

Sticks and Tissue No 113 – April 2016

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 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://sticksandtissue.yolasite.com/>

Writings and opinions expressed are the opinion of the writer but not necessarily the compiler/publisher of Sticks and Tissue.



George Stringwell launching his Earl Stahl 1.5x Interstate Cadet

It is with grweat sadness on Saturday that I learnt of the passing of John Oliver the afternoon before.

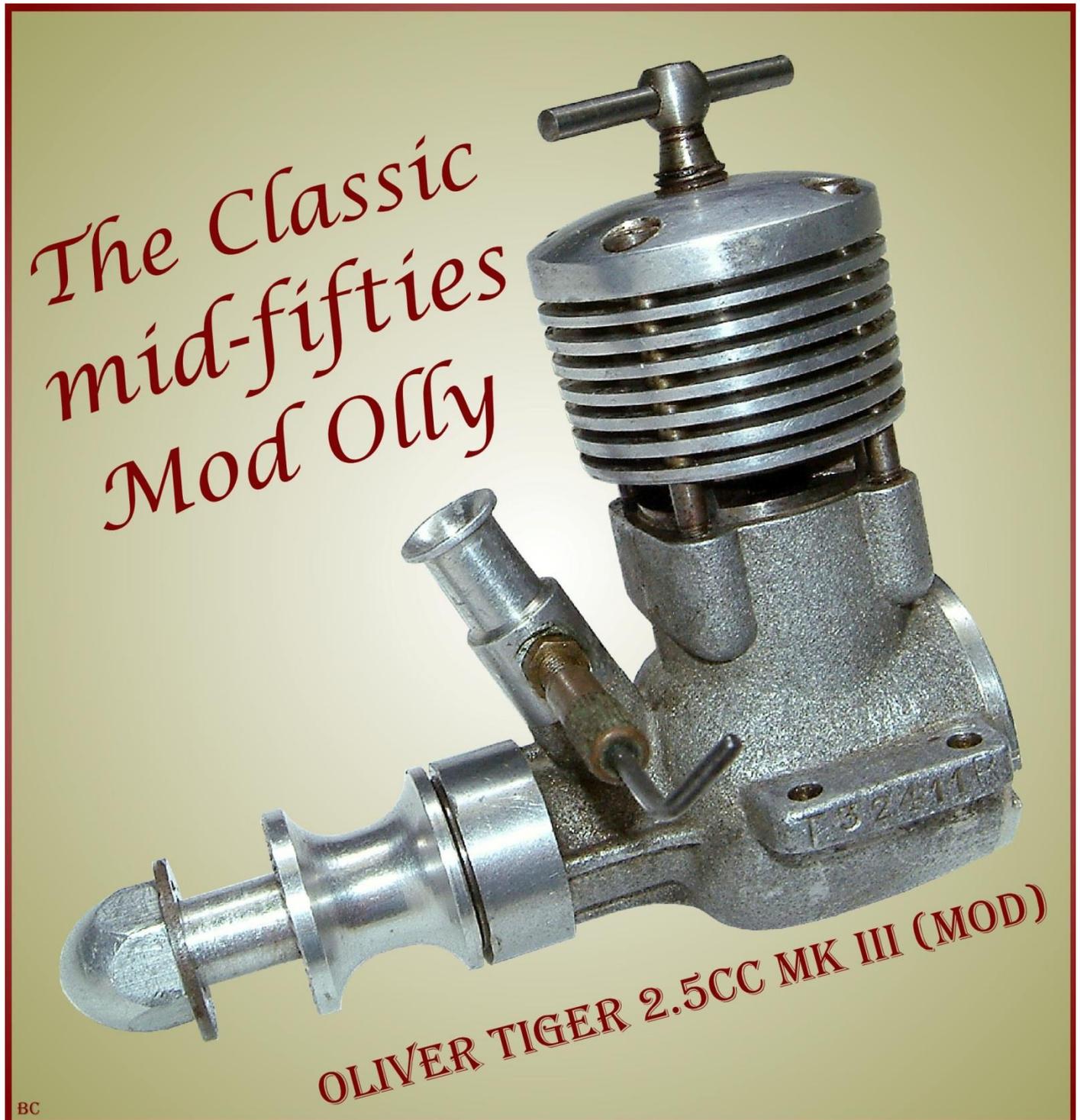
James, Following the sad news of John's passing, I thought it would be appropriate to show a typical example of what is probably the most important, and the most loved of all the Oliver engines.

This first version of the Oliver Tiger Mk III established Oliver supremacy in the highly competitive world of racing diesels, from 1954, over a period that lasted for more than 10 years...

The particular engine shown in the photo was my own very first Oliver. It was given(!) to me, in 1960, and it was about 5 years old then... Initially, I flew it quite a lot in some less than ideal environments (i.e. desert), so it was reconditioned by John & John in 1965, and hasn't been used very much since. Still in great condition, at 60 years old...

Thanks John, RIP.

Brian



From Peter Smith in Oz

If you short of pics one day maybe you could post these of my Phantom Racers. I built them to fly in the Phantom event run by SAM 1788 at Easter each year started by the Late David Owen. Regards " condo " Smith



Peter Kessell RIP

I'm afraid another passing of a great aeromodeller. I'll always remember him for his keenness of gliders and anecdotes covering just about everything, I'll miss our monthly meetings at the local hostelry for a coffee and biscuits discussing architecture. Again there may well be fuller obituaries in other mags / newsletters



Peter with his Apollo 3

From David Turner

Over the past couple of years, we've been doing a bit of aero-towing at our field in East Yorkshire. It's great fun ... it opens a whole new aspect to model flying, because it's such a demanding and collaborative undertaking.

Anyway, this has gotten me to thinking that it would be good to do some "vintage aerotowing". That is, vintage gliders, towed by vintage tugs. I reckon that would make a really pleasing spectacle.

The whole thing would be slow and gentle, requiring only modest power. Electric would be just fine.

Rudder/elevator gliders tow well, provided that you keep the speed down, and that's exactly what we would want to do.

Now, it's not something that you can just "turn up and do". You need to know your buddies, and you need competent fliers on both ends of the tow-line. I confess that I'm finding it difficult to find people who are:

good fliers that I trust
interested in vintage gliders
motivated and sufficiently local

Soooo, if there's any of you guys out there, who fancy a go, we should liaise. I generally fly at Beverley, East Yorkshire, but I could be persuaded to visit Cocklebarrow or Pontefract, or Doncaster ... or somesuch. Maybe I'll just plant a seed in your minds, and you'll have a go at aero-tow with your own buddies.

I include a link to a video we made, a couple of years' back. It shows my friend's Ivory Gull being aerotowed, and it illustrates the safest method of launch. This glider was quite large, at 10 feet, though a big petrol engine was not at all necessary to tow it. We have towed it behind an old OS .91 four-stroke, fitted to a Shereshaw Commodore. The model which I'm intending to use as a tug, is a Krupp 1937, fitted with a Saito .56. That'll provide sufficient power to tow quite large lightweight gliders.

You can find us on Facebook at "Westwood Flyers". ... some members of our little "club" migrated over to FB fairly recently. It's a "closed group", but if you send a request, you will be able to join. Not much going on at this time of year, but it's a great way to liaise, whether or not you have an interest in vintage flying.

<https://www.youtube.com/watch?v=CUhQc6ErzxE>

David Turner springers@springers.karoo.co.uk

From Judson Bock Sr.

Hi James. I receive a copy of the Sticks and Tissue every month via email from fellow Modeler and Newsletter Editor, Nelson Carpenter. I live in Honey Creek Iowa, which is near Omaha Nebraska and fly at the same field as Nelson does in Mead NE. I was a Newsletter Editor for a number of years at the Omahawks club in Omaha. He and I fly together and have mutual interest in all forms of R/C. My main interest nowadays is Oldtimers and I have three. I just finished a new one, a 1937 design called a Cumulus by designer Shereshaw, with a 96 inch wingspan, (picture enclosed.) . It is electric powered with a .60 size electric motor, a 100 amp ESC and a 5 cell 4000 Lipo battery.

Since I am now 83 and have been in modeling since I was a kid., I enjoy reading the S. and T. because it brings back many memories of flying of old. I wonder how many modelers today even remember what "Gallopig Ghost" was. While it worked in a fashion, my first one got away from me and flew into a parked railway car, which was at the end of our flying field in the "60's". That crash pushed the crankshaft right through the back plate of the O. and R. .19. R/C. Running into the side of a steel door, will do that to an engine.

I have a question which is the reason I am writing this email to you. Why do the British flyers seem to fancy the diesels? In all of my 70 years of modeling, I can count on one hand the number of diesels I have seen at the flying fields. I bought one out of curiosity many years ago, and could never get it started, so I ended up giving it away to some fellow modeler. To my knowledge, he never got it to run either. However, when I

read your newsletter, I see all the articles about diesels and it seems they are popular in England. Is it because the fuels is cheaper or what? I know they don't run as fast, but have more lugging power and can swing a bigger prop than the glow brothers. But the starting difficulty was never worth the trouble to me and most of my friends, so we stuck with glow. You will probably say or think that we were just lazy, and that is probably right to a point. However, ease of operation was more important to me than hand cranking on a model engine till your arm got tired, when a glow would start almost immediately. Anyway, I do enjoy reading the newsletter and you do a fantastic job.



Query from Paul Howkins

I have had a query from the USA and he's looking for a plan of a 1946 Bill White Petrol Model described in the February 1946 SMAE Model Aircraft Journal. I believe one flew at a Middle Wallop SAM Gathering 1997/98. Have you any ideas?

I don't have any ideas but I bet someone reading this will, if you do please email me jamesiparry@tallktalk.net

T.E. OF $1 \times \frac{1}{16}$ HARD AT BOTTOM SOFT ON TOP

FIN POSITION

C.S. BUILT FLAT ON PLAN (REMOVED AND PLACED ADJACENT TO TIP BEING BUILT. W4 SECURELY PINNED DOWN AFTER PIVOTTING ON W4 AND PACKING 1" UNDER W3 ON OPPOSITE SIDE. IT IS ADVISABLE THAT TOP PART OF T.E. IS NOT PUT IN PLACE UNTIL TIP IS COMPLETED AND THAT THE MAIN SPAR AND BOTTOM OF T.E. IS MADE IN ONE PIECE AND BOTH CRACKED ON ASSEMBLY NOTE THAT WASHOUT BEGINS AT W5

ADD $\frac{1}{8}$ " SQ STIFFENERS BETWEEN TOP AND BOTTOM OF T.E. BETWEEN W3-4-5

$\frac{1}{2} \times \frac{1}{8}$ " SPARS

L.E. $\frac{1}{2} \times \frac{1}{8}$ "

L.E. $\frac{1}{4} \times \frac{1}{4}$ "

TIP FIN $\frac{2}{16}$ OFF $\frac{1}{16}$ SHT.

CRACK MAINSPAR FOR DIHEDRAL BUT TAPER SUB SPAR AS SHOWN BELOW

MAIN SPAR TAPERS FROM W4 TO $\frac{3}{16} \times \frac{1}{8}$ " AT TIPS

SPAR MUST BE LAID FLAT ON PLAN & FILED FLUSH WITH RIBS AFTER COMPLETION OF WING

TOP JOINT

W1

W2

W3

W4

C.G.

W5

W6

W7

W8

W9

NOTCH SPARS SUB SPAR ONLY TOP MAIN SPAR AT BOTTOM

1" DIHEDRAL AT RIB W9

2 OFF $\frac{1}{8}$ " SHT.

RECESS FOR $\frac{1}{16}$ " SHT AFTER ASSY

PACK UP T.E. $\frac{3}{4}$ " WHILE BUILDING TO GET 1" WASHOUT AT W9

TAPER ON SUB SPAR CHAMFER TO FIT L.E.

$\frac{1}{4} \times \frac{1}{8}$ SPRUCE SKID

18 G. HOOK

BIND TO RIB

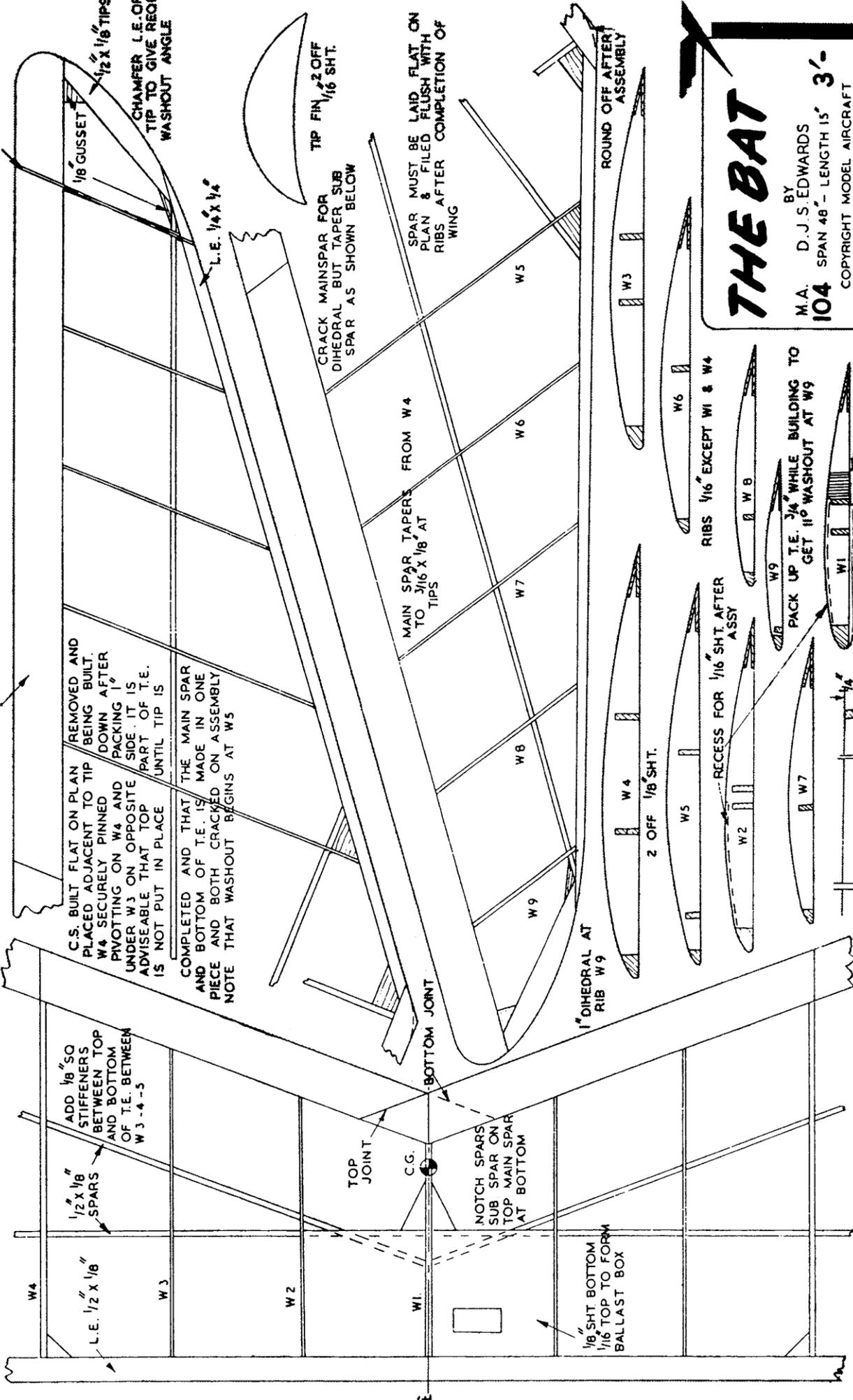
ROUND OFF AFTER ASSEMBLY

THE BAT

BY
M.A. D. J. S. EDWARDS

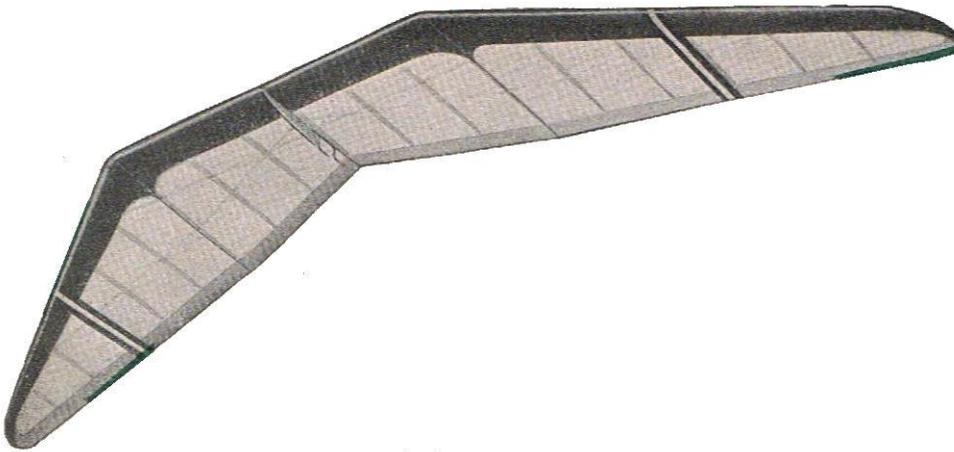
104 SPAN 48" - LENGTH 15' 3"-

COPYRIGHT MODEL AIRCRAFT
23 GT. QUEEN ST. - LONDON WC.2



The Bat flying wing sailplane by D S J Edwards from Model Aircraft September 1951

The designer.. Age 18 years ... Member of st. Albans M.A.C. .. Apprentice at De Havilland Aircraft Co. Ltd. . . Has been building models for eight years—mainly unorthodox types . . . Holds five St. Albans Club records ... Chief interest gliders. .. Proud owner of 11 ft. 6 in. span sailplanes which he built in a week—has no time for any other hobbies... Ambition : To win the Nordic A1 Trophy with a tailless model.



I am writing these notes and building instructions after a pleasant afternoon's flying with my two tailless models, The Bat and a high AR design based on the full size Horten designs and built the end of November, last year.

Both Bat and Harten have the same area, 312 sq. in., but Horten spans 80 in., as both are the same area, it is easy to compare performance and

stability both on the line and off, they are both vice-free on the line and have really excellent glides, although slightly faster than orthodox models, and sinking speed for both works out at approximately 1.3 ft./sec. One striking point brought out during tests is that the Horten is really at home in high winds, inasmuch as when flown in near-gale conditions on February 25 th it clocked 1 min. 45 sec., to beat the St. Albans' tailless record of 1 min. 36 sec., set up by the Bat mark I last October, the 22nd. But the Bat Mk. 3, avenged the Bat Mk. I, by clocking 2 min. 20 sec. In damp cold calm conditions.

The Bat is easy to tow up at a jog trot and it goes up remarkably fast. All flights so far have been made from a 150 ft. line (50 lb. nylon). The original Bat was built in a couple of hours after sketching a "shape that was different."- All the bugs in the original have been ironed out. These briefly were vicious stalling and a tendency to bunt after a stall, increasing washout from 10 to deg. 11 deg. has cured the bunting tendency and scrapping the tip flaps has cured the stalling, crabbing and sideslipping on the line has been cured by increasing dihedral from 1/2in. to 1 in. at wing tips. The only fault left now is slight wallowing tendency; the tailless form of Dutch roll. Do not be tempted to alter tip shape or area, as it is not at all harmful and is only really noticeable when hand launched very fast and towards the ground. It will then lift one tip before the other and looks as if it is trying to walk instead of fly.

Stall recovery off the line is very good, just once up and down and then it flies on normally, but if the line breaks whilst towing up at speed a stall sideslip develops. It turns on to its back into a loop, losing as little as 20 ft. of height. Cartwheels on landing do not harm the Bat in hard landing. It is amply strong, and will bounce even better if made from stringy wood and well covered.

Construction

This model was of simple construction so that modifications could be carried out with out undue structural alteration. The centre section is built first. Notice that the mainspar is notched on top. Leave spars, L.E. and T.E. full length. Crack T.E. and mainspar after removal from board. Prop up centre section 1 in. at the W.3, on opposite side of tip. Notice that the top part of T.E. is not put on until the whole wing is complete. The wash-out must be built in by packing up W9 3/4 in. at T.E. The spar is pinned flat on the board and filed flush with ribs after removal. The spar can be braced at the crack if need be but my Bat is not, and has survived all hard knocks so far without so much as a hole in the tissue.

Ballast is made from a block of lead trimmed to just under weight and then slotted into W.1 (N.B.— Cement this well in position). Final adjustment can be made by adding small piéces of plasticine to either side of the wing.

Fins can be added if necessary after covering has been completed.

Flying

Flying is simplicity itself. The major aspect here is that the natural turn must be opposed. By this means line stability is assured. With this trim spinning is eliminated. Small flaps can be added at the tips to get the skidding so necessary for high performance. If flaps are used do not bend below T.E. as the airfoil section will be blanketed and pitching will ensue.

Photos from Peter Renggli, Urs Brand and Urs Rindisbacher



Peter Müller



Peter Renggli





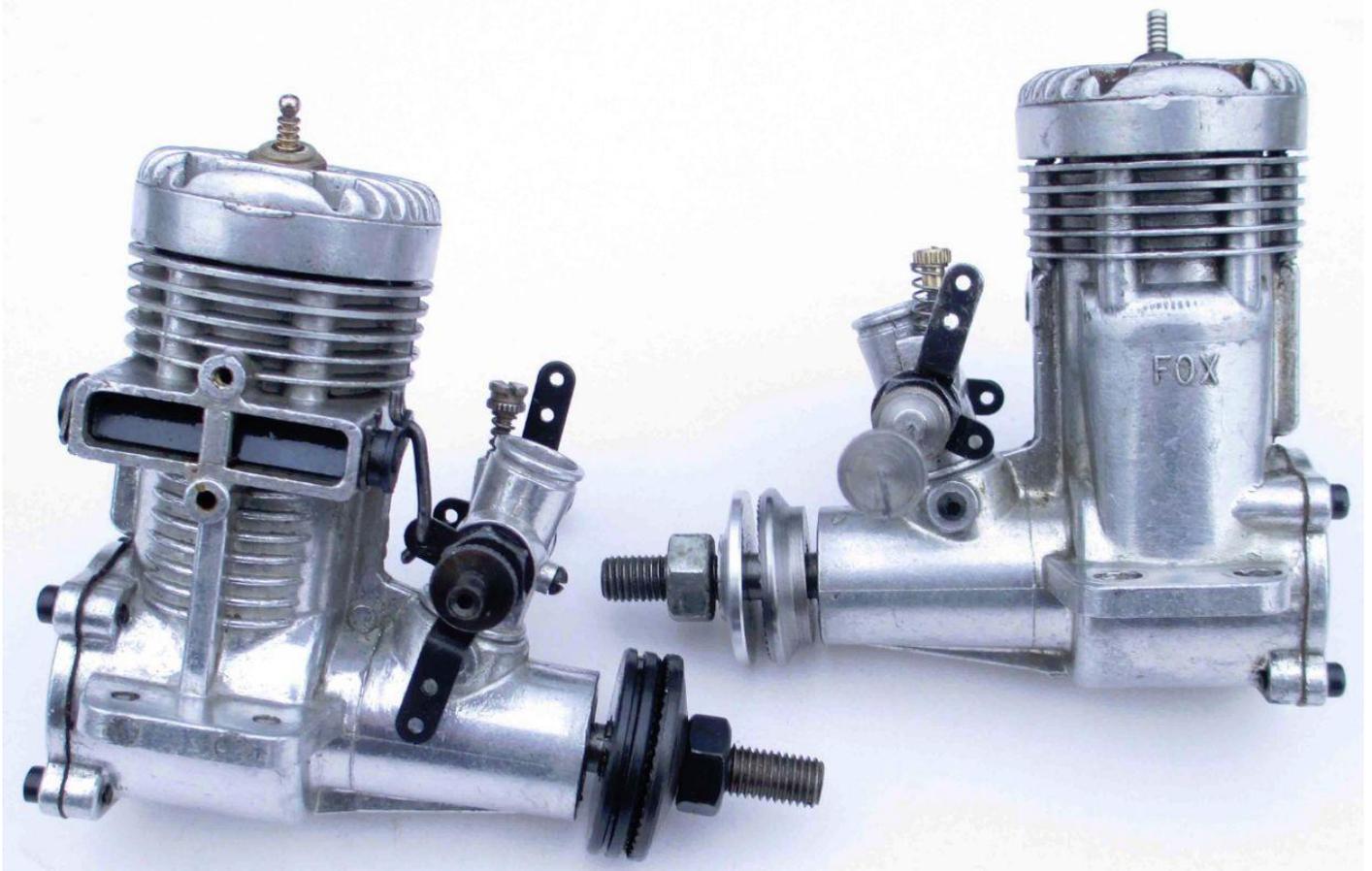




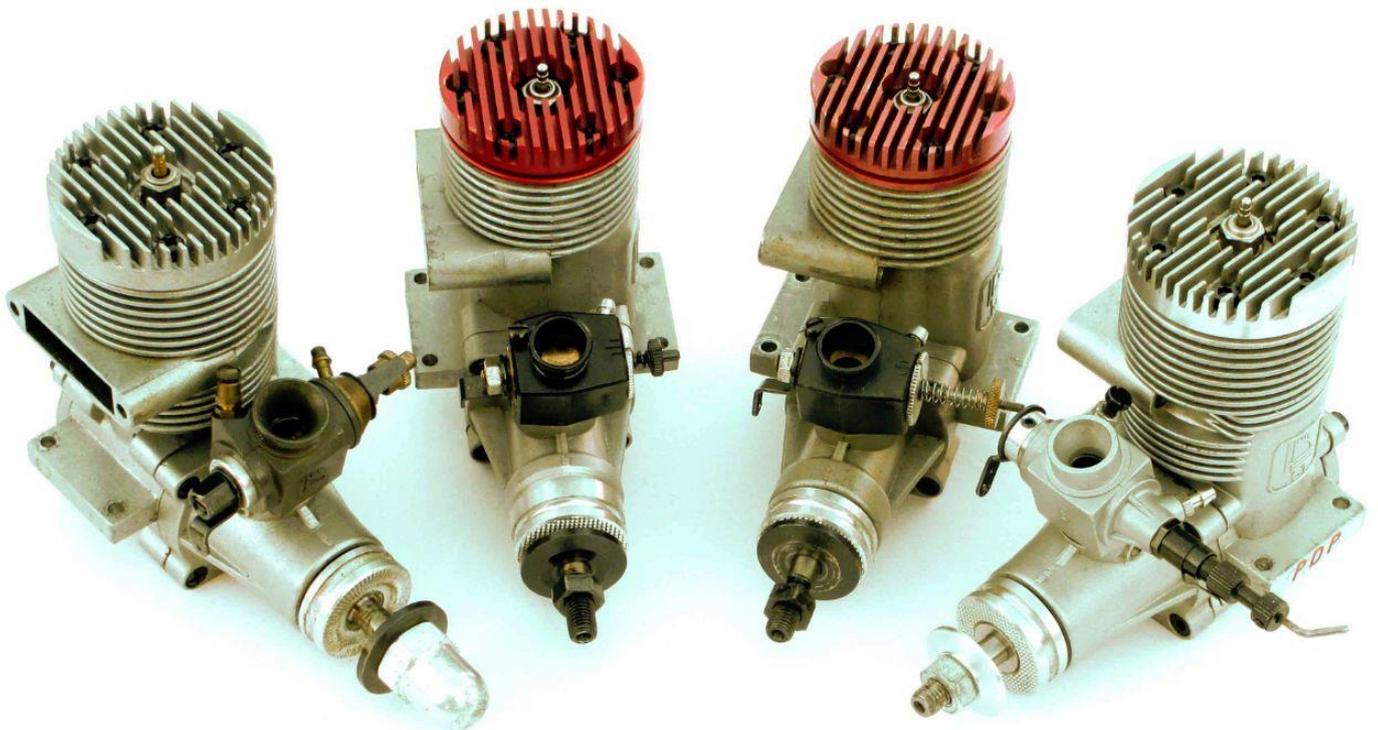




From Bill Wells



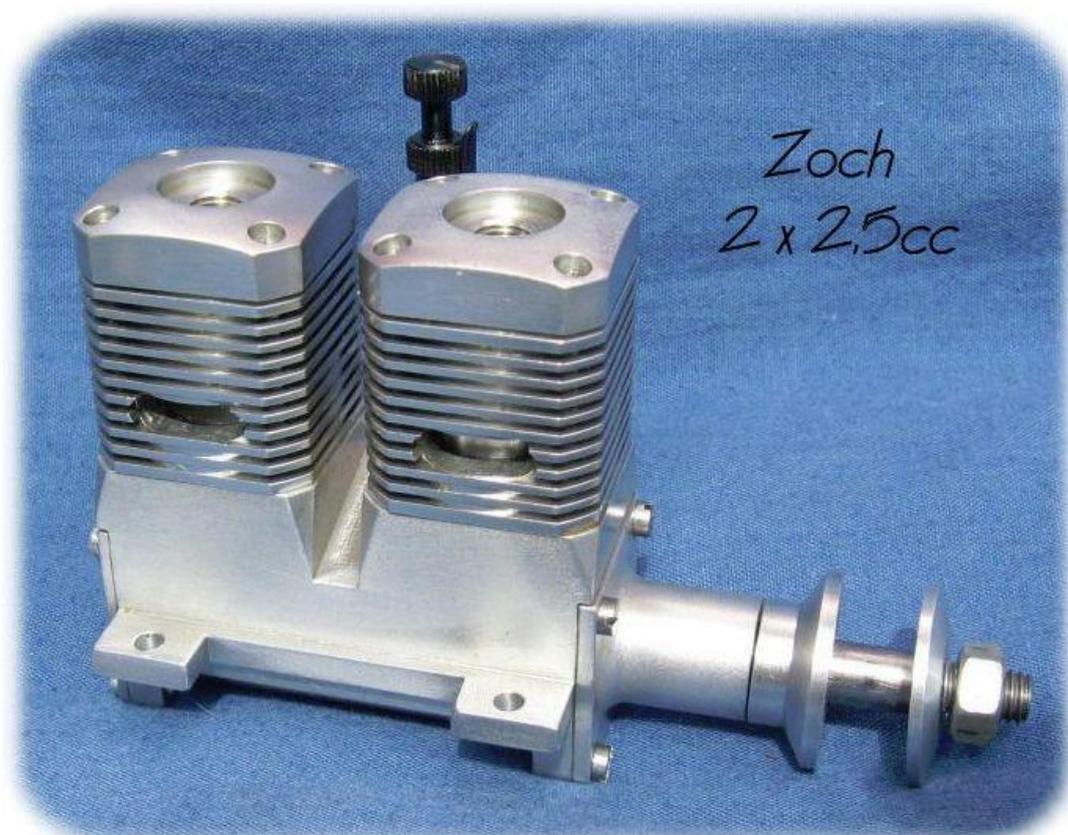
Foxes



HB's

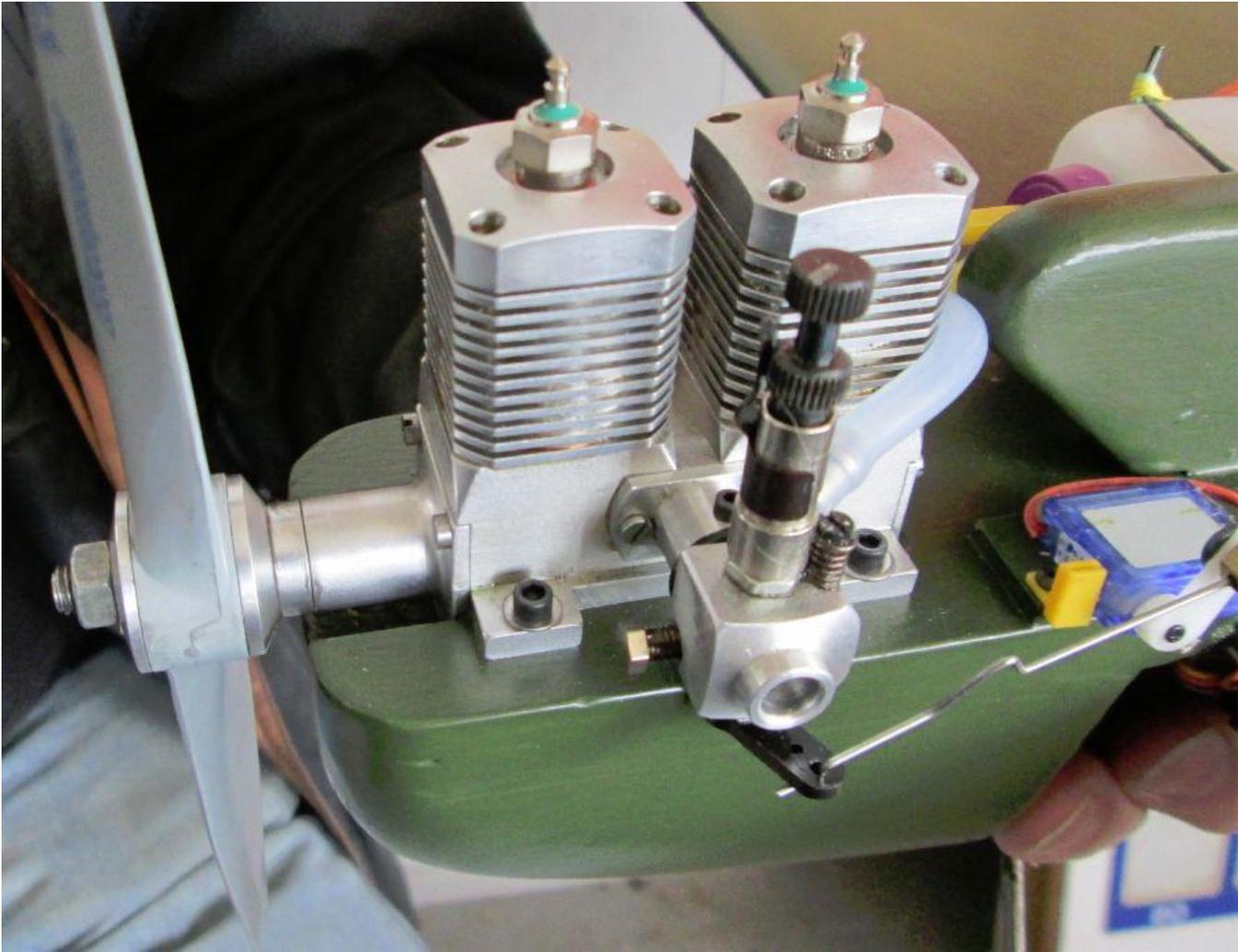
From Den Saxcoburg

I have attached a picture of the Champazaki that I was range testing on Sunday.....I'm pleased to report that the throttle and flap controls worked perfectly with the RC Handle....at about 80 - 100ft and with the engine running.....so perhaps first flight at Tarrant Hinton.....just to confirm the other pic is of the engine.....a 5cc 180deg two stroke twin made by a Mr Zoch of Czechoslovakia.....as you know it makes quite a racket but is beginning to run well and the throttling is improving all the time.



Den is quite right the first CL meeting at Cashmoor run by Wimborne MAC was subject to inclement weather. Tony Tomlin always says if you can stand up in it you can fly. Well we didn't fly and sat down in the club hut putting the world to rights! I did manage to take a few photos and here they are.









Business part of the day



This Russian fighter makes an ideal flying scale model for the Jetex "50." The barrel-shaped fuselage is very simple to construct and the all-sheet tail surfaces help to speed building. The original model was finished up to the colour doping stage in just on four hours- By placing the Jetex "50" in a trough under the fuselage the need for access hatches is eliminated and the unit operates more efficiently.

Fuselage

Cut pieces A, B, C and E from 1/16-in. sheet and pin in position over the plan with the strips of 1/4 in. X 1/16 in. Note strip "X" which is cemented to piece E, and the strip which joins A and B together at the nose; this latter strip forms the "division" in the nose intake. Cement all the half formers in place except 2A. Cement the two stringers in place which pass on either side of piece D, then add piece D.

Cement former 2A in place and the rest of the stringers. It may be found easier to add the extreme lower stringer which passes along the edge of the "duct," after the side has been lifted from the plan. Notice how the stringers cement to the inside face of former 9, these may be held in place by sticking a piece of Sellotape to the plan above the fuselage, wrapping over the stringers and pressed on to the plan below the fuselage. Lift this first side from the plan when set and build the other side on to it. Cut the nose block from 3/8-in balsa, make a disc first, cut in half, hollow out the centre, cement in place on former 1 and sand smooth to the shape of the protruding ends of A and B. The nose is circular in front view. Install the -1/4-in. x 1/4-in. bearer for the

"50" clip by cementing into the notches in 3, and 5, cement and screw the clip in place. Cut the duct from stiff paper and cement into the arched recesses in 5, 6, and 7. Fine sand paper the fuselage all over.

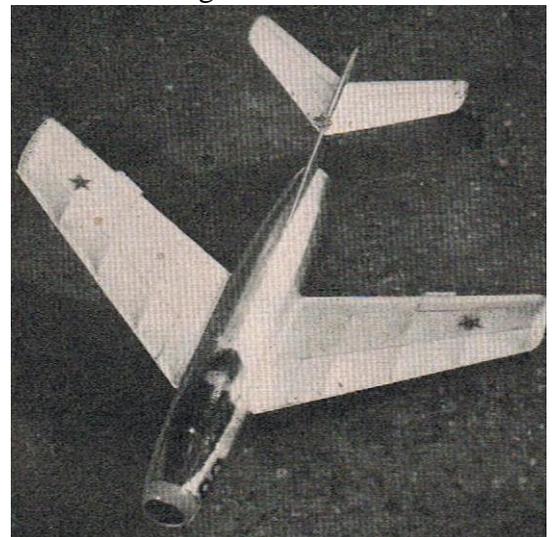
Wings

Pin the lower 1/16-in. X 1/16-in. spar and the trailing edge over the plan. Cut the ribs from 1/16-in. sheet and cement in position. Cement the leading edge into the rib notches then add the top spar, note both top and lower spars protrude beyond rib R1 providing ends to fit into pieces D on the fuselage. Carve the tip blocks roughly to shape, cement in place on ribs R5 and finish off with fine sandpaper.

Cut the fin and tailplane from 1/16-in. sheet and sandpaper both smooth and free from saw marks.

Cover the fuselage using "bands" of tissue, cover the wings in the usual manner. Water shrink all the covering and apply one thin coat of clear dope, take care to avoid warps in the wings. Cement the fin in position perfectly upright at the rear of the fuselage, apply cement to each of the tenons of the tailplane then join the two halves together through the slot in the fin. Run a fillet of cement along the four corners of the fin, tailplane joint. The fin, tailplane and nose block may be treated with a coating of clear dope mixed with french chalk.

When dry use extremely fine sandpaper to obtain a smooth finish. Apply cement to ribs R1, then press the wings in place on to pieces D on the fuselage. The lower edge of the rib should follow the lower edge of D. Check for 3/4-in. dihedral. Paint the top of the fuselage black from former 4 to 1 including the cockpit position, inside the nose cowling, and the rear face of former 9. Thin down some aluminium silver dope and apply one coat only over the whole model, trimming the black at the front into a curved shape to represent the anti-glare panel. Secure the cockpit cover by running a fillet of cement around it; lower edge while held in place on the fuselage. Some modellers may prefer to attach the cover before silver doping. With a small piece of plasticine inside the nose intake the original balanced slightly aft



of former 5 in flying trim. Test glide with the unit in the model, but not loaded try to obtain a fast flat glide. When the glide is satisfactory load up the "50" for power flights; the jet itself will not scorch the duct, but it is advisable to bend the fuse away from the paper before lighting up. A faster, smoother launch may be obtained using the hook detailed on the plan in conjunction with a 10 ft. strip of 1/4-in. rubber, one end staked to the ground the other held by a helper.

If difficulty is experienced in obtaining Russian insignia transfers, use the gummed red stars sold by some stationery shops.

Vintage day at DMFG Sunday 1 May 2016

Same old same old – wind. Still the morning was a little kinder you could stand up in it by pm it became somewhat inclement. Still with the Bedouin Camp up, including new extension and 4 burners burning all sorts of road kill and kettle making a shrill noise we sat around admiring those who flew.

A medal to be awarded to Spike Spencer and his RCised T tray. He flew it and landed it. That doesn't sound much I agree so I thoroughly recommend you make one twice size and have a go if nothing else it will wake you up, warning though wear bicycle clips.

A second medal has to go to Tony Tomlin. His Ace of Diamonds, long in the making with much remaking in between can I say flights or is that stretching it? the progress being monitored by magazines, the rich and infamous. Having seen this model in motion on a few occasions at Middle Wallop, Epsom Downs and our DMFG site I now have enough parts to build my own version, a clone if you like. Well egg on my face now with a gyro, new fins and a strong wind and utter silence from all those present, all were holding their breath, off it went and flew several minutes airborne and under control what a fantastic sight to behold. The landing was good. To prove a point later on when his heart had slowed to 200 beats a minute Tony took it out for another flight and same again perfection circling around and back in landing again, no breakages. Well done.

Free flight didn't really take place or not that I saw however The Caulheads, Q, Tony and Stewart did partake in control line. Stewart provided his hardboard runway. Apart from moi taking a few snaps I'm pleased to say Gill Caulhead also took some shots so here they are.



Tony's Sparky



Ian Pratt's vintage Spitfire





Mike Sim's negotiating the breeze



Medal winner Tony's Ace ... you can see it on the wing



And again this being one of Gill's snaps



Spike looking for his T Tray and John Taylor with his glider





Encampment all bar one are huddled in one corner. The mat is for Officers only but he was away something to do with 1:1 scale Hawks in red



Rob Blair's Super Scorpion



What a launch, trouble is nothing to get hold of I know I've heard the joke



The two medal winners



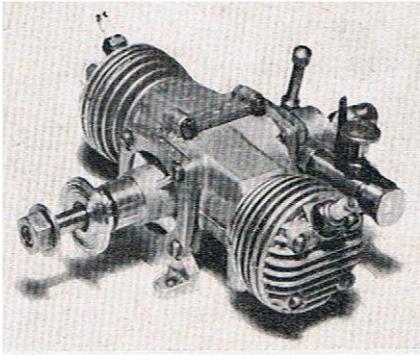
Tony just noticed a hole in the middle of his model





John Taylor's duo

The Craftsman Twin Model Aircraft February 1950



Designed by Edgar T. Westbury, the Craftsman-Twin is unique among British production engines in using a two cylinder, horizontally-opposed layout. It is produced by Craftsmanship Models, Ltd. of Ipswich and is available either as a set of castings and materials at 38/-, or as a complete, ready-to-run unit at £9 19s. 6d.

The Craftsman-Twin is primarily an engine for fairly large semi-scale free-flight models. i.e., models of 6 to 8 ft. span, weighing up to about 6 lb. Compared with the small lightweight engines which have been developed for power-duration and CL work, its peak output may not seem high, but where it scores is in its ability to swing a large diameter propeller, such as is required for large

bulky models, and in its general ease of handling. For R/C models, provided that the weight does not exceed the figure suggested above, the "Craftsman" should be very suitable, while it is hard to imagine an engine more pleasingly adaptable to a scale model of a typical modern light aircraft. The compact dimensions of the engine is a particularly note

worthy feature where true-scale design demands complete cowling-in of the unit.

While the Craftsman-Twin retains the familiar two-port two-stroke layout utilising a disc rotary-valve it has a number of interesting additional features. The crankshaft has two main bearings, and, as normally assembled and equipped, induction is via a side-mounted carburettor behind the left-hand cylinder, while the contact - breaker is driven from the rear end of the crankshaft. Thus all controls are well away from the airscrew disc. However, if required (e.g. for a pusher installation retaining a right-hand propeller) the drive may be taken from the rear end of the crankshaft and the contact-breaker and cam mounted at the front end. Both ends of the shaft are threaded 1/4in. B.S.F. and no propeller drive plate is provided, the drive system being left to the choice of the user, as the engine is equally well-suited to model boat or car use. For use with propellers and fan-brakes, the writer devised the simple split sleeve collet and alloy drive adaptor shown in the photograph and this was made up by Messrs. Electra Engines, of Chatham.

Specifications

Type: Horizontally-opposed, simultaneous-firing, twin cylinder, air-cooled, two-cycle. Spark ignition by induction coil and battery or special magneto. Rotary-valve induction through crankshaft-driven rotary disc. Baffle pistons. Offset, inclined sparking-plugs.

Swept volume : 9.95 C.C. Bore 0.750 in. Stroke 0.688 in.

Compression ratio : 7 : 1. Stroke Bore ratio : 0.917 : 1.

Weight : 15 oz. (with plugs and contact-breaker, but less other ignition gear, tank and propeller adaptor).

General Structural Data : Die-cast LAC10 alloy split-type crankcase with integral cylinders. Front and rear bearing housings of LAC 10 with phosphor-bronze bushes. Case-hardened steel crankshaft in two parts with crankpins connected by bolted-on crankweb to permit solid connecting-rods. Carburised steel cylinder-liners and cast-iron pistons.

Fully-floating carbon-steel gudgeon-pins. Connecting-rod of LAC10 alloy, unbushed. Heavy-duty contact-breaker assembly; fully adjustable for advance and retard. Carburettor assembly in brass with large diameter thumb-wheel needle-valve adjustment and sleeve-type adjustable choke.

Test Engine Data

Approximate time logged prior to test : 1 1/2 hr.

Ignition equipment used : Wico-Pacy and Champion sparking-plugs. M.I. Duomite twin-spark coil. T.C.C. Metalmite 0.01 mfd. condenser fitted direct on to contact-breaker. 3 volts used.

Fuels used : Record Petroil No. 1, Mercury No. 1 Competition Petrol, Record Petroil No. 2.

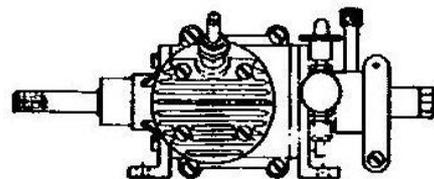
Performance

Starting the Craftsman-Twin is performed very easily. Following the maker's instructions, the needle-valve is set to about 3/4 of a turn open, the choke almost closed and ignition retarded. After switching on, one simply gives the engine about half-a-dozen flicks to draw up the fuel and set it running. Then, as it warms up, more air can be admitted and the needle-valve and contact-breaker readjusted to give increased power.

A feature of the Craftsman-Twin which was quickly noticed was the improvement over single-cylinder engines in the matter of smoothness in running. There is no doubt that the opposed twin cylinders, firing simultaneously, result in less vibration than is normally found with similar capacity single cylinder units.

Another feature of the "Craftsman" is its very moderate piston-speed of approximately 750 ft. Per min. at peak revolutions, which is, of course, a very low figure for a 10 c.c. engine, and, combined with the

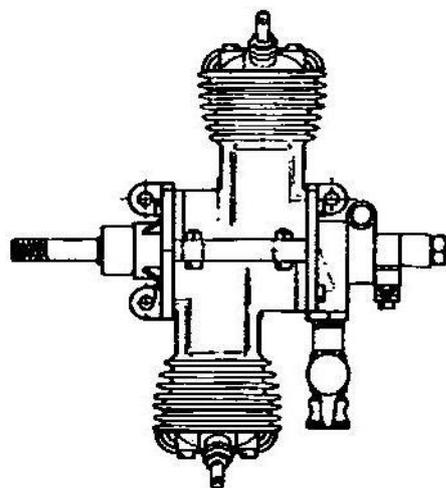
qualities of the materials selected for the working parts, should result in a very long useful life. An indication of this was, in fact, given during the torque tests which, despite 1 1/2 hr. careful running-in at 3-4,000 r.p.m. proved that a considerable amount of running would still be required before the engine reached its best output. A nominal running-in period of one hour was first given, consisting of many short runs of a minute or two, but it was found that the engine remained sufficiently stiff to cause complete tightening up so that it would not continue to run for more than two or three minutes at a



time. A change was made to a castor lubricant fuel (Record No. 2 Petroil) and, with this, the engine still slowed but then ran continuously, due, apparently, to the improved lubricating qualities of the castor-oil.

A series of checks was then made on the dynamo-meter during which readings were taken at intervals to avoid inconsistencies in power output, and the results obtained were then plotted over speeds ranging from 2,000 to 8,500 r.p.m. From this a maximum output of 0.2 b.h.p., reached at approximately 6,700 r.p.m., is evident, but it is almost certain that a substantially higher power will be realised when the engine has had more running.

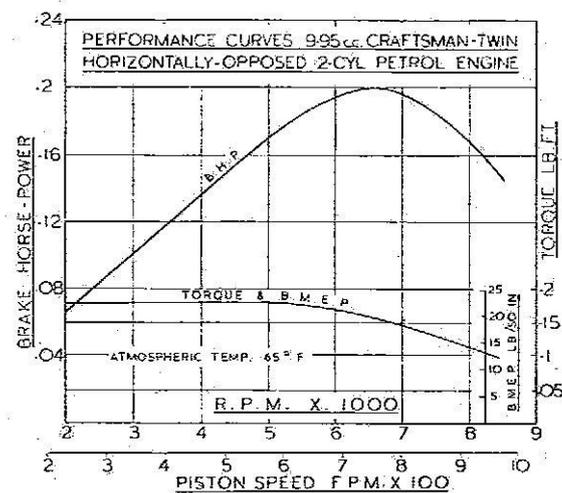
The manufacturers have confirmed that other examples of this design have required some four hours' running to overcome this initial stiffness. As is to be expected, the contact-breaker advance and retard,



combined with the choke and needle-valve, provides a wide measure of control over running-speed. No troubles at all were experienced with the engine, and the ignition system, including the compact M.I. Duomite twin-spark coil, functioned perfectly throughout the tests.

The "Craftsman" was also tried with glow-plug ignition on Mercury No. 4 petrol-base glow-plug fuel, the contact-breaker being removed and two Arden E.8001S glow-plugs substituted for the sparking-plugs, and was found to run satisfactorily, but one is left with the impression that many of the engine's best features are lost by converting to g.p.

Certainly the Craftsman-Twin is one of the easiest to operate and most tractable of spark-ignition engines and is undoubtedly an engine worthy of the attention of the more serious-minded enthusiast.



From George Stringwell

The cold wet and windy spring here in the Haute Vienne finally relented and produced a suitable day to do the first flights of the Interstate Cadet static shots of which you showed in the last S&T. Things were not entirely straightforward, first of all a prop change was needed to increase the watts from 33 to 50, then despite the CG being at 27% the next attempt was a "lock to lock" nose up struggle followed by an inelegant descent into the nice soft long grass which covers "my" flying field. So the CG had to come even further forward, to 23% and the control throws, rates and exponential needed adjusting. All was now well, although before the third and fourth flights I did move the CG a bit further, to 20%. This sounds extreme, but as I had elected to go with completely scale tail surfaces rather than the alternative enlarged ones on the original plan, it was no real surprise. Even this far forward there is plenty of elevator authority to flare it positively at slow speed on the landing

The model is now well behaved with a decent climb at full throttle and it cruises nicely at just over half. Surprisingly it also does lovely round loops, very nice stall turns and, despite the forward CG, a pretty spin which stops promptly when the controls are centred. It will require care on cross win landings, but a wing can be picked up quite easily - one of the photos shows it right wing down on "finals" but I was able to level it for a nice flared touch down, albeit the long grass promptly tipped it on it's nose.

The thing I am most pleased with is that, as I had hoped, it portrays the spirit of the original rubber powered model very well in flight with the light shining through the doculam/tissue covering.

As usual my wife Ali did her usual excellent job in capturing the flying shots (four of which are attached), life is a little easier for her now as she has a new camera with a 300 mm lens.





All stability problems are neatly solved by incorporated engine offset and a cambered rudder on this perfect replica of the famous Vickers-Supermarine fighter By P. L. WHITTAKER From *Aero Modeller* November 1955



This model is strong — virtually crashproof, a realistic performer, and stable enough to fly on a windy day. Pete Whittaker had in mind a scale model which would withstand all early misadventures and prangs to reach maturity without perpetual repairs and patch work quilt appearance. This was achieved, and after many flights the prototype bears only the small scar of a grid power line 120 ft. above terra firma—yes, it will climb! Clean lines enable an Ailbon Merlin to haul the 19 ounce gross weight off the ground in 6 yards in still air, or less with a breeze. In the hope that the propeller should point more to the front, and not

out of a starboard exhaust pipe, torque is partly cancelled by the “one-sided” fin section. Even so, engine bearers have built-in offset and downthrust, matched by former No. 1, thus preserving the smooth profile of the nose. A word of warning—use the timbers specified, and put them where specified, the C of G has to be squeezed

as low as possible.

Fuselage

Trace a spare sideview and build left and right handed fuselage halves, using balsa LI-ply for formers, 2, 3 and 4, together with the two wing root ribs on each side. Cement the halves together, ensuring accuracy of line. Set the engine bearers into former No. 1, persuade the bearers through the offset holes in formers 2 and 3 and cement into place. Next fit former 9 (also rudder post).

Carve lower nose from soft block, cement home and sand to shape. Sheet the entire fuselage with 1/32 medium sheet—performing with steam, water and persuasion—using one sheet for the entire top from formers 2 and 9. Now apply sheeting from wing T.E. rearwards—then fill in the sides. The large wing fillets, a feature of the Spit, are steamed 1/32 sheet mated on the T.E. to a length of cane cemented round from the wing to the fuselage.

Fit the LI-ply tailplane at this stage, cementing only at the rudderpost joint—thus allowing incidence settings to be finalised later. Before sheeting the belly, fit both u/c legs (14 s.w.g. piano wire) sewing them to the appropriate wing tongues. The legs are connected by a 14 s.w.g. wire crossing the fuselage interior, bent downwards and soldered to the top of each leg—thus shock loads are spread over the airframe and lateral stability is achieved.

Cover the entire structure with nylon—attached with glider dope, then fit the intake and radiators—finally covering these with nylon too. Due to the long nose, no fuel drain holes are drilled in the engine compartment. As the tank is emptied, splash is retained and trim is not affected. The detachable engine cowling is 1/16 in. Planked covered with nylon inside and out, the exhaust stubs being strictly functional—cut from cartridge paper.

Wings

Utilise 1/8 x 1/8 spruce spars top and bottom, plus a basket cane, crashproof L.E. 1/32 in. sheet is employed round the L.E.—while the “boxes” are 1/8 in. balsa sheet, bound with nylon tape.

Make a solid job of the root rib T/E join—this is loaded heavily when pranging. “Cartwheeling” protection is attained by coaxing the L.E. round the wingtips to the trailing edge.

Matt black dope the cockpit interior and fit the canopy over the nylon covering. Form the windscreen panel from cane, cement in place and apply camouflage—dark green and dark grey to all upper surfaces, using “Sky” below. Apply a white band round the rear fuselage, squadron letters, serial number, etc., and finish with two coats of fuel proofer.

Remember that the model is fast, so do your test gliding with some vigour. The scale tail surfaces need extra airflow to take full effect, a "mislaunch" can be very misleading. Cement the tailplane to its final setting and try a flight on reduced power. The writer uses a Truflex 6 x 4 prop giving 12,000 r.p.m. Such power can only be used when the offset and downthrust have been adjusted to a nicety.

Talking of power, a 1.5 c.c. motor has been flown in the first prototype, not unsuccessfully—using 2 1/2 inches dihedral and a penduhnn rudder limited to 1/16 inch movement each way, with a 7 inch pendulum arm carrying 11/4 inches flex cored solder. In this case the prop was a fibre five-blader, as shown on the plan for scale fanatics.

Don't hurry the job, follow the plans and you'll have a model which can be taken straight from flying field to any exhibition.

Engine note, and the behaviour of the model especially on take off, are strongly reminiscent of the real thing. The prototype climbs in wide left turns, giving a final burst straight ahead before weathercocking into an upwind glide, often landing within yards of its release joint.

SHOWSCENE from Dave Bishop of DB Sound.

It's just a few days to go before we all meet at Old Warden for the first (of Three) Modelair events on May 14 - 15 where there is full camping and real aeromodellers to have a catch-up chat to, for the whole weekend. It is run by Ken and Sheila Sheppard and it's a place to come early to if you are a day visitor, where you can get a "full English" at the super restaurant. Another thing is that it is not a show but everyone is invited to bring along a model to fly, albeit free-flight rubber - glider - control line - radio controlled- the whole gambit will be there "at it" from 10am to 5pm each day. There will a nice friendly atmosphere at the R/C area along with marshals James Gordon, Peter Royalle and Roger Godley and all frequencies are catered for as the friendly members of local Shuttelworth club man a transmitter tent for the 35 megers.

I am starting something new this year inasmuch as I want to get a record of the real aeromodellers. So everyone who has been "at it" for as many years as me say 50 - 60 or 70 plus are invited to come to my caravan at 3pm each day, which will be parked at the Radio control end of Old Warden and have a cup of tea and a biscuit. All will be invited to sign a special book. All I want is to meet real people, who way back in past years, have built and flown a Achilles -Ajax - Phantom - Competitor -Eaglet - Minimoa - Invader - Frog 45 - Lysander - Slicker -Saturn - Stunter - Korda Wakefield - Evans Jaguar - Tomboy - Cub, etc'. You get the feel of what is needed as being people from when we were real balsa bashers with half a Gillette shaving razor blade for the cutting tool. Also we are looking for a name for this "exclusive" new club and (possibly) another requirement will be that visible scar somewhere that all "proper" modellers have through been bitten by a propeller at some time, way back. This is definitely a "not serious" job but is intended for some more experienced aeromodellers to "swing the lamp" and say "I was there!" See you there at Old Warden so get thinking of a proper title for us exclusive aeromodellers!

More show events for you diaries.

June 4 - 5 at Long Marsdon a Traplet Publications sponsored event with some of the best show pilots from around the world demonstrating the latest and greatest aeroplanes ever. Bring a fisherman's folding chair with you , sit back along the long flight line with your sandwiches and drink and be thoroughly entertained each day. There are plenty of excellent toilets and stacks of friendly traders and I will do my best to keep everyone informed through my microphone as to what is going each day.

June 17 - 18 -19. Weston Park annual show at Telford where everyone meets everyone. Bring along a model as there is flying in the evening.

June 25 - 26 Wings & Wheels at North Weald aerodrome and I'll be there with my microphone to say goodbye to Jane Stephenson after so many years of her organising excellence but we have been assured that the show will go on which is very good news. Sadly there is no flying after the day show at this event but there is very good entertainment laid on for everyone during the evenings. There is the biggest market to see on the Saturday which sells almost everything you could wish to buy.

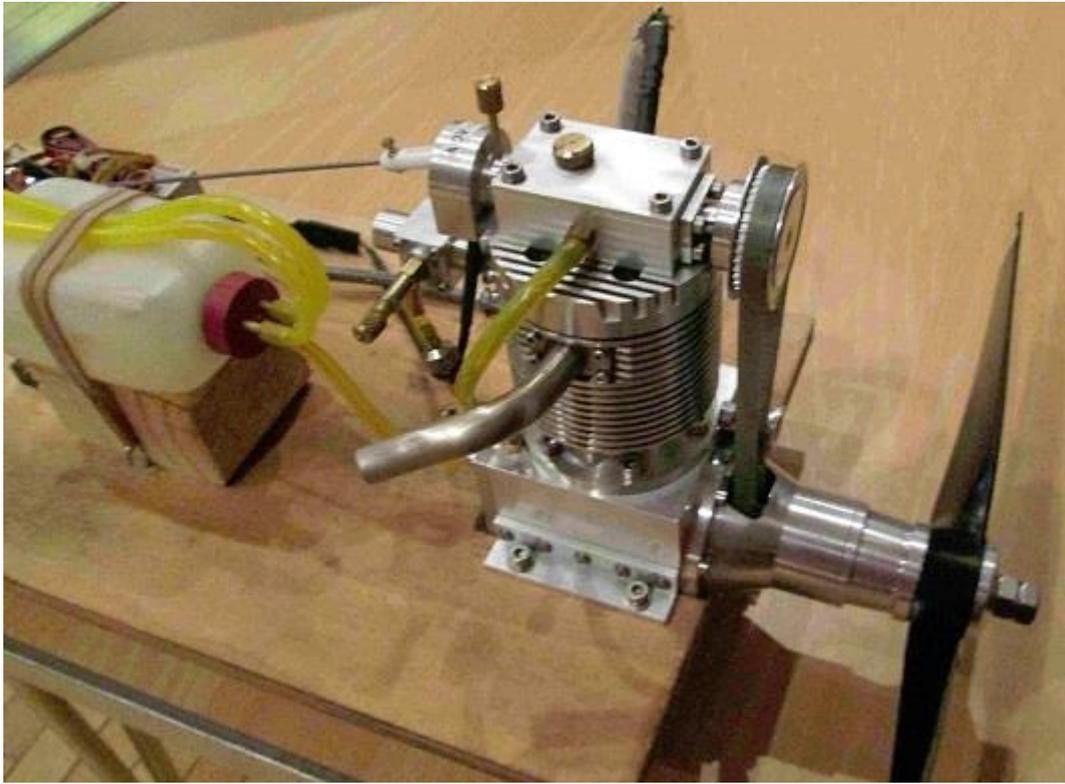
July 23-24 Old Warden Scale weekend .

September 24-25 and the last Old Warden's Modelair event with the Festival of Flight and the special "Vic Smeed" memorial day plus anything and everything Vintage. Belair will be at Old Warden and he will have all of the Vic Smeed models that will fit the bill for you to build before the third and final for 2016, Modelair event.

October 1-2 Ragley Hall this event replaces "Weston Park in the Dark" show and will be run by Steve Bishop and his team.



There was a great night held recently at the indoor Sevenoaks club's meeting at Westerham and two people who "made the evening" were Lesley and David Green with their Bi -Fli's



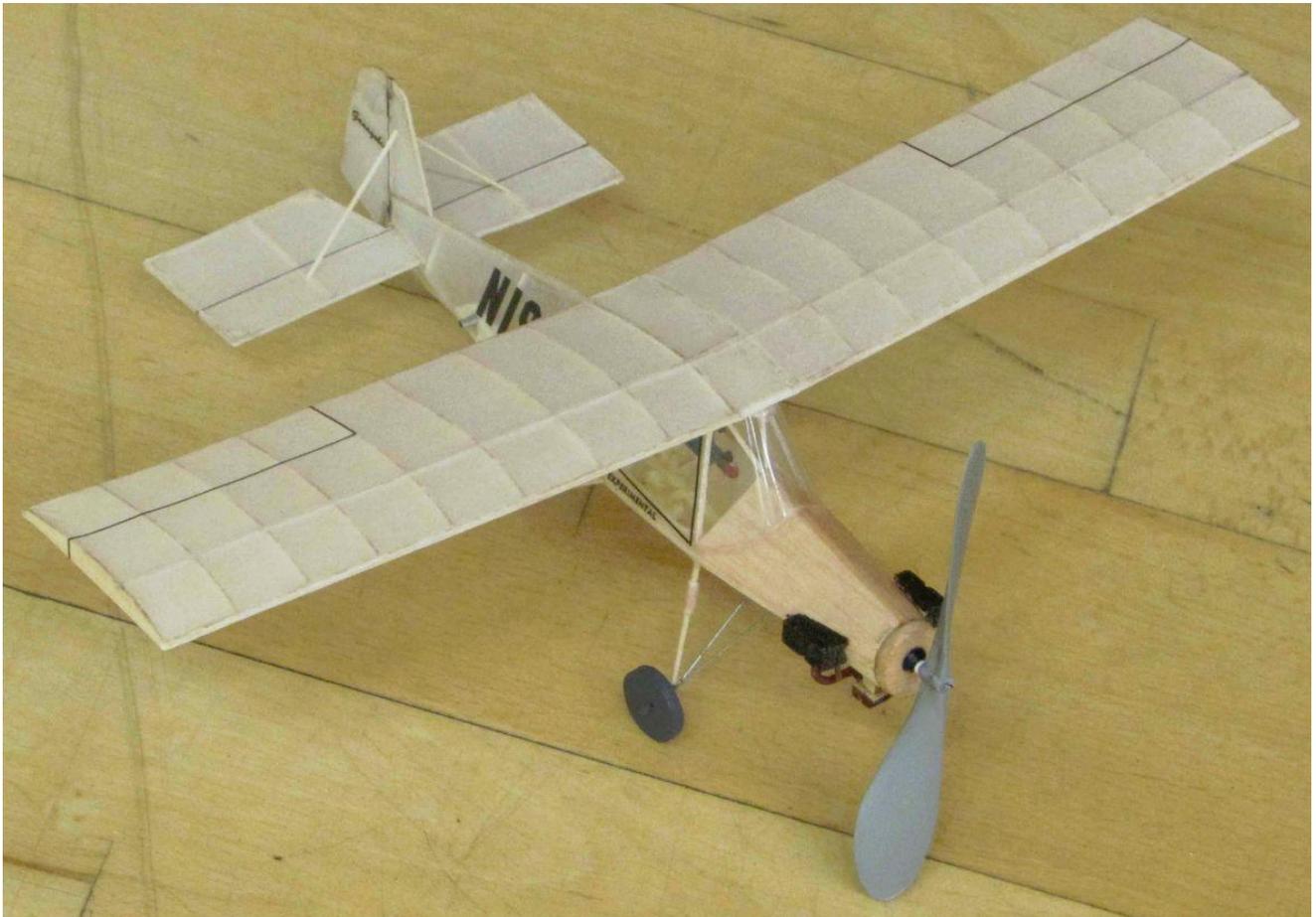
This home built 4 stroke engine was built by the chairman of the Sevenoaks club David Addison.



A free flight rubber model seen at the annual K2 Indoor event at Crawley in February.



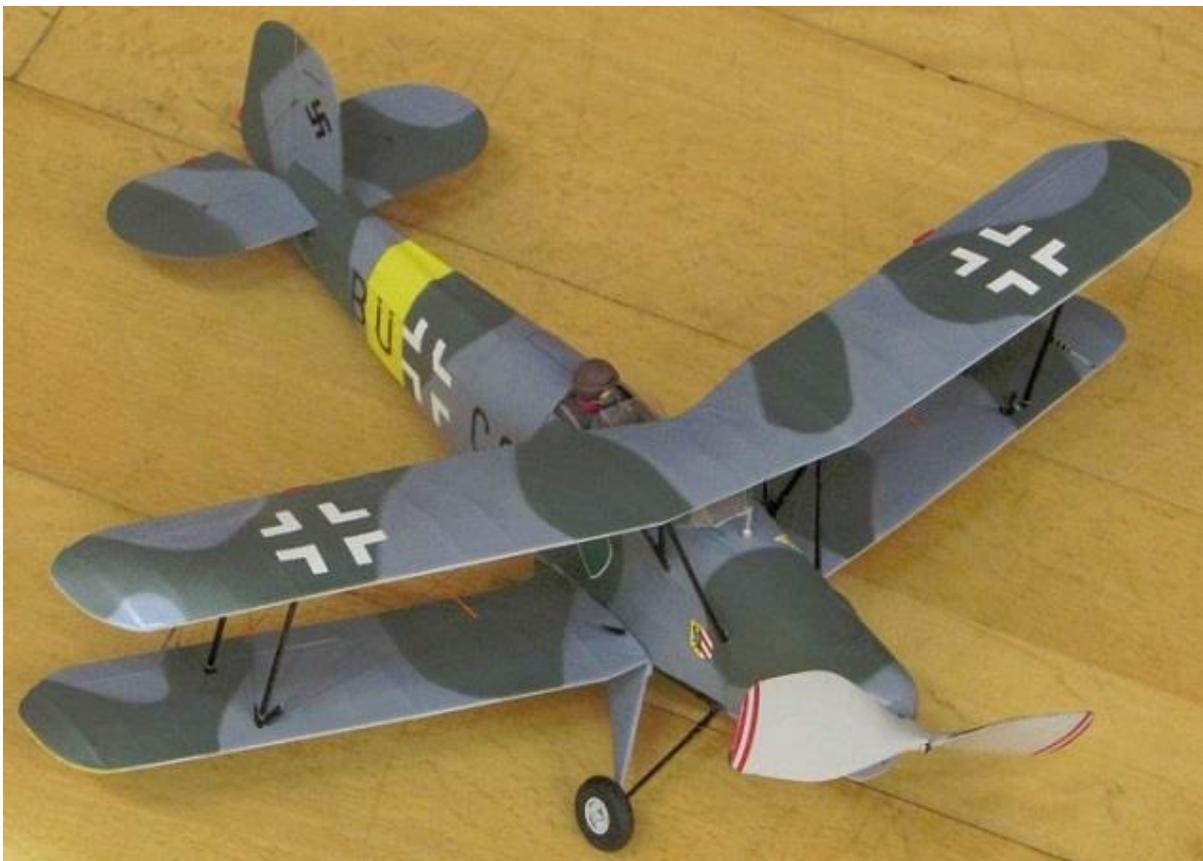
A lovely Cub at the K2 indoor event at Crawley in February.



A nice rubber flyer at the K2 Indoor event at Crawley in February.



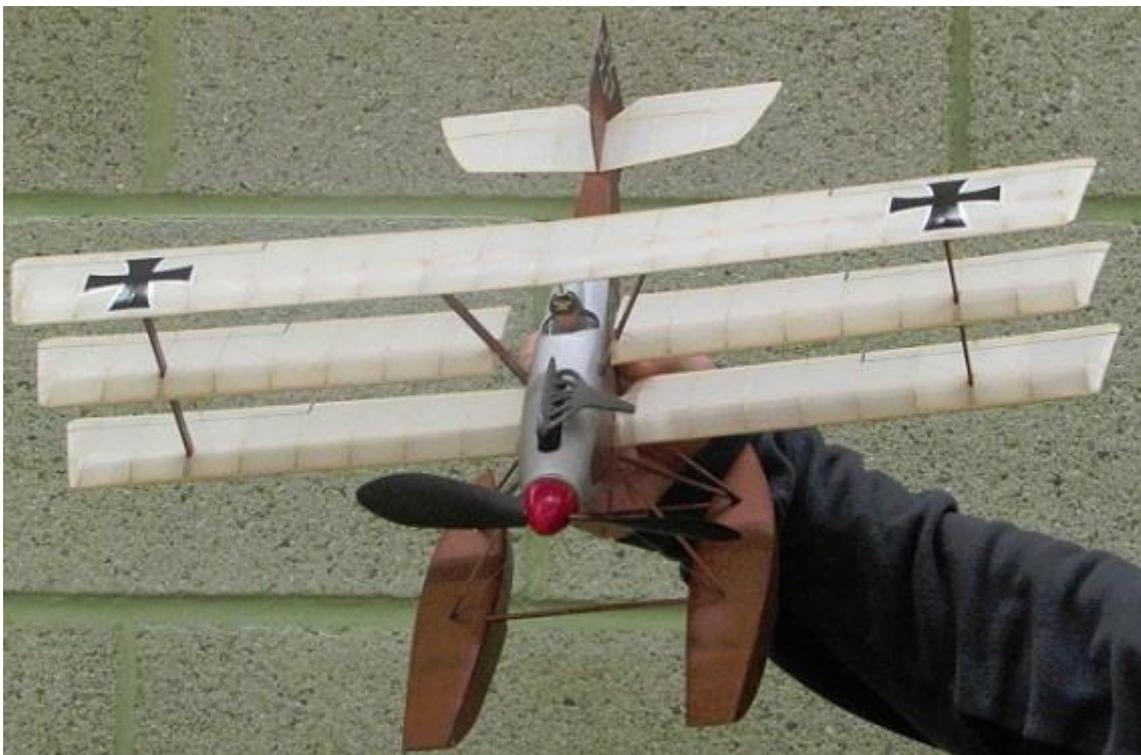
Another fine indoor Free flight rubber model at the K2 indoor event at Crawley in February.



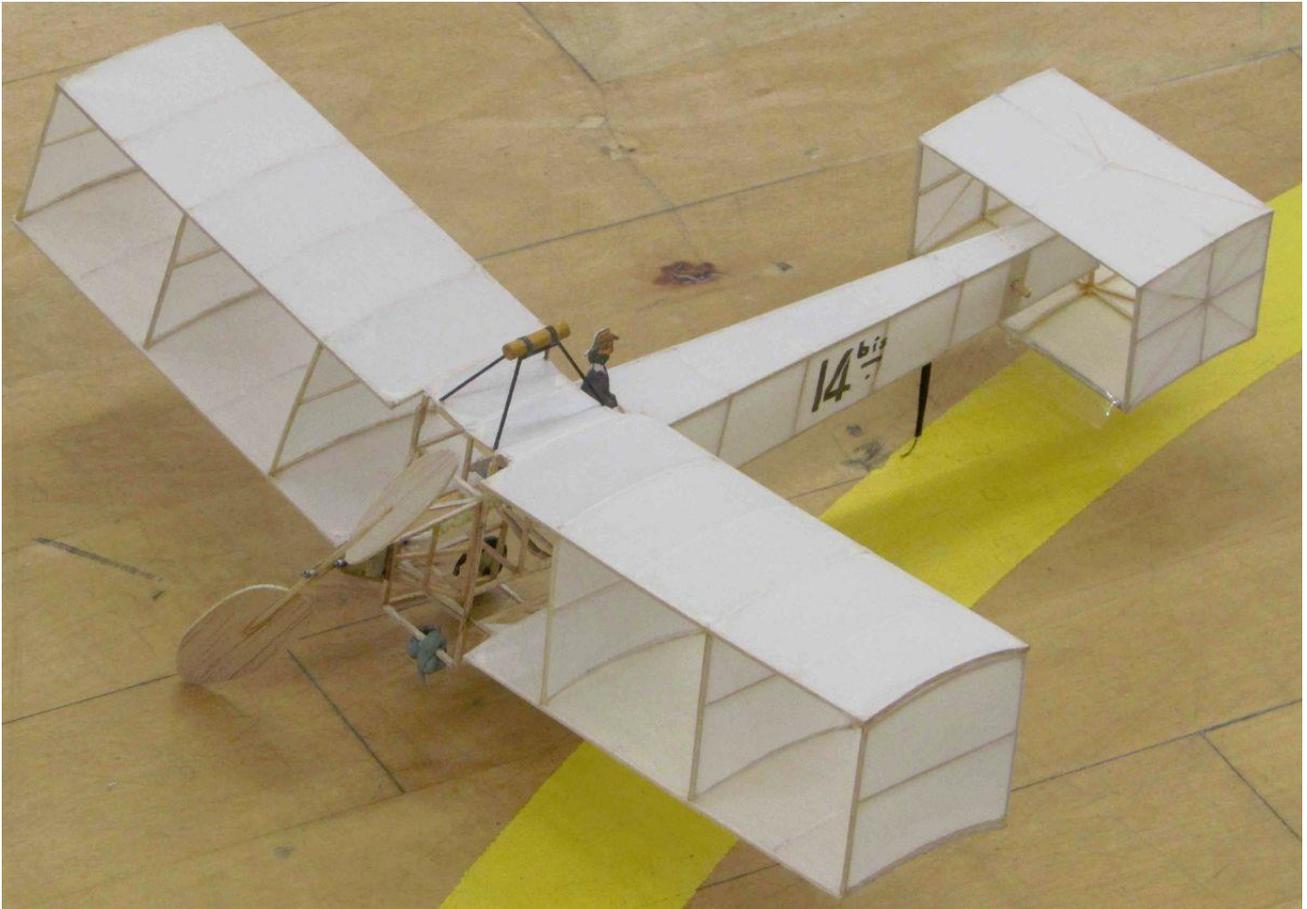
A "magic" Bucker seen at the K2 Indoor event at Crawley in February.



And another indoor flyer a Bucker seen at the k2 indoor event at Crawley in February.



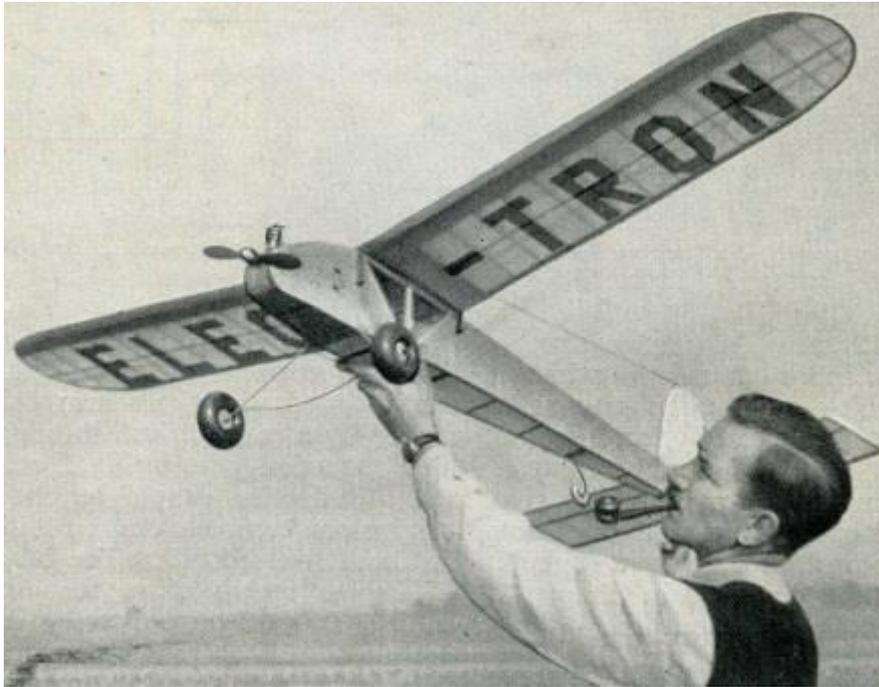
What a stunning piece of modelling is this Tri-plane seaplane seen at the K2 Indoor event at Crawley run by the BMFA and the Crawley club members.



This "14 Bis" pusher seen at the k2 indoor event at Crawley in February.



Have a go at guessing any (or all) of these happy trophy winners many years ago at a prize giving dinner. Any one of you Sticks & Tissue people could have been there! (I reckon they are UK Government advisors JP)



Now who is this and when was it?

(Ooooh I know I know picture me standing with hand up, me teachers pet JP)



And here is a "memory" picture at a special event so who do you know in the picture. There were other "people" there including the Duke of Edinburgh and the Archbishop of Canterbury. But what was it all in aid of?



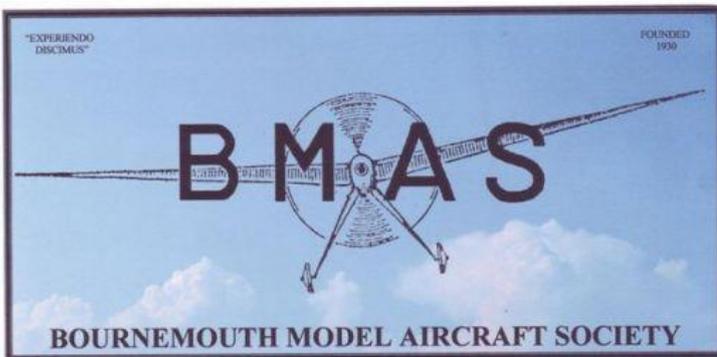
Ken and Sheila Sheppard will be running the Modelair at Old Warden on May 14 - 15.

Control line at Wimborne MAC

9 October Sunday

Cocklebarrow

The dates for Cocklebarrow have been confirmed as 10th July; 21st August and 2nd October.



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CONTACTS: JOHN TAYLOR 01202 232206

All dates are Tuesdays

26 April 2016

24 May

28 June

26 July

23 August

27 September

25 October

22 November



The Committee wish to acknowledge the support of the following sponsors without whom putting on this event and maintaining the field for the rest of the season may well have proved impossible :-

R & D Walker Ltd Butchers

The Moreton Charity

The Edith Mann Charitable Trust

This years event will be held on the weekend of 13th and 14th August. Format for the event will be very similar to previous years with :

- Off the peg flying both days
- Camping facilities (please contact us to book in advance)
- Saturday night BBQ
- Onsite toilets and drinking water facilities
- 200 ft grass strip for R/C flight
- Control Line Circle (depending on availability of land as we are on a working farm)
- Small field Free flight
- Bring and Buy Sale - bring along your bits that are "Surplus to Requirement" and turn them into cash

This year, as last, we will be holding TWO mass build events :-

On the Saturday we welcome pilots along to celebrate the "Cotswold Novice", the iconic Sid King Design

On Sunday it is going to be a mass collective of Vic Smeed designs.

In both events, models of any size (scaled up or down); in any version and with any power source, IC or electric, will be eligible.

For further information or to register your interest please email:-

gray@ncmac.co.uk

It goes without saying but please :-

**WILL ALL PILOTS PLEASE ENSURE THAT THEY
HAVE PROOF OF VALID INSURANCE WHEN
BOOKING IN**

**SHILTON
VINTAGE (FLY IN)**

BLACKWELL FARM

Saturday 28th and Sunday 29th May 2016

Details and directions for the Shilton Vintage meet on 28th and 29th May 2016.

Flying all day Saturday and Sunday.

Caravans and camping available, water on site and port-a-loo.

BMFA members only. Proof of Insurance required.

The Bar-be-cue will be running on Saturday evening from 7 p.m. Bring your sausages and burgers and enjoy an evening with like-minded people.

ARRIVALS FOR CARAVAN AND CAMPING AFTER 2 P.M. FRIDAY.

You will need to pre-book your pitch as we are limited to 10 caravans only. The site will be well sign posted with **SAM35**. Post code **OX18 4AP**

Caravans/Camping £10.00 for weekend

Flying £5 per pilot.

Local facilities are available in Carterton 3 miles away.

CONTACT: Nick Blackwell Tel: 01285 657610 (evening only)

Email: nick@nickblackwell.co.uk

OR Derek Foxwell Tel: 0208 647 1033

Email: derekfoxwell@btinternet.com

OR Boycote Beale Tel 01993 846690

Email: bealekraft@outlook.com

Directions:

By road from the north:

Follow the A40 to Burford, at roundabout take the A361 toward Swindon, at junction for Cotswold Wildlife Park turn left onto Hen and Chick Lane. Follow lane until it bears left, here turn hard right and take the track until it ends, this is the airfield.

By road from the south

From Swindon take the A361 to Lechlade and Burford. 3 miles before reaching Burford at junction for Cotswold Wildlife Park turn right onto Hen and Chick Lane, then as above.

(When you visit Blackwell Farm – you must try their honey – it's bloody marvellous)

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Belair Vintage is pleased to offer canopies for many of your favourite Keil Kraft, Mercury and vintage designs. Our moulds are designed in Rhino 3d using the plan's original outlines and profiles, then machined on a 4 axis Roland CNC mill, then vac-formed in house. No longer will you spoil the look of your KK Pacer or Ranger with a generic canopy, when you can use the original canopy.

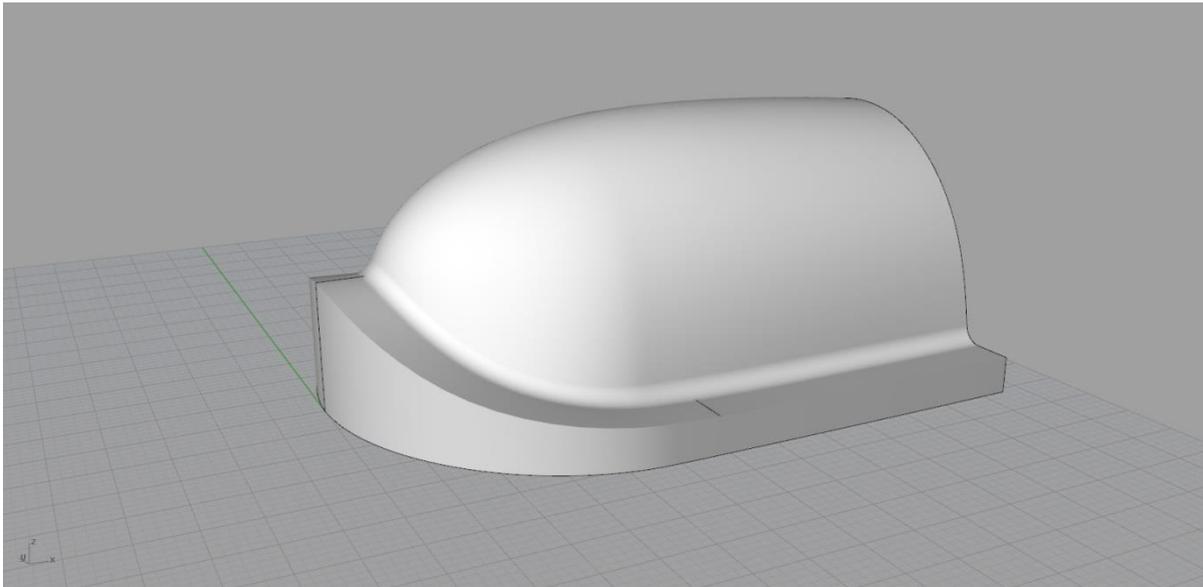
To complement the canopies, we are also producing original style bellcranks for many vintage Control line models.

Our latest list of Vintage designs has also grown and now includes -

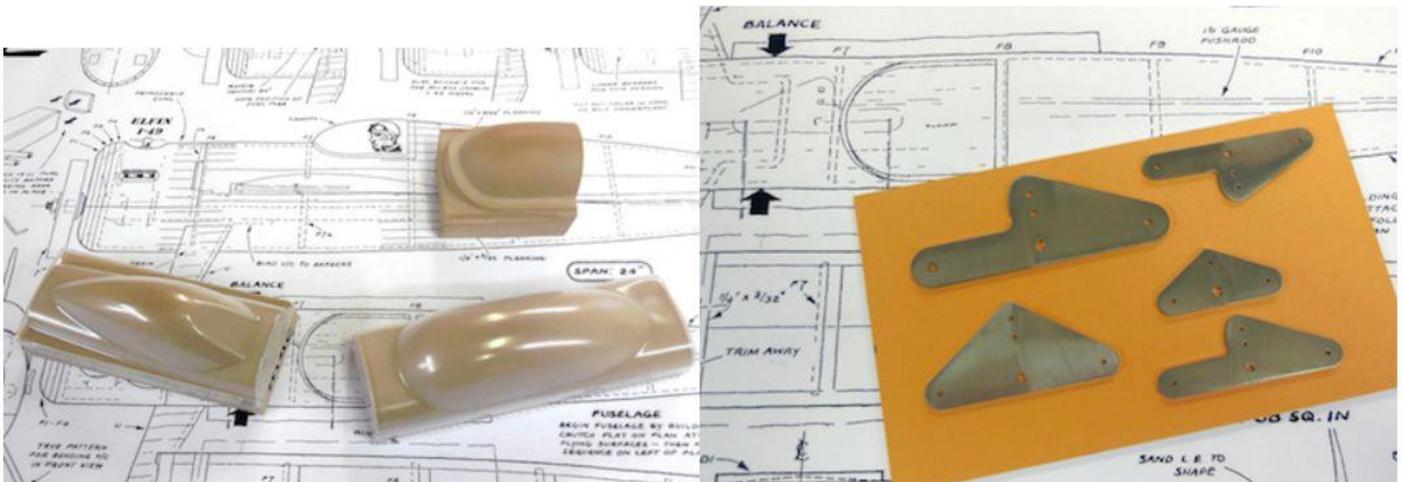
- All American Stunter - De Bolt inc plan
- KK Phantom - later version
- KK Phantom - early version
- KK Phantom Mite - 16"
- Princess
- Blue Pants
- FW-190 Focke Wulf CL 33" span Veron
- Veron Panther 41" span
- Veron CL Stunter MkII 30" span
- Mercury Team Racer MK1
- Philibuster 28" span
- Boogie Woogie AM
- Icarus - Coasby AM
- Peacemaker 46" inc plan
- Ringmaster Profile 42" inc plan
- Rascal
- Senior Monitor
- Supermarine Spitfire Mk XII Parts Set for AM1688
- Taurus - Coasby
- Thunderbolt - Morley
- Veron Nipper
- Vickers Viscount scale model
- Voetsak 1946 - Ron Moulton
- Weatherman - Cyril Shaw Speed CL original
- Weatherman - Clubman profile inc hardwood
- Skiffler - D Platt with canopy
- MiniBuster
- Philbuster
- Veron Combateer
- Peacemaker - Profile and built up with canopy
- Spectre KK
- Chizler
- Time Traveller
- KK Ranger Mk1 & 2 with canopy
- KK Pacer with canopy
- Spitfire 45" Pentland design CL776
- Humongous
- Mercury Mac with canopy

- Ringmaster
- Mercury Midget
- Tucker Special
- Feno
- Chizler Classic Stunter with canopy
- Sukhoi SU-26 profile stunter
- Trojan SAM35 Jasco
- Mercury Combateer with canopy
- KK Bantam
- KK Scorpion
- KK Super Scorpion

Call Belair Vintage on 01362 668658 for your free Vintage Catalogue.



Computer image shows the 3D development of the Keil Kraft Ranger Mk1 canopy.



Regards,

Leon Cole
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