

Sticks and Tissue No 107 – October 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 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>

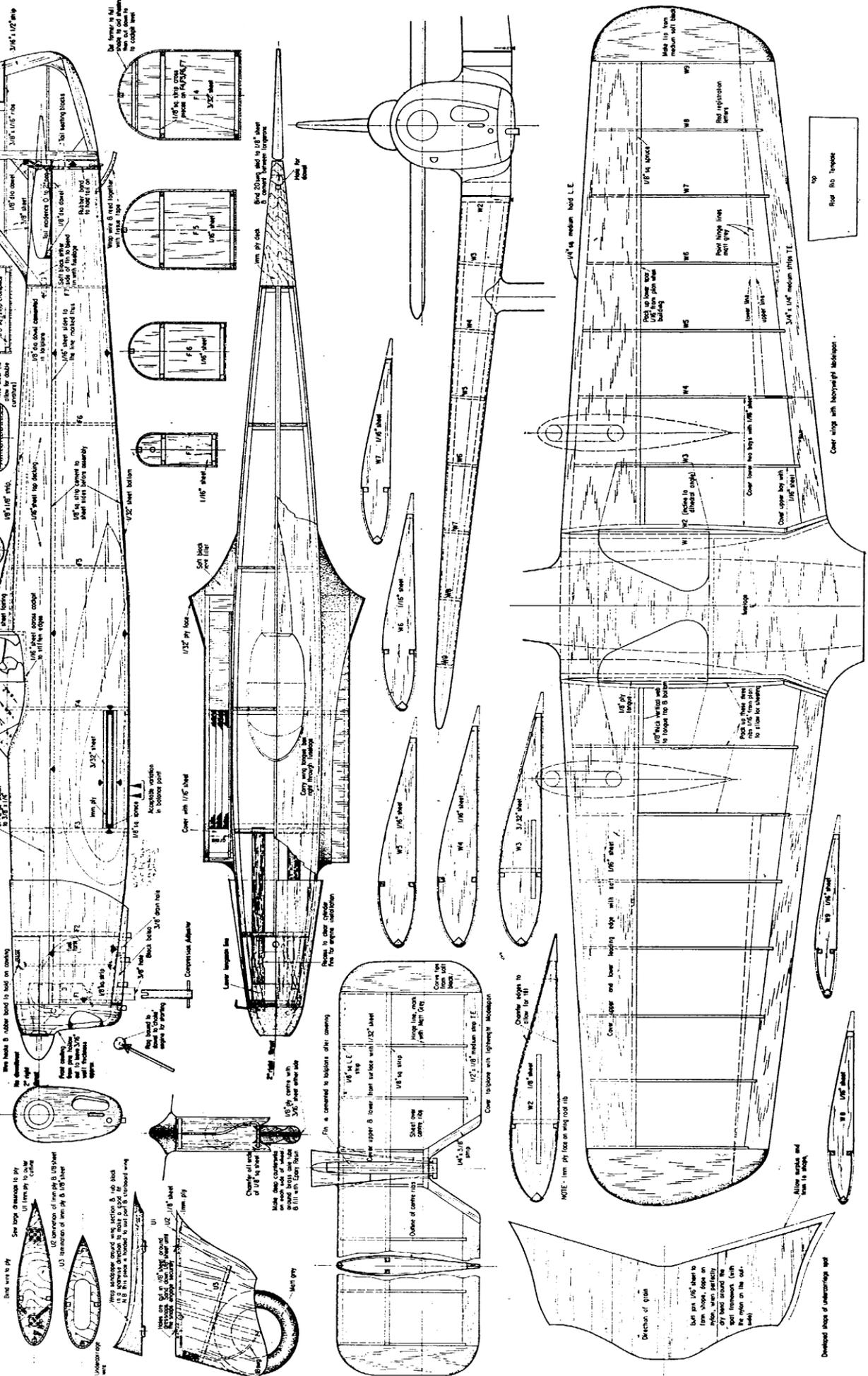
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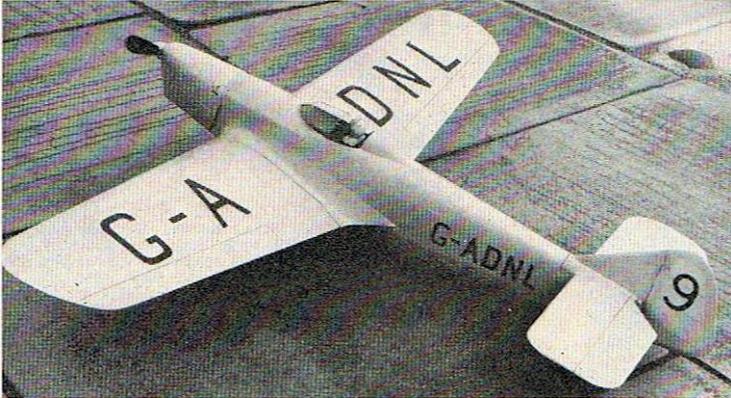
Derek Collin launching his Utility, powered by a sparky engine he made at Dorset Model Flying Group Gala day 18 October 2015

MILES SPARROWHAWK M5
 designed by **D.M. Collin**
 copyright of **The Aeromodeller Plans Service**
 15-25 JUNIOR STREET, LONDON, W8 7NS, ENGLAND

50p



**Miles Sparrowhawk .5 to .8 cc engines 35 ½" free flight designed by Derek Collin from Aero Modeller
January 1971**



The general proportions of the Sparrowhawk immediately struck the designer as nearly perfect for a free-flight scale model, when he discovered a three-view drawing in 'The Book of Miles Aircraft', a Harborough publication, no longer available and much treasured by collectors. The first model built utilised a D.C. Dart .5 cc. diesel, and weighed 14½ oz. In this form it was underpowered and would only just maintain height — although no doubt a lightweight version with a powerful .5 cc. engine would be quite satisfactory. However, the resulting flight would

be unrealistically slow, and thus a .75 to 1 cc. engine is advised.

Originally, the model featured pendulum-operated rudder, but later experiments proved that stability was increased by using a fixed fin and trim tab.

To check this, an AM10 diesel was substituted for the Mills .75 cc., and it was found that providing the model was trimmed to glide straight (or with just a gentle turn), it would fly successfully in quite a strong wind. Even with the model trimmed to stall heavily on the glide there was no tendency to spin-in.

It would appear that pendulum control is fine on a relatively slow flyer, such as the B.A. Swallow, but on faster models any sudden change in direction due to air turbulence etc., causes the pendulum to swing outwards under centrifugal force and tighten up the turn into a spiral dive. This caused quite a few inexplicable random crashes while the pendulum was in use.

The only known deviation from true scale is that the dihedral does not start immediately outboard of the wing fillets. The Sparrowhawk has extensive sheet areas, so choose soft or medium balsa to keep the weight down. Use P.V.A. adhesive for joints involving hard wood or ply.

Cut out the fuselage sides and cement on the 1/8 in. square edging strips. Build up the wing tongue box and glue between F3 and F4. Stand the assembly upright on a flat surface and carefully check for squareness. When this is quite dry, cement the sides to F3 and F4 but do not put any cement on the joint where the wing tongue box goes through the fuselage sides until after the tail end of the fuselage has been pulled together. This is essential as otherwise the fuselage will not be able to assume the correct curvature between F3 and F4. When cementing the tail end together, and when inserting the other formers carefully check that the fuselage remains symmetrical and untwisted. The rest of the fuselage is straight forward. The curved top decking is easy if you use soft, straight grained sheet wetted on the outside and doped on the inside. Engine bearers are glued into F2 and F3 and before pulling-in the front part of the fuselage sides around F1. Check that the engine can be installed at this stage of the construction and leave off the bottom part of the engine cowling until the engine is finally fitted. As the model is likely to be tail heavy, a piece of pine can be used for the front cowling, which can better absorb impact damage than the hardest balsa. Wing fillets are built up from soft 1/4in. sheet cut to the side view shape. Profile them to match the fuselage sides, carve and sand out the concave surface before cementing in place.

The wings are conventional although care should be taken that the root ribs for the port and starboard wings have the slots for the wing tongues cut identically. If soft block is not used for the wing tips they should be hollowed out as much as possible. The fillets for the undercarriage legs are fitted after covering the wings. Remember that the undercarriage spats are vertical and are not perpendicular to the undersurface of the wings. The joint onto the wing surface can be neatly made by rubbing the fillet span-wise on glasspaper wrapped around the wing.

Cover the wings with heavyweight Modelspan and all the rest, including all sheet areas, with the lightweight grade. A couple of coats of clear dope followed by two coats of cream colour dope thinned with their own volume of thinners gives a reasonable lightweight finish. Registration letters are painted on with Humbrol enamel (so that mistakes can be corrected). The fuselage was also fuel proofed with particular attention given to the engine bay.

Before flying make sure that the plane balances as indicated on the plan, preferably on the forward limit. The original model required nearly one ounce of nose ballast. Probably due to the thick wing section and the in-built wash-in towards the tips the stall is very gradual, more of a 'mush'. This is just the job for the full size version, but rather tricky for the first test glides as there may not be sufficient height for the stall to develop. If possible, launch down a gentle hill slope and trim out any tendency for the glide to level out, which is really the start of a stall. The glide is quite fast and should also be quite straight.

With power on, adjust the sidethrust to give a slight turn to the left — a gentle glide turn either way seems quite safe. If the glide is satisfactory but the model flies fast under power without gaining height try a spot of UP thrust for the engine. A high thrust line in a low wing model produces a nose down couple under power, which may prevent the model from climbing.

The designer has no experience of radio control in this model although there is plenty of room.

The model is very robust and is reasonably stable, but it is expected that at least a 1 c.c. engine would be needed.



George Caple Hitchin UK

The LULU was written about recently. In 1949 or so, a friend gave me a Lulu set of plans, and I made a number of them - as they kept disappearing. One disappeared on a York MAS outing to Baildon Moor, and another covered 13 miles to a village from whence I retrieved it. I believe that I built a third. However, my main challenge was the Wakefield of which I finally built two Evans Clippers at the age of 15. The second flew so well that it eventually covered the whole length of York aerodrome's main runway plus a field or two and disappeared into the corn. I just could not locate it. My main claim to fame was the design, construction and flying of my canard which in 1952 set an RAF and British duration record of 22 minutes 11 secs which was NEVER beaten. Jim Newman could comment on this.

Cocklebarrow Farm Vintage R/C Event

Tony Tomlin

Sunday October the 4th, was the date of the final meeting, of the three planned for 2015, at the excellent Cocklebarrow Farm site near Burford, deep in the Cotswolds. The previous two meetings in July and August had been blown / washed away, much to the disappointment of the keen fliers who turned up.

After a foggy start the sun broke through, the visibility gradually improved and after a while we were treated to a virtually windless day. Within a very short space of time the car park was full, 66 fliers signed on, with an estimated 140 models, however there were also many more people present, some there to just watch and soak up the atmosphere of this very popular event. Again it was all organised by Paul and Val Howkins. Thanks to them and their band of helpers who make this meeting such a success.

With the large amount of models present, the air was soon buzzing to the sounds of four and two stroke engines and of course, as is now the trend, many electric models. The smallest there were probably a couple of Vick Smeed Chatterboxes and a Sharkface, which seem to fly at great speed, mainly because of their small size. Shrimpos, Majestic Majors, a pair of Spooks, a Privateer, a 9ft span Mamselle and many more made up the 'large' size category with Junior and Super 60s, 48" Tomboys, Galahads etc filling in between. A small number of low wing models were flown which made a change from the normal, large amount of

high wing vintage designs seen. John Laird was flying his well finished Ben Shershaw, Cumulus design with Tony Tomlin flying a scaled up 1.5 to 1.0, Peter Fisher designed, Meson. Mervyn Tilbury was also flying his recently finished scale Bebe Jodell that, after a little fettling, flew well.

As normal at Cocklebarrow events there was a competition for 36" and 48" Tomboys. The foggy conditions earlier in the day gave some of the competitors problems making the two, four minute + duration flights to qualify for the mass launch flyoff. It was decided, in fairness to the fliers that only one flight was required to qualify.

Tomboy Competitions

Tomboy 3

There were 9 entries for the popular 36" span Tomboy class, with 7 making it to the mass launch flyoff. Nick Skyrme was the starter, 6 models got cleanly away but George Ford was sidelined with engine starting problems. It was soon apparent that although the sky was a brilliant blue with just a few fluffy clouds, visibility was still poor. After around 1 minute of climbing [the normal motor run being around 2 minutes] most of the models were suddenly vanishing and having to be spun down to a lower level. John Strutt was unlucky to lose sight of his Tomboy, which vanished upwards and was lost. Bob Young was the first down in a little over 3min 30secs, followed by Tony Tomlin, 11/2 mins later. Brian Brundell, although not having a long engine run claimed 3rd place at 8 mins 21 secs. The two remaining fliers, Paul Netton and James Collis, were just about visible at an estimated 600ft. James finally became the winner at just short of 12 mins, around 11/2 mins after Paul in second place. All agreed that the visibility problem caught the fliers out. We were pleased when John Strutt appeared an hour or so later having luckily found his model undamaged two fields away. John did claim that he should have won, with a time of 1hr 30 mins O.O.S.!

Results

1] James Collis 11 mins 52 secs 2] Paul Netton 10 mins 33 secs 3] Brian Brundell 8 mins 21 secs
4] Tony Tomlin 5 mins 06 secs 5] Bob Young 3 mins 31 secs
Did not qualify; John Strutt, model lost O.O.S. and George Ford, non start

Tomboy Senior

Seven fliers qualified for the flyoff and it was hoped that the larger 48" Tomboys would be easier to see in the conditions. Nick Syrme was again the starter and this time all the models got away well, staying close and climbing in what seemed a more leisurely fashion. As before it was apparent that visibility was a problem. The faster climbing models were soon vanishing from view and having to be spun down. Tony Tomlin and Bob Young both came down a little too much, with Tony landing at 8 mins 17 secs followed by Bob 13 secs later. Roger Briggs was next down at 10 mins dead, a good time in the conditions. At this point Peter Rose's lightweight Tomboy vanished upwards and was gone. The remaining 3 were close, all trying to balance lift against visibility. Barrie Collis was down in 3rd place at 12 mins 14 secs, four seconds before his son James. Brian Brundell had managed to stretch his glide for a few more seconds and landed in first place, 12 secs later to a round of applause from the many spectators. Luckily Peter Rose was reunited with his Tomboy Senior the following day after it was found by a friendly farmer.

Results

1] Brian Brundell 12 mins 40 secs 2] James Collis 12 mins 18 secs 3] Barrie Collis 12 mins 14 secs
4] Roger Briggs 10 mins 00 secs 5] Bob Young 8 mins 30 secs 6] Tony Tomlin 8 mins 17 secs
Did not qualify; Peter Rose model lost O.O.S

Fliers then continued to make the most of the good conditions until late in the afternoon when Val Howkins presented the raffle prizes and Tomboy awards, bringing to an end an excellent days flying for all.

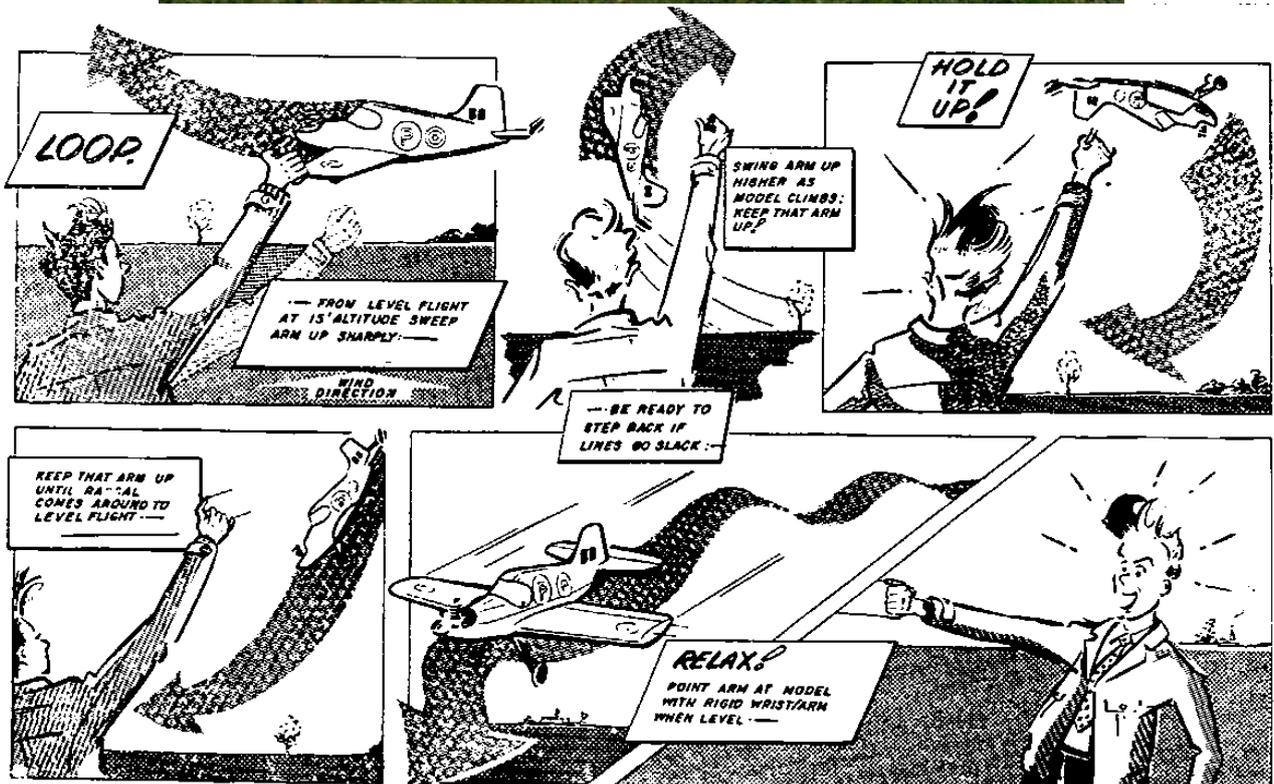


John Laird revving up and rolling



James and Barrie Collis





Wimborne MAC control line day Sunday 11 October 2015

The weather was reasonable for the day and turn out was expected to be reasonable. Many thanks for those attending and had long distances to come such as East Grinstead, Horsham, Burgess Hill etc etc. Still numbers were enough for an interesting day. I even had a fly!

Of interest was the number of electric models Dick Stepney had and IC and electric version of the Whilst Chris Hague had electric carrier deck and virtually all Stewart Hindle's models are electric.



Chris Hague's carrier model electric with RC throttle







Dick James debating fly or sit





Dave Ashenden knows how to start his PAW



Dick Stepney's IC version of an Allen Brickhaus design called Legacy.





John Bainbridge's former Terry Baker's Conquistador flown by Chris Hague



Chris's Kittyhawk built many moons ago by Brian Beacham







John Stemp brought along a variety of combat models





Action man Dick Stepney

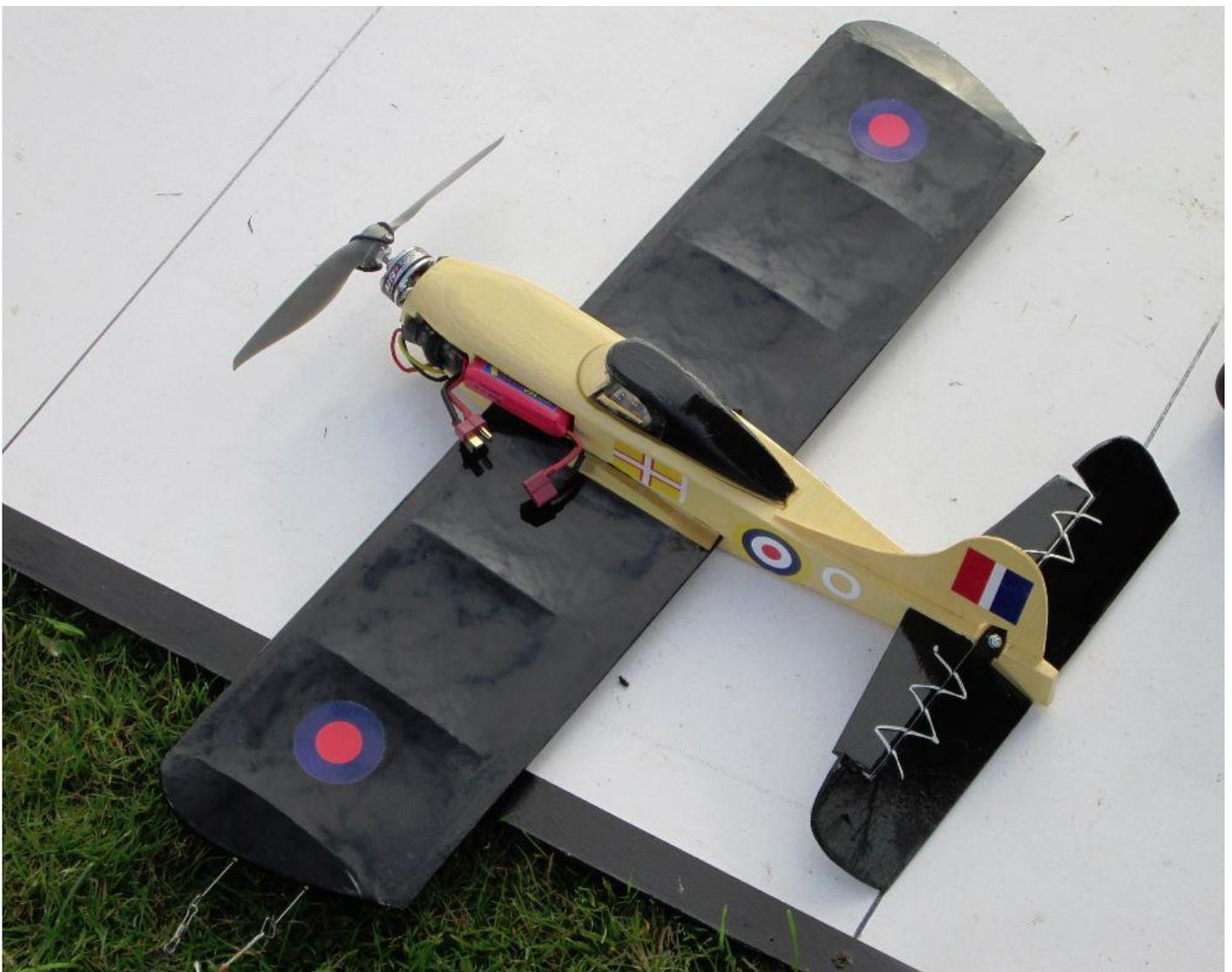


John Bashford watching Barry launching





Stewart Hindle's boot of models



Here is Stewart's Veron Bee Bug electric



Bee Bug and dolly. Stewart always brings with him some boarding, carrier deck, which is useful for taking off of grass with small models





Dick's electric version of the Legacy.







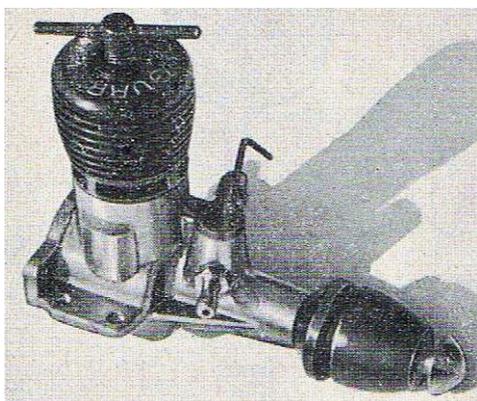
James,

Here's an engine we don't see very often. This H.P. 3.5 cc engine was made in Barnet, North London, in 1947. It was a continuation of the earlier Atlas engines, made in Dunstable.

The Atlas was a good engine, but this H.P. is even better. The production quality is superb, and it's a great runner as well. Shame there aren't more around.

I've been thinking about flying this one for donkey's years... but you know the way it is...

Brian



Jaguar 2.5 cc Aero Modeller October 1955

Overall impression of this German engine is of a beautifully made engineering job with a particularly fine finish. The die casting, for instance, is buffed and polished to a mirror surface whilst interior machining is generally excellent, all threaded parts fit really tight, etc. Further, parts are taken down to relatively thin walls throughout, more in keeping with American practice, so that the complete engine only weighs just over 3 1/2 ozs.

Design is straightforward enough. The crankcase has cast-in beam or radial mounts, the latter being machined away so as not to interfere with beam mounting. Holes are drilled -to the metric equivalent of 6 BA clearance size. Controls are sensibly proportioned. The needle valve is angled back and fitted with a ratchet-type lock with a very positive action. The tommy bar for compression adjustment is easy to grasp and contra-piston fit just about perfect for ease of adjustment without showing any tendency to work off when running.

Running tests were started with large size propellers when performance and general handling characteristics were rather disappointing. Starting was easy enough with the engine cold, but difficult with the engine hot. And the engine does get quite hot after a minute or so's running. As soon as a change was made to smaller propellers, however, pushing the operating r.p.m. to beyond 10,000 r.p.m. a complete change in behaviour was noted.

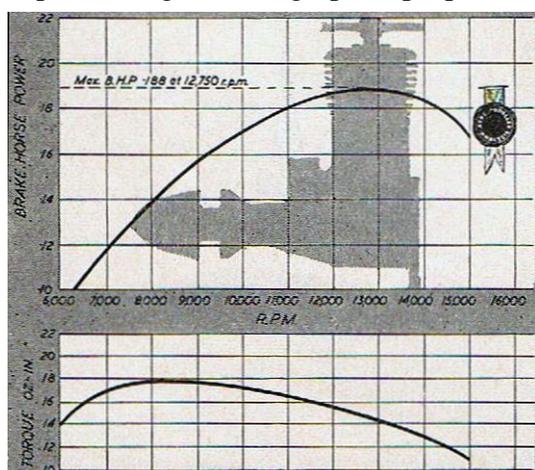
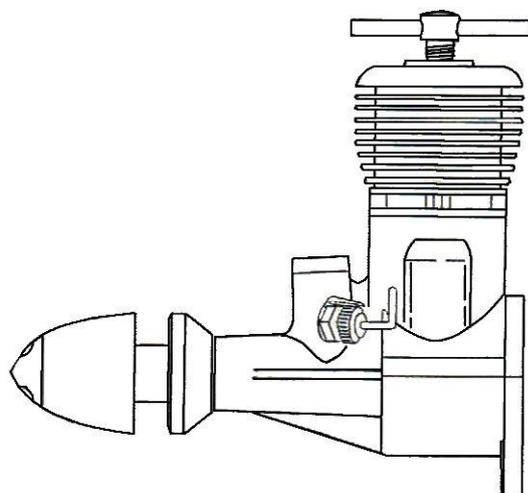
Running was sweet and free from the laboured heavy vibration experienced below 8,000 r.p.m. and starting, hot or cold, was easy. A single finger choke induced sufficient prime for an immediate start without altering the controls from running setting, when hot. Two choked turns produced a similar start from cold. Further, the engine seemed particularly happy running at high speeds.

With small propellers, this is one of those diesels which will hit back smartly, starting with small diameter propellers, if the propeller is not flicked over fast enough. But with a sharp flick, hand starting with 7 and 6 inch diameter sizes is easy— and safe.

As an additional precaution the needle valve can be opened up a turn for rich and slower starting, although this is not strictly necessary. With rich starting, too, it will almost certainly be necessary to reduce the compression slightly from the best running position for high speed operation. Given the right initial settings and a determined flick over, it is readily possible to operate this engine without touching the controls further.

We were not too taken with the propeller shaft assembly. A 3/8inch boss projects in front of the propeller driving disc, which fixes the propeller hub hole size required, but this is relatively short.

A threaded shaft with a "spinner" head screws into the crankshaft proper, sandwiching between a spinner-shaped fairing. With high pitch propellers (i.e. large hub thicknesses), alignment does not appear always as satisfactory as it might be. Presumably, if high pitch propellers



are to be used, the answer would be to cut back the spinner fairing. Additionally, the "spinner" head on the shaft screw is quite small and the tommy bar hole large, by comparison. Hence this unit will not take a lot of excessively rough treatment. But particularly we comment on inclusion of a tommy bar of the right size with the motor. Only a small point, but one which many customers will appreciate.

Power output we found to be of the standard expected with a normal 2.5 c.c. production engine with plain bearings. We have

Propeller dia. X pitch	r.p.m.
9 x 8 (Truflex)	7,500
9 1/2 x 4 1/2 (Truflex)	8,350
9 x 6 (Stant)	9,300
8 x 6 (Stant)	11,200
7 x 4 (Trucut)	13,750
6 x 4	15,000

already remarked on the excellent high speed running characteristics which are maintained well past the peak B.H.P. point. Our torque figures showed peak B.H.P. to be developed at just below 13,000 r.p.m., but the Jaguar sounded just as happy running at 15,000 r.p.m., although at this speed torque was considerably reduced.

The marked falling off of torque at the lower end of the speed range may be a characteristic only of the test conditions since considerable vibration was present in this region. We would say from general operating characteristics, however, that this is not an engine which will be happy with large size propellers holding the r.p.m. down to 8,000 or less. Nor does it appear capable of any outstanding performance, although it is a really pleasant engine to handle and obviously well suited for sports flying.

Fuel consumption is moderate and it does not appear in the least critical on fuels. Allbon diesel fuel was used in establishing the test figures, but performance appeared similar on other standard proprietary fuels tried.

DATA

Displacement: 2.48 c-c. (.151 cu. in).

Stroke .59 (15mm) Bore .55 (14mm)

Bore / stroke ratio: 1.07. Weight (bare) 3 5/8 ozs

Max. B.H.P. .188 at 12,750 rpm. Power rating .076 BHP per cc

Power / weight ratio .052 BHP per oz.

Material specification

Crankcase: Die cast light alloy, buffed and polished.

Cylinder: Steel. Cylinder jacket: Light alloy (anodised black).

Piston: Cast iron. Contra piston: Cast iron.

Connecting rod: Dural. Crankshaft: Steel.

Bearings: Plain. Spraybar assembly : Brass.

Manufacturers

Josef Friedrich Schmidt, Munchen 13, Blumenstrasse 21, Germany.

From Ronald in Belgium

just a few action shots with the Radio Queen





By the way James, the wing is not the correct Radio Queen one, but the enlarged (+1/8) Buzzard Bombshell wing, which flies the model in fact better than the original wing. Prop is a Master Airscrew Fokker series Scimitar profile 13x6 (undercambered) on a Laser 70. This setup allows me to fly in winds up to force five, provided the wind is not too turbulent. The spoked wheels originate from a Blue Max plane (which was totalled last year) and they were included with the ARTF kit. I actually bought the kit in order to get to those spoked wheels!

As you mentioned that the latest edition of S&T is a bit less bulky than usual, I herewith send you another set of pictures helping to fill the next issue, with a modeler "in action". The plane is the well known Lanzo Record Breaker, moved by an old OS FS-90 (push rods at the rear) churning an APC 14x6 at moderate rpm. Having added an Enya 90-4c silencer, the resulting sound is very nicely mellow and civilised. A joy to pilot, preferably in light winds to make it really enjoyable.





There's concentration we've all done it







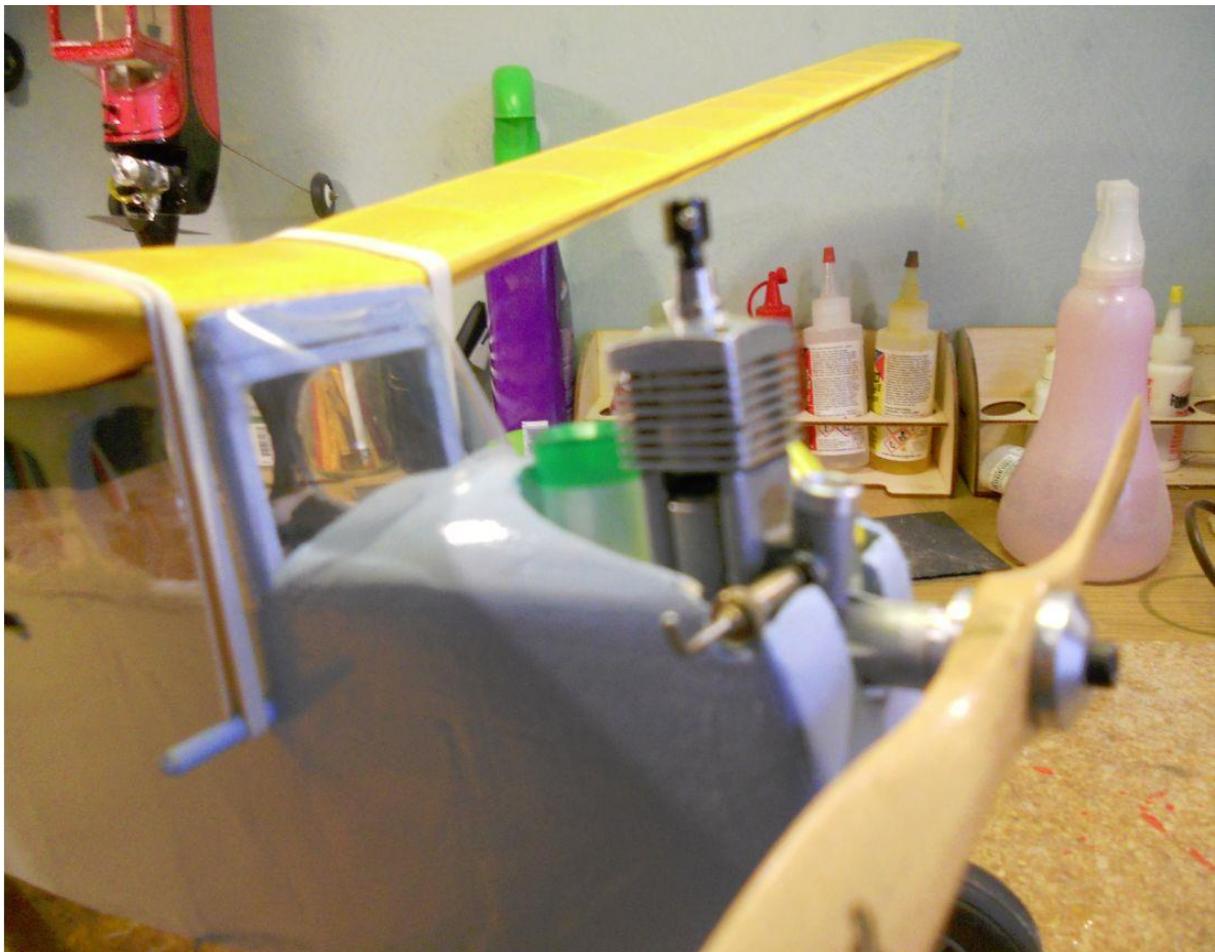
One happy Ronald

From Jörgen.

Hi James sending you some pic,s of what could be the last flying day of this season? Ibrought along my ten years old Varsity and my 25 years old Taylorcraft the Varsity is a short kit from Klarich custom kits the Engine is an old OS 15 Max 111 the Taylor is a kit from MicroXmodels and has a COX 0,49 teedee up front sadly the Varsity crached on the first flight the rec battery Quit on me the model is a total crach



.Hi James showing my latest a 105 cm Powerhouse short kit from Caramba models Belgium and in front a 0,75 Polodnik diesel unflown yet sorry about Indoors pic, raining cats and dogs outside

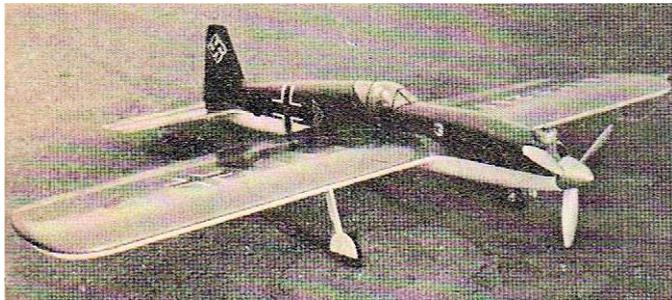


Heinkel Stunter. Clemete Cappi's semi-scale 54" control line design from Aero Modeller September 1969

When construction started on this model last winter it was intended to duplicate the author's previous model named Skylady a development of the Skilat (squirrel) by Luciano Compostella which has so strongly influenced the stunt trend in Italy.

The problem was that perhaps too many Skilats have been built in Italy during the last two years so that the design is now rather commonplace. It was decided that it would be better to personalise the new model in some way, without losing anything of the very remarkable flying characteristics of its ancestors. A good semi-scale effect seemed to be the right solution. When research for a suitable aircraft was commenced it was obvious that the choice was not too wide owing to the upright engine. In fact only W.W. II fighters developed around Daimler Benz 601 could be considered.

After discarding the Tony and Macchi 202 which were already being flown by other modellers, the designer's attention was caught by the Heinkel 100 which, though not so renowned, had the advantage of being particularly suitable.



If readers compare the plan of my model with drawings of the real aircraft (see War Planes of the Second World War, Fighters Volume One by W. Green or the monograph by Aero Publishers of U.S.A.) they will easily discover that details of this model are not to scale. This is because the first object was to have a 100 per cent competitive stunter so the proportions and surfaces of the previous Skylady were not altered.

After more than a hundred flights, the Heinkel is still in perfect condition and this proves that the basic design is functional and exempt from substantial errors. It can be recommended to those flyers who like to have a good-looking semi-scale stunter which is not too difficult to build.

Construction

The original model was powered by a Fox 35 and weighed 45 ozs. without fuel. Flying characteristics can be still further improved by reducing weight to approximately 43 ozs. This can be achieved with a careful selection of balsa and a light finish.

The wing should be built first as the model is constructed around it. The wing has a 'D' tube structure which is now traditional in stunt. The main advantage is a high torsional strength which practically eliminates the danger of warps due to covering. On the other hand, it must be carefully built to avoid built-in warps which are very difficult to remove, and can seriously affect the model's flight behaviour. Keeping this in mind check critically your building board; if it is not absolutely rigid and flat do not hesitate to replace it. The spar is slotted from the ribs which are then glued on using a P.V.A. glue as this does not shrink. The 10 s.w.g. landing gear is mounted with J bolts onto the respective ribs before they are glued to the spar. By constructing the wing upside down, blocks may be placed under the L.E. and T.E. to assure accurate setting of the parts. Be sure to position the spar correctly on the board otherwise one risks getting the shorter panel on the inside! Wing tips are carved from 2 in. balsa block. Only the inboard tip is hollowed. Leave out-board tip solid. Remember to insert (between trailing edges) the small triangular blocks supporting the flap hinges. To complete wing, cement bellcrank mount in place, add bellcrank with leadouts. add pushrod bent as per design, epoxy flap horn to T.E. and finally add planking. Do not forget double planking the central section between L.E. and spar. To allow this, cut centre ribs as per plan. The flap horn is bushed as shown. The tail is cut from 3/8in. balsa sheet and profiled. Central section has a constant thickness to facilitate 0° setting and obtain a stronger bond with fuselage. Flaps are cut from 1/4 in. balsa and slotted to accept horn and hinges. They are epoxied in place before mounting wing in fuselage. Cut fuselage sides from two 1/8 in. balsa sheets with perfectly straight edges. Mark the thrust line carefully which will allow one to align the various components: engine, wing tailplane fuselage doublers are cut from 1/16 in. Ply wood and epoxied in place. Then cut slots for wing and tail. Mark reference lines for engine mounts which are mounted 1 mm. lower than thrust line to allow a place for 1 mm aluminium reinforcement to be epoxied to the mount. Cut motor mounts and drill holes for engine bolts remembering the sidethrust (2—3 degrees). Glue them to

doublers. Cut formers, top and bottom blocks, then assemble fuselage sides using the bottom block as a reference. To obtain exact distance between sides, engine is temporarily bolted in place. Only the formers are firmly glued, while top and bottom blocks are spot-glued only taking care to insert paper between wood parts in contact. Round off the blocks as per design, then separate them, hollow the inside and put aside. Do not hollow the blocks where the formers fit. Now cut fuselage under the wing slot (this piece is glued in place after the wing is mounted) to allow insertion of wing with flaps already mounted. Glue wing, checking carefully that it is square and true. Cement horizontal tailplane with push rod already in place. Now glue bottom block permanently in place, not forgetting to add tail wheel which is sewn to a plywood plate. Now secure push rods to flap horn. All parts including the bellcrank must be absolutely neutral. Be very careful and critical at this stage!

Now the fuselage can be completed by adding the two upper sides and top rear block. Tack glue this in place, carve, then detach — hollow it and glue permanently in place. Add rudder which is built separately. Cut rear cockpit frame from 1/16 in. plywood and look for a bubble canopy of suitable dimensions. Make tank and glue permanently in place with scrap balsa. The tank compartment is sealed with balsa cover so that fuel cannot seep into fuselage. Carve the engine cowl from block and hollow inside.

Before covering the model, give the entire structure two coats of sanding sealer. Then, sand with 400 wet or dry paper to obtain a smooth surface.

Wing, rudder and front fuselage (to spar) are covered with silk, other parts with light weight Modelspan. Apply several coats of clear dope until all pores of the silk are filled and a smooth surface is obtained on other parts. Between coats, sand with 600 grade wet and dry paper used dry on silk and with 400 on solid parts. Brush or spray again a final coat of sanding sealer and check for results, repeating if not satisfied.

The model is painted in a very simple way but the final result is good. The underside is first sprayed pale blue,

then separation lines are masked and upper surface sprayed olive green. Paint inside of cockpit matt grey; add cockpit details and then epoxy a clear canopy in place. Small strips of thin black self-adhesive tape will simulate the presence of a cockpit frame. Apply military insignia. Finally, apply a coat of fuel proofer.

Flying

First of all, check balance point: it should be 3 in. behind the leading edge. A nose-heavy model will make beautiful landings and take-offs, but will not square so well, while a tail-heavy model will be oversensitive and will fly with slack lines, particularly when the down line is under tension. While a nose-heavy model is easily balanced with some lead wrapped around tail wheel, it usually needs much more weight to correct tail-heaviness. Therefore it is recommended to build the model in such a way that the second case does not apply. For instance, a good precaution is to hollow the tailplane and elevator and then add ribs inside.

Fly the model on 60 foot lines and gain confidence gradually. Observe its behaviour: if it flies with a wing down, counteract this by adjusting the small fixed tabs. Do not twist the flaps as this can adversely affect the behaviour of the model on squares.

Generally speaking there is no secret to stunt except consistent training. However, results can be more or less satisfactory depending on various factors. If you intend to become a regular competitor, the following factors are critical: —

1. A well designed and correctly built model
2. A well broken in engine.
3. A good fuel.
4. A fuel filter between carb and tank.
5. The right prop.
6. Lines free from kinks.
7. Hard wearing bellcrank and horns.
8. Someone watching your flight from judge's point of view and willing to explain what mistakes you are making.
9. Crush free engine mounts so that the engine is not in any way disturbed when bolts are screwed tight.



From Karl Gies



Putting in the blast tube in case the rubber motor blows up, The model is a Korda Open Road Special

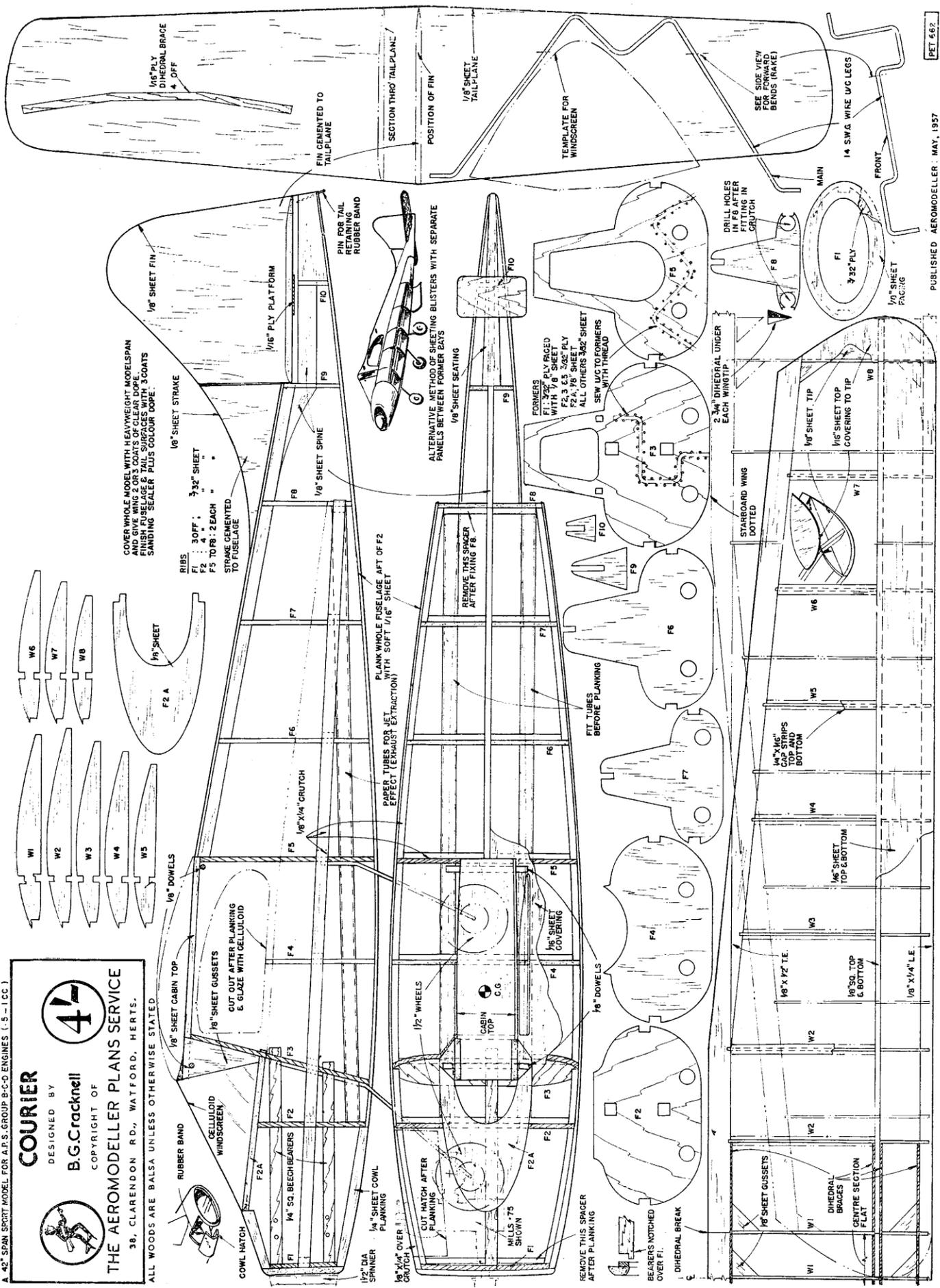


Winding that model up

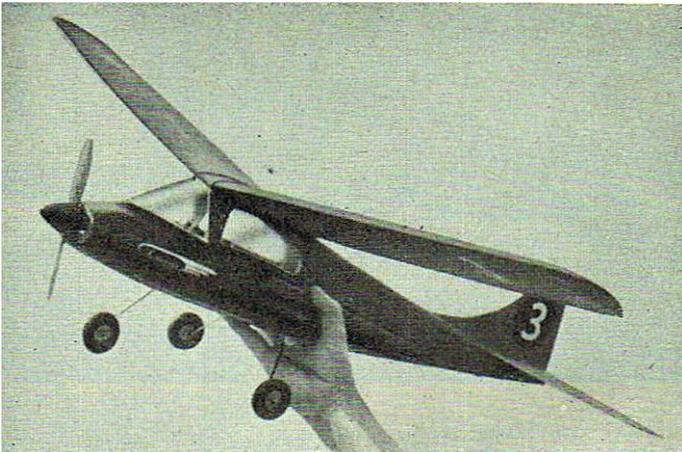


My real old Korda Victory taking off

COURIER
 DESIGNED BY
B.G. Cracknell
 COPYRIGHT OF
THE AEROMODELLER PLANS SERVICE
 38, CLARENDON RD., WATFORD, HERTS.
 ALL WOODS ARE BALSA UNLESS OTHERWISE STATED.



A new look in free-flight sports model design with turbo-prop lines and jet exhausts on an elegant tricycle u/c fuselage of . . . Brian Cracknell's 42" span Courier from Aero Modeller June 1957



This model is one of the most emphatic answers to the query "What can there be new in the shape of a sports model?" Jet lines are brought to a line streamlined fuselage with chubby cheeks and very neat nose cowl. Though Courier may appear to be difficult to construct for the beginner, the bulkheads with their close spacing offer no problems, and when located over paper tubes for "Jet" exhausts and 1/8 1/4 in. main crutch members, planking is simplicity itself. The result is a novel fuselage cross section which appeals not only for its ingenious shape, but also for its high resistance to punishment. In fact the prototype model dates right

back to December, 1951, when the first model flew under the spectacular name of "Assassin".

Development models with modifications including the mock gas turbine layout have all shown high resistance to warps and can be left in the rain, sun, under the bed or stowed in the attic for a couple of months, then flown without qualms.

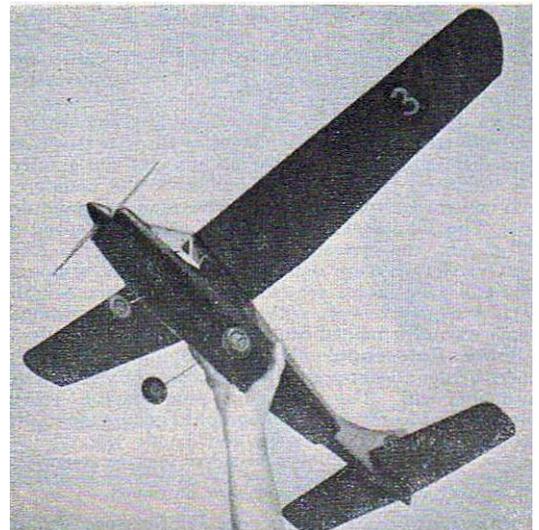
The fuselage is made by constructing the main crutch over the plan view, having cross braces of the same 1/8 x 1/4in. materials. The undercarriage members are bound to F3, F5, and all formers fitted in place. Then the spine is added from F5 to F8 which in turn carries F9 and F10 on the extensions. The under-belly which is flat, is now covered in one piece and care should be taken to see that the tail end remains true to the centre line of the fuselage. The twin exhaust tubes are now threaded through their appropriate holes in the formers after forming them by wrapping brown or stiff paper around the suitable dowel. The rounded portion of the fuselage is now planked, followed by the flatter upper sides and lastly, the top curve, and engine cowling. Finally, all accessories are added, such as wing dowels and cabin glazing, tail platform and fin strake.

Being all sheet and immensely strong, the tail surfaces need no explanation, except perhaps that care should be taken to see that the grain of the wood is even and not diagonal, which is rather prone to warps. For the experienced modellers, the mainplane is also very simple, but beginners will find assembly best followed by pinning down the leading and trailing edge, bottom spar, then cementing ribs in place, followed by top spar and gussets, making the wing in two separate pieces to be joined together by the dihedral braces in the centre section.

Make wing panels from the dihedral break outwards and fill-in the two flat centre section bays when each tip is supported 2 3/4 in. above the building board and clothes pegs used to clamp the 1/16th ply dihedral braces against the relative spar, leading and trailing edge faces.

Cover the entire model with heavyweight Modelspan and give wings two or three coats of clear dope using sanding sealer and colour on the fuselage.

A Mills 75 was used on the prototype, but this design caters for a wide range of engines and is extremely easy to fly, preferring wide left hand circles which it performs with grand realism after fine take-offs using the tricycle undercarriage.



From Peter Scott

During the wonderful Indian Summer of Sept/Oct, I have had my almost 10-years-old City Slicker airborne again. I had a lucky experience at Middle Wallop on Oct 3, when I experienced a flyaway after just a 20 sec engine run on the Super Cyke. My increasingly arthritic knees meant I could just about get from the North side of MW to the Southern perimeter track, only to see the model disappear into what looked like tall trees several fields away. Thanks to a friendly farmer, the following day I was able to get onto his land, and found the model in a stubble field close to where my estimate from Google maps suggested it would be. It was just short of hedges and trees, with no damage apart from 2 small punctures in the tail covering, and fortunately before the rain set in !

Lessons learned:

1. Check D/T every time
2. Even in October, thermals can be very powerful
3. Large models are easier to see.....
4. Be respectful of farmers' land when retrieving (and I did give him a finder's reward)



View from a distance



Peter reunited with flyaway Slicker

From Howard Mecalfe

A photo essay on two days at Middle Wallop by the brothers Metcalfe and pals.



Howard Metcalfe's Rapier powered profile models in flight, Hawk, Mig 29 and Skyray



Howard's Comet gets lit up



Comet launched with too much bank, oops!



Howard's T38 Talon in flight, note see through lightweight Depron construction



Clive Metcalfe's Aerographic Blackburn Monoplane with KP01 power on charge



Clive launches the Monoplane



Clive's own design Me109 with KP02 comes in for a smooth landing



Another of Clive's o/d models gets away, this is his Corsair again powered by a KP02



Outrunner powered BE2C in glorious flight

Photos courtesy of Clive Metcalfe



Howard Metcalfe with a bunch of profiles powered by Rapier L2's



Bill Dean's enlarged Spook gets fired up for another great flight



Howard's KK Attacker getting too friendly with the photographer



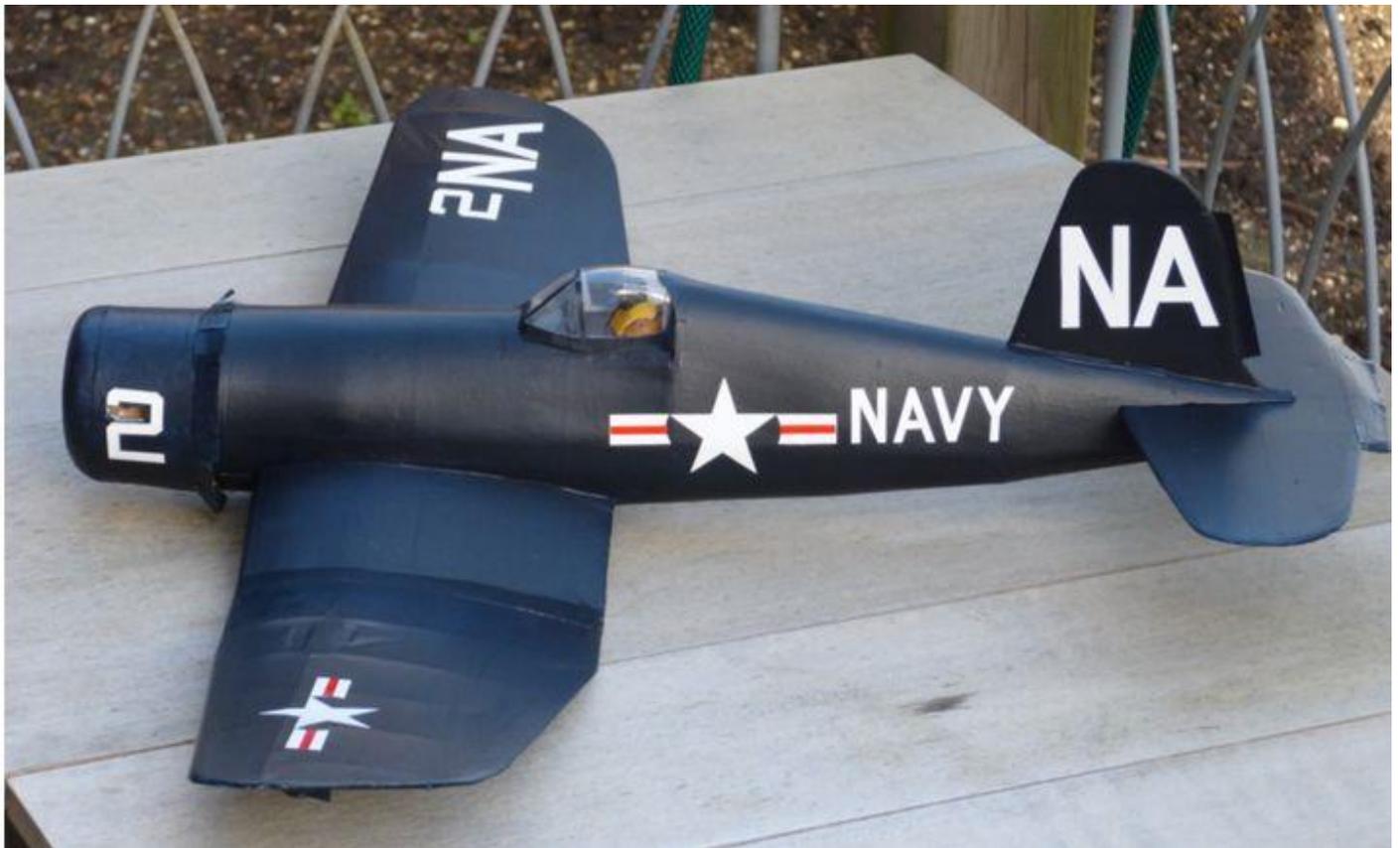
Howard's Talon at rest on the grass after a long aerobic flight



Clive's model line up



Clive was still test flying the all Depron Invader with two Kp02's, needs one more cell



Clive's Corsair before getting loaded up for the day's flying



Clive's own design Me109 with KP02 power



Mini Junior first flight



Mini Junior on the glide



Howard launches a smoking Jetex Wren (with Rapier L2 power)



Howard's Cougar and KK Attacker, Depron Valiant and Balsa Comet for Rapiers



Skyray, Spook, Bae Hawk, Comet, Boulton Paul P111A, Supermarine 508 and T38



Cougar, Supermarine Swift, Mig 29, T38, BAe Hawk and Jetex Wren



Bob Pickernell's Rapier fleet, KK Skyjet, Jetex Flying Wing and KK Space-Jet



Peter Smart's KKSlicker gets a launch into the blue, this model was made for Peter as a present by the late David Deadman



Pete Sander preps his HMM Smarty Pants for a first flight FF with a PAW .75cc



and away she goes.



A little more relaxed on the second flight, looking good so far.



Smarty Pants climbing away nice and steadily.



A very happy Pete



Smarty Pants enjoying a new career as a free flighter. Peter was pleased with the way it flew he is thinking of putting into production.

If the Rapier models stir your interest more info on them can be had at Jetex.org

Here is a link to a video of the flying fun by my brother Clive: <https://youtu.be/Wqt7Tna1X7c>

PS the reference to 'Debby' at the end of the video is another 40 year model Debutante designed by Vic Smeed, an old favourite as I have built three. This one was built in the mid 1970's and has been completely refurbished recently. I think the flight was actually also at Middle Wallop this Easter.

Sticks and Tissue from Dave Bishop of DB Sound for November 2015.

Showscene. Some sad news has been learned to start with which is that the Quiet & Electric Flight (edited by Tony van Geffen) and Helicopter World (edited by Jon Tanner) magazines will no longer be published by Traplet Publications after so many years and what a pity that is for the regular readers. Another sad item to follow is the sudden passing of John Swain who started the Fanfare business and his funeral was in Kent last week. People attending it came from all over the UK and abroad, with some who had been "Brats" with him when he first joined the RAF. The tributes read out at the funeral were very moving and he leaves behind his devoted wife Sheila and two girls. I first saw John when he was demonstrating the Hawker Hunter fighter at the Farnborough airshow for a number years and it was much later that I found out that he had joined the RAF at Halton as a young apprentice. Later on as a qualified pilot, he was in the same squadron as the brilliantly gifted and popular Chris Golds, who was John's boss. Another string to John's bow was that when he was in the RAF he taught the famous full size airshow arranger/director Rod Dene, to do rolls in a Hunter aeroplane. (Chris Golds was boss to both of them) As a very keen aeromodeller, John built his own design of models and one model I remember in particular seeing was one of the successful shows run by Derek Foxwell at Old Warden. Although John could fly a very expensive fighter full size aeroplane, he couldn't fly in public because he didn't possess any BMFA certificates that allow him to fly a radio controlled model in front of the public at our airshows. John asked Derek Foxwell to test fly his Boeing Globemaster C17 four jet fan model he had just finished building at the end of one of the days flying when the many Old Warden visitors had gone home. Derek Foxwell completely changed Old Warden around with a completely "new look," when he moved the traders from around the corner of the control tower end (where they had been placed for some years) to behind the radio controlled flight line where most of the hundreds of "customers" enjoyed watching the flying and enjoyed a full professional PA presentation. The camp site on the road opposite side of the road to the main gate entrance was always filled to overspill in those days and which pleased the top man Ron Moulton, no end.

I missed the third Modelair Old Warden meeting over the weekend of September 26-27 due to my Jan and I having a week's holiday (the first for 8 years) down at Cornwall. Wall to wall blue skies were the order of the whole week and hardly a breath of wind every day. We both came back totally refreshed and it's such a lovely place to go but the belt had to be let loose a click or two afterwards. The Old Warden Modelair flying weekends are now without the help of Mike and Joan Reynolds who have retired and the whole of the Modelair events are run by the genial Ken and Sheila Sheppard who work their butts off to help everyone in every way, to enjoy themselves. If you haven't been to any of the Modelair events, the place has "everything" including the full size aeroplanes on show in a superb museum, a cracking bookshop, excellent toilets and a restaurant that serves the best "full English" you have ever started the day on. Peter Royalle kindly took some pictures from the free flight area where everyone had perfect weather and lots of fun at the last Modelair event of the year.

It was my pleasure to be invited once again to the British National Championships (BMFA) at Grantham by James Gordon over the recent August Bank holiday weekend. After the long drag up the A1, we were rewarded by being met at the entrance by a smiley group of "traffic controllers" who were extremely helpful with parking our long reach Mercedes van and caravan, to a separate waiting area. Soon we were all shepherded to the "proper" parking places and for me, the "Nats" started on the Friday afternoon at around 5pm. James Gordon of the Caterham and Croydon clubs, is the organiser and ring leader of the Fun Fly line and this title enticed me to see what these lightweight electric and IC powered aerobatic beauties, actually did. There are so many different and individual events taking place all over the huge Grantham airfield that locating some of them is sometimes a bit time consuming. The Fun Fly team are extremely easy to find because sticking out for all to see is an enormously high display sign showing huge letters FUN FLY visible for miles, so nobody can miss the event. What is it that attracted so many people to even think about the sort of competitions that they do? Well for a start, one of the attractions is that the aeroplanes can be built for around £100 and yet they are extremely strong. Under the organising teams direction, the arranged competitions took me back to my early days of radio controlled flying. There was, timed maximum spins, touch and goes, rolls and loops and water carrying. They made the whole weekend such fun and I put up some DB Sound loudspeakers and had a lot of family fun and enjoyment at this very much laid back and "working man's" popular event. As is well known by now, the Monday finale day dawned with quite heavy rain stopping many of the different events being held over Grantham, but the competitors on the Fun Fly line were asked if they wanted to carry on with the planned final day and they all unanimously agreed to go for it. Summing up; the Fun Fly competitions at the "Nats" are like a Club fly in and that pleasant and friendly atmosphere was present there for the whole weekend. "Helpers" along with James Gordon

were, Nick Lester, with his father Keith, Gavin Barden, Richard Pidduck with Francis and Robert, Neil Wallis, John Snewing, Peter and Sue Royalle. It was good to go into one of the hangers at the end of it all on Monday, to receive the awards being presented by the popular Chris Moynihan the BMFA Chairman, who is a very nice chap. I must also thank the very helpful BMFA records officer who gave me all of the information I asked of him before I motored to Grantham. It was a wonderful weekend with so many things going on and so many friends to have a "catch-up" chat. It's a pity that it doesn't last for a whole week (or more). Even then you would only scratch the surface and congratulations and a big "well done" to the BMFA for all of the hard work that must have taken ages to plan so successfully.

I have just completed compiling my fifth DB Sound talk entitled "aeroplane memories over some 60 plus years at home and abroad" so if your S&T and club members "might" be interested in the possibility of seeing yourselves from way back, then feel free to give me a call please on 01959 577550 or email; davebishop_dbound@yahoo.co.uk To finish with this month here are some more pictures taken from the hard drive on my computer and elsewhere. (Thanks to Peter Royalle who kindly took the some of the pictures at Old Warden at the last Modelair event).



Sadly there will be no more of these Traplet magazines, Quiet and Electric Flight and Helicopter World.



This multi electric fan twin Boeing C17 Globemaster was built and flown by the late John Swain of Fanfare fame. This picture was taken some years ago at Old Warden. .



*Starduster "this might be" John Taylor's TDL 049.
(Peter Royalle picture)*



*Another "free-flight" assist model seen "resting" on
the grass at the recent Modelair event at Old Warden*



Another Starduster 420 which (again, might be) by Bill Longley.(Peter Royalle picture)



A radio assist "free flight" model comes in for another landing at the Modelair event at Old Warden in September. (Peter Royalle picture)



Malcolm Jagger with his Keil Kraft Playboy rubber powered from the mid 1950's (a Raynes Park flyer) and Simon Wootton with his Frog Redwing and his 14 gram brushless motor and lipo battery. (Peter Royalle picture)



Rick Morris ex full size jet jockey and senior airline captain (and all round nice guy) with his own design electric flyer. (Peter Royalle picture)



Close up picture by Peter Royalle of Rick Morris's own design electric aeroplane.



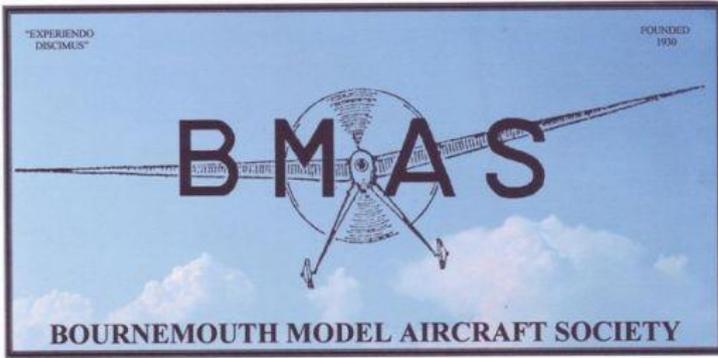
The brilliant and ever hard working Leon Cole with his son and the world famous Belair marquee, doing what they do best. Tell Leon of any aeroplane you desire as a part kit and if he hasn't got it in stock, he will design one and have available for sale in 16 days.



Seen at the British National Championships is the puppet maker Ian Redshaw with his show stopping Handley Page 42.



The "always helpful", James Gordon at the Modelair events at Old Warden with his Mowhawk.



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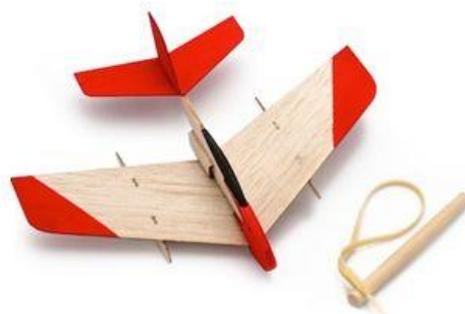
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