



## Sticks and Tissue No 98 – January 2015

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](mailto:JamesIParry@talktalk.net) The content does not follow any logical order or set out, it's "as I put it in and receive".

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.



*David Acton launching his Lola*

## Lysander From Ted Horne (Raynes Park MAC)

I did build a free flight version !!!

Back in 1987 I built a Lysander from the Howard Boys plan. As I recall the plan looks almost identical to Aeromodeller Staff version. The plan I built from had the 2 wings on the plan at right angles to one another. During the printing process the paper stretched, and one wing is 1/2 " longer than the other, my plan had slats on the leading edge. You can see from the photographs that it did actually fly, and received a commendation from Geoff. Clarke at an Old Warden Scale Day (1987?).

I am also adding Alan Jupp's Auto Gyro and Javahawk.



*Alan at Epsom Downs*





*Ted's Lysander at Epsom Downs*





*Lysander at the old Croydon Airport*





*Derry holding onto the Lysander*



*Javahawk at Epsom Downs*





It doesn't seem possible, but this PAW 149 RC TBR is more than 25 years old!

I hadn't run the engine for around 10 years, so I used it to shoot a video of « sorting out an engine that's completely gummed up », in unfavourable conditions.

The video is an attempt to show the complete process of resolving a difficult engine starting situation. The engine is locked solid with congealed fuel residue, and the mid-winter temperature is only 1 or 2°C. It took around 3mn 30sec to get the engine running properly, which I thought was reasonable, plus another minute or two to achieve a first flick starting situation... Not bad in mid winter.

Hopefully some « diesel beginners » may see the video on youtube. I cringe when I see people using electric starters on diesels, or whacking engines with a stick... Oh dear!

Long-time diesel lovers will probably get a smile out of it... Good!

Finally, I've put French sub-titles on the actual engine running part, so you'll get a free language course as well!

The video is here: <http://youtu.be/S4c9JqfufUE>

## From Peter Zeigler in Switzerland

I received this email from Peter Ziegler following a request for mor einformation regarding his model. The Model on this picture is the “Banana Fritter”. He is built 1 ½ greater as the original plan. Powered by rubber and controlled by RC (Ruder and Elevator). Built is this model from my Friend Alfred Genthner.





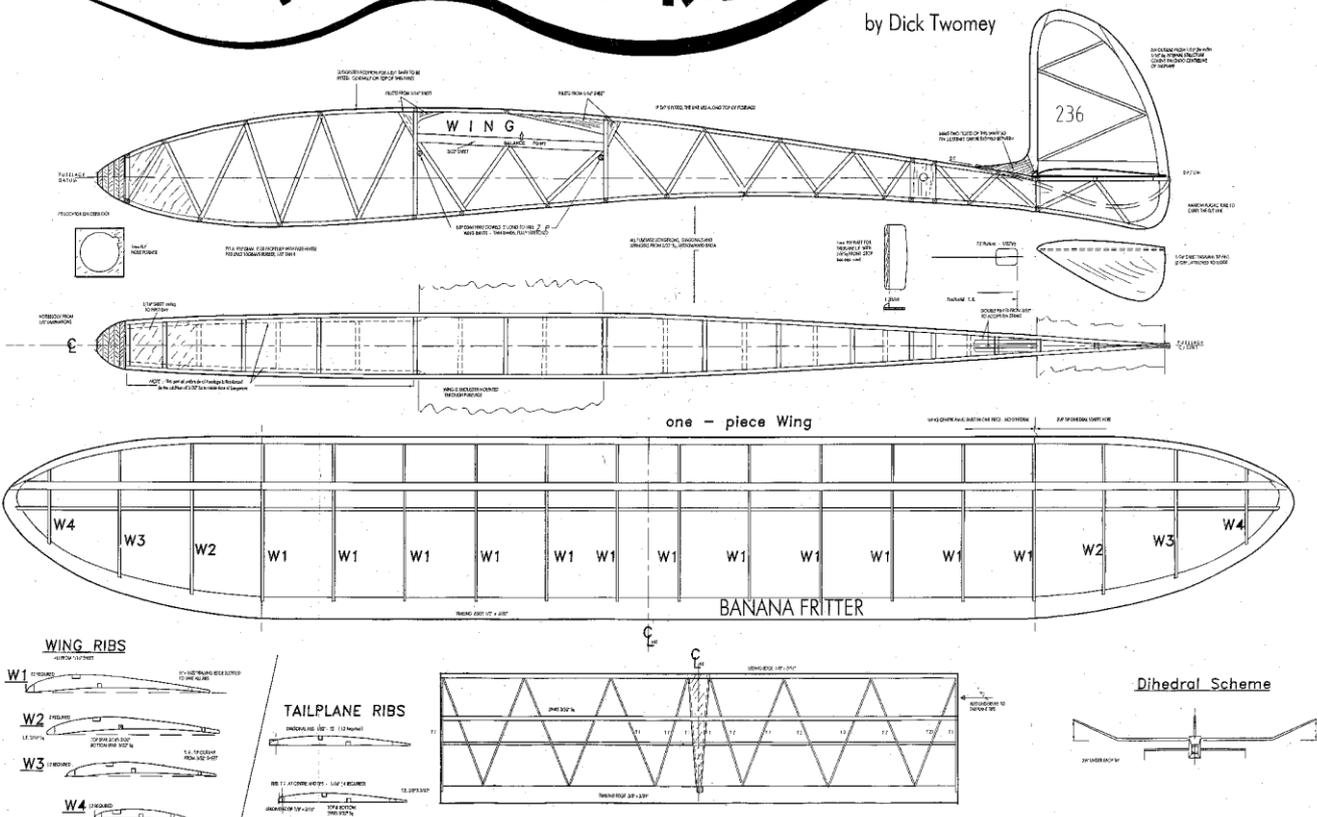


# THE BANANA FRITTER

by Dick Twomey

Model Activity Press - 3 High St. CHESHAM  
Buckinghamshire HP5 1BG

ORIGINAL DESIGN: NICK FLOMMY, FLYING CLUB AND BANANA TEAM  
SECTION CUTS: 1952  
THE YEAR 2002 VERSION WAS MODIFIED TO SUIT F30 SPECIFICATION

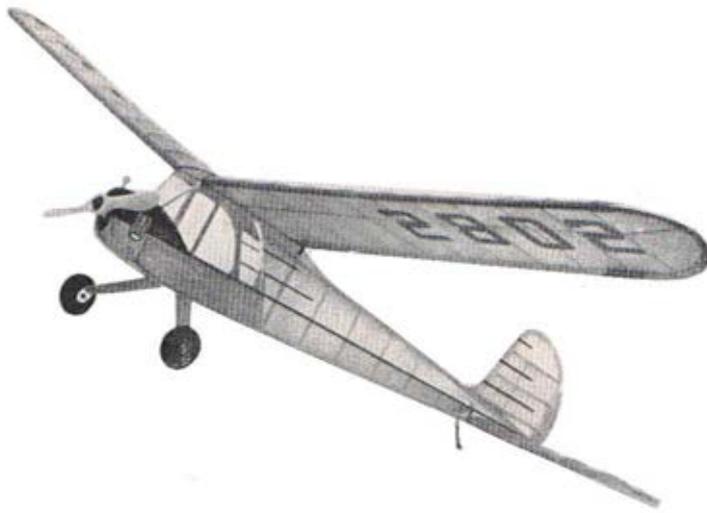


Also from Peter  
*I start my Model Nieuport 23C-1*









The heading photo not only shows off to advantage the pleasing lines of this attractive little model, but also bears witness to its flying ability, for the model was by no means "unaired" when the picture was taken. A Frog 50 and an E.D. Bee (with radial mounting adaptor plate) powered the original models, but any 0.5 to 1 c.c. motor can be used, while the new Frog 80 is ideal.

Note that the longerons are of 3/16in. sq., whereas the spacers are only 1/8in. sq. fitted flush with the inside of the fuselage, so that there is a 1/16in. gap between them and the tissue covering. This space is occupied at the nose and tail by the 1/16 in. sheeting which is

therefore flush with the outside of longerons. Build the starboard side first, face down on the plan, fitting the 1/16 in. sheeting before the spacers. Next build the port side face upwards on top of the starboard, this time putting in the spacers before the 1/16 in. sheet.

Cut out the fuselage formers, bend the 20 G. wire tail skid and attach to F4, then assemble the two sides with F1 and F2 and check for squareness. Complete the structure in the vicinity of the cabin, if necessary damping the sheeting over the nose to assist bending. Join the rear end of the fuselage, then fit F4 and the remaining spacers.

Add the 1/16 x 1/8 in. stringers, tapering the ends to fit, and the 3/32 in. dia. dowels at the tail and wing trailing edge. The dowel at the wing leading edge should be fitted later, after the windscreen is in position. The cowling is carved from block and hollowed to suit the engine used, allowing sufficient space below the engine to accommodate the coil of fuel tubing used as a tank.

The duralumin undercarriage is much better than the wire type, and no more difficult to make, but take care that the bends are "true." Each wheel is attached by a 6 B.A. steel bolt, held firmly by a nut on each side of the leg. Be sure that the wheels rotate freely. Attach the completed undercarriage with woodscrews.

The fin outline and rudder should be constructed and cemented, complete with the mainspar, exactly on the fuselage centre line, afterwards adding the 1/16 x 1/8 in. ribs, bent to shape as shown in the plan view.

Cut Out the 3/16 - in. sheet tips, assemble on the plan, then put aside until required. Join the mainspars at the centre; note how the double thicknesses fit together and are reinforced with 1/16 in. plywood.

Cut out all the ribs and build the wings one at a time by pinning down the mainspar, cementing the ribs in position, then the leading and trailing edges. Attach the tips at the angle shown, then trim the mainspar to shape between the last rib and the tip.

When completing the centre Section take care to avoid warps. Prop up the tips so that they are both at the same height (2 3/4in. at the last rib), while the root ribs are flat on the plan. Check that neither wing is twisted. Fit the centre section leading and trailing edges and 1/16 in. sheet gussets. When the cement is dry, spread more around the joints for extra strength.

Sand the leading and trailing edges to the correct aerofoil shape and round off the tips. Cut out all the sheet parts, then assemble the whole outline flat on the plan. Add the main spar, ribs and 1/16 in. gussets.

Sand the leading and trailing edges to the correct airfoil shape and round off the tips. Sand smooth the whole structure before covering. Lightweight Modelspan can be used for the entire model but, if desired, heavy grade on the fuselage will improve strength. At least four coats of thin clear dope should be applied overall, plus one or two extra coats round the nose.

The original model was coloured yellow with black trim.

The thin celluloid cabin windows should be fitted after covering but before dopping. Determine the windscreen shape by making a paper pattern by the cut-and-try method. After the engine and fuel tube are in place, the cowling is attached by three spots of cement. I used this method for simplicity and found that the cowl could be snapped off and re-attached any number of times without trouble.

Start with the c.g. at about 50 percent wing chord and by small adjustments to wing incidence or balance (using modelling clay) trim for a smooth steady glide with little or no turn. For the first powered flight keep the revs low, increasing power gradually on successive flights. Turns to the right or to the left are possible but try to arrange side-thrust and rudder settings so that the turn on the glide is either reduced or reversed by the application of power. I tried a floating tab on the wing tip but soon discarded it as an unnecessary eyesore.

This model is stable but it should be noted that the rudder is in the slipstream and consequently is very effective under power, so for a quiet life make all adjustments small.

### **DMFG 36 “glider event**

The 36” glider competition has begun to catch on here in Dorset, being run by John Bainbridge there’s about 12 who have or are building models and practising has begun. We’re not exactly to the Peterborough rules but that may happen when we get models sorted out and practice in. Chris Hague has been giving it his all and sent in a few photos taken a couple of weeks ago.



*Chris's bare bones Merlin*





*John Taylor's Doofah*



*The following photos were taken on Monday at, DMFG (Dorset Model Flying Group) site*



*David Ralph and Mercury Gnome*



*Brian Beacham and Dizzy with temporary weight*



*David's Gnome has an auto rudder*



*Brian with Dizzy and Chris with his Merlin*





**From David Acton, White Plains, New York, U.S.A.**

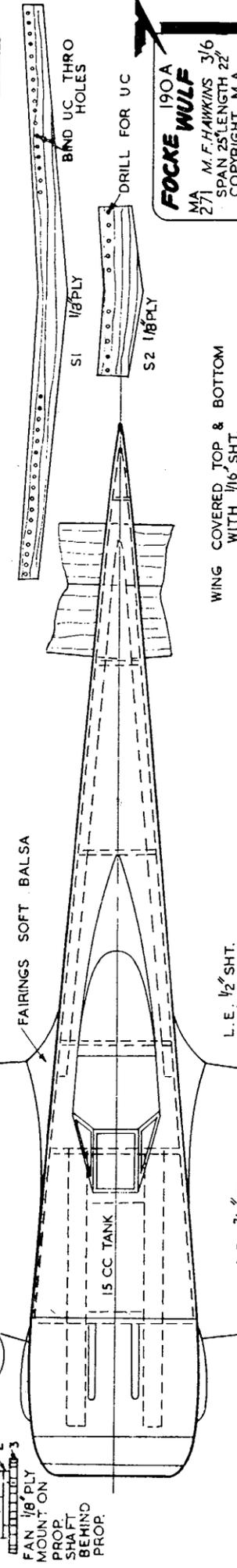
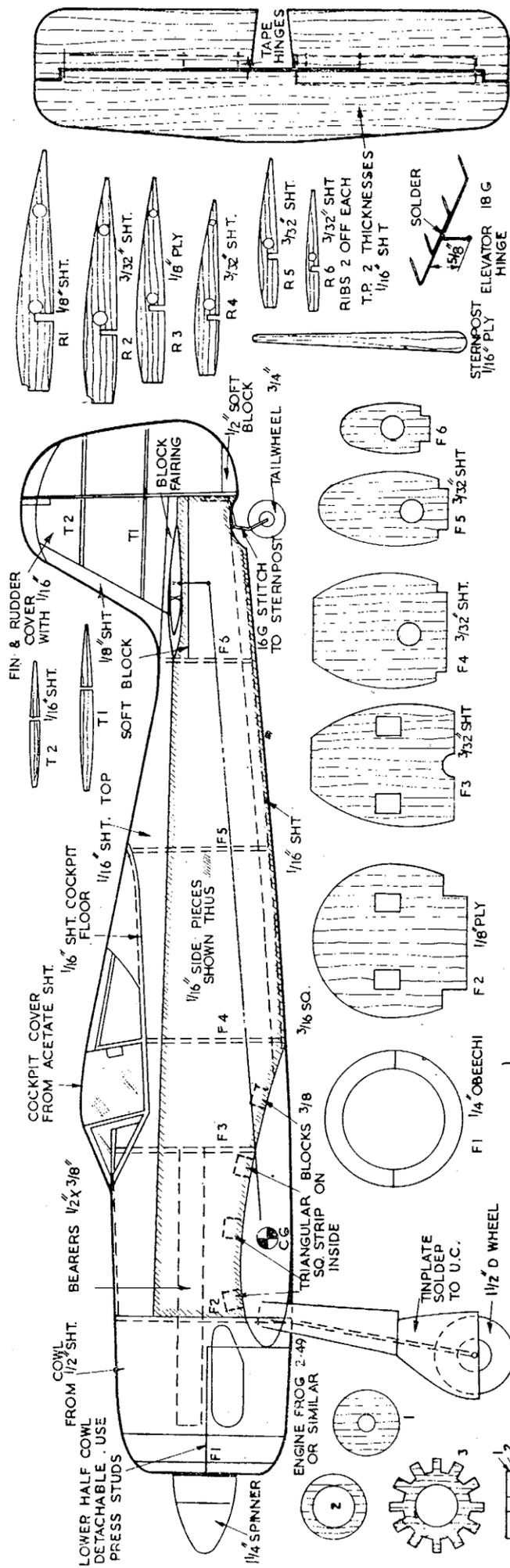
Here is my Lola powered Lola at the 60th King Orange International contest in Palm Bay, Florida, December 29 - 31. The engine will soon be available. It flies like it is on rails with only a bit of right rudder for trim. Dave Platt calls it a "up down". Great fun!



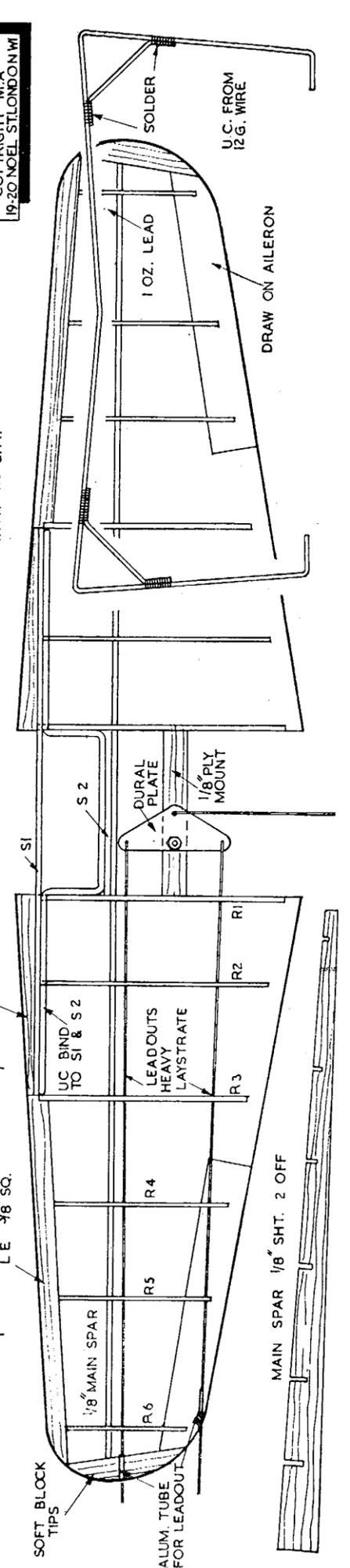


*Dave Platt and Lola*

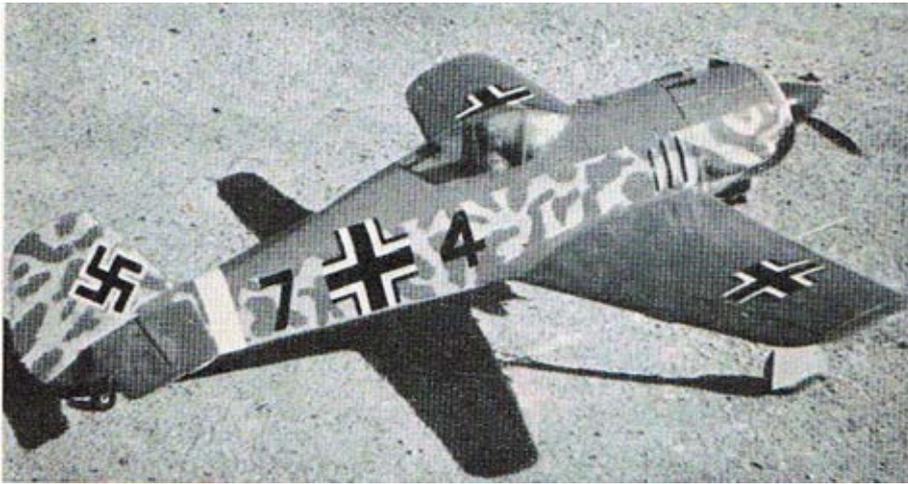




**FOCKE WULF 190A**  
 MA 271  
 M.F. HAWKINS  $3/16$ "  
 SPAN 25" LENGTH 22"  
 COPYRIGHT M.A.  
 1920 NOEL ST. LONDON, WI



## 25" span control line FW 190A by M F Hawkins from Model Aircraft January 1958



When the First All Speed Team in California started this Team Racing business, the rules stated that the models should be "scale or semi-scale" in appearance. I have never seen a scale model flown in competition racing and the reason for this is twofold. Firstly, some of the rules—that specifying a totally enclosed cylinder head is a good example—make it very difficult for an accurate scale model to conform to the specification. Secondly, to obtain the maximum speed and laps

the model must be designed right down to the limits of the specification. Over the years one layout has proved to be the most consistently successful, therefore, all team racers now look alike—well almost!

Scale models can never compete on even terms with the highly developed present-day team racer, but what a wonderful sight it would be to see Hurricanes, Spitfires, FW 190s, Thunderbolts and, perhaps, even Bristol Monoplane Scouts and Miles Libellulas racing each other. Most World War 11 fighters would work out at about the right size if built to a scale of 3/4in. to 1 ft., while of kit designs the Mercury Spitfire and Mustang would be very suitable.

I would like to suggest the following rules for scale team racing. They are framed so as to give a wide choice of suitable prototypes and I do not think that any one design would predominate, while the spectacle would be worth the extra work involved in building the models.

1. Minimum wing area 100 sq. in.
2. Undercarriage must be fixed, or retracting-detracting with scale type wheels. Some departure from scale will be allowed to enable safe landings and prop clearance.
3. Cockpit must contain a pilot of a scale appropriate to the model.
4. Cylinder head need not be completely cowled but should be as unobtrusive as possible, preferably inverted or side mounted.
5. Rules for racing, i.e., tank size, engine size, line length and number of laps, etc., as for S.M.A.E. Class A team racing.
6. The model judged in each heat to be best finished and nearest to scale (25 points for finish and 75 for scale and detail—this means that not too much notice will be taken of the inevitable wear and tear of a team racer), shall have four laps less to fly in that heat.

To test the practicability of these rules I have built and flown models that conform to them. A Douglas Destroyer is shown in the photo overleaf, while my Focke Wulf 190A4, as can be seen from the photographs, is an accurate and attractive model. It has even won a team race, but we are not yet very expert in Nicosia.

If by now you are sold on this scale team racing idea, you will be looking round for a suitable design, so what could be better than the FW 190A4, plans and building instructions for which appear herewith.

### Building Instructions

Start with the wing. Prick Out the outline of the half wing on to 1/16in. sheet balsa, butt jointed to make up the necessary width. Cut four of these. Assemble the ribs, mainspar, outer leading edge and plywood front spar S1 on to the two under surfaces, building in 1 1/4 in. dihedral under each tip. Instal the control system and push rod, also the 1 oz. outboard wingtip weight.

Bend the undercarriage to shape to fit the wing and solder on the bracing rods to each leg. Sew it to the mainspar brace and glue this firmly to the mainspar, then sew the undercarriage to S1. Add the innerleading edge from soft 1/2 in. balsa and finally add the upper wing surfaces.

Fuselage

Assemble the plywood formers F2 and F3 with the engine bearers and tank. Add the fuselage sides (shown dotted on the plan) from 1/16 in. sheet and use plenty of 1/2 in. block gussets to brace this structure to the wing. Add the other formers and firmly glue some scrap block under the tailplane site. Build the stabiliser with the tape hinge and control frame sandwiched between the 1/16in.halves, and cement in place. Sheet in the rest of the fuselage with 1/16 in. balsa and then construct the fin and rudder with 1/16 - in. sheet over the 1/8in. leading edge and tip, with ribs T1 and T2 cemented to the sternpost.

Add cockpit detail as required and a pilot to the appropriate scale. The canopy can be moulded or folded, though this latter is not so good, from acetate sheet. The cowling is made up from 1/2 in. sheet with a front ring cut from 1/4 in. obechi. The detachable lower half ends level with the wing leading edge, and the blisters which are attached to it overlap the fixed part.

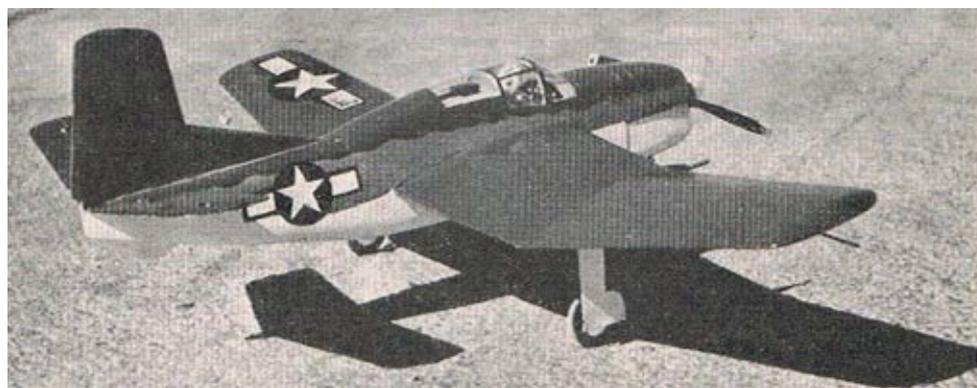
The cowling on the original was attached by two press studs on each side, sewn to small pieces of ply and let into the opposing surfaces.

#### Finishing

Give the entire model two thick coats of talc and clear dope mixed, then cover all over with lightweight tissue doped on. Mark the control surfaces by cutting a shallow V with a sharp knife and indicate their ribs with thin strips of paper stuck in position, then add bomb rack, guns, trim tabs, oil cooler gills, and any other details you can dig up. The fan is made from 1/8 in. ply and mounted on the prop shaft behind the propeller and the model should balance on the front spar. Ballast in the nose may be necessary with a light motor.

The performance is not startling by normal team race standards— 29 laps at 60 m.p.h. with a Frog 249 B.B., but the model flies steadily and will do a genuine three-point landing with no fear of nosing over.

Whether you fly this model for sport or racing you will find it well worth the building time.



Another model built by Michael Hawkins to his scale team race formula. This is the little-known Douglas XBTD-1 Destroyer, forerunner of the Skyraider. Only one of the full size machines was built and its CL counterpart certainly makes an unusual model

## From Geoff Goldsmith

This may be useful for S&T, it is a Cavu, built for free flight by the late Mick Smith but never flown. The model was in the care of Dennis Bryant for many years, who passed it to me, I recovered it and modified it for 3 channel R/C and electric, the span is 44 inches and weight 1lb 14oz WITH the 3 cell lipo. It should be easier to launch than my other Mick Smith model I have, the Mercury as I am sure you will be most thankful.

I will send a few more pictures and you can choose the best.

I am told the name comes from the full size world, I am sure others will put me right if this is not true.

CAVU = ceiling and visibility unlimited.



## From Spike Spencer of Salisbury Club

### MAIDEN FLIGHT OF JOHN MELLOR'S MARS

In Issue 96 of S&T, I posted initial details of the MARS project undertaken by John Mellor and me during 2014. It is now time for an update following the maiden flight of the electric version.

My IC version is almost complete but probably now will not fly until early in 2015. It sports a Vintage MERCO .61 twin plug Glow engine but, for a direct comparison with a modern power installation, John's electric setup uses an outrunner approaching the 700Watt level with a 3600 4S Lipo and 70 amp speed controller. Both our models are turning out at a little over 4lb weight, ready to fly. At those weights and power levels, neither is going to be a slouch, so the comparison will be interesting. John's electric version later tipped the scales at a flying weight of 4.5 lbs. and was prepared for a Maiden flight during a narrow weather window on 27th November.

The forecast for the day chosen for first flight promised to be relatively dry and with light winds, so John,



David Lovegrove and I arranged to meet at a site near Benson. As it turned out, that morning was rather discouraging with complete cover of very low cloud, some mist and only the promise of a clearance later. However, we continued as planned and by 10:00 the cloud was starting to break up and blue patches were spotted over RAF Benson, a few miles upwind. Although the grass was still very wet, conditions were almost perfect for a first flight and John was politely informed that he had run out of excuses ! John's MARS had been assembled and was being range tested as I arrived at the site. An initial taxi trial on the short grass showed a spirited acceleration. It was brought back to the downwind end and lined up for the Maiden takeoff. It rushed across the surface at increasing speed but would not lift off before the longer grass at the end

became uncomfortably close so that takeoff was aborted and she was lined up again. On the second attempt with more vigorous use of throttle, liftoff was achieved in a sensible distance. Rate of climb was impressive with the chosen power and, after gently exploring the flight envelope, the handling characteristics were most acceptable and we all had a stir of the sticks while the battery lasted.

After about five minutes, John decided that it would be wise to terminate the flight to check the battery state. He brought her onto Finals and the subsequent landing was a complete non-event with the trike undercarriage producing a 'glued to the surface' effect as soon as the Main wheels touched. When later analysed, the LiPo had only used about 30% of the available energy, so routine flights of about 10 minutes are expected.





As all three of us had been involved in some way with this development, a hearty round of back-slapping and hand shaking ensued as we pondered the success of this first flight. There are several tweaks that John will pursue and I will incorporate into my own version but we all went our various ways deeply contented, having probably had the 'Last Hurrah' of the 2014 outdoor season. More details and comparative performance comments in a future issue. We plan to have a formation 'mixed-power' flypast at a future Cocklebarrow Farm meeting.

Mike Spencer & John Mellor

## **Black Arrow & plans & many plan mistakes From Karl Gies**

Back in the mid 60's I taught junior high science at Rancho Milpitas Jr. High in Milpitas CA. The movie *The Long Flight*, the only drama ever made about rubber powered ff to my knowledge, had just been released by Herb Franck. I was on the AMA National Junior Committee (I don't exactly what they called it but John Pond had me appointed because of my model airplane club at the jr. high) and there was a press release about it. Almost immediately I contacted Herb Franck and rented it & the only format Herb ever rented it was in 16mm.) The '39 Korda Wake sort of stole the movie with an in flight bit that Herb shot from an airplane. I resolved that this model had to be built. Fast forward about three years and I am now teaching fifth grade math & science in Butte, Montana at the Hillcrest School and showed the movie again to the kids in math/science class. This motivated me to start building the '39 Korda Wake. My main mentor in building and flying model airplanes in California and my life was a guy named Jack Brown. who took me under his wing Jack had been on the U. S. Wake team twice and we were in "900" club together. I called Jack talking to him about building this model. Jack asked me, "have you built the wing yet?" (red flag time) I was somewhere in the wing building process. Jack then asked if I was building it from a copy of the original Megow plan and the answer was yes. This was the Megow plan that came w/the model in their kit and my plan verified this. Jack then told me, measure the wings because one wing is longer than the other on this plan. And Jack was correct as they did not measure out the same. I asked Jack if this was done on purpose and he said absolutely not. Jack grew up in Cleveland and was a teen in the same club as Korda, Lanzo & others. I then built the wing so that the halves were both the same length. That was a good learning lesson for me as I always measure stuff on the plans and plans have many mistakes on them. The Scientific 35 Cent series of Super Flyers has many errors in the wings in that one half is a different length than the other half. You can watch the movie *The Long Flight* - 30 minutes long, on Youtube as it is on there in four segments. I had Herb make me a VHS copy of the movie - it cost me fifty bucks. It was a copy of poor quality but Herb had sold all of his equipment and made it by using a camcorder to film it as it played on his screen ala 16mm. Later on when I had more money I called Herb to get a better copy and his wife, Libby, answered the phone and told me that Herb had died. I contacted SAM and proposed that we get the rights to the movie and I think it was Mike Myers who called me and said go for it. Libby said she would just donate the movie to SAM as that would have been Herb's wishes. BTW, Herb was always disappointed that the movie never caught on or was rented much. I paid Libby to send me all of the 16mm reels she had and sent them to Al Heinrich who passed them on to I think John Morrill to see if he could make a better copy but he said they were in very poor shape and that it would be very expensive to restore them. But at least I had the VHS tape and Mike Myers drew up the papers and Libby Franck donated the movie rights to SAM. Later on I sent the VHS tape that Herb had sold to me to a friend in Oregon who then transferred it to the new format of DVD. If you have not watched the movie go to Youtube goto:

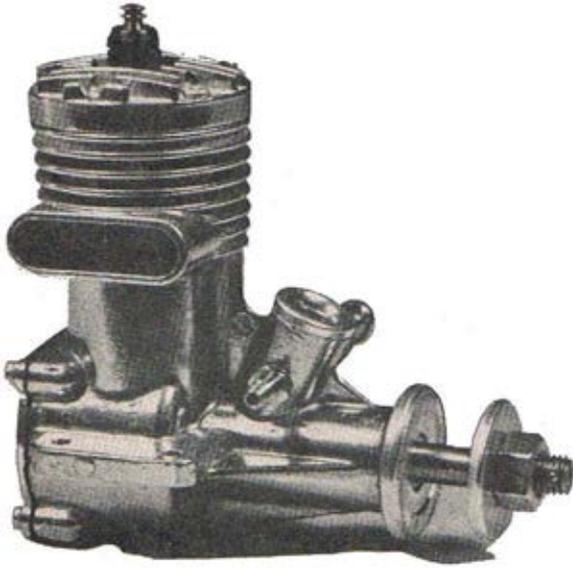
<https://www.youtube.com/watch?v=Nk4cO0OICgU> On the sidebar of the screen playing the movie you will see pts. 2, 3, and 4. I know that I have given away or sold this movie in VHS and then DVD over three

or four hundred times. After SAM got the rights I sold it for them in DVD format only. I have watched it at least seventy or more times. My wife describes me as a fairly obsessive person but she liked the movie but does have not much interest in model airplanes except that it keeps me out of the bars. cheers, cccnh

### **From Jim Woodside**

Your correspondent 'BC' displayed a shot on his Atom running on glow. I have attached three pictures of my John Maddaford made version of his iconic engine. Originally, it had the cast-in carb and was flown in free flight in a 72" Long Cabin. Lacking a convenient field large enough for this combo after the closure of RAF Sealand, I asked John if he would fit a RC carb. It now has an OS 2A and throttles very well. In this format, the engine powered an ancient Junior 60 for a couple of seasons until the model was retired – victim of terminal oil soaking after ten years solid RC flying!





## Veco 35 Series 100

A brief external examination of the Series 100 VECO 35, is sufficient to show that this motor should offer above-average resistance to crash damage. The main casting, comprising crankcase, main bearing and cylinder barrel in a single unit weighing just over 2 1/2 oz., is very strong and rigid, with good, substantial mounting lugs and a heavily webbed nose section. The crankshaft is fitted with a steel prop driver, and end float is held to a minimum, thus avoiding any possibility of damage to the backplate by the shaft being knocked back. The Series 100 Veco has been designed primarily for CL stunt and combat work, where such robustness is especially welcome, and also with the requirements of the multi-channel radio-controlled model in mind.

The general layout and structural design of the engine follows that of the Veco 19 engine, which was the first Series 100 type Veco and which earned a very favourable report in the February 1957, Engine Test article. Features of the design include a sintered iron cylinder

sleeve, lightweight piston with relieved skirt and floating bush type big-end bearing. Two structural changes evident in the larger engines, are the use of a bronze (in place of sintered iron) main bearing material and a taper friction drive to the prop washer instead of the latter being keyed onto a flat on the shaft.

The engine is, of course, of the shaft induction type. Gas is admitted via a fairly large diameter (5/16-in.) gas passage from a rectangular valve port just under 13/32 in. long and occupying 3/8 in. of the shaft circumference. The intake aperture from the carburettor is 11/32 in. dia. and the carburettor is fitted with a detachable venturi insert reducing the choke diameter to 17/64 in. for increased fuel Suction.

Induction timing is on the generous side, the valve opening at 35 deg. after b.d.c. and closing 55 deg. after t.d.c. a period of some 200 deg. of crank angle.

The crankshaft has a 1 11/32-in. long journal of 7/16 in. nominal diameter. It is machined in one piece and, like the majority of American engines of this type, receives no hardening or after-treatment. It has the usual machined-in crescent counterweight which balances all rotating mass including approximately half the connecting-rod weight. The crankpin is of 7/32 in. diameter and coupling to the rod is via a 9/32-in. o.d. dural floating bush. This latter is made necessary by the one-piece design of the body of the engine: after removing the cylinder liner, extraction of the big-end bush allows sufficient angular movement of the connecting-rod to allow it to be lifted clear of the crankpin, and the entire piston and rod assembly is then withdrawn through the top of the cylinder barrel. The piston is of lightweight design, with a straight baffle, filleted at its base. The skirt is relieved 0.001 in. for the lower third of its length to reduce piston drag. The gudgeon pin is of quite modest diameter (5/32 in.) and is fitted with brass end pads. Total weight of the piston and rod assembly is only 0.54 oz. The cylinder sleeve has a wall thickness of 0.058 in. and is a firm press fit in the casting. It is located vertically by a flange at the top. This fits into a channel in the cylinder head, trapping the head gasket which is thus virtually blow-out-proof. The head carries a long reach lo-plug, offset to the exhaust side.

The finish, in general, is good throughout. Castings are tumbled to a pleasing polished finish and externally, the engine is of neat and purposeful appearance.

### Specification

Type: Single-cylinder, air-cooled, loop-scavenged, two-stroke cycle, lo-plug ignition. Shaft type- rotary-valve induction. No sub-piston supplementary air induction. Baffle piston with ignition plug offset to exhaust side.

Swept Volume: 0.3495 cu. in. (5.728 c.c.).

Bore: 0.784 in. Stroke: 0.724 in.

Compression Ratio: 8 : 1.

Stroke/Bore Ratio: 0.923 1.

Weight: 7.4 ozs.

## General Structural Data

Pressure diecast aluminium-alloy one-piece crankcase/cylinder/main bearing unit, with bronze main bearing bush. One-piece alloy steel counterbalanced crankshaft, unhardened, with steel drive disc and prop washer. Sintered iron cylinder sleeve closely fitted to cylinder barrel, flanged at top and retained by diecast alloy cylinder head, attached with six Phillips head screws. Meehanite lightweight lapped piston with fully floating gudgeon pin. Aluminium alloy connecting rod with floating big-end bush. Pressure diecast aluminium alloy backplate attached with four Phillips head screws. Reversible spraybar type needle valve assembly. Detachable venturi insert fitted as standard: beam mounting lugs.

## Test Engine Data

Running time prior to test: 3 hours. Fuel used for running-in: 70 per cent. I.C.I. Blending Methanol and 30 per cent. Castrol "M." For dynamometer test: 10 per cent. B.D.H. Nitromethane, 65 per cent. I.C.I. Blending Methanol, 25 percent. Castrol "M."

Ignition plug used: Anderson Veco 7/32-in, reach as fitted.

Venturi insert retained for all tests.

## Performance

The Veco 35 is supplied with a helpful instruction leaflet. This, however, tends to give the impression that the engine is supplied ready run-in, whereas, of three engines tried, two required quite a lengthy running-in process. This consisted of approximately two hours' rich mixture running, starting with short runs on a straight methanol-castor mixture. We would advise special care here. Using a 10 x 6 prop, the needle valve should be set so that the engine is four-stroking evenly, in order to provide extra lubrication and cooler running. Any attempt to use a "hot" high nitro fuel and weaken the mixture setting for a fast two—cycle, at this stage, will almost certainly result in overheating and an abrupt stoppage or, possibly, preignition followed by a shaft run.

Most engines of this type vary somewhat in the amount of rich-mixture running required and it is impossible to lay down hard and fast rules. We have had, for example, two new 0.29 engines of another make, one of which took 30 per cent. nitro-methane without protest within half an hour. while the other would not tolerate 5 per cent, even after two hours. The moral is clear. Play safe until you are completely satisfied that your engine is ready to take a lean mixture and/or nitrated fuel.

Compared with the Veco 19 (which admittedly is exceptional) the starting and handling characteristics of the 35 were less impressive. The main difference, however, is that the 19 will stand quite an appreciable amount of clueless handling, whereas the 35 responds best to the expert touch, so this is not likely to bother the experienced stunt enthusiast.

Two Veco 35s, were acquired for test and, after running-in, the best of the two was selected for dynamometer test.

As the curves indicate, the 35 produces plenty of power and a maximum output of a trifle under 0.57 b.h.p. at 14,000 r.p.m. was recorded on test. Maximum torque, developed in the 9,000 r.p.m. bracket, was 0.255 lb. ft. equal to a b.m.e.p. of 55lb.sq. in.

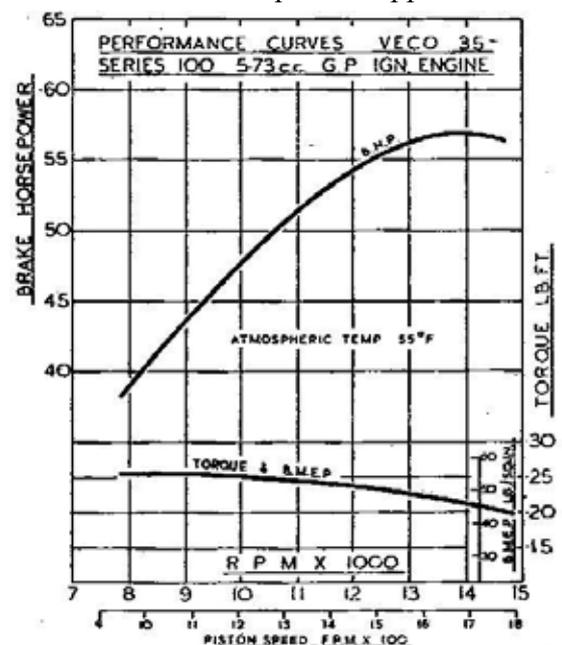
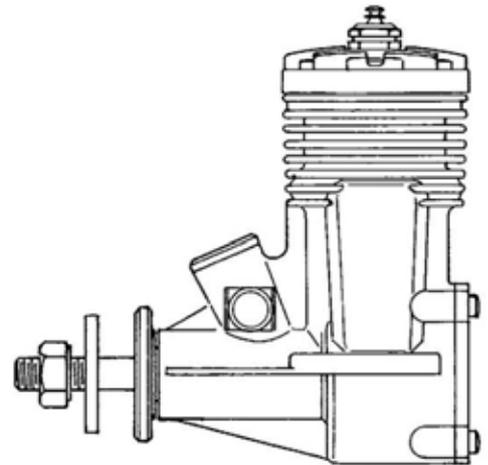
On the popular 10 x 6 size stunt props, 11,500 to 12,000 r.p.m. can be expected.

To sum up, the Series 100 35 is not an engine for beginners, but the fact that Bob Palmer uses one is probably sufficient recommendation to most suint experts.

Power/ Weight Ratio (as tested):

1.23 b.h.p./ lb.

Specific Output (as tested): 100 b.h.p./litre.





The 1939 Ohlsson Gold Seal, shown here, is generally known as the « taper fin » version, with reference to the previous (1938) version, which had a definite « step » in the fin profile.

This was the last engine made by Irwin Ohlsson « on his own », before he teamed up with Harry Rice and the marque became Ohlsson and Rice (O&R), in 1940.

## From Bryan Passey.

Just recently I came across these photographs taken at a fly for fun event at Machrihanish airfield, of an attempt to set up a record ( unofficial ) of the most number of " Novices" ( a Sid King design ) in the air at one time. For those readers of Stick & Tissue who are not familiar with this popular little trainer, it is a two channel design powered by a small diesel, and very simple to construct.

I think we finished up with ten or perhaps 11, a confusion brought about by a biplane sneaking in on the act. A formation loop was achieved under the direction of Steve Rickett flying my aged example on the day. To hear all those little diesels working in unison was a treat to hear. A record of the event can be found on YouTube.

Sid tells me that by popular demand he has updated the model for electric power and added ailerons, but a small diesel can still be fitted. So for those who want to do aerobatics, and have lots of fun with little outlay you might consider the " New Novice", that's not to say that aerobatics were not possible with the original, but attempts were interesting and entertaining in equal measure.



*Machrihanish airfield 2010*





Sent by Vryan written by John Ralph.

I received this mail from John Ralph recently, it is intended for inclusion in "CVA Without Feathers" but as you can see he suggests passing on to you. I passed on a similar article to you for inclusion into S&T just recently, telling us how he got my ( now his ) free flight Walrus to fly with the aid of radio, This article mirrors to some extent the earlier one but with more photos and text, and the fact he flew it off, and landed on water very successfully without damage or leaks ( remembering it's a tissue covered model ) . Perhaps you might have a browse over the article and decide if it has a place in S&T. I thought it rounded off the subject very well.

My kindest regards, and good wishes for the new year.

Bryan.

## TAMING A WALRUS

by

JOHN RALPH

### BACKGROUND.

A year or so ago I met up with an old ex Glevum ( Gloucester ) club member who now resides in the little town of Lochgillphed in Argyll . Bryan Passy is one of the few remaining members of my old club who is still very actively building traditional vintage models of all types from indoor scale to pulse jet powered CL models .

You may recall I mentioned in a previous " Feathers " that Bryan past over to me a FF " WALRUS " , the second he had built from the The Aeromodeller plan of the 1950's. He had had no success with trying to get the first model to fly and this second one appeared to also be a " Do -Do

Bryan was sure that I could succeed in getting the beast airborne so I accepted the challenge on the understanding that I would convert it to electric powered RC. .

THE FULL SIZE AIRCRAFT.

Now the Walrus is a strange old bus and you either like it for being so , or simply dismiss it as an “ ugly beast “ . Surprising then that the man who designed it for Vickers in 1930 -R.J. Mitchell ; only a few years later came up with the Spitfire! The aircraft which entered service with the Royal Navy in 1935 were fairly unique for the time in being the first British squadron aircraft to have a retracting undercarriage and completely enclosed crew accommodation. Folding wings were another innovation and the experience of water spray problems on tractor engines prompted the choice of engine location “ Not many people know that “ ! However ,back to the model.

FREE FLIGHT TO RC CONVERSION .

The model weighed in at just under 2lb so I chose a suitable brush less motor to be matched to a 3SP Li Po of around 1000ma hr. to fly the beast. A couple of 7gm servos and a 2.4 GHz Rx for control added only a little more weight .

The wing loading of around 10ozs/ sq .ft , based on the total wing area , of the 40in span model was nothing to get worried about I felt! Howls of laughter no doubt from FF duration model enthusiasts but maybe not so different from some FF scale models to be seen gyrating around at Middle Wallop or Old Warden.

The model was so well finished that I wanted to minimise any butchery on it so decided to use rudder and all moving tail plane as controls , in much the same arrangement which I used to converted my FF “Kestrel “ (See Feb. 2007 AMI) ..

The operating line for the tailplane passes down the fin and through a nylon bush at the base to the operating servo . Both the latter and the rudder servo were positioned just below the rear gun hatch . The line to the tail is always under tension provided by rubber bands pulling down on the leading edge of the tailplane

halves . The rudder was connected to its servo by closed loop wires.

WAKE UP AT THE BACK!

You are following this lot I hope ? Ron may cut out the detail as the important stuff comes later !! The “out runner “ electric motor , was relatively easy to mount , just needing the engine bearers to be sawn off flush with the pylon mount and the motor screwing on. However , some thought was given as to what the thrust line should be. The most important consideration is the angle that the propeller slipstream meets the tailplane which appears to be about a zero angle on the full size machine. I decided that I would set the thrust line to give a few degrees of down wash on the tail to help compensate for unavoidable down pitching due to the high mounted motor.

The battery box was positioned down in the fuselage just forward of the pylon . A access hatch was provided for the battery and the BEC/ motor speed control which fed the system. The motor speed controller ( SC ) must be cooled which requires a bit of thought if models are going to be flown off /on water and I was optimistic enough to plan for such! So I sealed the SC. Into the side of the fuse . The same optimism made me fit the access hatch with a rubber seal and small magnets to hold it down.

The system check out once all was complete showed the motor was turning a 3 blade 8x6 prop at about 9000 rpm clearly giving more than adequate thrust to get the beast aloft!

READY TO FLY. WITH CG AS SHOWN ON THE PLAN .

Now for the more interesting ( I hope ) and important lessons for anyone tempted to build a WALRUS from the Aeromodeller plan or any other plan for that matter.

The CG was clearly shown on the plan and it only required a bit of nose ballast to achieve it. I should have known better at my age than to accept the position shown blindly !! But I did!

So I was now ready for the first trial flight. This would be made over land even though past problems with another scale water plane had shown that water is a lot softer than the ground!! I thus fitted the u/c to the model ready for the off.

I must say that I had enjoyed converting the model and had started to like its unique look so I made sure I had a few photos for the record .

WEATHER OK SO NO EXCUSSES.

A suitable day with a light easterly wind was chosen for the maiden flight from short grass at Stithians Reservoir . Under full power the model lept into the air but I cut the power quickly and landed as it was

clearly under elevated. A few degrees of up were added to the tail and a second take off attempted after I had taken another tranquilliser! This time the model although needing full power to get airborne did start climbing, flying at about ten times scale speed however!! At about seventy feet and on the down wind leg coming back towards me I reduced the power.

#### UNSHEDULED AEROBATICS.

The next few seconds taught me that even RC control can't deal with a grossly incorrectly balanced model! As soon as the power was cut the nose reared up and the model snapped into a spin followed by several others in opposite directions. The gyrations were too fast for me to correct and the model plunged down thankfully into a patch of scrub grass. The only damage was to the fin which proved the effectiveness of the flexible wing mounting system.

"Best hang it up in your workshop" was the advise from one of the onlookers but kinder advise was to have a check on the CG position in particular as that seemed to be the likely trouble.

#### BACK TO THE DRAWING BOARD. ( You may skip this part ! )

The first thing to do when estimating where to set the CG on any model that you do not have your own or others sound experience of is to do a calculation to find the so called "Neutral point" ( NP ) for the aircraft. This is the point where the respective forces acting on the wing and tailplane balance out in steady flight. The CG must be set INFRONT of this point for stable flight to be resumed after any disturbance.

Historic early experience showed that lifting surfaces have their "Aerodynamic centre", or the point at which the lift force acts, close to their quarter chord points. This fact can thus be used to approximately calculate the NP. from :-

$A_w \times a = A_t \times b$  where  $a + b = L$  the distance between the tail and wing quarter chord points and  $A_w$  and  $A_t$  are their respective areas.

It then follows that the NP is located at  $C + a$  from the leading edge of the wing at the location of the "EFFECTIVE" quarter chord. The wings on the Walrus are not staggard and of constant chord but are swept. So again, as an approximation, the effective quarter chord location was taken at mid span.

#### IS THE CG SHOWN WRONG THEN?

The answer is "YES" and dangerously so. The position shown is BEHIND the effective NP. The latter was calculated as 1.8 in. from the LE. at midspan. The shown CG is a further 0.5 in BEHIND this estimated NP or at 38% of the chord at midspan.

There are two things causing the forward NP on the WALRUS :- The small tailplane ( 13%) and the short moment arm ( 2.3 C ). For those familiar with tailplane "Volume Coefficients" (  $V_c$  ) the Walrus has a value of about 0.3 and since the plan shows a scale TP, this is also the model  $V_c$  and is very bad news!! . A very forward CG is needed to deal with such a low value of  $V_c$  as is known by experienced scale enthusiasts and the Aeromodeller team should have been more careful.

#### WHAT TO DO?

Build a bigger tail plane was considered but rejected mainly on laziness grounds so the obvious other solution was adopted.

I would set the CG at 13% ( THATS RIGHT—THIRTEEN PERCENT ) from LE at the midspan. So lead was added as far forward as possible to achieve this.

#### WHAT ABOUT THE THRUST LINE ?

The fact that the model had been flyable under full power indicated that the considerable down couple from the motor had permitted this and it would need reducing further with the new forward CG. I thus re-set the motor to provide more down wash on the tail. The angle can be seen in the photograph and is about 10 degrees. Now this is in the opposite direction to that suggested on the plan published by NEXUS for a large ( 68 in span ) RC Walrus designed by a D.J.Gray..So I thought long and hard before making my decision.

#### THE SECOND FLIGHT.

With the repairs done and the CG and thrust line changed it was back to the flying field again. A bit more wind this time and as before full power had the model airborne in a few feet. I kept the power on until the Walrus was a couple of hundred feet up and still climbing into wind before I throttled back. This time the

model responded OK and settled into level flight so I then came around for a few circuits each one a little slower .

WOW IT FLIES !!

Well ,yes it did but it had a tendency to “ DUTCH ROLE “ as the speed was reduced which was a bit unnerving for an old man! However I landed OK at not too high a speed so I was well pleased.

WE NEED A FILM TO SEND TO BRYAN!

The next couple of times out I made sure that I took my camera and have now got videos of land AND water flights. Yes ,that's right the WALRUS is now back flying as it was intended and handles well when on the water . Taxiing is helped by a retractable extension to the rudder made from thin polycarbonate which you might be able to see in the photographs. Even though the model is tissue covered the finishing coat of matt polyurethane which Bryan applied keeps the water out and surprisingly the covering stays taut.

Airborne the role oscillations need to be kept in check by keeping the speed up but smooth water landings are still achievable and the model has now become a favourite of the Stithians “ Fleet Air arm “ .

HERE ENDETH THE LESSONS !

And they are :-

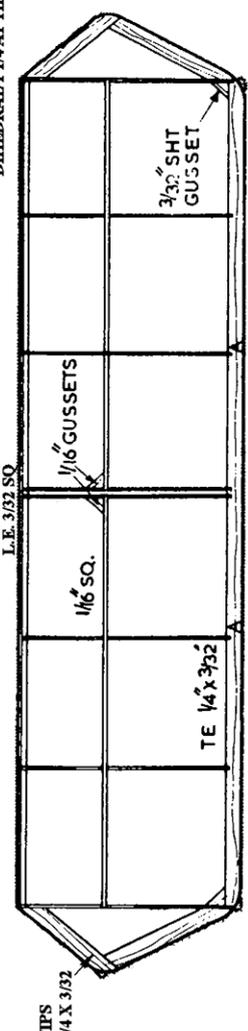
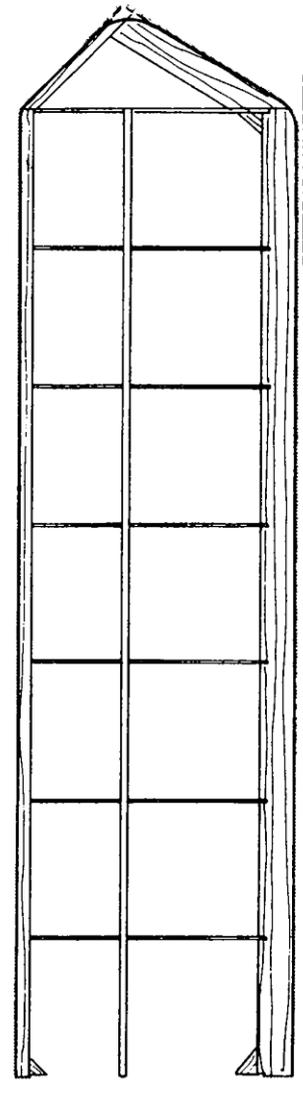
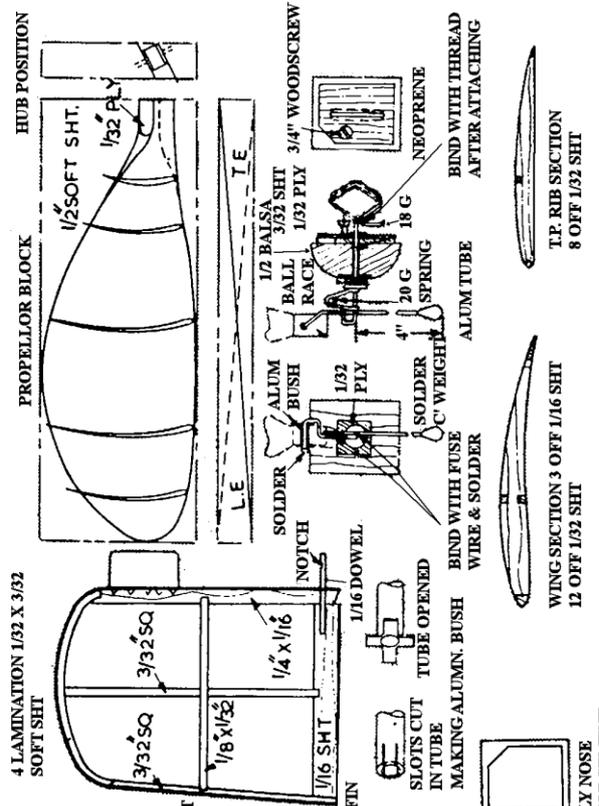
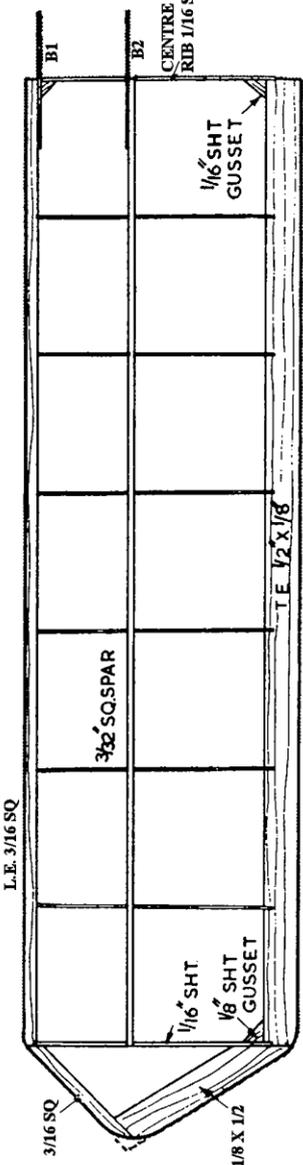
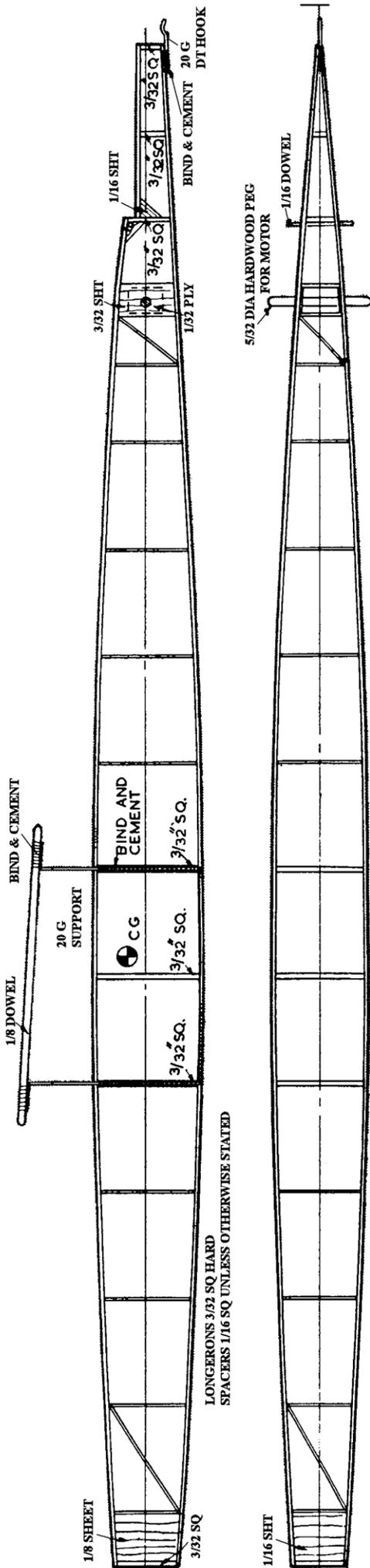
1. Never trust the CG position shown on plans particularly on models with scale tail planes . Or the motor thrust line !
2. Even strange old aeroplanes can be made to fly with a bit of thought regarding the rigging.
3. Don't be afraid to use a bit of theory !
4. Radio Control can't work miracles.



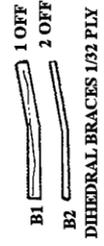


*(Photo is a still from a video)*



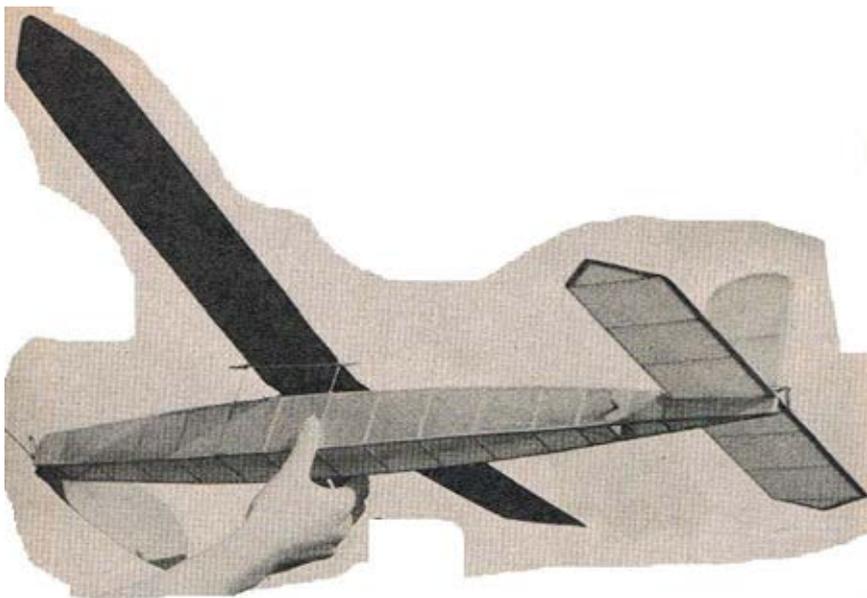


**SCHOOULER** 3/16  
R.M. THOROGOOD  
SPAN 30 LENGTH 28"  
COPYRIGHT MODEL AIRCRAFT  
19 20 NOEL ST. LONDON W1



ATTACH A THREAD LOOP AT POINTS A-A. ON  
T.P. TO PASS UNDER FUSELAGE AND ACT AS  
DT STOP SET STOP ANGLE AT ABOUT 40 DEG

## Schooler by R M Thorogood A 30 in. wingspan light weight rubber model for contest beginners from Model Aircraft January 1959



Schooler was designed as a competition model with the emphasis on simplicity, and intended to be suitable for modellers with experience of elementary sport models, such as can be gained from many popular kits. It was thought that a model of small size would be most suitable but with a minimum still air performance of 3 1/2 min. To obtain this performance a wing span of 30 in. was the minimum size that could be used so the design was based on this dimension.

For simplicity and stability a parasol wing mounting was used—this avoided the use of a pylon mounting with its inherent complications, and dictated the

use of a slab-sided fuselage. The folding propeller and dethermaliser are an essential part of the competition lightweight and these were naturally incorporated in the design. The resulting model has a performance in calm air of 3 1/2, to 4 min., with a rapid climb and floating glide, and the design has been built and flown by juniors and seniors with highly satisfactory results.

### Fuselage

Commence construction by building the fuselage sides. The first side should be built over the plan omitting the sheeting and gussets. Care must be taken to set the 1/16 in. sq. spacers with their lower faces flush with the bottom of the longerons., The second side must be built directly over the first but with the top faces of the 1/16 in. sq. spacers level with the tops of the longerons. All the cross spacers should then be cut to size from the top view of the fuselage, and the three central pairs of 3/32 in. sq. spacers cemented to the inside face of one of the fuselage sides, taking care with their alignment. The second side can now be cemented to the spacers, the assembly being held together with elastic bands; it is important to keep the fuselage square at this stage. When dry the remaining spacers can be added; the nose and tail being drawn together first, then the intervening spacers added outwards from the centre. The nose sheeting and gussets can now be added, also the plywood reinforcements. The parasol supports should be bent from 20 S.W.G. wire and also the dethermaliser hook; these must be bound to the fuselage with thread and given a liberal coating of cement. Finally, the motor peg must be carved from hardwood, be careful to see that the peg is sufficiently strong for its job.

### Wings

Lay down the leading and trailing edges on the plan, packing up the trailing edge to allow for the under camber, also remember to pack the lower main spar to the correct height when placing it in position. Cement all the ribs in place except the centre one, then when dry remove the wing from the plan and cement the upper main spar in position, finally building up the wing tips as shown.

To set the dihedral angle, pin one wing panel flat on the building-board and pack the other panel up until its tip is 2 1/2 in. above the board. Trim the spars to fit at the centre and cement them together, then cement the dihedral braces in position, followed by the centre rib—trimming this as required.

### Tailplane and Fin

The tailplane construction is similar to that of the wing. Lay down the leading and trailing edges on the plan, cement the ribs into position, the spar can then be glued into place and, when dry, the assembly removed from the plan, and the tips fitted. Now the fin, and here the first step is to build the laminated tip. Cut a former from 3/32 in. sheet to correspond to the inside curve of the tip. Then cut four strips 3/32 in. X 1/32 in from soft balsa. Pin one of the strips to the former allowing an overlap at each end, the second strip is

cemented to this and allowed to dry ; the other strips can then be cemented in turn and the whole removed when dry.

Build the fin outline on the plan, add the 3/32 in. sq. spar and when the cement is dry remove from the plan and add the 1/8 X 3/32 in. cross spacers and 1/16in. dowel. The trim tab is best cut from thin aluminium (e.g., an Oxo tin) and inserted in the trailing edge of the fin. Finally cement the fin into the tailplane.

#### Propeller Assembly

The propeller assembly is the most difficult part of the model to construct. Mark the outline of the propeller blank onto soft 1/2 in. balsa and cut to shape. Next mark the diagonals for the leading and trailing edges onto the curved sides of the blank, these are so give the correct twist to the blade. Carve the upper surface of the propeller first, using templates cut to the sections shown, and taking care not to cut the hub away.

Completely finish the upper surface before beginning the lower. The lower surface is best carved by gouging away the wood until it is slightly thicker than required and then sanding it down to the exact thickness.

Lastly, the hub is carved to the correct pitch (as shown on the plan) and reinforced with 1/32 in. plywood as indicated. The propeller must be covered with lightweight tissue and given two coats of sanding sealer before mounting on the nose assembly and balancing.

Shape the noseblock from 1/2 in. sheet and add the 3/32 in. sheet and ply reinforcements, then drill to take the 18 S.W.G. aluminium tube. Before fitting the tube, open out one end by making two cuts at right angles to a depth of 3/32 in. then opening out as shown on the plan. Fit the tube in the noseblock, cementing well, and open out the other end. Bush the propeller in a similar way.

Bend the propeller hinge and winding hook on the 18 S.W.G. shaft and solder the counterbalance arm to this, binding it first with fuse wire. Then bend the spring from 20 S.W.G. wire and mount the spring and ballrace on the shaft. Attach the propeller, place the assembly in the noseblock, and balance the propeller with a solder counterweight.

The motor hook should next be shaped and neoprene tubing fitted to protect the rubber. Finally set a woodscrew with a countersunk head in the noseblock to act as a stop for the propeller arranging it so that the blade folds on the right hand side of the fuselage, looking towards the nose.

#### Covering

The model should be covered with lightweight tissue and given two coats of dope, when the final weight distribution should come out approximately as follows:—

Fuselage 3/4 oz.

Wing ... 1/2 oz.

Tail and fin 3/8 oz.

Propeller ... 1/2 oz.

Motor ... 1 1/2 oz.

Total ... 3 5/8 ozs.

#### Motor

The motor should be made up from 21 1/4 ft. of 1/2 in. x 1/24in. rubber into eight strands approximately 32 in. long. This must be well lubricated with castor oil and when run in will take approximately 950 turns. After the motor has been attached, the hook should be bound with thread to prevent it from opening out.

#### Trimming

Before test gliding the model, give the motor 300 turns and allow it to unwind while the model is held in the hand. This tensions the motor and holds the noseblock in position. Trim the glide to a slight stall with the model flying straight, and then adjust the trim-tab to give a fairly tight right turn. All subsequent trimming under power should be carried out by adjusting the side and downthrust at the nose-block.

For the initial trimming flights under power, give the motor about 200 turns and adjust the side and downthrust to give a moderately steep right hand turn.

Increase the turns by increments of 50 up to a maximum of 950 to 1,000 obtaining the best trim at each stage and being careful to avoid power stalls.

Under full turns the model should climb almost vertically with a slight right turn which develops into a full spiral as the power slackens. Adjust the propeller stop so that no height is lost at the end of the power run, and when correctly trimmed, times of 3 1/3-4 min. should be achieved.

Last but not least, don't forget to put your name on the model and use the dethermaliser at all times.

## From Dave Bishop

Colin Agate.

It's sad to say that the very keen scale modeller, Croydon Airport Model Flying Club member and scale judge, Colin Agate, passed away on January 3. Colins' funeral will be held at the North East Surrey Crematorium at Lower Morden, Surrey SN4 4NU at 9.20am on Friday - February 6. I first saw him many years ago when he appeared at an Old Warden flying weekend show which I was presenting. I thought that he had come in a stage costume for there on the flightline was a totally Black haired model of Elvis Pressley complete with the large coloured glasses. So I announced to everyone that "Elvis was present" and I could see straight away that he was totally chuffed to bits. It was later that I discovered that he was a dedicated scale modeller and he certainly built very nice aeroplanes and very often brought them along to O.W. I later saw him at the BMFA indoor flying events at Crawley and run by the local club, on the first weekend in February. Even later, he was accompanied at one of the tables judging the free-flight scale aeroplanes at the new large K2 Sports stadium. I also learned that Colin was a very good motor cycle rider some years ago. At one time he was very friendly with a nice partner and I have attached a picture of the two of them together at a Croydon Club night at the Pegasus club at RAF Kenley airfield. So he joins all of those super people up in that big sky and I wonder if what sort of scale aeroplane is going through his head for the next project. We will certainly be thinking of him when the next K2 indoor flying event is held at the K2 at Crawley on the new date of March 8 which will run from 11am-6pm.

Terry Watson.

Another "nice guy" I knew for many years who has recently passed away was Terry Watson who (like me) was an honorary member of the BMFA. I first met him at one SMAE Nationals when he was in charge of the aerobatics geniuses team that were doing such superb manoeuvres in a restricted time slot. Terry had that kind of way which would endear him to everyone and he was always accompanied by his helpful wife Kath. The last time I had a good talk with him was at one of the recent Modelair events at Old Warden last year. Kath kindly invited me to have a "catch-up" with him in their very nice caravan parked behind the BMFA stand which was being "manned" by the usual hardworking team. In no time at all, both he and I were laughing our heads off at all of the places and people we had met, and things we had done, over the years. A lovely man so well thought of and much loved.

Dave Bishop.

Showtime pictures.

Attached here are a few more of the hundreds of photographs that I have taken from all over the world at aeroplane events and some of them might stir a few nice memories and places for some S&T readers;



*This lovely free-flight "All American" was taken at Epsom in 2010.*



*My lovely "Old School" Ballerina named "Boddo" after my best man at our wedding David Boddington. It is being modelled by Bianca Fiorre.*



*Andrew Johnson of the Liverpool club with his naked Handley page Victor Bomber which when it was finished flew just like the real aeroplane. Andrew was one of the best Flight Line Directors I have ever worked for at the Woodvale Rallies. Whatever the weather and even though he was totally exhausted at the end of each show, he would walk around to thank everyone for their hard work.*

*The Schneider Trophy at Spithead in 1981.*



*Another "nice memories show" that I presented was at Spit Head near the Supermarine works at Southampton in 1981, which was the 50th anniversary of the 1931 Schneider Trophy final race. Dear old Dudley Patterson's Flair team of three fellers each built a cracking Shorts Crusader for the event and Dudley's was a fantastic speedy and aerobatic seaplane. He took it abroad a lot afterwards and won many events where it was more popular than in this country.*

*I built one of these delightful Sparky's designed by Harry Hundleby of the Aeromodeller in the early 1950's and recent this one is belongs to Michael Jones*



*A nicely flown free-flight scale Mustang taken at the K2 Indoor BMFA event run well every year by the Crawly club.*



*The late wonderful Wing Co. Ken Wallis came to my Family Model & Craft show at Plumpton Racecourse in Sussex quite a few times with his autogiro "Little Nellie". Ken flew it in Japan in shirtsleeves for the James Bond 1967 film "You only live twice".*



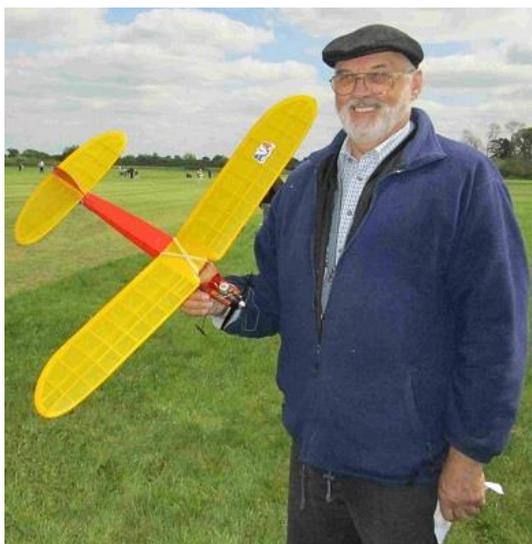
*The Woodvale International Rally that I presented for some 39 times was the biggest in the country run by the Liverpool club. The club made thousands of pounds for charities and packed every hotel and restaurants for miles around Southport on the first weekend in August. Here is the show stopping Boeing 747 made in 1978 and flown by the members when they ran the world championships there.*



*The late scale man Colin Agate (Elvis) and his partner at one of the Croydon Club nights.*



*I was lucky to get this photograph of the "Old School" Bi-Bi coming into land on its maiden flight at Epsom Downs. Our editor James Parry was the test pilot.*



*Modelair in perfect thermal weather at Old Warden on May 3 - 2014 along with Colin Shepherd and his Keil Kraft Pirate.*



*Modelair at Old Warden on May 3 and ex test pilot David Hunt is with his father both sharing a Keil Kraft Eaglet*

*There is mention and photos in this issue of the Lola, Balerina, Dizzy glider and Bi-Bi these are kits being manufactured and sold by Old School Model Aeroplane Factory for more information email [derekfoxwell@btinternet.com](mailto:derekfoxwell@btinternet.com)*

## David Kinsella's Column

### Lucky Find

Recently discovered but unfinished, a Bond yarn concerns the capture and rescue of racing ace Stirling Moss! A takeover scribe is now putting the final chapters together but a fictional driver will replace Stirling. Here he is ahead of Fangio as he wins the British Grand Prix at Aintree.



### Winter Building

The SE5a perfect as a Great War subject, a peep at SAM 35's Speaks (July to November 2013) will reveal a good body of info to help you on your way: key differences, kits, magazines, SEs to see and much more. Pitfalls await...

### Warden Wanderings

With the Phantom Mite competition well under way I met old friends and enjoyed the goodies on offer along the line of tables: that stretched into the distance. Lots of untouched kits (a fine Ranger and Pacer at £40 each, these VTRs favourites of mine over the years). Good repro YJ Doolings were there at £550 or so plus fine examples of the MkI Racer and ever-loved Bee. Several well-built models of 7ft and more were there but possibly their size worked against them at point of sale. I picked up a folder of cuttings relating to the SE5a and a Stant prop. What made the day was the wonderful weather and many excellent models along the flight line.

### Talking Points

With bank branches turning into wine bars and eateries these days, a surprise or two awaits the first—time diner. Too big to fail or remove, this mighty door of 25 tons once protected 3800 deposit boxes. Boilers too remain in place as do old diesel generators and lift motors. And there's a bonus should a movie company come knocking. Waste not want not.



### Where Blowers Stood

The Bentley Boys of yore kept their machines in Reeves Mewes, an old stables site dating back to 1734. There was even a Bentley Corner in Mayfair. All change now, and today there's a fine bouse where Le Mans racers once rested and a snip at £24 million. Having seen a gold plated Ferrari in the King's Road (plate not paint) there are fellows around able to afford the place. Bentley Boy Kidston was a leading pilot of the age, opening routes followed by Imperial Airways and others. I raise a Tizer to him.

### Stonelake Stunner

Borrowed from Brian Lever's august column, here we have a super B29 of size powered by four Oliver Tigers. In flight the silver bomber trails blue smoke and wonderful sounds as it circles majestically on long lines. Sadly a prop and finger moment at Old Warden kept the Boeing grounded as David Goddard and Brian Lever attended the injured pilot. Martin Stonelake's glorious model reminded me of SAC and uber chief Curtis LeMay and the General's move to boost road racing in the USA (airfields loaned for the first Sebring etc). Did the B17 or 29 ever tackle the 26ft of the Wallis Grand Slam, a hefty wing—bender when taken aloft in a stripped down Lancaster. for concrete— busting duties at Bielefeld and elsewhere?



### If Only

There was a magnificent KK Mite at Old Warden. Glass-like surfaces, wooden wheels, right motor, a beauty. But, sadly, she just would not start! Flying part of the comp, this beautiful and likely winner failed to make it. All with Mites made efforts with support items such as plans, articles, handles. even vintage fuel bottles and cans.

### Westward Ho

Good to see chums on my Christmas card list flying well at Berkeley. South Bristol MAC's super venue with sunshine to suit, all helmed the Weatherman to good effect, David Finch topping 115mph. with his (West 55 powered). The GWR and the works of its cigar-smoking genius IKB of interest to me, I lived in Bristol for a while and enjoyed it. Long John Silver and Jim sailing from the port on their famous Treasure Island adventure never out of print. Hearty thanks to John Mealing and SBMAC.

### Mite Prizes - Old Warden

Items other than cash included a boxed-with-papers Rivers Silver Arrow and a huge illustrated book on the Battle of Trafalgar. Hardly seen these days, the Rivers box was wrapped in blue, white and blank. The stout box (8 staples) was of its time and much better than stuff seen today. The motor itself was mint and with massive compression. The 560 pages of the Trafalgar book told the whole story in great detail, hundreds of colour pictures throughout. Both items highly collectable today.

### Bond Movies

Ever famous for their intro stunts pre CGI, we all remember the sensational parachute jump in The Spy Who Loved Me (1977). A 7000ft mountain secured, days ticked by until the wind blew in the right direction. Then young Rick Sylvester (as Roger Moore) pushed off on his skis, shot over the edge and fell like a stone until his chute opened. No room for error although a ski, nearly hit him, this was and is one of the greatest stunts ever. Gasp—worthy still after forty years.

### Saving Ballast

Werner Franz spoke on Radio 4 about the vastness of the great airship Hindenburg, its huge silvery shape towering above him as he boarded as a cabin boy of 14. He sailed above oceans and desert sands, saw the Berlin Olympics and dusted the on-board grand piano. Luckily a burst water tank doused him when Hindenburg caught fire in. New Jersey.

### Dig This!

Ariel, a Brit bike from way back (remember their pre rice burner. Square Four you just loved to hear), bounded into 2014 with an uber hairy 1300cc Aerial Ace of four cylinders and 190mph. Godzilla girders underscore grunt as our intrepid pilot gives it the gun.



### Gripping Stuff

J B Weld of Texas make Kwik Weld. Really powerful and rock solid in 4 hours, this is the answer for serious bonding of metal, wood, glass and much more. Setting in six minutes gives time for final adjustment. In my case shiny metal to) plastic worked a treat. £5 for a handy two-tube pack.

### 200th Anni

Quick off the mark for 2005 celebrations, chum Andrew Roberts gives us a fine Napoleon The Great. Waterloo and other battles of course, Andrew shows that the little giant dealt with law, town planning and a host of other matters often forgotten. Had the Prussians not arrived in the nick of time that huge station south of the Thames would not trumpet Wellington's greatest victory!

## Event dates

### Machrihanish

Hello everyone, Just to let you know that the spring fun fly at Machrihanish will be held on the first weekend of May, the 1st-2nd-3rd.

I would ask all who intend to support this event to get their details in to myself or Andy Rudden by the last week of April.

To maintain our presence at this wonderful site,you support is essential,so please spread the word ,and don't forget we fly anything,rubber power to pulse jets!

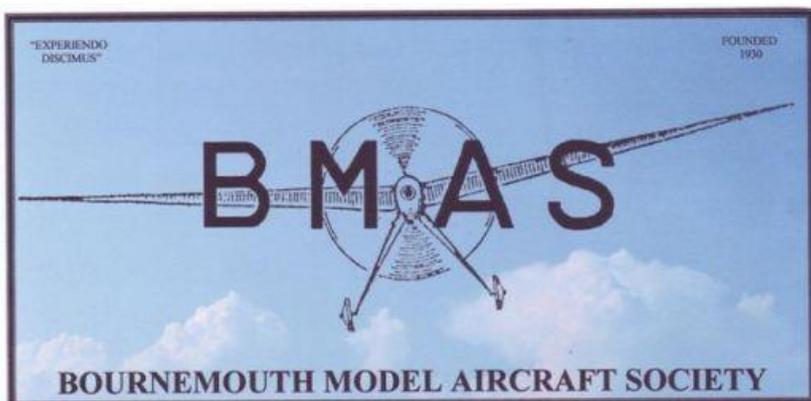
Bryan Passey [b.passey@sky.com](mailto:b.passey@sky.com)

### Shilton

Just the dates for the Shilton vintage event this year they are Saturday 23rd and Sunday the 24th of May and Saturday 12th and Sunday the 13th of September contacts Nick Blackwell and me same emails and phone as last year [nick@nickblackwell.co.uk](mailto:nick@nickblackwell.co.uk) phone 01285 657610

### Cocklebarrow

The dates for Cocklebarrow are as follows: 12th July, 23rd August and 4th October.



## INDOOR MODEL FLYING

**FREE FLIGHT ONLY**

**TUESDAY 24th FEBRUARY 2015**

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**TUESDAY 28th APRIL**

**7pm to 10pm**

**ALLENDALE CENTRE**

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**FREE CAR PARKING IN PUBLIC CAR PARK IN ALLENDALE RD**

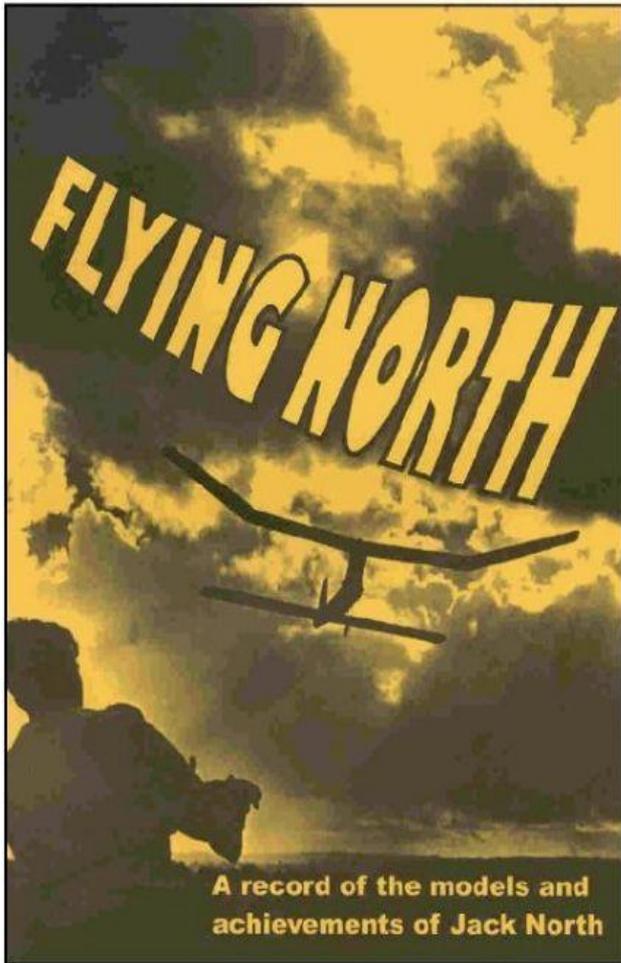
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## **Flitehook Indoor meetings at Totton - Southampton**

**Sunday 8<sup>th</sup> February 2015**

**Flitehook Indoor Free Flight Meeting**, Totton Community Centre, Hazelfarm Road, Totton, Southampton, SO40 8WU. 10.00a.m. to 4.00p.m.

Contact Flitehook Tel. No. 02380 861541

**Sunday 8<sup>th</sup> March 2015**

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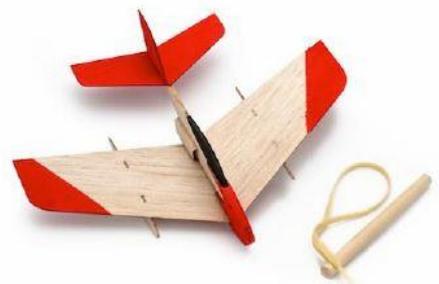
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