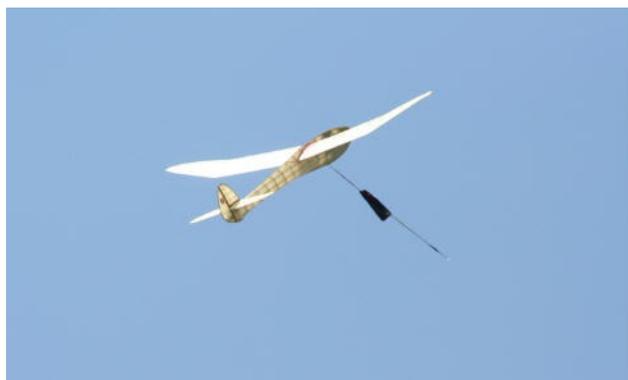


There will be many more fascinating photos and text next two months, which I know you will enjoy, great stuff.

More photos from Switzerland, taken by Urs Brandt sent in by Peter Renggli







Golden Cross Vintage R/C meeting 12/09/10 by Alan Holmes

Once again the Eastbourne club conjured up superb weather for their vintage R/C meeting with warm sunshine and light winds. There was a good turnout from the Raynes Park and Surrey clubs plus other flyers. As usual there were some interruptions for full size activity but for me this adds to the interest. I shot a bit of video of models and full size which might be of interest:-

Raynes Park Club members at play

<http://www.vimeo.com/15032370>

Ever wondered how a banner towing plane manages to take off and land? Find out here

<http://www.vimeo.com/15051077>

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From John Hoyle

I thought you might like to know that the “Bowden Bee” had it’s first flight two days ago at Avon Flying Field and was out again for another two proving flights yesterday. I had hoped to take Joyce to see it fly but she couldn’t come with me so will take her a few photos instead.

To my consternation the model is 2 pounds heavier than the original which weighed in at 6lbs 8oz, a few ounces of R/c equipment cannot make that much difference and I am at a loss to know how Col Bowden, not known for lightweight construction(!) managed to build the airframe so much lighter than did Phil!

The model is fairly marginal on power as you might expect, take off in a light breeze being in the region of 50yds and service ceiling not much above 200ft. I had considerable trouble finding a reliable ignition system for the Atom Minor, the two lightweight coils I tried first just weren’t up to the job; finally I had to use the rather heavy Runbaken coil and bingo it starts and runs very easily. This of course may be down to my homemade spark plugs! I have not yet risked fitting the original hand beaten cowling until I am quite happy with the rest of the model. I am attaching some photos of yesterday’s efforts.



Going back to the 30's 40's 50's and 60's there was, as now, a fair amount of activity on the slopes initially free flight and then a mixture of free flight and early radio. Many enjoyed this part of aeromodelling but I don't often see much mention of it so if you have any anecdotes, photos for that period and even non "carbon" models in the 70's please put some words together and scan the photos so they can be included in S&T. Yes I admit I'm totally ignorant of the subject so help please!

Derick , <http://www.model-plans.co.uk/index.html> has started the ball rolling with a plan or two and Derek Foxwell 02086471033 has laser cut ribs for Soarcerer RM47 so what are you waiting for?

From Jim Beale of Kennebec Valley Model Aviators

We are located in Sidney, Maine U.S.A. I have attached the latest edition of our newsletter, and hope to make regular contributions to yours.

"Indoor flying season" is about to begin, and rubber powered stick and tissue planes are a big part of the show.

Also attached are photos of fellow club member Paul Flohn's Wright Flyer.

Here's a link to our website if your interested. <http://www.modelaviators.org>



JIMMIE ALLEN MASS LAUNCH COMPETITION

MIDDLE WALLOP MONDAY 30TH AUGUST 2010.

Report by Roy Tiller

The Jimmie Allen Mass Launch Competition was scheduled for Sunday but as the wind was too strong for these mainly small models, it was decided to delay the competition until Monday.

Seven competitors entered the competition. The Skokie was the most popular model with three entries

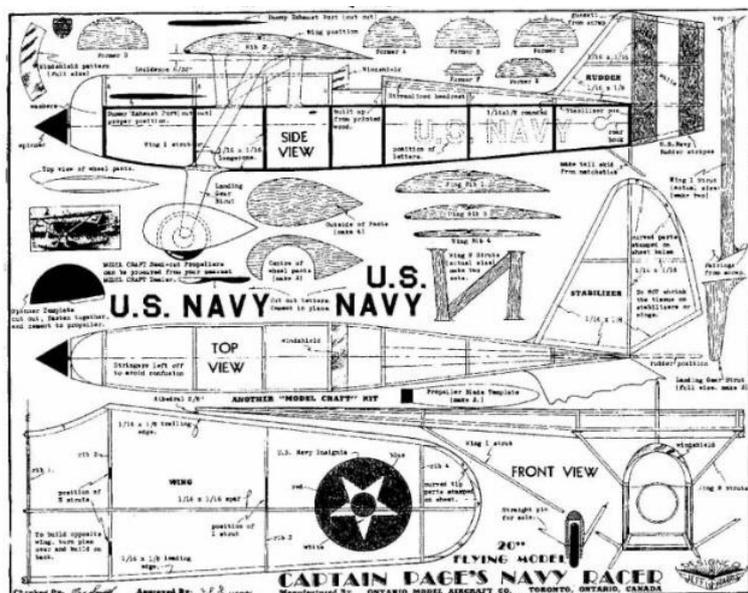


followed by the BA Parasol / JA Racer with two entries. Six flyers with their models, assembled for the group photo at 2 p.m. Chris Strachan arrived in time for the launch and five competitor's models got away in the dry and breezy conditions. Barbara Tiller's Jimmie Allen Special took first place followed by Chris Strachan's Skokie and Allan Arnold's 40" wingspan Sky Chief. Allan is a Bournemouth MAS Country Member, in this case the country being U.S.A. Allan tells us that at his flying site in California it is always sunny, the wind does not

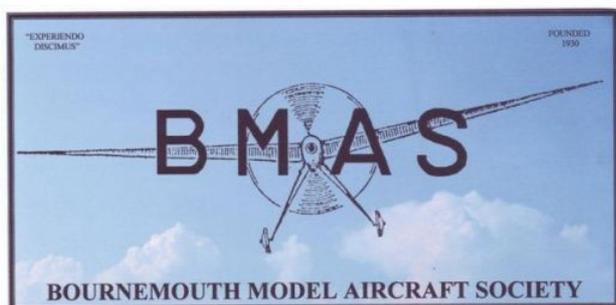
blow and there are miles and miles of open flat ground. When I asked why there are no trees he said "because it is all desert".

We need a really big effort next year from all you chaps to build, trim and enter Jimmie Allen. Why? Barbara has now won for two years running, flying the smallest model in the competition. Are you going to let her make it a hat trick?

Winning the Jimmie Allen Competition gave Barbara also the Ladies Cup, presented by Carol Farley and Mike Parker.



Jimmie Allen plans available from David Baker Heritage Library, see SAM 1066 website or from Bournemouth MAS library e-mail roy.tiller@ntlworld.com or Tel. 01202 511309.



INDOOR FLYING 7pm to 10pm

ALLENDALE CENTRE, HANHAM RD. WIMBORNE BH21 1AS

Adult Flyers £4 Accompanied Juniors & Spectators £1.50

Free car parking in public car park in Allendale Rd

Tuesday 26th October 2010

Free flight only, all meetings

Tuesday 30th November 2010

Informal competitions inc Gynnies Cricket League

Tuesday 25th January 2011

All flyers must have BMFA insurance

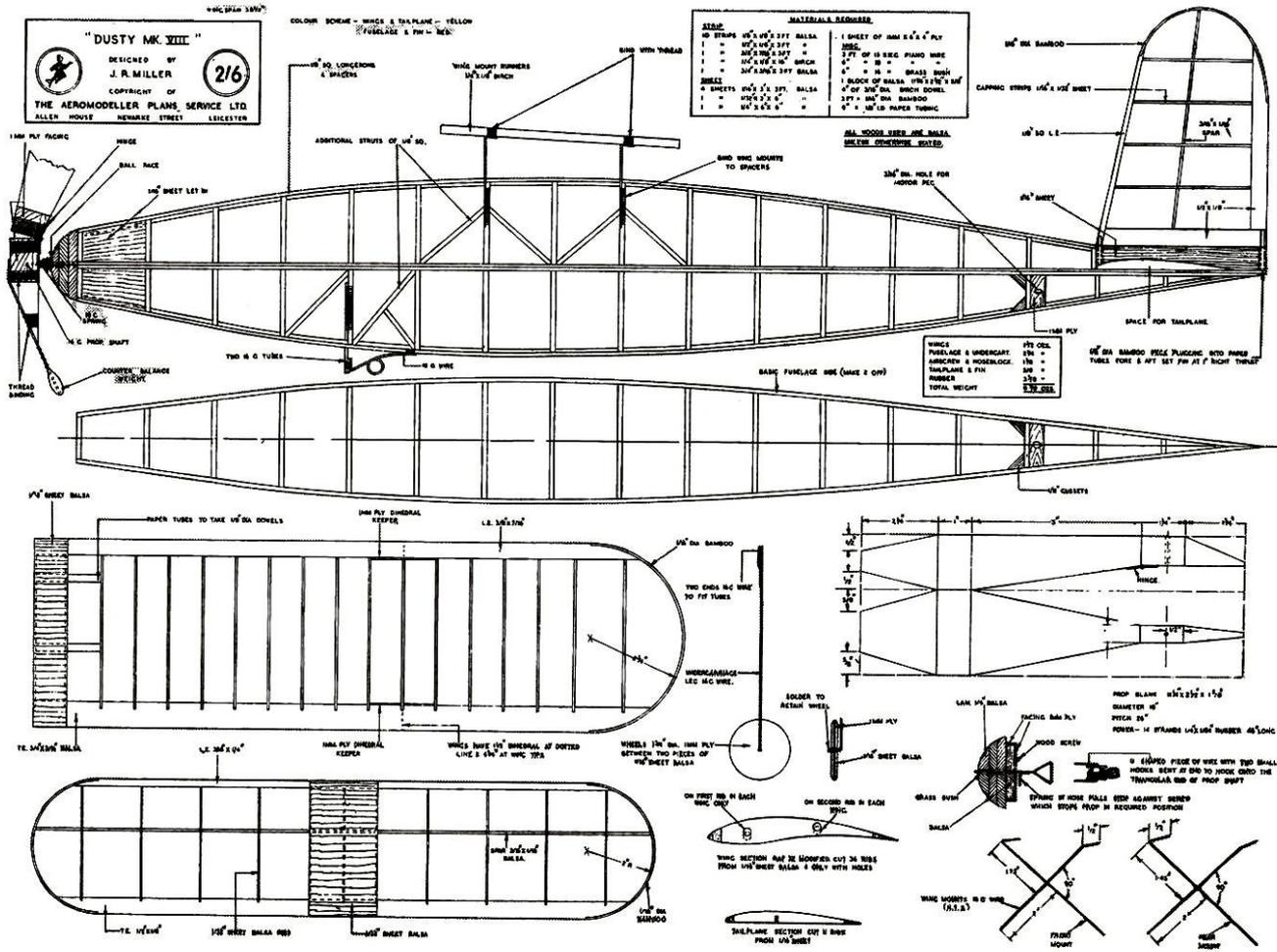
Tuesday 22nd February 2011

Flitehook normally in attendance

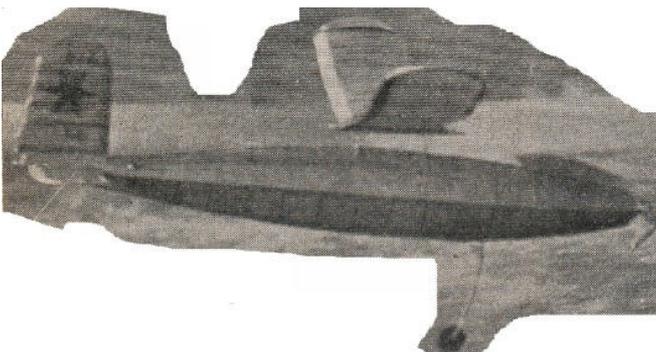
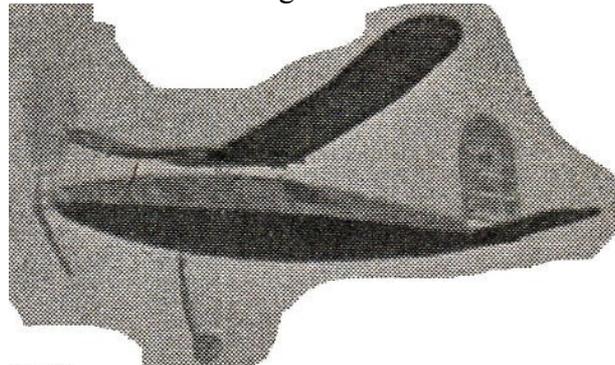
Tuesday 22nd March 2011

**Contacts: John Taylor TEL.No 01202 511502
Roy Tiller e-mail roy.tiller@ntlworld.com**

Dusty VIII by J R Miller, from Aero Modeller April 1946

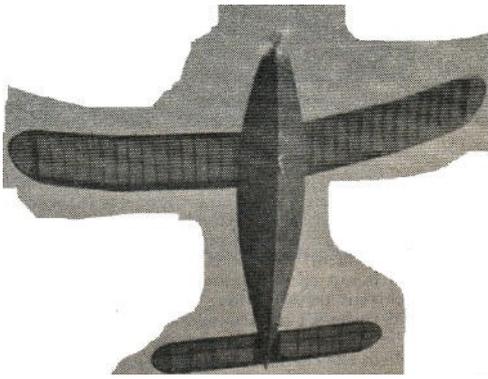


Dusty VIII came with a big reputation--26:35 hand-launched on its maiden flight and second in 1945 Gutteridge Trophy with an aggregate of 683.4 seconds Tests by the AEROMODELLER Research Staff soon showed that these, flights were no mere flash in the pan. Short trimming trials proved nearly long enough to lose the model, which has a remarkably flat glide. Once adjusted satisfactorily—a matter of about ten minutes only—tests on half turns produced still air flights around the ninety second mark. Unfortunately these took' place before our recent move to Eaton Bray and the horrid proximity of trees and bushes prevented



an all-out effort. However, its competition successes add emphasis to these preliminary findings, and we have every confidence in recommending Dusty to those many Wakefield fans who will doubtless be in their element once more now that rubber, can, with a little patient research, be obtained once again.

Building. Developed through a series of duration models the structural problems have already been solved by the designer and building should present no difficulty.



Trimming.

Adjust the model to climb in fairly tight spirals against the torque, and glide in circles of about one hundred feet diameter. No difficulty should be found in obtaining a trouble-free takeoff with the pegleg undercarriage as the model has ample power.



Southerner from John Laird

Too bad about the wind at M Wallop, lets hope that Cocklebarrow is better.

Thought you might like a few photos of my latest for the newsletter - a Southerner 60 scaled to 72" span Photos show the uncovered frame, then covered and finally a flying shot.

Flies nicely, but needs a lot of elevator in the turn to keep the nose up. Been windy on the few days out so far and I think it will fare better in lighter winds with a hint of thermals to save on battery power.

I was going to go for the polyhedral wing but I made a reasonable job of steaming the curved L/Edge and T/Edges, that I couldn't bear to cut the wings in half.

Essential statistics are -

Span 72" , weight 3.5 lbs, wing loading approx 12 oz/sq ft motor - Emax BL 2820/07 - approx 400 watt motor - power to spare but the CG is right with the 2250 3S lipo loaded in thru the nose

Covered with doped polyester dress lining and tissue trim. The dress lining had a sheen finish which helped to keep the yellow strong with just a little transparency to show the framework



BUILDING INSTRUCTIONS

Fuselage. Pick out some hard 3/16 in. square and scarf on enough to each longeron to allow the joints to be well staggered in the fuselage. It is also advisable to pre-cement the joint.

For the actual construction of the fuselage the longerons are laid down in pairs and the two sides constructed together. Cut the cross-braces out in fours so as to get them the same length.

When the two fuselage sides are firmly stuck, lift from the board, sand to same profile, and then cut apart with a razor blade.

The next step is to stitch and glue the wire parasol to the second and third formers. The formers are backed with thin ply to stop the thread from splitting the formers. When the binding is really well cemented, erect the two sides of the fuselage on the formers and place the rest of the cross braces in place. The weight box, chute box and tow hook are now fitted and after the structure is sanded down, the fuselage is ready for sheeting. The nose is now cleaned up and the nose-block is glued on and carved down.

Wings: These are easy and straightforward if started by pinning down the lower spar. To get a good fit at the centre section, build one wing and cement centre rib slightly out of the vertical, join the wings by dowels and cement centre rib in other wings to fit flush with its opposite. To get the leading edge to continue round to trailing edge, it is necessary to pack up the tip with scrap wood.

The fin and tail plane do not need any explanation, the only point being that the joint between fin and fuselage should be faired in with rag tissue and cement to strengthen the joint.

Finishing: Flying surfaces covered with double-strength tissue and two coats of dope. Fuselage—four coats of banana oil, sanded between each coat (or colour to taste).

Flying: Trim in the ordinary way, using the C.G. on the plan as guide. The model is stable on the line when the turn is not too great, so a medium has to be found between towline stability and turn.

From Peter Scott

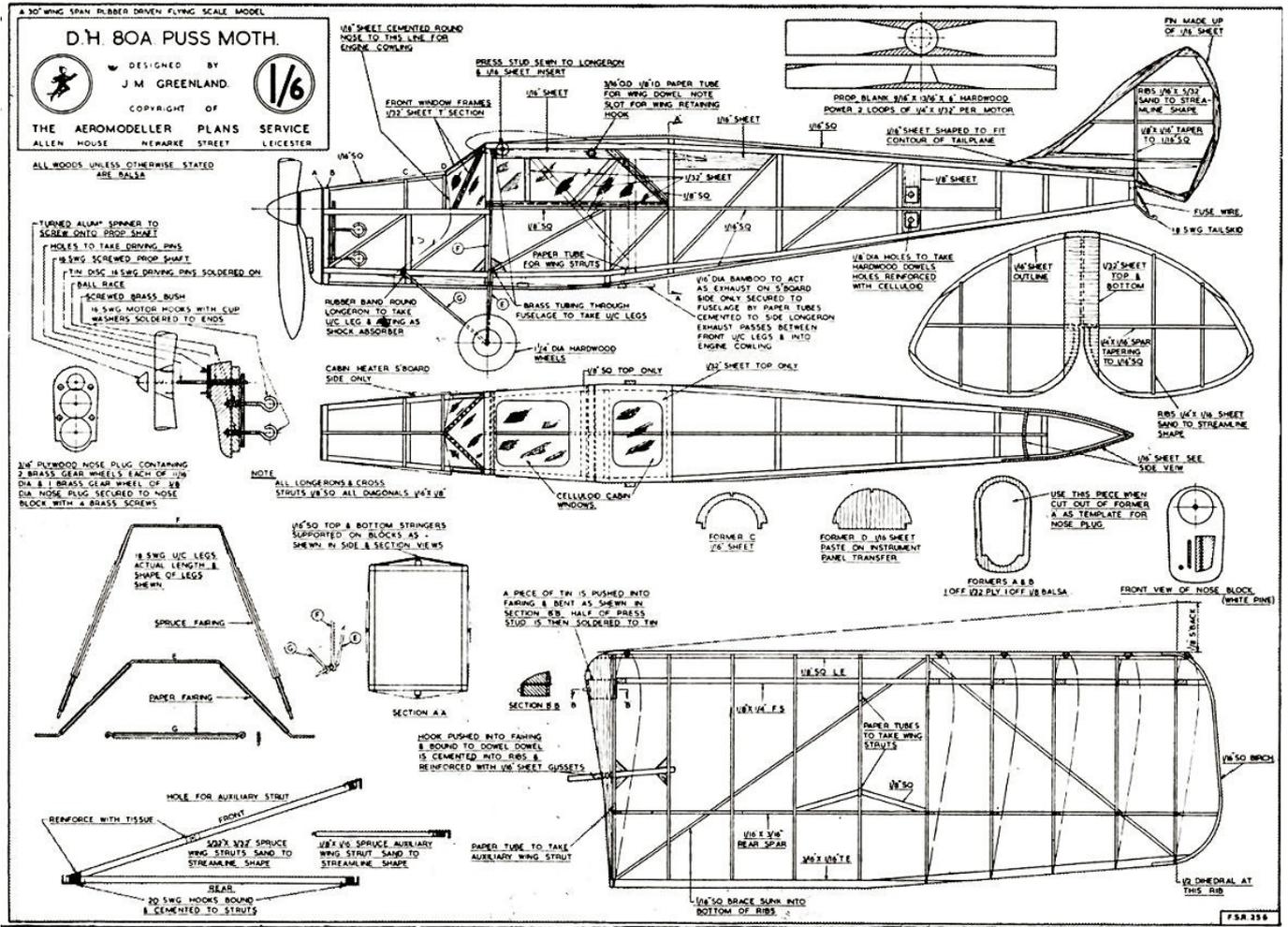
Here's a "rubber-powered" contribution, a whole flock of Golden Eagles [1938 Zaic Yearbook], at Middle Wallop on Monday 30 August 2010.

(I should have included last month! JP).



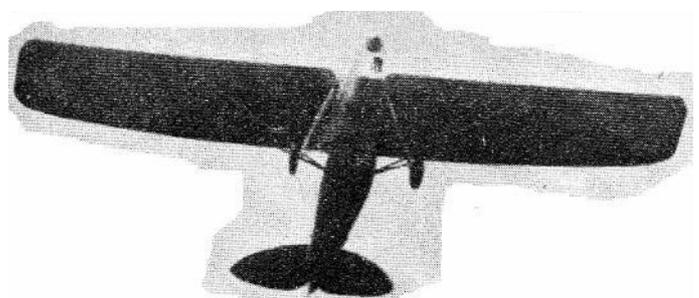
Hi James, I've been following the Sticks and Tissue site for some time now and wondered if any of your readers might have a memory of a spotty young lad arriving at a vintage event at Pontefract race course 1981/82 with a huge Orange Powerhouse powered by an 'open valve' OS 60 Four Stroke. If so, has anyone got a photo of same as now, ripe in my 50's I'm looking to rebuild her and any reference to my old one would spur me on to getting the job started. If I remember rightly I walked away with a trophy that day for a precision flight (My first and only trophy for model flying!) Here's hoping. Andy Powell andyp57@gmail.com

D H 80A Puss Moth 30" span by J M Greenland from February 1947 Aero Modeller



THIS model is of the Puss Moth used by the Royal Air Force Flying Club at Hatfield before the war, and the full-size machine is depicted on our front cover this month by C. Rupert Moore. It carries the club's crest and rudder stripes and is built to the scale of 5/6 to one foot giving a wing span of 30 inches and flies with a scale tailplane.

Fuselage.
I build in the usual way with 1/8 in. square longerons and spacers. The top and bottom stringers are raised on blocks of balsa to the various depths shown on the plan. The



window frames are of "T" section 1/32 in. sheet balsa, the celluloid being fitted on the inside, a separate piece being used for each panel. The undercarriage is mounted in brass tubing cemented firmly into the fuselage, the front legs are tensioned by two elastic bands tied round the bottom longerons.

Wings.

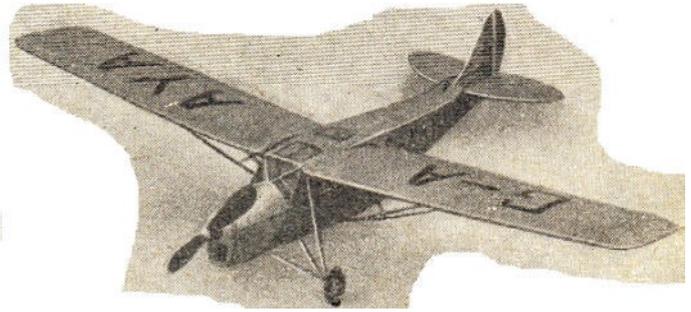
These are of straightforward construction. Pin the main spars to the plan and slot on the 1/16 in. sheet ribs, then add the leading and trailing edges and birch tips. The solid balsa fairing at the wing root is tapered to a point where it touches the cabin roof. Half of a press stud is soldered to a strip of tin which is

pushed through the fairing and first rib, and then bent back and soldered. The struts must be carefully adjusted to give the correct amount of dihedral and sweepback as shown on the plan.

Tail Unit.

A symmetrical section is used, all ribs are cut from 1/16 in. sheet balsa. The ribs are fixed to the main spar and then the outline is added. The fin is cemented to the centre line of the tailplane and the whole unit is held to the fuselage by a rubber band.

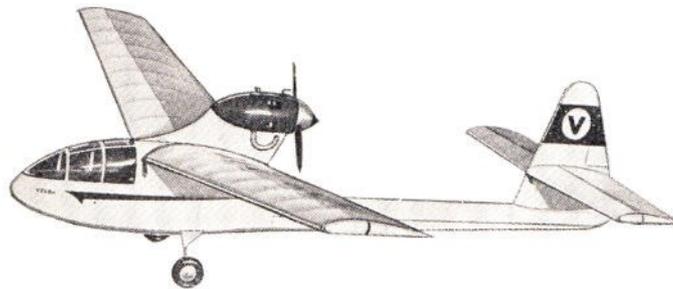
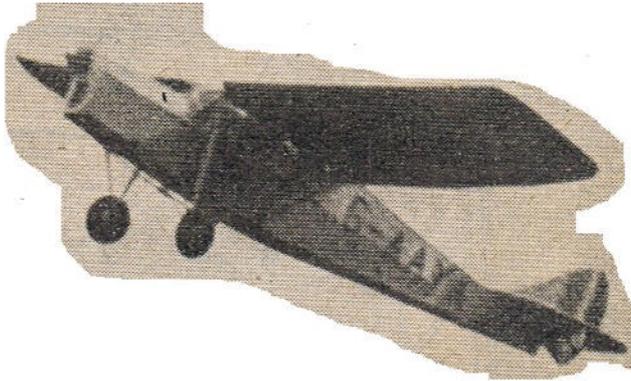
Cover the whole model with jap tissue and spray



aluminium all over. The lettering is in black and the R.A.F. Flying Club crest is deep red with pale blue and dark blue.

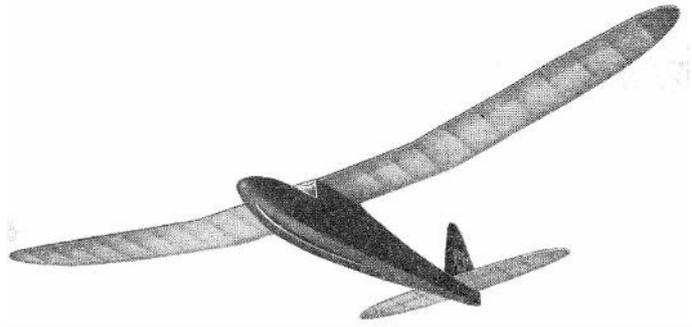
Flying.

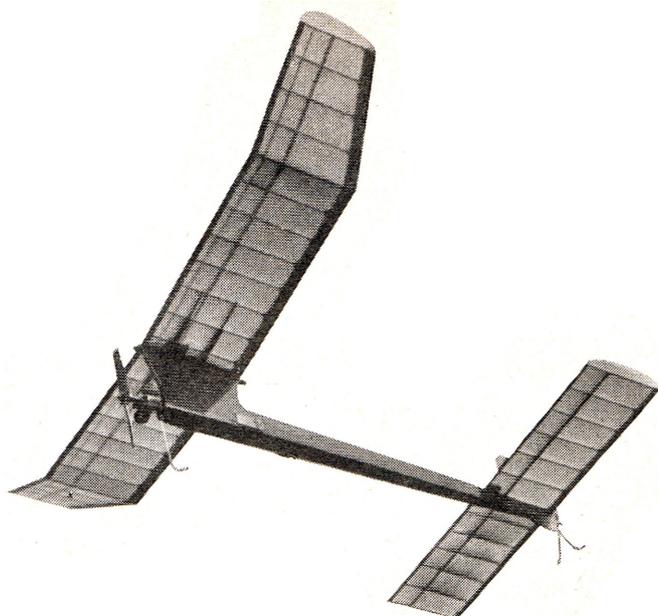
1/4oz. lead was put in the tail of the original model to get the c.g. in the correct place. The glide is very flat and fast and the model flies in a nose-down attitude, like the real machine. The average duration on 300 turns is 20 seconds.



**Hi James I am sending you some pics from last summer
Best regards from Sweden Jörgen.**







" Eliminator " can use a little wash-out on each wing tip panel. Barry Wheeler recommends that the C.G. should be between 85 % and 95 % of the root chord, and that glide tests should be made with tail packing to trim for a long and fast glide. Then set the clockwork timer for 6 seconds, add an extra 1/32nd trailing edge packing under the tail, and launch with the engine at low revs. Best trim is for a 100 ft. right hand spiral climb, followed by 100 ft. left hand circles in the glide, the offset underfin taking care of this and also helping to stabilise the spiral climb. To increase forward speed, that extra piece of 1/32nd tail packing can now be removed. To tighten the glide turn, add plasticine ballast weight to the drag tab, and for best climbing performance, fit an 8 X 6 wooden prop.



Epsom Ups and Downs From Dave Bishop of DB Sound

I had just a few days "free" of commentating at airshows and rang a pal of many years Derek Foxwell, to ask what he was doing on Wednesday September 1, as the weather forecast looked good. "Why not go along to Epsom Downs on the Racecourse and see a bit of model flying?". Well he is the owner of the company the "Old School Model Aeroplane Factory" with some 19 complete aeroplane kits for people who like to build their own models out of real balsa wood and not just click plastic bits together. Luckily he had a new model ready for air testing with the name of "Ballerina". It sounded good to me and we arranged to meet at the car park where the modellers and dog walkers go. Armed with my "point and shoot" Kodak camera, I walked to the area where the take of strip has been neatly mown and there I was welcomed by some friendly faces, some of which I had met at the aeroplane shows I had presented in my DB sound business. The chaps had some very nice radio controlled model aeroplanes with them. The skies were a mixture of slight clouds and a gentle wind blowing of just a few knots. It was just perfect weather in fact, for a couple of hours of enjoyable flying.

Ballerina brought to light.

Derek was already there with his new kitted high wing model and it was then that I found out that it was an electric powered, rudder - elevator model, with a speed controlled brushless motor up front. The transmitter radio was on 2.4 gig. I felt the weight of the aeroplane and was pleasantly surprised just how light, compact and neat it was. It "looked" right and the eventual flying proved that it "was" right.

And up she goes.

A gentle hand launch with the throttle full forward and away went Ballerina in a smooth climb with straight and levelled wings and not a touch of movement needed on any controls. It was just like a



modellers dream when everything goes just right and in no time at all Ballerina was high up and being throttled right back to the halfway notch on the transmitter. All that was needed on the transmitter for rudder and elevator control, was a slight squeeze either way on the stick and the model responded “oh so sweetly”. It was a joy to fly. At low throttle it just poodled around the sky and after a while some loops were tried, which were round and smooth. A slight push on the control stick down and she gently lowered her nose and lost height. It was a pleasure to control the model and the only problem I had was, that when it was getting “upstairs” to a greater altitude, it was a bit hard to see it properly as my eyesight is not so good nowadays. When I eventually build one of these Ballerinas I will need a different colour on the underneath of the wings just to let me know which way up (or down) it will be.

Landing.

In no time at all Derek decided to land Ballerina after its first test flight and I was surprised to find that no less than 20 minutes had “flown by” since he had launched it. And then there was the pleasant surprise of holding the model, which bearing in mind the motor had been running continuously for that whole flight, the front of the aeroplane was cool and no burning smell at all that I have experienced with some electrically powered models. Upon querying why it was so cool, Derek explained that he had designed cooling vents in and around the brushless electric motor and he had also included venting the battery compartment as well. He winked at me that it is called “engineering” and so it proved to be. No noise no smell, no messy oil to wipe off, in fact after a session of flying, it could be safely put on the best polished table back home in your front room.

Conclusion.

Ballerina is a great aeroplane and I am totally hooked on this vice-less smooth flying, pretty model that is such a joy to put fully assembled in the boot of the car. and simply go flying. One can arrive at the flying field and straight away just launch it off into the sky for a totally enjoyable 20 minutes, each flight. I suppose the real guys have a couple (or more) sets of these “Lunn Polly” (Lipolymer) cells that they can recharge on the flying field and then fly continuously until it is time for dinner. That would surely be perfection.

Tech Spec.

The technical spec of the Ballerina is as follows; It is - 38” Wingspan, is fitted with a - 1,000Kv Brushless Motor, a - 18 amp speed controller, a - 1300 Li-polymer battery and the all up weight is 411 grams.

Derek tells me that presently he has 20 of these kits already in stock and as I do like the feel (and the smell) of balsa cement on my fingers, I cannot wait to get the plan undone and start gluing bits of wood together. Now where do I go to get a brushless motor? The Li-po batteries will come from Overlander of course.

I also took some pictures (attached) on that super day at Epsom Downs as follows;



Tony (the great) and his Zoot Suit and PAW powered Ballerina

John (still noisy) Gnatty - OS 40



John and Lecky with brushless motor



Nigel Pearce and Fox Glider



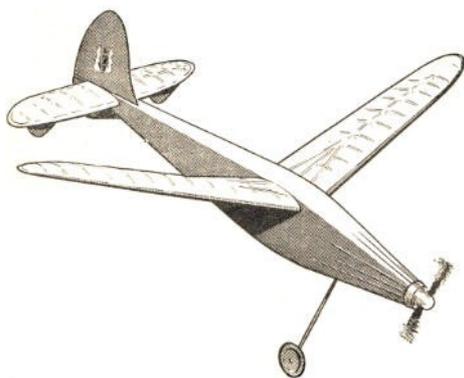
Joe Taylor and his Harvard bought 3 years ago at Jane Stephenson's "Wings and Wheels" show at North Weald air show for £300.

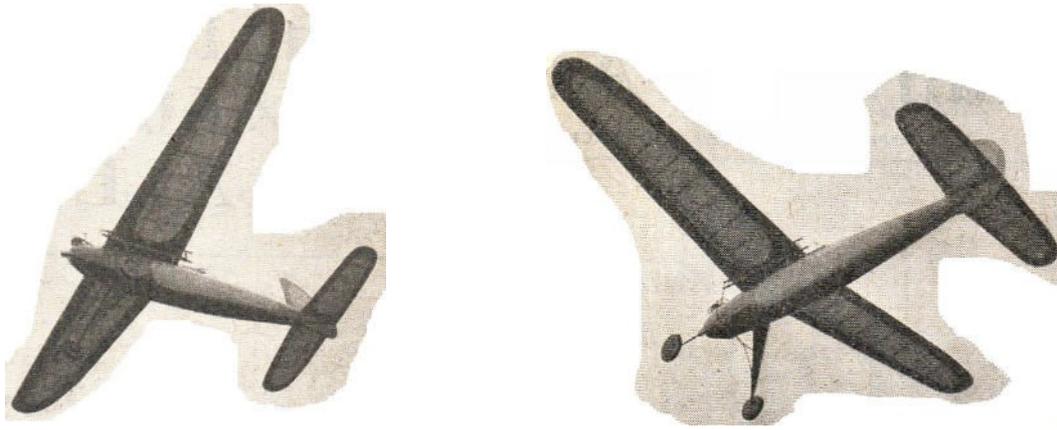


Alex Third from South Africa and his Wot 4



Tony Morris and his Camel –Mick Reeves kit – Built the same as the full size at Hendon. Been modelling for yonks!





The Dude by G W W Harris from September 1945 Aero Modeller

A more advanced 64" span model for 4 – 6 cc. The fine flying characteristics of this model make it ideal for competition.

When this model was designed, special attention was paid to the following points :-

- A. Performance.
- B. Appearance.
- C. Strength of structure.
- D. Good and easy access to engine and its ignition system.
- E. The ability to take hard knocks.
- F. Mainplane mounting to be crash proof.
- G. The tail unit to be light and rigidly fixed (experience has shown that all too often badly fitted tail units are the cause of smashed models and that rarely is the tail unit damaged).
- H. Provision to be made for more than one type of engine fixing.

The designer also considered the possibility of scaling the design up to, say, 8 ft. span for radio control work.

Provided the instructions and drawings are followed and a little discretion is used no difficulty should be experienced in constructing this plane—so here we go :-

First of all study the drawing. Check up and see which will be the best way to mount your engine. Make yourself familiar with every detail, and the job will be an easy one.

Fuselage. Begin by laying a sheet of paper on the drawing; trace through the formers, numbering each one as you go along. Cut each of these drawings out, allowing about 1/2 in. margin; do not cut the centres out yet. Now cement each drawing on to a sheet of 1/8 in. balsa. Keep the grain vertical. If only the wood available is soft it will be best to cement a sheet of paper on both sides; this will prevent it splitting during the cutting and other operations to follow.

Cut the formers out and slot them as indicated. Steam three lengths of 1/4 in. by 1/8 in. hard balsa to the shape of the three master stringers A, B and C. A way to assemble the fuselage is as follows: obtain about Three feet of 2 in by 2 in deal and cut it up into lengths varying from 4 in down to 1 1/2 in. Nail these blocks 2 1/2 in apart on to a building board, keeping them square to a centreline, see plan.

A, B and C can now be fitted into the slots of the formers and the whole job squared up and cemented. Drawing pins pushed through the formers into the blocks will position them while the 1/8 in. by 1/8 in. stringers are fitted. (Avoid applying any undue bending forces to the stringers, otherwise when the fuselage is removed from the jig it may distort.)

The stringers should be fitted alternately from side to side (it may be necessary to steam some of the stringers).

Now lift the fuselage away from the jig and fit the 1/4 in. by 1/4 in. strips and the remaining stringers. Study the fuselage drawing and then proceed to fit the various parts as shown. Note that one rear wing strut is staggered.

Undercarriage. Make up the undercarriage parts and assemble as follows : Cut out two stringers from each side of the fuselage between stations No. 1 and No. 2 to provide access for fitting the undercarriage legs.;

Thread the legs into place and cement the whole job up; all parts should be pre-coated with cement. Bind the ends of the legs with florist or brass wire, line up and solder. Fit the spreader bar landing wheels.

Fill in the legs with balsa, cover with silk and dope. Replace the stringers.

Now fit the engine bearers. Unless your engine is intended to run inverted I advise you to fit it upright. In any case, keep the thrust line as per drawing.

Sandpaper the fuselage all over until quite smooth. From a soft block of balsa carve out the hatch slightly oversize, lay it in position and sand it to shape. Next hollow it out, dope it all over and when dry cover it with silk, now dope again.

Main Planes, It will save time if you work on both panels-changing over with each stage of operations.-- The wings are not difficult to build, so do not hesitate. Trace the ribs on to some 1/16 in, balsa, cut them out and slot them and clean up with sandpaper. Now plane up the leading and trailing edges to shape. Pick out some sound lengths of balsa for the spars, lay one of them on the drawing and fit the ribs to it ; now push the top spar into place; make sure the ribs are in their correct order. Slot the T.E. and offer it up to the ribs for check; if or when O.K., cement the whole job up. While it is drying attach the other panel in a similar manner. The L.E's. can now be fitted. Use plenty of cement. Do not round off the L.E's. until the 1/32 in. sheet nose covering has fitted. Next fit the nose ribs.

Mark off and drill the root ribs. I find the job is best done by drilling the holes undersize, then worrying them out with around, file until they line up O.K. Make up the paper tubes and cement them in well and truly, smear them all over with cement.

Fit the tips. With a straight edge mark off the slots for the top rear spar 1/8 in. by 1/8 in.) - the slots must be 1/4 in. deep to prevent the spar showing through the covering. Cement the Vee block to the port wing root. Fit the drag struts. Clean up with sandpaper and fit the 1/32 in. sheet covering. Finally, fit the capping strips (1/4 in. by 1/32 in.) and sand all over. Note :— to obtain first class results make periodical checks by sighting the wings with the eye to see if they are true, particularly when the 1/32 in. sheeting is fitted.

Tail Unit. The stabiliser should be made first : it is very easy to make. Start by shaping out the centre block and make sure it fits the fuselage snugly, then drill two dowel holes. Mark off and drill the two fuselage blocks to suit. Now go ahead and assemble the stabiliser.

It will be, noted that the fin is fitted with a birch or bamboo spar. Bamboo is to be preferred, because should the model overturn the fin will survive the blow. Clean up the tail unit and check for warps.

Assemble the model and stand it on a table, now close one eye and sight down from the front to the rear and check the alignment of the main plane's tail unit. If necessary, add a strip of say 1/32 in. balsa along the wing mounting that is low.

The model can now be covered and doped. The original machine was covered with silk, but bamboo paper will do quite well. - It will be best to cover the fuselage with three separate pieces of silk or paper. Give the fuselage and mainplanes two coats of dope and the tail unit one. The machine can be colour painted to your pet scheme; my father finished his off in blue and cream, which looks very smart indeed. By the way, do not forget the dodge of rubbing down each coat of dope and cellulose with fine sandpaper, very lightly of course.

Go ahead now and fit the ignition system. Fit the timer in a position where it will help to bring the C.G. about 3/4 in, behind the mainplane spar. Note:— the battery should be in place when the C.G. is checked.

Propeller. The propeller size cannot be given here owing to the various engines that can be fitted to this machine. Our engine, which is home made, is 4 c.c. and is driving an 11 in. prop.

The engine is offset 2° to the right 2° down. If you are flying this model with a 6 c.c. engine go easy with the throttle or it will climb like a ding-bat!

Try to make the model fly in gentle turns to the right, the fin tab can be used to assist but do not abuse it, or the glide will be ruined and so might the 'plane. And remember VOLA CUM CURA !

Vintage R/C in Sussex. Tony Tomlin.

Sunday, 12th September, was the date for the second, Vintage R/C event of 2010 run by Stan Coombs and his team of willing helpers, from the Eastbourne Club. As always, this must rate as the most relaxed vintage meeting of the year, no competitions, only gentle flying all day. The site at Deanland Airfield, near Ripe in Sussex, is unique, in that during the day a few light aircraft come and go. At this meeting we were treated to the spectacle of a Cessna 172, picking up its banner from between two suspended poles and later, dropping the banner at the launch point before landing again.

A contingent of Raynes Park MAC members joined the 35+ fliers enjoying the wall to wall sunshine and gentle breeze. A little cross wind on take off, but certainly not a problem. Mike Cummins, Adrian Bernardout, and Alan Holmes had four Junior 60s between them, Alan's being the only electric powered model of the bunch. All flew well with the Mike Cummins model powered by a rare Oliver Major. Gerry Parker was flying a Sai Taibi Powerhouse, that after a few engine problems, flew successfully. Tony Tomlin was flying his trusty 150%, Peter Fisher designed, Meson that flew as if on rails. He also flew a PAW19, R/C George Fuller designed, Zoot Suit that climbed like a rocket and had to be persuaded to descend on the glide, by judicious applications of down elevator, as there was copious amounts of lift around. Another Raynes Park model was a Coronet, originally built many years ago by the late Derek Bird as a F/F model, and refurbished by Mike Cummins and John Perry as a club model. The PAW100 engine and radio equipment etc for this being donated by various members of the club. After a few trimming problems the model flew nicely, although perhaps a little fast.

There was a good turnout from the Surrey Club with Roy Woolston, Dennis Bryant, John Hawkins, Ray Page and Geoff Goldmith. Geoff seems to be having a run of bad luck, having lost a model to a fuel fire at Old Warden a few weeks ago and at Eastbourne having his Anderson Spitfire throw its prop in flight. Losing a prop shaft spacer, the model landed safely but after an extensive search the spacer could not be found.

Models ranged from a tiny diesel powered Shark Face, Matador, Spook Tomboys of both sizes, to a Lanzo Record Breaker and many others. Designs by Vic Smeed, Phil Smith, Geoff Northmore and many others were seen flying during the day. As far I remember there were no crashes during the day which reflects the skill of the fliers at this popular vintage event.





Raynes Park MAC club model



Dennis Bryant and Ray Page enjoying the day

David Kinsella's column

Carrier Action

East of Gibraltar and in the blue of the Med a flight of Hawkers cross above their ship. So sleek and silver, the war to come saw the big and beefy radial storm on in the FW 190, Tempest II, Sea Fury, Swordfish and American designs in the Pacific. A cylinder blown away? So what! Again Roger Middlebrook's Slade skills shine through.



Steady, 007

New to me, a boat named Bradstone Challenger powered by two Caterpillar engines has been timed at 86mph in ordinary sea conditions! Thunderball's Emelio Largo enjoyed his Disco Volante, but the fast part broke away on hydrofoils. Military powers are considering Challenger as an attack platform for missiles. Crikey!

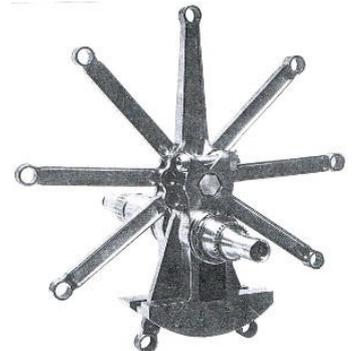
Commando Immortal

Over a drink in The Feathers pub on 19 September 1946, Noel Johnson was offered the part of Dick Barton for £18 a week. The famous Devil's Gallop by Charles Williams set the pace, Captain Barton facing gangsters, giant spiders, apes with knives, H bombs and a-psycho dwarf.. ...A comic strip by sound, within weeks of the first broadcast on 7 October empty streets confirmed that 15 million plus were tuned to the Light Programme. Floods of fan mail arrived and phone lines to the BBC were jammed. On 30 March 1951 broadcast 711 marked the end - up to a point. Movies and plays remain, books too, and somewhere there's Marylebone Pictures material for a movie starring Johnson. The Daring Dexters circus family preceded The Archers, Johnson's son joining the farming folk of Brookfield, and from time to time the idea of a proper 1950s style movie surfaces in Soho Square and elsewhere. Here Johnson, left, hands over to new Barton, Duncan Carse.



By Jupiter!

Here's the crank, master rod and rods of Bristol's famous 9-cylinder found in the Bulldog and several greats of the biplane era. Broadhurst, Bennet, Lott and Bader sat within feet of the clatter as it warmed up (no coolant to dull the sound) and relied on it to get them through stunts like the five fighter Lover's Knot at Hendon, 200,000 attending. With all rods solid (no split big ends) the crankshaft was in two main parts, the rear half with counter weight slipped on and held by the grip bolt tightened to 100lbs at 12ins. Built-up crankshafts were not cheap, the Hirth crank in a 300SLR costing DB a fortune. But, as they knew, it was bullet proof. Much machining of a mass of parts took time.



Jubilee

The stunning looks of Stanier's crimson Duchess may have overshadowed his earlier 3-cylinder 4-6-0 Jubilee, but standing proud on her 6ft 9in drivers the Jubilee class of the LMS (191 built in the mid 1930s) was elegant and carried several magnificent names of Empire: Bengal, Punjab, Gold Coast, Jutland, Trafalgar and Beatty. Gradually, as if drawn by an invisible force, I'm closer by the day to 5584 North West Frontier...Gauge One, 27 ins, 171 lbs, sounds good to me.

Good Stock

David Bancroft (01983 759069) continues to offer quality signed stuff: Johnnie Johnson (£48), Brothers In Arms (10 sigs £75), Wotton (several with Cunningham and Beamont £198), Prince Wittgenstein (WW2 aces £70). Each catalogue carries 160 titles. Spitfire Books (01829 751308) continue.

Super Treat

Apprentice draughtsman Gary Richardson starting the DC Bantam in his Mercury Agressor at the Nats in 1960 had his picture taken, the result a surprise trip to the Davies-Charlton works in Douglas, Isle of Man. And this meant a tour of the TT course, the giant Laxey wheel, dinner in Geoff Duke's hotel, salmon fishing, hours in the factory and meeting Messrs Davies, Hundleby, Kermode, Quale and Maddrell. When millions actually made things and apprenticeships were common, Gary's trip by BEA Viscount was how things used to be... Here S'urtees flies the MV on the Island.



Sunny Southern

Author and publisher Kevin Robertson stocks a wide range of railway titles and issues The Southern Way for SR enthusiasts. He attends a number of shows and may be contacted on 01489 877880, His Pullman book is excellent.

Top Terry

Walk up the war memorial steps of Waterloo's main entrance and the fine statue of Terence Tenison Cuneo CVO OBE RGI comes into view. Easel in hand and brush lowered, he's pausing before pressing on with his enormous output of pictures: portraits, battle scenes, railways, aeroplanes, country and Wild West action, he was a proper artist. I knew him in later years, his mouse themed Christmas cards a treat, his 80th birthday party in 1987 an enthusiast packed full day affair. In messes, clubs, ships and private homes, much of his work is never seen. Lloyd's of London have a fine display in Lime Street and the FA has one or two. Thankfully New Cavendish published a slipcased book with several colour plates and there are others. HRH The Princess Royal unveiled the 'Waterloo statue on 26 October 2004, thousands every day thus reminded of his long and meaningful life of 92 years. Yes, the mouse and his master are complete, the cheeky rodent peeping from beneath an upturned book.

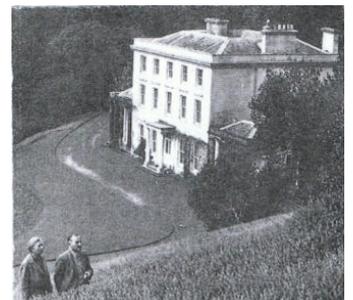


Shark Attack

The Rescue Flight by Captain Johns springs to mind, the RFC pilot writing of a gaggle of DVs chasing an Ally two-seater heading west. That extra strut to the V tells us it's a Va, operated years ago by Leisure Sport of Chertsey. Von Hippel of Jasta 5 flew such a machine in 1918.

Pen Power

The Great War survived, RFC pilot Christie and his wife stand before their magnificent house in the west country. Travellers too, rough sea crossings failed to upset Mrs Christie's writing routine as, one after another, Agatha turned out her scores of best sellers and plays.

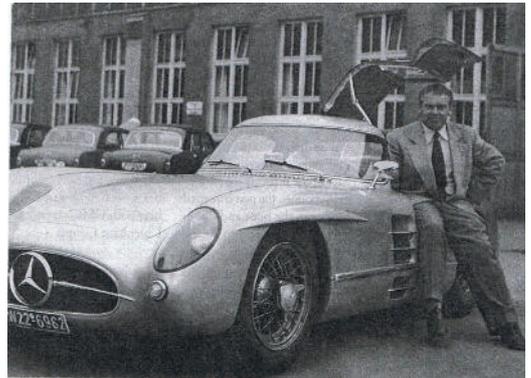


Favourite Ear

Having read Dick's offering for May (8 pages and 20 pictures) I could almost smell the Castrol R, especially when the Brooklands ace Noel Pope - leaping blown V twin Japs belching fumes that would strip paint at twenty paces - appeared in the text (do read his Full Chat). The Aldrich McCoy 29 reminded me of info sent by George, but trips through Texas failed to find him at home. Good stuff too on Bill Atwood's Triumph 49 and 51, one at Long Beach (once famed for the GP, Spruce Goose and the great Cunarder's arrival) cracking 136mph in 1948. Lots on a delightful twin, a beautiful box of Yulons and a Grayson Gnome. Ever nearer to that Nobel, Dick Roberts delivers! Read him in SAM 35.

Dig This!

Slip back 55 years and here we are in the Daimler-Benz plant with Rudi Uhlenhaut and his Formula One based roadster. Late for a meeting in Stuttgart, ace engineer and track quick Rudi hit the gas and covered the 170 miles from Munich in an hour! Silver, trimmed in red leather and so stuffed with detail, GMC will release a 1:18 super scale model this year. They get no better and demand is high. Try 0844 887 8888.



Costly Complication

Travelling from Mornington Crescent to Waterloo - just over 2 miles a straight line - took 2 hours on a 168 bus. High end motors, now vastly expensive and good for 200mph talk to us about tyre pressures, oil and water requirements, best ways to get from A to B and need a computer at the service station. Do we want all this? Last year's Model T fondly remembered (utter simplicity!) a peep at the 1172 or 750, bonnet down and off we went. A Haynes and DIY!

No Tripod

Charles Schneer was a hands-on movie producer, like David O Selsnick leadin from, the front- rather than resting with a fat cigar. Two of his best - Jason And The Argonauts and Clash Of The Titans - saw stars mixing it with sword- bearing skeletons and Golden Gate-attacking octopi thanks to step-motion quality animation that influenced Lucas and Spielberg. The only man to do so, he teamed the Reagans in Hellcats Of The Navy and made I Aim For The Stars (von Braun story). Tight budgets producing an octopus with six legs, he warned that soon he'd end up with a tripod! Off the coast of Italy and lining up Jason's BC galley, into shot came Drake's Golden Hind from a unit nearby. Here the Rocket Man makes a point.



Plastic

Not Bongo Bank Or Have It Trust, but Airfix and Revel and Frog. Buffs masse at Hendon in their hundreds on 24 May for a huge display of high detail modelling in several scales. Notable was a magnificent HP42 liner of Empire days and drum-braked MVs when Agostini was king. Hundred of kits were for sale, Cross & Cockade were in force, and I was able to advise that Udet's top wing was black and white and not red. Now to caveats: parking charges now apply and the Graham White building shuts at mid-day. A jolly afternoon.



Combat Full On!

Calling his flight with a red Very light, young Hugh White closed on one of nine Pfalz. At once Karl Petch of Jasta 29 pulled up and crashed into White's SE5a, causing the Hispano to stop and the starboard wings to fall into an anedral position, fabric streaming astern. Hard left rudder and leaning over the side,

Hugh dived again and fired 100 rounds causing the Pfalz to shed a wing. Just managing to fly, Hugh was attacked by another Pfalz. Grasping a drum of Lewis gun ammo, Hugh threw it astern - straight into the prop of the Hun; Like many at the time, especially with the growth of the RFC, Hugh Granville White travelled across the services: HMS Conway, RMC Sandhurst, Cambridge, East Kent Regiment (The Buffs), RFC, RAF. Hugh retired as an Air Vice Marshal in 1955 and died in 1983, his last years spent in Eastbourne. As well as the documented Pfalz - which cartwheeled over White's SE5a - mention was made of a crash with a Fokker DVII!

Top That!

Captain W E Johns rejected Lawrence, but a note from top brass got the Prince of the Desert into the RAF. Known as Ross and Shaw, famous too, an All Souls Fellow and fond of 1000cc Brough Superiors (as we have seen) he was a difficult case to handle. Late on parade, Thomas Edward Lawrence (1888 -1935) pointed out that dinner with Lords Beaverbrook and Birkenhead, McDonald and Churchill had run over time at No 10. Gasp suppressed, the luckless Sargeant turned away....

FAST Approved

VTR enthusiasts north of the border lost Alex Hill and Erik Pow in the summer. Staggering the masses, Alex's Rowell 60-powered Weatherman (crikey!) could be heard for miles. Dainty and quick, Erik's -1/2A Pawprint has the crisp look of a proper racer, at home in the air or highly polished in the model room. Williams and buddies of California's FAST would have given it full marks. Well remembered is the biplane McCoy 29 racer designed by Williams, he later moving into parts for models (scale too, with guns and wheels for Milani-size SE5a fighters and other heavyweights of the Kaiser War). Famous charger in the circle, Sam Alexander of Angus (well remembered at VTR 2000) makes a splendid job of his early VTRs, for me a Frog 500 Mercury Mk1 as Boy's Own in red plus a stout box, retained, for the long journey south. I'm facing north and saluting, boys. Keep 'em flying!



Paperweight

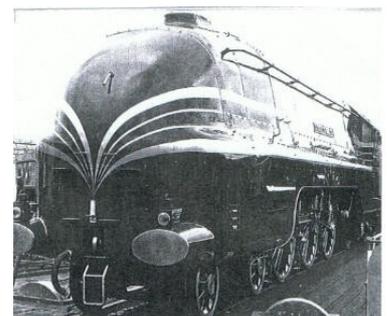
Tighter belts or a need for them may remind us of Beveridge (1879-1963) and his efforts re labour and the Welfare State. Born in Bengal, later a director of the LSE and master of his Oxford college, William Henry Beveridge wrote much more than the famous Beveridge Report and these days Nick White, looks after 500 boxes of his papers at my old college. Serious sailor and musician to concert standard, Edward Heath left behind 7 tons of the stuff. Heath helped the Clyde, but after QE2 it was Type 45 destroyers, Now only the blue 800 ton Titan crane stands to remind us of John Brown, big gun ships and elegant liners to New York and the East.

Chas At Chuffers

Attending a Gauge One running day, I took along my Class B Bengal Lancer (S&T No 31). A Chas Taylor design as Cardinal Puff and finished in blue and yellow, an attached ticket gave history and noted the good work by Alan Walker and Mike Crisp. Much interest was generated. Good show!

Great Scot

Wild Swan of Didcot have published a brace of booklets on the stunning Coronation express engine of the LMS (S&T Nos 31 and 37). Fold-outs and nutsy boltsy like wow, this is for all who worship at the altar of uber steam traction. Best read sitting down. Blower is 01235 816478.



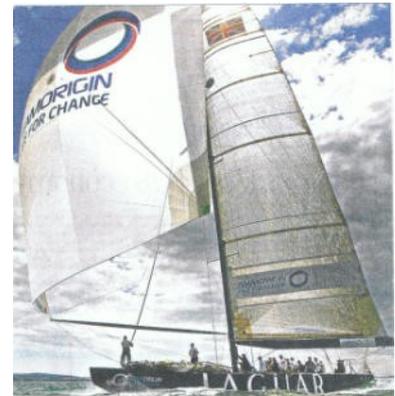
Super Snipe

Not a Humber (remember them?) but a brand new repro Sopwith. Snipe in the sun of California and awaiting its brand new Bentley BR2 rotary engine from New Zealand. This front end shot shows the rising hump to the cockpit and the interplane struts, four sets in all. Biplanes and the Great War have massive appeal, art sales at the Guild's July exhibition confirming the pull of Biggles and the Red Baron. "Switches on Contact."



Cowes Cracker

Off the south coast the 12 of Sir Keith Mills slips along in style. Booms are as they should be, the spinnaker pulling well. When the America's Cup was launched again in 1958 we sent over Sceptre, having faced little in the way of serious working-up competition before she went. Slipped for polishing, her shape caused more than a ripple of surprised comment. Out on the water things were worse, a huge spinnaker too big to fill properly. Cunningham's Columbia was supreme, Sceptre trailing by 15 minutes in one race. Briggs, the great sportsman, offered to switch boats to make a Cup contest worthy of the name. The big cats are miles faster it's true, but a ride in a hot racing 12 Metre is memorable. At Brighton long ago the Swedish 12 Sverige, in blue and yellow, broke a mast and I was given the tell-tale from it. Our Lionheart was there, impressive in black with the Union flag across her stern, but the essential bendy mast did not turn up. Tommy Sopwith with his blue Endeavour J Class nearly did it, but crew and other problems kept the America's Cup in Manhattan where it remained until Alan Bond's winged keel wonder took it to Australia in 1983. Donated by the Marquise of Anglesey, the Garrard-made Cup was held in its round room at the New York Yacht Club for 132 years. Some record!



Joining Guy

An unusual building stands north of London. With only three sides, each of 33ft, from above it's a giant triangle. The windows have three sides too, and '3' features throughout the structure. Above the door in Latin an inscription reads 'Number Three Bares Witness'. Built at the time of Shakespeare by Thomas Thresham, son Francis became involved in the Gunpowder Plot, but died before Fawkes and friends were discovered. Much lore is attached to pyramids and triangles. Pictured is the M15 logo, the ancient all-seeing eye at the top. Very interesting...



Ripping Yarns

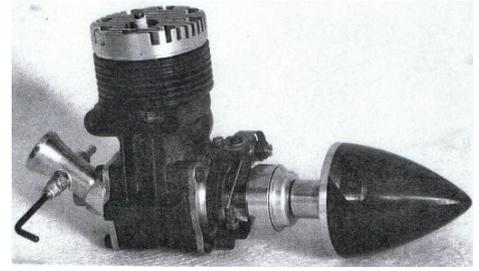
You have to spend hours there and mine the stuff yourself, but awards to die for await the dedicated old book nut. Forget jackets. In the good old days hard board covers were embossed, often gilded and impressive. Because childhoods were longer then, many titles were published covering hobbies and adventures of all kinds. Boasting full colour plates by Terence Cuneo (who also wrote some stories), it's important to check that a volume has not been raided for these to hang on the wall. Ripping Yarns - often on radio and that's what it's called - is a short distance from Highgate on the Northern. Finds last time were a 412 page Chums of 1935 and a hardly used Young England of 1922.

Bader Or Boffin

It's said that modern fighters cost £69 million and £90 thousand to fly for 60 minutes. Drones do the business, controlled by guys in white coats beyond the horizon. Should the RAF return to the Army and Navy from whence it came in 1918? The RAF is 50,000 down on V—Bomber and Cold War days. Little known is the, fact that thousands are concerned with the unseen ogre of cyber warfare. Computers run everything. It's difficult decision stuff. Who would dare to set a course?

Dooling Derivation

It's a 61 and there's a dash of Bruce Underwood in the crankcase area. The repro Yellow Jackets in the early 2000s had a central plug, but here it looks set to the exhaust side. Whatever, this black beauty is fondle fabulous for sure. Answers on a post card to the Editor.



Jim's Joys



In the 1930s the Texaco Cup was awarded for duration flying over the vastness of Uncle Sam's deserts, owners chasing hard by car. Pictured and held by Jim Shelley is a 10ft stunner from Ben Shereshaw in 1937. Moving on to Riches Street, Wolverhampton (we get around) a huge model was found in a car showroom. Carefully developed by Jim and powered in the end by a Maltese Falcon flat four, this 15ft giant was registered G-AMAG and given a test run in his beautiful garden, Ron Moulton



recording the scene. Over history weights varied with engine fitted, but this big baby consumed 8 pints of dope spread over 14 sq yds of nylon. Bundles of balsa obechie beefed came from a woodyard in Market Harborough when Lou Watson built her in 1961. Mods included ailerons, half flaps, revised dihedral and better radio. Seen on TV, there was ample muscle to handle a long Welcome To Walsall banner in Staffordshire's remembered skies. Jazz and old car fan, Jim Shelley's book should be on every shelf and is worth hunting down, the Vintage shots a treat in themselves. Jim's cabinets groan under much hardware won in Vintage and other competitions. Solid stuff, Jim!

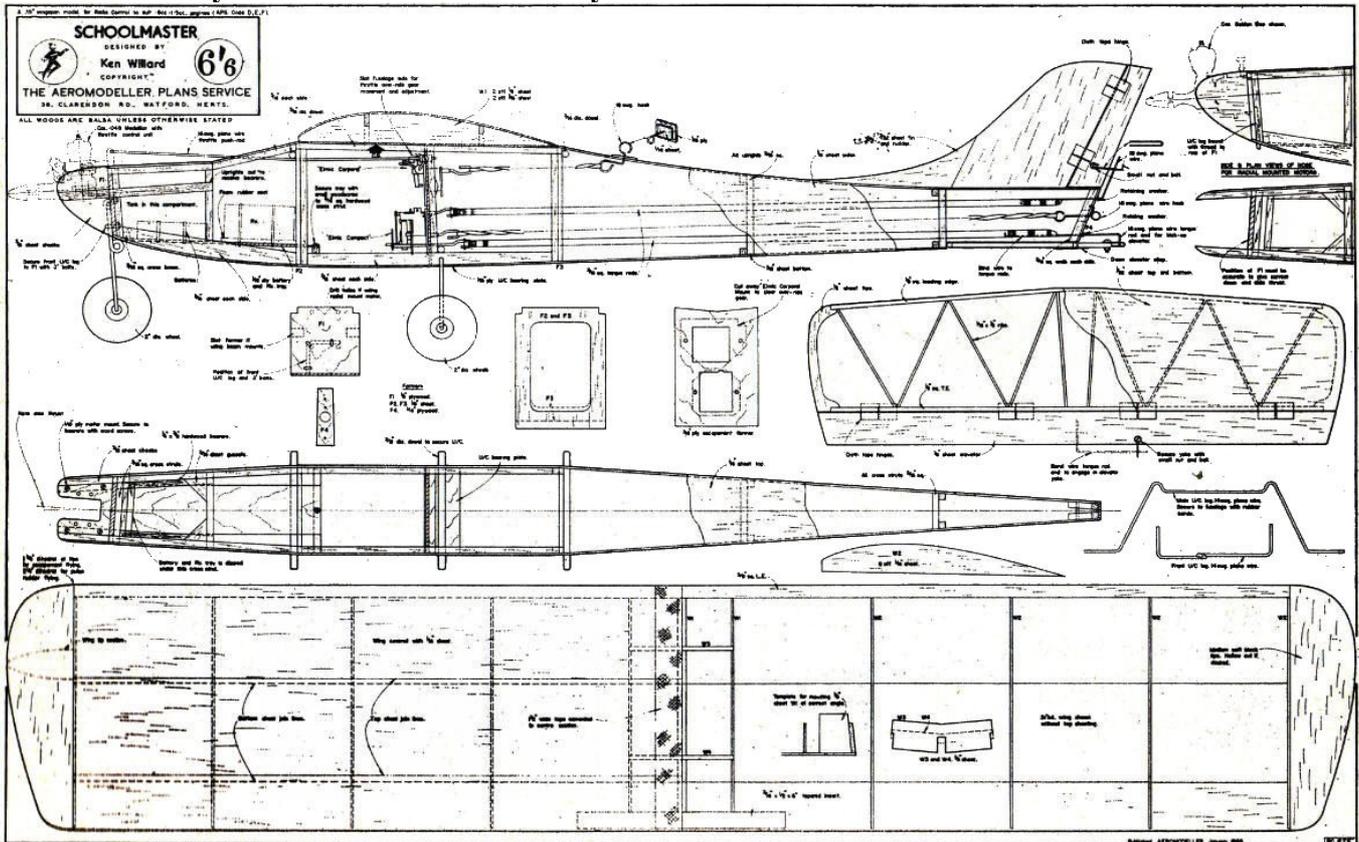
Another brief note from Sweden

Hi James I have some more pic,s from last summer I am the fat guy in the straw hat and the yellow bipe is my Coquette from Old school model factory a very nice kit flies right out of my hand. Best regards Jörgen.





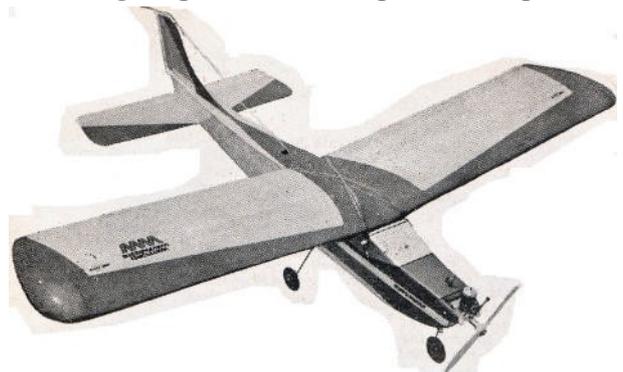
Schoolmaster by Ken Willard from January 1965 Aero Modeller



A 39 in. radio control sportster for .8-1.5 c.c. produced with the co-operation of Top Flite Models, Inc.

Followers of the Willard design pattern will see the lines of his much earlier 'Breathless' in this one. Slimmer for latest equipment, lighter yet stronger, and still very docile with .8 c.c. power, 'Schoolmaster' is likely to become a standard trainer/sportster in future. With higher power and compound escapement with elevator action it can also become quite an acrobatic maestro too!

For more years than we care to remember, Ken Willard has been continual leader among designers of radio control models to suit Compound escapements. Well-known for his small designs, notably Roaring 20, Rascal and Schoolboy, which have been kitted by Top Flite Models Inc. in the U.S.A., Ken was also the designer of the Gasser, a fast 40 in. shoulder wing design for 1.5 to 2.5 c.c. engines, which is in A.P.S. as drawing RC/744, price 6/6d.

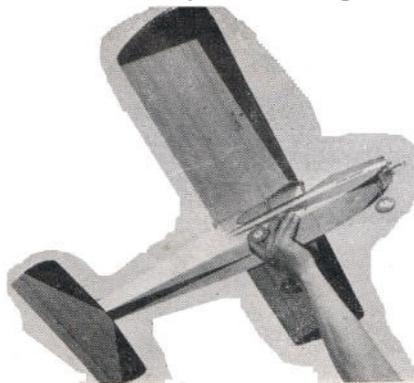


Just as he has always managed to anticipate the demands of single channel sport flyers over the years, Ken produced Schoolmaster for Top Flite Models just over a year ago, and it was an immediate resounding success. We are very pleased to have been able to negotiate permission to include such a fine design in our Plans Service with the full co-operation of the designer and Top Flite Models.

Schoolmaster is 39 in. span and designed for .8 c.c. glow plug engines. Certainly it can accept larger capacity engines, but the charm of the design is that it will perform at reasonable speed, is very docile to control for the absolute novice and above all, is extremely robust with its all sheet construction. A word of warning here: Be careful to select lightweight soft sheet for the wing construction in order not to build up the weight too much. Normal flying weight, with equipment, should be in the region of 19 oz. In our experience, it is advisable to cover the sheeted wing with tissue to bond the surface. This is a tip we would advise to all who make the model from the kit.

Incidentally, Top Flite Models are now distributed by Messrs. Ripmax, and Schoolmaster retails at 65/-. The kit is really first class production, with all parts die-cut, metal and nylon fittings supplied shaped, with top grade wood for the airframe, and a fine booklet on how to fly radio control models especially written by Ken Willard.

Although we have presented the model with amendments to suit British equipment, notably the new Elmic Compact escapement, we should also point out that the kit plan includes information on how to fit four or six channel multi control using small servos, or alternatively, proportional rudder. The versatility of Schoolmaster will make it a standard recommendation for many years to come, and we look forward to seeing a lot of them on the local fields in the coming season.

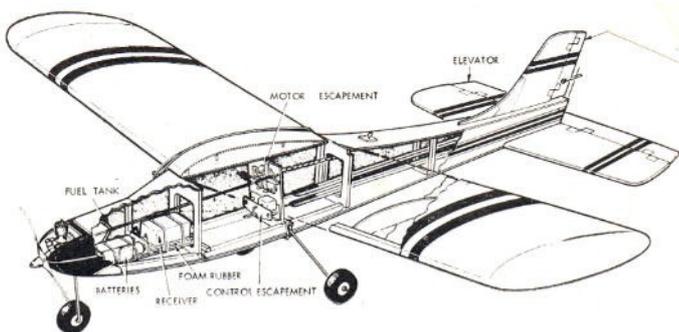


Commence construction by cutting fuselage sides. from 1/16 x 4 in. wide med. hard sheet and cementing 3/16 in. sq. uprights and 1/4 x 3/8 in. bearers in position. Note that the starboard front 3/16 in. sq. upright is staggered back to allow for the offset on F.1. Cement -3/16 in. sheet braces between F1, F2 and F3 also 3/16 in. sheet cheeks. Cement the fuselage sides together with F2 and F3 in place. Put plywood escapement former in position but do not cement in. Drill 3/32 in. dia. holes in F1 for 'J' bolts to hold nose wheel leg. Cement former F1 and 3/16 in. sq. cross struts into place using rubber bands around nose and tail end of fuselage to hold steady. Bind wires to torque rods and slide into fuselage. Mount and wire escapements, then secure former in place. Add top and bottom r in. fuselage sheeting and 1/16 in. dia. dowel rods. Leave the 1/16 in. top sheeting behind F1 to fit tank and nose gear later. Make up winding hook for top escapement from 18 s.w.g. wire and -1/16 in. sheet.

Cement fin together from 3/32 in. sheet, noting the grain directions. Cut tailplane tips from 1/8 in. sheet and pin to a flat surface with 1/8 in. sq. leading and trailing edge. Cement 1/8 x 1/16 in. ribs in. When dry, cover with 3/32 in. sheet on top surface, remove from board and sheet under surface. Cement cloth hinges to fin and tailplane and then add rudder and elevator.

Cement fin to fuselage, and pin, do not cement, the tailplane to fuselage. Bolt both rudder and elevator yokes into place, bend torque rod ends to shape, put 3/16 in. rubber loop on to rear winding hook, and thread rubber through fuselage to escapement. Mount the receiver 1/16 in. plywood tray and secure to fuselage by sliding it through wing opening and screwing down to hardwood cross strut. Place fuselage to one side and commence wing construction.

Cement three sheets of 1/16 in. x 3 in. sheet edge to edge on a flat table to form the underside wing sheeting. When dry, add leading edge, tapered insert trailing edge, and wing ribs. Take care to get the right dihedral angle on the two centre 1/8 in. sheet wing ribs. Join wing halves together with the 1/8 in. sheet dihedral keepers and cover top surface with 1/16 in. sheet, again by cementing the three sheets together first and then forming over the wing with rubber bands to hold it in place. A slower setting P.V.A. glue is best for this sort of covering. When dry, smear cement over join line, add block tips and cement some tape over the



wing joint. Set wing aside and screw 1/16 in. plywood motor mount on to bearers in fuselage and fit 16 s.w.g. throttle push rod.

Hold wing on fuselage with rubber bands and check the tailplane/fin alignment by looking down the fuselage from the nose end. When you are satisfied that all is square, cement the tailplane permanently to the fuselage. Sand the whole model to a smooth finish and add wheels, tank, and engine. Apply one coat of sanding sealer, rub down and then cover with lightweight tissue. Finish with three more coats of clear dope, and the colours of your choice.

Events

This coming Sunday 3 October Cocklebarrow (RC Vintage)

Sunday 10 October Middle Wallop (Free flight only)

Sunday 17 October a whole day of control line flying with a BBQ and WC for ladies only use. Wimborne MAC, flying site at Cashmoor, which is on the A354 between Salisbury and Blandford Forum Nr Gussage St Andrew. Find a pub called Inn on the Chase at Cashmoor and flying site entrance is approx 400 metres to the East (heading towards Salisbury) on the South Side of the road, there is a what looks like a lay by with traffic speed sign. Go through gate and up track.

Google Earth N 50° 55' 27.25" W 2° 01' 50.11"

More details from James Parry 01202625825 etc etc.



There has been a great deal of interest in OSMAF Ballerina kits therefore pricing details have been sent to me by Derek Foxwell. There is mention of the Coquette, I would warn that Coquette is a builders model with lots of parts etc. Also due to date mix ups OSMAF will not be at Cocklebarrow this Sunday. JP.

Ballerina/Coquette

"The Ballerina price is £34.50. They are available from stock and there is an extra £4 post and packing charge.

We also have in stock electric motor packs. These motor packs are suitable for the Tomboy 36 and the Ballerina and contain 1000KV motor, prop driver and prop, again available from stock at £19.95 plus £1.50 post and packing. 02086471033.

The Coquette is £40.50 plus £4.00 post and pack".

Finally

I have been contacted by a reader who has strong views on RC Vintage models and would like comments on starting a "National" club dedicated to this type of model outside of SAM1066 and 35. If you have feelings on the matter please email me (James Parry JamesIParry@talktalk.net) and I will forward on. I have deliberately not mentioned any names but no doubt some will guess and it may be that depending on comments an expansion of ideas and aims will be included in S&T soon? I'd add that I have no leanings either way as I already have too much to take up my week and go to work!

THE END