

Sticks and Tissue No 152

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.



Cocklebarrow July 2019. John Laird landing his enlarged Vagabond, it had to be spiralled down due to thermal during which wing flutter caused the wing tip and U/C to work loose

Building Your Own Wheels by Allan Knox

I always enjoy making wooden wheels. They are very easy, light and cheap and ideally suited to lightly loaded vintage, free flight or light electric models.

I start with a ply disc sandwiched between balsa discs.

Next I drill the hub centre whole on the drillpress table ensuring I get the axle hole square then rough carve to shape. I prefer a streamlined shape but you can do conventional hub and tire shapes too.



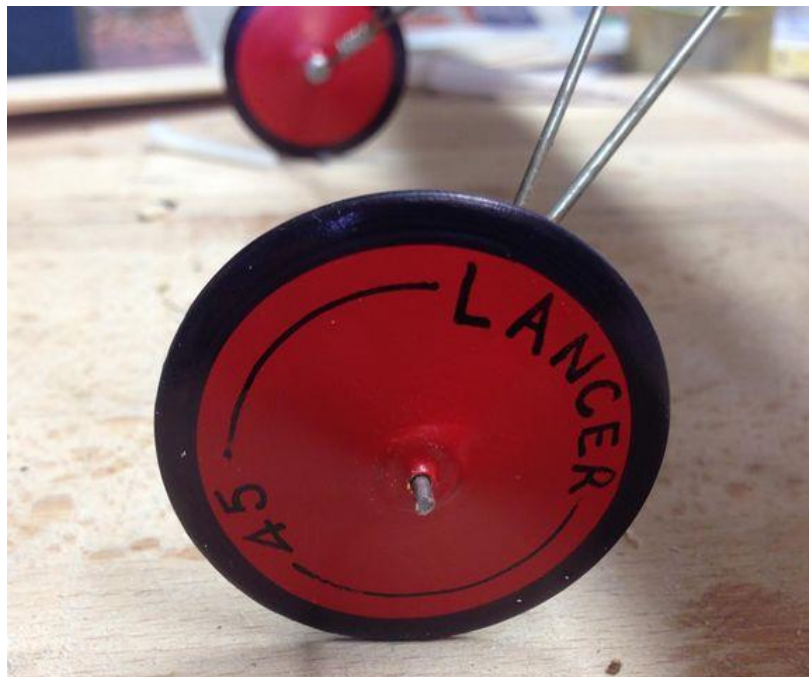
Next I CA the hub tube in place but leave it long enough to act as a mandrel that can be clamped in the drillpress chuck.

By spinning the wheel on the drillpress, I have a simple lathe so with sandpaper and a block I can shape a nice turned wheel.





After that I trim the hub tube to length and add facing washers using epoxy to support the tube. For larger wheels bigger than say, 2.5 inch diam, I use 1/2 inch diam discs of circuit board as washers but on little wheels I just added smaller metal washers. The washers are epoxied in place over the tube and transfer axle loads to the wheel faces thus stabilising the hub. I finish the wheels with a coat of epoxy to harden them up, finish sand them then paint.



The tyre is just drawn on with a permanent marker and then a bit of detailing added the same way. Clear coat or fuel proofer will lock all this in place. If you spin the wheel on an axle and hold the pen steady then you get a nice even tyre. A bit like using a potters wheel.

On bigger wheels I often do a wrap of carbon around the rim to give a wear resistant surface and usually apply a layer of 3/4 oz glass over inner and outer faces of the wheel. Built this way they stand up to the rough and tumble of vintage power model spot landings which are often arrivals. The ones on my 3 pound, 60 inch, Lancer have done 12 years service now.

So there you go, customized streamlined light weight wheels costing pretty much nothing. Very satisfying.

Trimming the cheap way. By Allan Knox

Vintage models need their name and year on them for competition as well as general trim. I have bought commercial sticky vinyl stuff from sign-writers but even at mates rates this is expensive. The vinyl is usually heavier than the film covering on open structures so tends to pull the covering. Add to this the difficulty of getting stickies in the right place and not stuck to your fingers and whatever else they touch I figure there had to be a better way.....and there is!

I now trim in solar film. Its easy and cheap too if you use offcuts. You just position the decal then iron it down. Any air bubble dissappear over time or you can pop them with a needle if they are really big. I find I can build up layers to get muli coloured markings like the roundels on my 30s American trainer schemes.

The trick with hand cutting is a shape blade and use a straight edge for all straight cuts. The pictures tell the story. It takes a while but rewards patience.



2 layers of film are taped to the board all the way around then the lettering is blown up and printed on a photocopies, trimmed to size and taped down around. It's important that nothing moves.



Lettering is cut with steel straight edge and sharp scalpel blade. Curves are trickier so take your time.



I use another copy of the word taped above where the decals will be placed as a spacing and alignment guide. The letters want to stick down anyway so stay where placed. I smooth them into position before applying the iron to lock them down.



And this is the finished model, all the trimming was done this way including those scalloped leading edges.



My 5 Foot Gas model uses hand-cut film too. Those roundels are made up of 3 layers to get the multi colours. The chequered cowl wrap is a strip of sticky decal though.

Fokker D8 by M F Hawkins from Model Aircraft September 1961

This year I had one month in which to build a model for the Super Scale Trophy at the Nationals, so a simple, flyable, subject with a bright colour scheme was called for.

Here is my answer. Although usually known as the DVIII (D for “Doppledekker”), this plane is correctly titled the E.V. (E for “Eindekker”). It is one of the few aircraft that appears to have been designed with the scale modeller in mind—we should be grateful to Reinhold Platz.

Construction

Wings. Ribs are made by the sandwich system. The spars are pinned down onto the plan, with the dihedral braces, which are placed under rib 9. This will give the correct washout at each tip.

The wing fixing consists of rubber bands, which pass through a 1/4 in. dia. paper tube inside the centre section. The bands are fixed over the wing rests, using the hook shown on the plan to thread them through the tube.

Cover the wing with lightweight Modelspan, give two quick coats of dope, then pin down for 48 hours. This will prevent warps.

Tail. Pin down after covering and doping as with the wing. Aluminium hinges should be stiff so that trim will not be accidentally upset.

Fuselage. All the wire struts should be tinned where necessary, the wing struts should then be threaded through the fuselage frame and the undercarriage bound on with fuse wire and soldered. The struts are then bound to the frame with thread and well cemented.

The 1/32 in. sheet fuselage sides are cut slightly oversize and slit, so as to slip over the wing struts. The wing rests can now be soldered on to the struts and should be lined up to have a slight positive angle of incidence, with the fuselage top. Strut fairings are attached with Evo-Stik.

The engine mount is cut to suit the motor, well braced to the front former and the tank cemented beside it.

The cowling is laminated on its jig, trimmed to size and attached with Evo-Stik.

The stub wing is built onto the axle, after this has been soldered to the undercarriage struts.

Decor. One aircraft was flown in the U.S.A. after the war. It appears to have been a glossy dark green overall, with no markings except red, white and blue strips on the rudder, blue foremost.

Lozenges do not take as long to paint as one might think, if a celluloid stencil is cut for the first colour, the lozenges marked out with a soft crayon and painted in, then another stencil is made for the next colour and so on. The fourth colour can be added by eye and the fifth fills up the remaining spaces. Using one coat of matt Humbrol enamel it took me three evenings to do the lot.

Unit markings are well shown in Imperial War Museum photograph Q 66496, but there was even a DVIII with Japanese red runs, with a narrow white outline in place of crosses. The rudder of this machine was plain white and it was marked DVIII below the cockpit.

Trimming and flying I used a D.C. Dart, with a D.C. 8 X 4 in. nylon prop. A little lead was added over the motor, to bring the C.G. into the position shown, which brought the all-up weight to 8 1/2 oz.

Hand glides do not give a very good indication of trim, so give slight right rudder and launch over long grass on low power. The model should fly fairly straight. On full power it will then give a rapid climb in a left spiral and a glide to the right.

It seems to be a very stable model and will fly when quite badly out of trim, it is also practically crashproof.

I bounced it off the tarmac at the Nationals, with out doing any harm at all.

R.O.G.s are most impressive with no tendency to ground loop.

Geoff Jones

Sad message from Steve Midson that Geoff, who suffered a serious stroke three years ago, passed away Tuesday 9 July 2019 at an Epsom Nursing home.

Alan Holmes noted he was heavily involved in indoor rubber duration flying, he was also a keen model engine collector and in later years became involved in IOM model yacht racing on the Rick Pond in Hampton Court.

Alan Bond 1946-2019. The following obituary was sent by Tony Crollie:-

Alan's passion was electronics. As a boy, he, like most of us, made Keil Kraft flying scale models, mostly flown in the back garden in Newark, where he grew up. He always said his favourite was the Kirby Prefect glider. However it wasn't long before he was making electronic projects from the pages of electronics magazines. He went on to develop this to the point where he built himself one of the earliest home computers.

Whilst studying for his electrical engineering degree Alan joined London University aeromodelling society with whom he built and flew control line combat wings.

It was not until he retired from a successful career in electronics, designing flight recorders for airliners and such like, that he got back into model making. After meeting Tony Crollie he first got interested in model radio control boats and was soon making electronic speed controllers for other members' boats. This led to an interest in and production of many electronic gizmos especially sound units for model boats and cars. This was to be his enduring model interest.

Later, Alan and Tony got interested in the question of electric flight, especially for indoor models. Then, with the advent of brushless motors, an electric control line model was built using a timer designed and built by Alan. As it happened, the first time that it was flown, at Tarrant Hinton, it was seen by Den Saxcoburg of Den's Models who was immediately taken with the potential of Alan's timer. This quickly led to an arrangement whereby Alan would supply electronic timers to Den's Models under the brand name Forge Electronics. These would go on to be supplied all around the world. Working closely with Den the timers were developed to include versions for electric and I.C. Free flight (with RDT provision) and gliders. Later, Alan also produced specialised timers for competition use in collaboration with leading exponents of E.36 and SLOP.

Alan was a caring person who just loved to talk about electronics. He always had time for anyone's electronic questions and problems, whether from a novice or an expert. For this he will be greatly and sadly missed.

1947 GB 5.4 cc Diesel from Jack Hiner USA

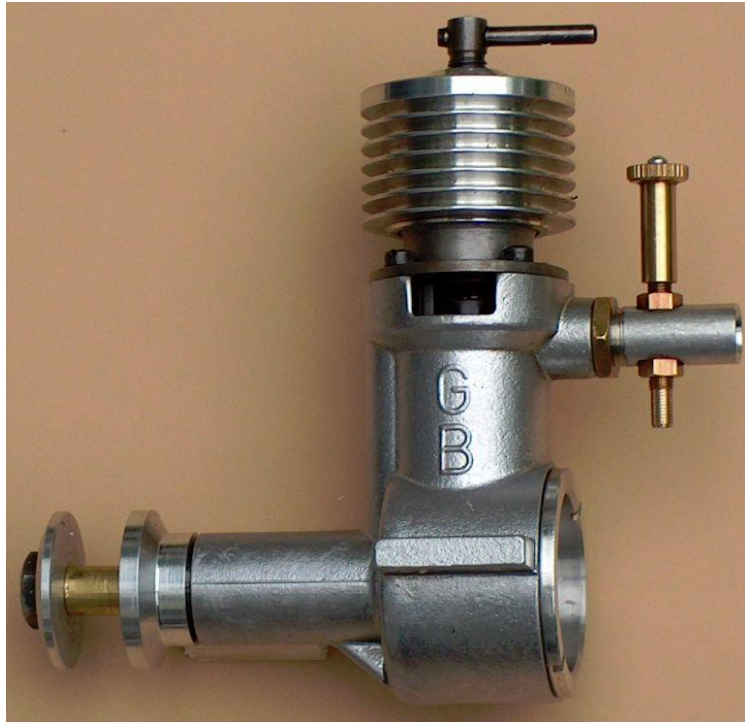
One of my favorite engines a 1947 GB 5.4 cc Diesel. I first became aware of a replica of this engine when Motor Mouth did a review of this diesel in the UK magazine Model Flyer. I think in the year 2000. I actually have two, one from the first batch and another from the second batch. A replica of Australia's Gordon Burford's first diesel from David Owen. Gordon did the crankcase and rest by David. Sort of a very high quality large Mills diesel.

The first thing I did before running the engine was remove the attached fuel tank. This was done so I could use a pinch off fuel cut off when flying. Since the props I would use had holes too big for the motor I made some brass tubes to shim for the props used. Then run on the test stand enough to get accustomed to starting and adjusting this motor. The motor is so well made with great fits that not much run time needed before flying.

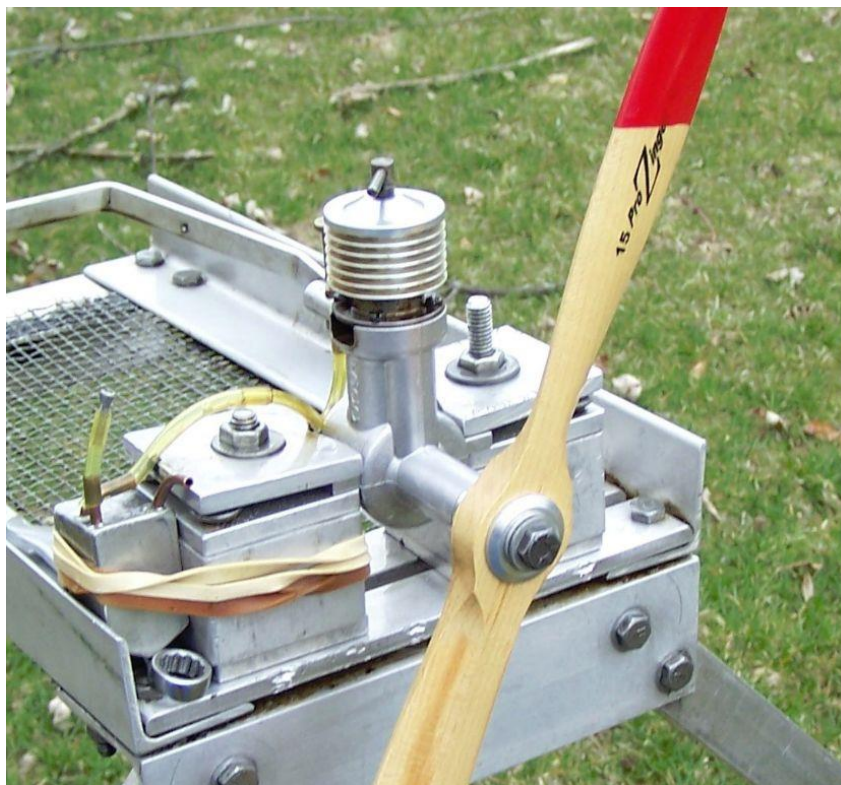
The large old time diesels do vibrate more than the old time smaller diesels. So I like to take a prop to be used and if a bit out of balance I put two coats of epoxy paint to make that blade even heavier. Mount the prop with the heavy blade up when piston is down. Helps a bit reducing vibrations. Another trick to reduce

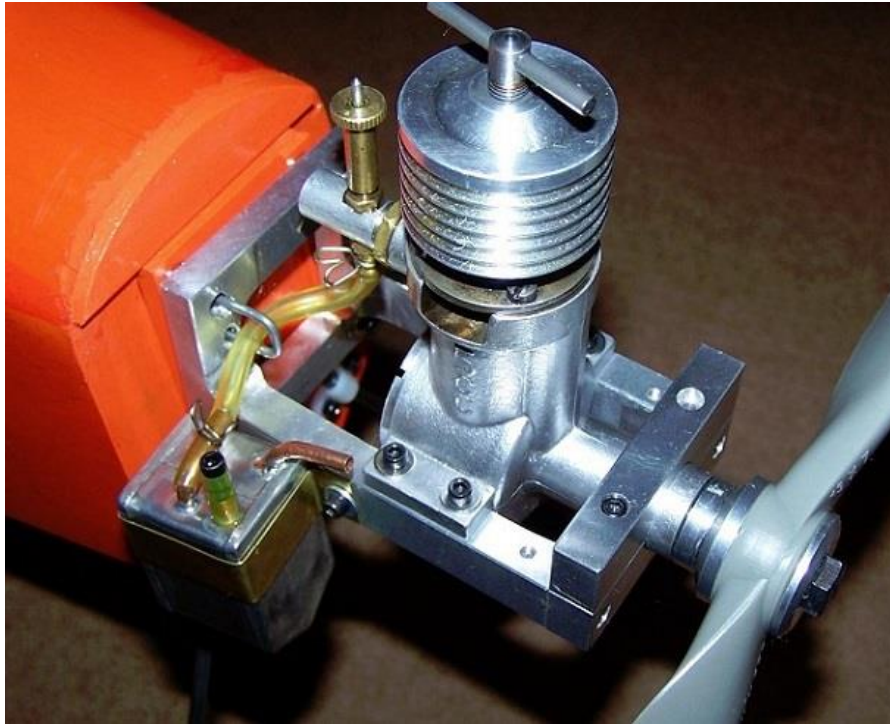
vibrations a bit is a motor mount that captures the engine just aft of the prop. See photo number 3. This has to be accurate so as not cause crankshaft binding.

The original compression adjusting lever is the "L" shape. David asked what I thought of the engines. I said great but as I have gotten older it is difficult turning the "L" shape compression adjusting lever. And would be better with a "T" version. A "T" version arrived soon after and can be seen in photo number 3. This photo also shows the fuel cut off I have used on a Playboy and Airborn. Also the Uni-Flow fuel tank can be seen in this photo.



1947 GB 5.4 cc Diesel





David Owen offered a Thunder Tiger R/C carb with an adapter to fit the GB 5.4 cc diesel. I have one and it works great. Early I used the pinch off to shut down the GB diesel. But much nicer with the R/C carb when you fly a Texaco event. Take off with reduced throttle and once some altitude throttle back more. First photo shows the Thunder Tiger R/C carb and adapter for the GB 5.4 cc diesel. Second photo shows the R/C carb on the GB running on the test stand.

Allan Laycock from Australia sometimes attends the USA SAM Champs. The 2018 USA SAM Champs was held at the AMA facility at Muncie, Indiana. And Allan attended this contest. I loaned Allan the use of my Airborn 810 sq. in. wing area with the GB diesel set up for Texaco. I placed an Australian flag on the right wing for this event. See photo number three. Photo number 4 show Allan just after starting the GB diesel He placed third in the event.



GB RC Carb And Adapter



GB RC Carb



Gordon aand Dave

During the year 2006 a fellow had a model airplane Dunham Valkyrie 5.3 cc old time diesel for sale. SAM USA considers this as an old time SAM legal engine for competition. Valkyrie was new in box with papers for just US \$30. I had Drone BB and GB 5 cc class diesels and paid much more than 30 bucks. The GB diesels run great right out of the box but the Drone BB diesels need some work for best results.

The Dunham 5.3 cc diesel was not a true old time engine but built similar to old time pre 1945 diesels. Built in 1984 and later by Dunham Engineering. Dunham an Agricultural Machinery Maintainer/Services Company. Work was slow at the time so Dunham got into building some model airplane engines. Mine was engine number 002 built 12-4-84 per info in the box. Later I got another early serial number Valkyrie diesel also for \$30.

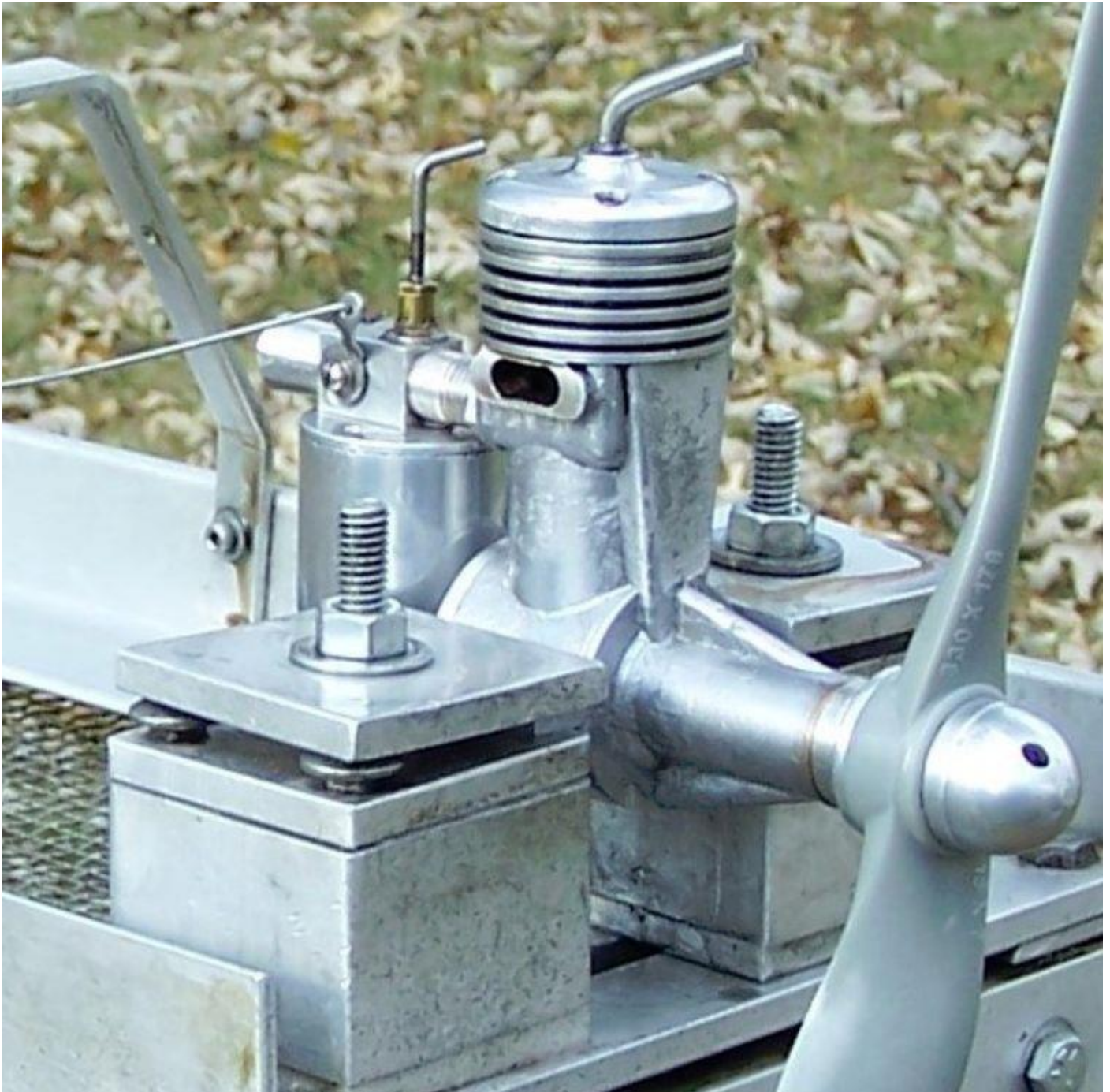
The paper work with the engine indicates the engine was run at least 10-15 minutes with 11-6 Top Flite Maple Prop. Paper works recommends an additional 50-60 minutes with this size prop. 5 minute runs followed by complete cool down. I did this then tried larger props. Larger props (APC 13-7 Sport Prop) I used with GB and Drone caused the Valkyrie to over heat. So more time but still not happy with the props I use on the GB and Drone engines.

What to do? Both engines had black crinkle paint finish on the crankcase. I decided to remove this paint thinking the paint might keep the heat from dissipating from the crankcase when running. Did not help and I was told by engine guy better to leave the paint on as can help get rid of heat. So I made a mistake. And the crankcase casting was not so pretty when the paint removed. See photo one and two.

I sent an email to David Owen about my problem with the Valkyrie diesel over heating. As it turned out David imported some to Australia in the 1980's. Early ones had too tight crankshaft/bearing fits. So I checked with SAM member and engine guy Don Blackburn about my problem. He told me to send him the two engines. I did and he made them both well. Don has fixed other diesels for me. Unfortunately, both Don and David Owen have passed away.

Now the Valkyries turn the APC 13-7 Sport Props at 6,500 RPM without over heating. I like the fuel cut off feature on this engine. A one flip of the prop start engine on a good day. I have flown my GB and Drone diesels for sport and also Texaco. But, at this time only run the Valkyries on the test stand. I need to build a Limited Engine Run (LER) SAM model for this engine. Or put R/C carb on it for Texaco SAM event.





A short video of the Airborn Laser .80 diesel At Eloy, Airizona January this year.

https://youtu.be/Z6oWS3p_MbA

Jack Hiner USA

From Bill Wells

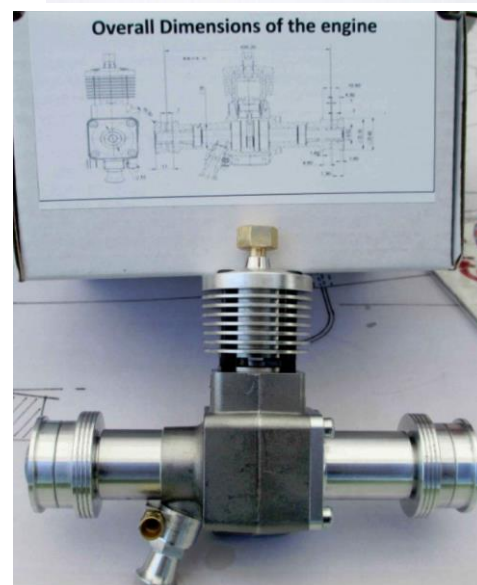
Recently Alex Phin producer of those Redfin and SAM 35 / 50 engines showed me his latest radial engine mounts for those that want radial mounting as an alternative. The mount is undoubtedly slightly heavier than the commercially available plastic version if you can find one!! It weighs in at .225 ozs which compared with the weight of a SAM 35 1.63 ozs is about a 15.64% increase.



Bear in mind the alternative wooden bearers and additional structure in the bulkhead does weigh something! The mount is extremely well made and has the four engine lug holes drilled and tapped 2mm so most of the latest Redfin engines will fit like a glove. Best to ask Alex if it will suit your engine before you buy one. Mounting bolts, whoops sorry, 2mm cheese head screws are not supplied but are readily available on the internet. Considering the machining of this mount (at time of writing) at the price of £7-50 it is good value for the money.



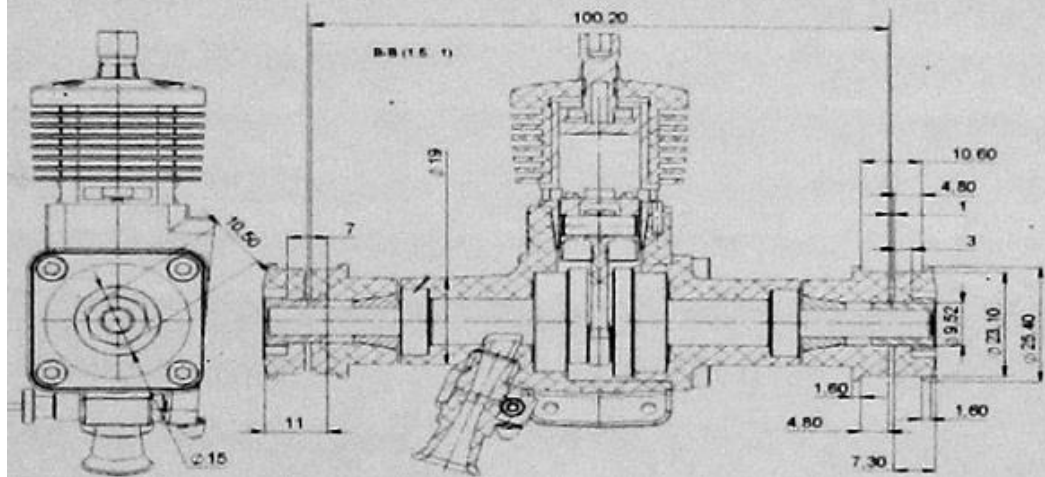
Now for something completely different as they say! Alex has recently produced a new diesel engine. It has already been mentioned in the July 2019 addition of Aeromodeller. It is a 2.5 cc tethered car engine looking very much like the Oliver Tiger Mk II Racing car engine from the early 1950s. To the average aeromodeller a propeller front and rear mounted like a Dornier Do X style or Chantiers Aero-Maritimes de la Seins (CAMS) 33, 51, 53 or 54 might be possible!! The extra shaft and sturdy drives makes the engine heavy, so as a push pull aero engine it might not be a practical



proposition. Alex tells me that with the engine running at full power the wheels (rear drive) are lowered onto the surface from a 'L' shaped cradle. Once released the object is to get out of the way as quickly as possible before the car travelling around 70 mph gets back to the starting point!! The cars have a fuel cut out connected to a vertical wire lever which sticks up above the car body. Just knock the wire lever back and the car will stop.

What I would like to see is Millish Redfin side port RC engine with a capacity of about 2.5 cc. Perhaps I am in a minority of one! Thinks, a fairly low revving long stroke 2.5 cc engine turning relatively large propeller would be ideal for scale modellers or those slow vintage models but large enough for a practical RC model.

Overall Dimensions of the engine



I have just received the following e-mail from Alex Phin alex@redfinengines.com

Hi Bill,

These are marketed by me and designed by me and are a full kit. The only thing I do not provide is the u/c wire and the covering material. The kit contains all of the strip wood component parts in balsa and ply. It also has in some soft block for infill and 1/8th sheet for the doublers (front end of the body). There is sufficient components to build TWO aircraft in any of three configurations. There is a full size plan plus mini plans of other variants as well as photographs of construction.

Retailing at £80.00 and I do not know the postage cost but due to size would have to go Parcel Force as it is a metre long.

The sam-neeza is a flat sheet variant and again enough to build TWO aircraft at £40.00. Quick and easy, build in the morning, fly in the afternoon, crash in the evening then start again the next day.





Think that is about all
Cheers Alex

Cocklebarrow Sunday 7 July 2019 photos from Graham Crawshaw

Below are a few photos from Graham, to date I have about 250 from various sources including the ones I took therefore not all can be included this month although they will appear during the year. JP







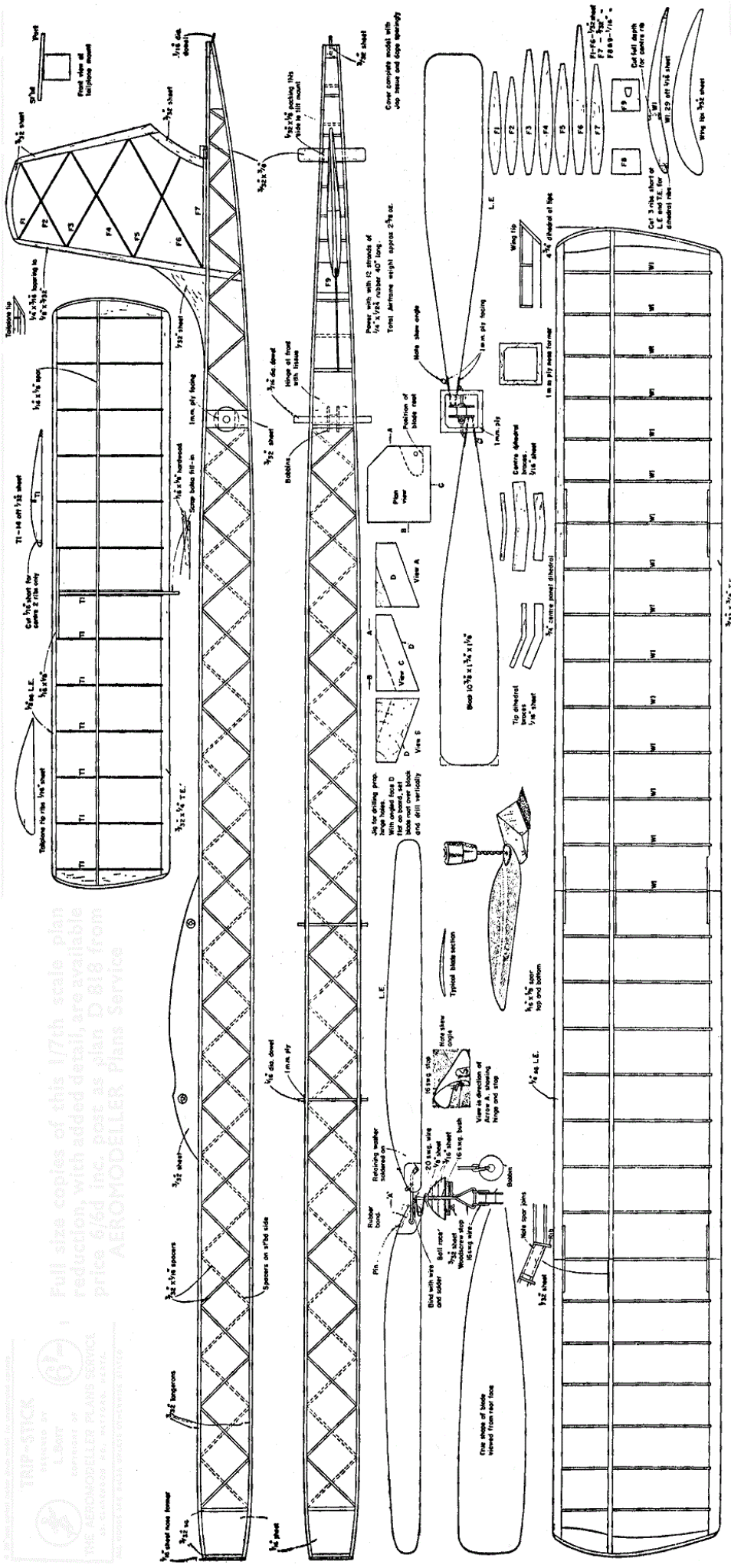






Tripstick by Laurie Barr from Aero Modeller May 1962

For local field flying or major contests, here's a 39" open rubber design. This model was originally drawn and built within the short space of three evenings during late 1959, for an S.M.A.E. open rubber event. Time was at a premium, and Laurie drew upon ideas and experience used on rubber models, designed in 1949! Although the model flew well right from the start, there was not sufficient time to trim it properly, and no great score was returned at that time. Thereafter some trouble was taken in obtaining perfect trim, and subsequently another identical model was made. Laurie followed this with the present Tripstick, which differs only in the total weight (reduced by one oz. by careful selection of wood) and changing the type of prop. The latter change made a very significant difference to the climb, the improvement being clearly seen as a gain in height of some 40 per cent., over that of its predecessors. Models one and two, had a long string of near misses, after being in fly-offs in every open event entered, placing third in all comp. that paid out to second place, and was once fourth in a comp. that paid out to third place?!! Eventually, Trip Stick was persuaded that the idea was to win, and nearly did so in the open rubber at the Nats in 1961, being only a few seconds behind the Fly-off winner at some 9.00 mins odd! and followed this by winning the Fairey Cup at the



Full size copies of this 17 1/2" scale plan reduction, with added detail, are available price 6/6d inc. post as plan D 818 from AEROMODELLER Plans Service

TRIP-STICK
 DESIGNED BY LAURIE BARR
 THE AEROMODELLER PLANS SERVICE
 10, GARDENERS WALK, WATFORD, Herts.

Northern Heights gala at Halton.

At this point in the history, Laurie started using the present model, and it was used by the Hayes club in their hard fought battle for the London Area Challenge Trophy, finishing the season by coming second in the Bill White memorial cup at Chobham in perfect weather, having reached the fly-off, and producing nearly five minutes for second place.



The model is drawn exactly as used and is fully developed. If correctly built, it can be relied on not only to return high times, but is very consistent and can be used in all weathers. In thermal conditions, getting it down can be quite a problem, as normally it will be high enough to make recognition difficult, and careful adjustment of the tailplane dethermalising angle is well worthwhile. In construction, the important thing to note is the proper selection of wood, and if you see a piece of wood in the shop with thumb nail marks in it, do not use, as Laurie has probably tested it and discarded it before you!! Anyone who has built a few models before (preferably rubber type) will have no difficulty in producing a sound model. It is essential at all stages of the construction to ensure that all the parts are built true without warps (apart from the slight washout on both wing tips). It is no good hoping that the covering

will rectify wings and tail that are built twisted. Simi any, the washout at the wing tips must be built in, and covered well so that the washout remains as built, and that the amounts on both tips are the same. Cover the model with Jap tissue. For fixing the covering, clear dope is recommended, the virtue being that it is almost im possible to "pull" a warp into the wing during covering, as the tissue will only adhere to the structure if it is "laid" down naturally. A light spray with water will taughten prior to doping, and help to remove any



small wrinkles. When dry (approx. two hours in a warm room) dilute the dope from 60 per cent, dope 40 per cent. thinners for the fuselage and 40 per cent, dope to 60 per cent. thinners for the wing and tail (if in doubt, use even lower proportions of dope for the tailplane). Since the wings and tail are very light, you must support the structure during all stages of tissue tautening and doping.

Pin down the tailplane to a board lined with pieces of ¼ in. square balsa at about 3 in. centres. For the wing, pin down one of the inside panels (usually the right-hand side) and support all the rest of the wing by erecting some ¼ in. square balsa struts and pinning through at the dihedral joints and wing

tips at L.E. and T.E. Before doping, rub all surfaces that will come into contact with a bar of soap or candle to prevent adhesion.

The propeller is the most important piece of equipment (after the wing and tail). An expert, once said, if you cannot make a good prop, don't bother with the rest of the model, and these are wise words. If you are new to the art of rubber modelling, build the airframe first, take your time, make a good job of it, and this will give you the ambition and interest to make a good job of the prop.

Laurie makes use of an old bevel edge chisel, which he keeps just for this job. It is short, about 3-inch blade length, and can take hours of work out of prop carving. Both blades should be the same in all respects, otherwise the consequent vibration will have disastrous effects upon performance. While carving, make periodic checks with a straight edge (the side of the chisel will do), to see if the undercamber is like the drawing and the same for both blades. Finish by folding up a piece of medium grade glasspaper and abrase with a rotary action up and down the blade until the perfect shape arrives. The other blade should also be carved and sanded to the same stage, before any top surface is attempted. Carve away the top surface of the blade. Get to within about 1/8 in. thickness and finish off the blade with glasspaper. Then compare blade shape with the true prop plan shape and sand to blade outline, matching both blades, re-sanding the section at leading and trailing edges. Ply hub strengtheners may be added at this stage. When fully dry and hardened, these may be blended in at the hub with the main blade shape. Give the blades several coats of sanding sealer or clear dope, and whilst still soft apply lightweight tissue, and rub the tissue well into the

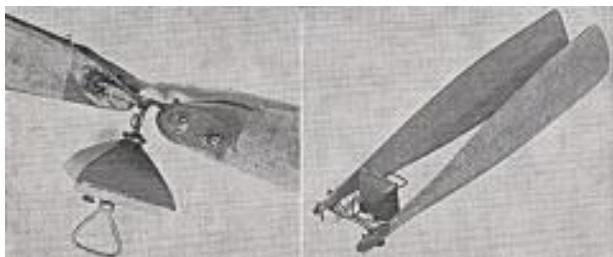
blade with more of the same dope/sanding sealer. Apply several coats, sanding between, until you have a fully finished blade with a smooth surface.

Make up a drilling block as shown and mark out the position of the hinges and hinge stops. Place prop on jig (get someone to hold it if you haven't got three arms) and drill level and square with the work bench. This will give you the correct angle on the hub for swivel and fold action that makes the prop. fold really well against the fuselage. For the hinge hubs, use 1/2 in. long round-headed aluminium rivets 1/8 in. O.D., and drill these out to allow free fit of 16-gauge piano wire. Fastening these and the wire prop' stops can be done with Holts Cataloy, which is a catalytic filler, which can be bought at most garages. Pass the parts through prop. into position, and using a thin narrow piece of springy metal, "trowel" the Cataloy behind underside of the head of the rivet, which is exposed due to the angle it passes through the hub. Small blobs can be manipulated into position on the other end of the hub rivets, as well as the wire prop. stops, and can be smoothed off with a half-round Swiss needle file or rolled up glass paper.

Balance the model at approx. 1/2 in. in front of the wing trailing edge. Test glide to see if the descent is reasonable.

For all glide and power-on testing, never put packing under the LE. on the tailplane, unless you have not built the fuselage true and need this to rectify matters. Up to approx. 1/16 in. packing can be employed under the T.E. of the tailplane, to achieve the right trim. After this if more is required, ballast the appropriate end of the fuselage to attain glide. Wind on about 200 actual turns on the motor, and pack nose block with 1/32in. of down and side thrust (you may be able to remove this later).

In good trim, and with first-class rubber, the model should have a high angle of climb throughout, and on full turns it will climb straight up in a gradual turn, and should show no signs of dropping a wing and mushing after the first burst. This is attributed to good dynamic balance, the high power to weight ratio, low total weight (5 1/8 ounces including 2 ounces rubber) and some rather good rubber! Don't forget your name and address, and always light the DIT, even on trimming flights.



Heart of Trip Stick is the propeller and views at left convey some of the details in the hub. The blades are offset to one another and use of a drilling block as shown on plan ensures correct angles. When folded, the blades lie snug alongside the fuselage, and are held in place there by rubber band tensioners as seen here. Note the triangular end of the shaft to engage the bobbin hooks

and the woodscrew "stop" in back of noseblock to locate the folded blades on fuselage

Cocklebarrow Sunday 7 July 2019 *Some of the photos I took. JP.*









Richard Farrer with his current project for RC all controls for this Invader glider are via the main wing as you can see, for turning, the wings pivot thus acting as ailerons whereas elevator is taken over by increasing / decreasing the angle, decalage, of the main wing.











From Jon Porter of Micro Aces

The Sachsenberg Fokker D.VII Limited Edition Kit. Availability for the latest Microaces 'Limited Edition' kit comes to an end



If you'd like to add this striking livery to your fleet, or use this kit as a first build to hone your skills with the unique materials used in Microaces models, then head on over to microaces.com to grab one!

https://www.youtube.com/watch?v=yAyUEIAFENw&feature=youtu.be&mc_cid=4622884ddb&mc_eid=507ea81f46

You'll need to check but the offer / kit may, by now have ended, James P

Did Brown shoot the Baron down?

It's been the subject of much speculation and forensic examination. On the 21st April 1918 Manfred von Richthofen was downed by enemy fire whilst in pursuit of Lt. W.R. May.

Brown, flying his Sopwith Camel, was the last aircraft to fire upon Richthofen and was credited with the kill. However more recent inquiry has concluded that the most likely source of the deadly fire was from Australian ground forces, even pinpointing Sgt. Cedric Popkin, an anti-aircraft gunner, as the most likely source.

However, Roy 'Brownie' Brown and his Sopwith Camel are a much modelled subject and the mysterious events that surrounded that fateful day have made Brown's mount an iconic aircraft.

So to celebrate the launch of yet another printed Assembly Guide that will be included in all Camel kits, we've replicated the red nosed fighter in all it's WWI glory; plenty of detail and weathering in the pre-printed parts plus 3D printed components including the rotating fuel pump prop and rigging guide.

We're limiting our first run to 50 kits so if you're a fan of the Camel, this is your chance to get an icon of the Sopwith breed.

Production starts tomorrow so we'll be shipping out from next week.

Grab one while you can!



Email dated 1 August 2019 so offers are probably expired. James P



DMFG Friday 12 July 2019. The sausage and onion flying event

All our events seem to be food related. The following photos were kindly sent by David Bintcliffe.





David's Radio Queen





Tony Tomlin's Swanee



Tony's David Boddington designed Tinker



Tony's Ace of Diamonds just before.....



Andrew Squires's Sid King designed Novice



Andrew's Dads Lancaster ready for first flight it was either 20 or 30 years in the making!



John Bainbridge's Dallaire Sporster, powered by Laser as you can see from a Belair kit





Alan Coppen ready for some free flight

The following photos I took at the event. JP.



Some of the original flight crew signed the paper now in the cockpit



Maiden flight powered by brushed400 motors





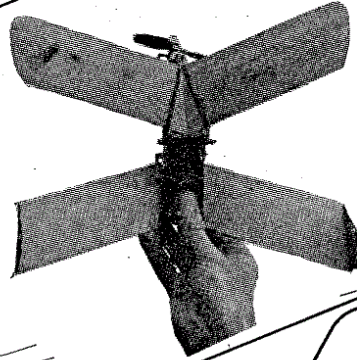
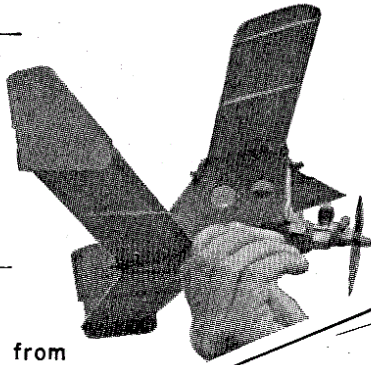
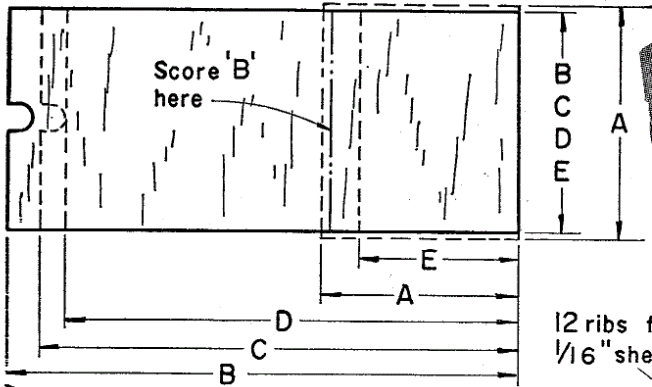






Note the remodelled Ace of Diamond

FULL-SIZE
PLANS!



'A' from 1/32" ply and 1/16" sheet.
Rest of formers 1/32" sheet.

12 ribs from
1/16" sheet

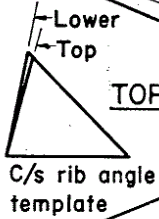
MITEY ATOM

by E. Clutton

A novelty for the Cox .010

Note:
rib angles.

Scrap 1/16-in. for the ribs, a few inches of 1/8-in. dowel, a small square of 1/32-in. ply and just two sheets of 3 x 1/32-in. balsa are all you need to make this veritable demon of a sport flyer. As far as Eric Clutton is concerned 'X' marks the spot where two Mitey Atoms have bored holes through the sky. Put your name on it and don't fill the Cox .010 tank—they disappear very quickly!



TOP WING

LOWER WING

1/8" dowel
1/8" sq. wing rest

Both wings from
1/32" sheet, top
surface only.

FIN
1/32" sheet

1/4"
Dihedral

1" Dihedral

Fin

Fuselage sides, top and
bottom from 1/32" sheet.

1/8" dowels

Total weight of model 1/2 ozs.
Use 3" x 1/4" prop supplied
with motor.

Do not tissue cover or dope
model. Finish with one coat
of synthetic enamel.

1/4" sq. between
sides

1/8" dowel

From Aero Modeller December 1961

From David Bintcliffe

The first flight of No 2 biplane took place yesterday am at about 7.45 am. The flight was short and was “accidental” taking place half way along a fast taxi run!,

I had taxied the plane along the lawn at home on it's pontoon,,,plenty of power

During the 3 or so taxi run on the lake the plane fairly suddenly rose into the air ...I instinctively throttled back (mistake) and the plane “ landed” heavily like a dead duck.

Good news was minimal damage...loose horizontal front wing and one tip float pulled off! The flight was caught on video. Adjustments probably will include some more church roof and a bit of down elevator trim. Hopefully then it will fly okay.

Very fortunately Stephen Bohill Smith was able to be there , he was the instigator of the project



A few photos from David taken at the last Old Warden meeting



Hawker Cygnet folded up ..there are 2 full sized ones in the Shuttleworth Collection



Taken thro the car window...a beautiful Wakefield with steering servo above the wing



Flying very well was this twin engine free flight EDF seaplane



Next model box protection!

Next three photos were all free flight EDF models... Hunter Canberra Buccaneer...





Coquette

...and finally a beautiful KK Contestor



From Jürgen.

Hi James sending you a couple of pic,s from a nice day at the field maiden for my Cardinal and second for the Miss 35 both flow great.





From Richard Farrer

I liked the photo of you with your Novice and I thought you would like to know that Sid King, the designer is still designing and building model aeroplanes. I see him up at the Aston Down club when the weather obliges.

I recently purchased a secondhand three axis slope glider from a retiring club member, later discovering it was a Sid King Topline. I loved the look of that glass fuselage and it flew superbly. On complimenting Sid on his design he gave me a set of wing cores for the two metre polyhedral wing he designed for the Topline. They have a slightly undercambered section and were in superb condition. I have built them up and now have interchangeable wings. The rudder/elevator wings give the model a wing loading of under ten ounces per square foot so you can imagine the performance. The photos show the polyhedral version on the ground and the aileron version in flight.





From Larry Davidson

I've attached my list of Items I've been selling for many years around the world Larry

Larry Davidson
 488 Peaks View Dr.
 Moneta, VA 24121-2565
samchamp@jetbroadband.com

(540) 721-4563

Name _____ Phone# _____ Email _____
 Address _____

4-15-2019 List

- ___ Rimfire "V" (3/8 X 24) Spark Plugs, Great Plugs! @ \$ 27.00
- ___ Rimfire V-3 (1/4 X 32) Short Reach Spark Plugs @ \$25.00
- ___ Rimfire V-2 (1/4 X 32) Long Reach Spark Plugs @ \$25.00
- ___ Rimfire VR-2 (1/4" X 32) " Replaces old Champion VR-2 plugs @25.00
- ___ Adaptor 3/8" X 24 To 1/4" X 32 (Adapts V-2 & V-3 Size Plugs to Large 3/8" Threads) \$ 3.75
- ___ Coils, small, light wt. 30 grams, 2.4V to **3.7V** @ \$40.00
- ___ Solid State Ignition Module #SSIGN W/Instructions @ \$24.00
- ___ Solid State Ignition Unit #SSIGN2 (TIM-4), @ \$ 24.00
(Instructions Included for points or Hall Effect operation) W/SSIGN2
- ___ Ignition cut off w/solid state ignition combined #SSIGNCO. @ \$40.00
 When prop stops with the points closed on ignition engines more than 2 seconds,

It Cuts Off the Battery Power, saving the coils and SSIGNCO.
MY MOST POPULAR SOLID STATE UNIT! (Coil Also needed)

- ___ Hi Tension Leads with 10K resistor & Clips (HTRC) For R/C @ \$ 6.00
- ___ Hi Tension Leads (No Resistor) (HTFF) Free Flight & U-Control @ \$ 4.50
- ___ 3/8" Rubber Bands for DT (Bag of 100) @ \$ 1.25
- ___ Dethermalizer Fuse (3/16" X 33') (English Type) @ \$ 15.50
- ___ Fuse Lighter, (Battery powered & included) (see photo on back) @ \$ 6.50
- ___ Polyspan Covering Material, **NOW 20" WIDE X 10' LONG** Folded @ **\$16.00 NEW PRICE & Size**
- ___ Polyspan Covering Material, **NOW 20" WIDE X 10' LONG** Rolled In **Tube** @ **\$16.00 NEW PRICE & Size**
- ___ Polyspan Instructional VHS Video or DVD **Choose** (40 Minutes) @ \$ 20.00
- * ___ Polyspan Dye (Can Be Used for Most Coverings Too!) 2 Oz. Bottle * @ **\$ 12.00** Added P&H might apply (heavy!)
 Red, Yellow, Blue, Orange & Black **NEW Prices** for more than 2 bottles
- * ___ Polyspan Fluorescent Dye (2 Oz) Yellow Or Orange " * @ **\$ 12.00** Added P&H might apply (Heavy!)
- ___ Glue/Oil Dispensers (Perfect for Thin CA Applications, Etc.) .010 Dia. Tip @ \$ 3.50
- ___ Glue/Oil Dispensers (Perfect for Medium CA Applications, Etc.) .023 Dia. Tip @ \$ 3.50
- ___ I Stock Some Small Parts for the Super Cyclone Engines (Inquire!)
- ___ NOTE! I HAVE SOME BMJR LASER KITS IN STOCK. INQUIRE
- ___ Silk Covering (K&S) **Orange** or **Green**, per sq. yd. \$14.50
- ___ Badge BL-7 Viscous DT Timer Super lite, great timers @ \$19.00
- ___ Badge BL-3 " " " " @ \$22.50
- ___ **Back in Stock!** ASTOP Rudder Adjuster, super light! (See photo below) @ 15.00

GLASS SYRINGES FOR FILLING PACIFIERS AND FUEL TANKS



- ___ 10 ML \$ 14.00
- ___ 20 ML \$ 15.00
- ___ 30 ML \$16.00
- ___ 50 ML \$ 19.00



ASTOP 15.00



Fuse Lighter W/ Batteries 6.50

- * ___ Butterfly Ready to Fly Rubber power Free Flight 7-1/2" Span, Super Light @\$26.00 **CHECK AVAILABILITY**



Prices subject to change without notice!

SORRY, NO CREDIT CARDS

POSTAGE & HANDLING (USA) \$ 8.50

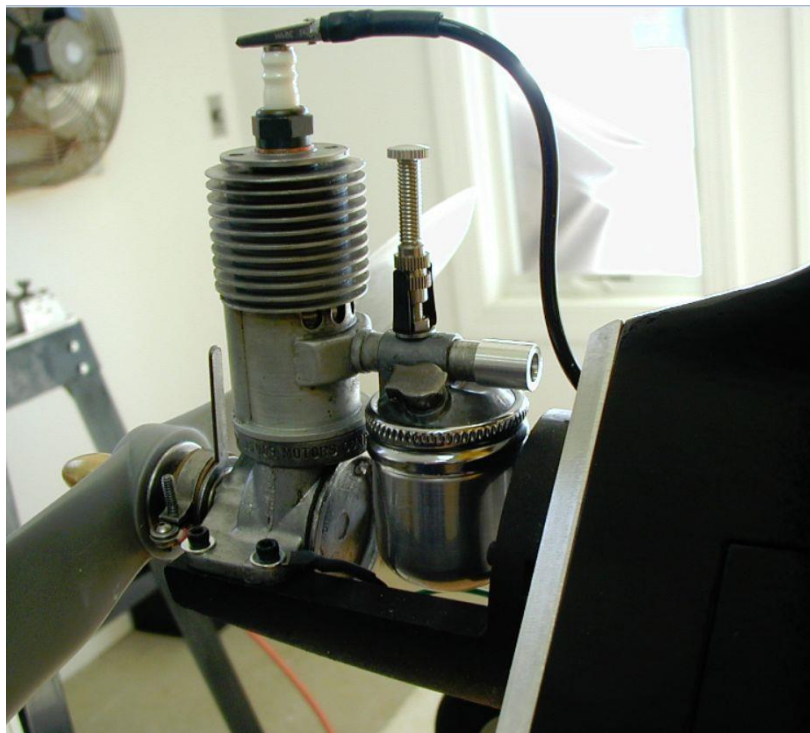
*PERSONAL CHECKS (USA), BANK CHECKS OR POSTAL MONEY ORDERS PAYABLE IN US FUNDS
(EXTRA P&H FOR FOREIGN ORDERS*

PLEASE PUT PHONE# AND EMAIL ADDRESS ON YOUR ORDER PLEASE!

**We now Take PayPal! USE THIS ACCOUNT: samchampal@jetbroadband.com Please add 5%
to the total for PayPal orders.
This is what they charge me!**



Lanzo Bomber FF RTF



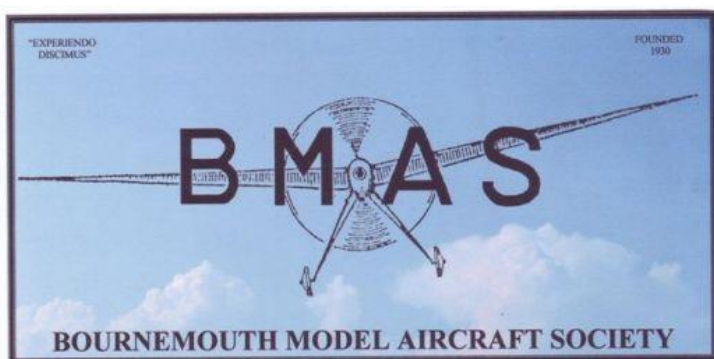
Thanks, Larry

Revisiting Fleet Tx conversion to 2.4

As you gather from last mention I was really pleased on converting a XP/FM Fleet Tx to 2.4. It was a learning curve so I ended up converting another 3, an Omega a mode 2 XP/FM and mode 1 XP/FM. The Omega was easier to convert however a common problem I had was with regard to the battery indicator gauge and so left it disconnected. The other week I found a supplier online and bought 5 voltmeters with a range of 5 – 30v, the gauge is small and aimed at the hobbyist. Oh well I connected it up and hey presto it worked.

A couple of things I did learn is that when you put 10v through an LED it makes a very loud “crack” sound and when you short a switch while testing voltage and get it wrong the smoke arising is seemingly instantaneous and the positive wire very hot.

Mike from our flying group gave me the mode 1 Fleet Tx and also a Futaba T7CP Tx which was on 35 mhz. Guess what I decided to convert that and compared to the Fleet Tx it was absolutely simple and very quick, I won't bore you with details however if a few are interested I'll write about it in another issue.



Hi All,

Dates for BMAS Indoor flying sessions for Autumn/Winter 2019/2020 have now been booked at our new Venue of The Friends Meeting House in Wharncliffe Rd Boscombe.

The dates are:	Wednesday	25th September 2019	Wednesday	30th October 2019	
	Wednesday	27th November 2019	Wednesday	29th January 2020	
		Wednesday	26th February 2020		
		Wednesday	25th March 2020	Wednesday	29th

April 2020

Wednesday 27th May 2020

Times are 7.00 pm - 9.30pm

Fees will be: Adult Flyers £5.00 Junior Flyers £2.50 Spectators £1.00

Dorset Swapmeet

On Saturday 7 September there will be a model aeroplane swapmeet at Marica's Frm Shop, Spetisbury, DT11 9DF which is just South of Blandford Forum.

Whilst mainly for model aeroplanes there may well be some boating, car and train presence.

All is under cover and there is a café, bar, WC's and ample car parking.

Due to low number of tables available traders assume that you should either bring your own or put items for sale on the concrete floor. Each plot will be 1.98m x 1.5m. A few bookings have been made already. Given the vast amount of room available it's is hoped response will be good so that this can become an annual event. If demand is high then another barn will be used thereby space per plot will increase.

Starting at about 08.45 for traders and open to buyers from 09.30.

Contact John Bainbridge 01258458749 or mobile 07864297226
or if problem getting hold of John you can email me James Parry at :- jamesiparry@talktalk.net

Subject : Cocklebarrow Vintage R/C Events 2019.

18 August 29 September

Cocklebarrow Vintage R/C

Signposted from Aldsworth Glos. on the B4425 between Cirencester/Burford and off the A40 between Northleach and Burford [follow SAM 35 signs].

All types of R/C up to 1969 sport flying no competitions.

BMFA insurance essential [A certs. not required]

Tony Tomlin 02086413505 pjt2.alt2@btinternet.com

North Cotswolds MAC August event from Gray

I'm pleased to announce that the North Cotswold MAC's Fly For Fun 2019 event will be held **on Aug 10th and 11th** at Far Heath Farm, Moreton-in-Marsh. This will be a special one, as we will be celebrating the club's 70th anniversary.

We'll be holding two special events alongside our regular programme, with informal judging and prizes - on the Saturday for Vintage and Nostalgia models and on the Sunday, 21st century designs only!

We'd be very grateful if you could give this an early mention in S&T when you can. I'll send further details after the Xmas mayhem has subsided.

Shilton flying group 2019 fly in dates

We have now formed a model flying group with the blessing of RAF Brize Norton who have given us written permission to operate dawn to dusk 7 days a week within an area of 1 kilometre and to a height of 1400ft. we have a small number of vacancies still available to interested parties, contact bealekraft@outlook.com SMFG sec.

autumn vintage fly in Sept 07th + 08th

*Hope to see you there, regards Boycott and Nick
Boycott Beale bealekraft@outlook.com*

FLITEHOOK

Indoor Free Flight Meeting West Totton Centre, Hazel Farm Road, Totton, Southampton.
SO40 8WU

Contact: Tel. 02380 861541
E-mail flitehook@talktalk.net

Café on Site

Flyers £8
Juniors & Spectators Free
Flyers must be BMFA Members

Sundays 10.00a.m. to 4.00p.m.

2019

8th September 2019
13th October 2019
10th November 2019
8th December 2019
29th December 2019

2020

12th January 2020
9th February 2020
8th March 2020
12th April 2020



Belair Vintage Parts Sets

VOETSAK Tribute - now available



By Ron Moulton

The popular Voetsak has been reduced to 70% and is now powered by the affordable AM25. Come and join the Belair Kits sponsored team race series in 2020. Series awards and cash prizes

Belair Vintage have the largest range of Vintage Parts Sets, including designs from Aeromodeller, Veron, Mercury, Keil Kraft. All your favorites - Just like the good old days ...

Call for your free catalogue or view online at www.belairkits.com

Tel: 01362 668658 www.belairkits.com

Visit our stand at all ModelAir Sam35 Old Warden events in 2019



Miss 35 parts set and plans

Ref: otmiss35

Miss 35, exclusive SAM35 model designed by David Banks. Laser cut parts set and full size plans. Includes formers, fuselage sides, cowl cheeks, bulkhead, gear mount, fin support, tailplane and fin outlines, wing ribs, tip shapes and many smaller parts. Builder to supply stripwood/wire and covering.

Designed for the new SAM engines - [click here for details](#)

Note to builder - DO NOT use the plan in Aeromodeller, as they were unable to get the scale correct of their magazine printed plan. A correctly dimensioned plan is included with your parts set

The SAM35 "Miss 35" has been designed around the Red Fin special edition motors

Price: £50.00 Inc VAT
55.00 USD | 59.19 EUR



Full size plan included.

KK Scorpion Specification

Wingspan - 44 inches

Suitable for 1.3 to 2.5cc engines or conversion

RRP: £55.00 Inc VAT

Price: £55.00 Inc VAT

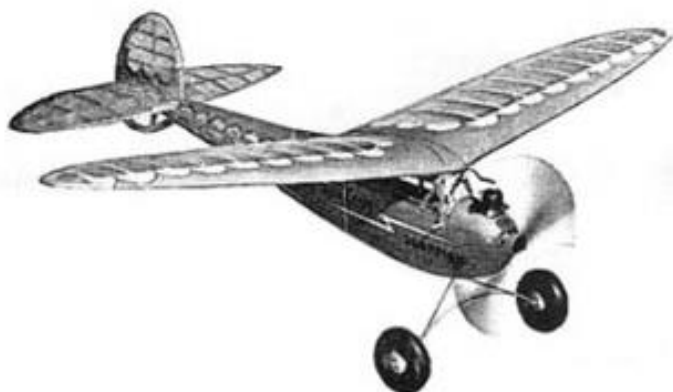
60.50 USD | 65.11 EUR

KK Scorpion - 44" cabin model

Ref: ot-kkscop

Parts Set for the attractive Keil Kraft Scorpion. Includes all the shaped balsa and plywood parts required to build the basic airframe, including bulkheads, formers, wing ribs, shaped trailing edge for wings and tail. Shaped outlines for fin and rudder, sub fin, cowl cheek sides, dihedral braces, gussets, plus many smaller items.

Builder to add their own stripwood and covering.



Super Scorpion - 66" cabin model Parts Set

Ref: ot-kksupersco

Parts Set for the attractive Keil Kraft derived Super Scorpion. Includes all the shaped balsa and plywood parts required to build the basic airframe, including bulkheads, formers, wing ribs, shaped trailing edge for wings and tail. Shaped outlines for fin and rudder, sub fin, cowl cheek sides, dihedral braces, gussets, plus many smaller items. Includes plan, which shows RC Assist conversion. Builder to add their own stripwood and covering.

KK Super Scorpion Specification

Wingspan - 66 inches

Suitable for 3.5cc engines or conversions

Price: £75.00 Inc VAT

82.50 USD | 88.79 EUR



Air Trails Sportster Cabin Model

Ref: ot-airtrsport

Air Trails Sportster by Ben Shereshaw from Air Trails 1939 - 46in span Cabin model. Parts Set includes all shaped balsa and plywood parts to complete the airframe, such as fuselage sheeting, bulkheads, formers, wing ribs, tip shapes for wing and tail/fin, wing joiner boxes, plus many smaller parts. Includes full size plan

Price: £55.00 Inc VAT

60.50 USD | 65.11 EUR

Linnet Parts Set 43" span

Ref: ot-linnpk

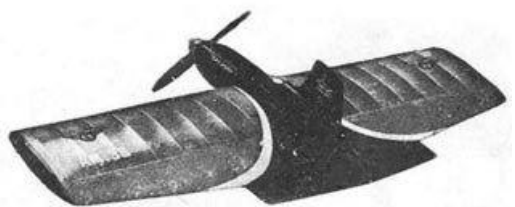
Quirky looking design by GR Woollett published in Aeromodeller January 1954

43in span suits 1.3cc size motors. Tricycle undercarriage and low wing, looks semi-scale and makes a pleasant change from the usual high wing cabin job.

Part Set includes all the laser cut balsa and plywood parts, such as cowl cheeks, fuselage sheet, formers, bulkhead, LG mount, shaped gussets, fin outlines, wing and tailplane tips, wing ribs, sub fin, wing seat, plus many smaller items.

Parts fit original Aeromodeller plan which is not included - shown for reference only. Builder to supply stripwood and covering to complete basic airframe.

Mercury Toreador CL Parts Set



Ref: ot-kktore

Parts Set for the **Mercury Toreador** model. Suitable for Stunt or Combat. Laser cut parts will save you hours of tedious cutting and include fuselage sides, fuselage top & bottom in one piece 1/2" balsa, bulkheads, formers, fin/rudder, wing tip shapes, wing ribs with additional tab to allow the symmetrical wing to be built on a flat board without packing each rib, bellcrank mount, spinner ring, shaped trailing edge and elevator.

Also includes **full size plan, and canopy, vac-formed in clear plastic.**

Specifications Wingspan - 36 inches, weight around 20 oz and suitable for 2.5 to 3.5cc engines (AM35 shown on plan). Builder to supply small amount of stripwood to complete.

Price: £50.00 Inc VAT
55.00 USD | 59.19 EUR

Regards,
Leon Cole
Belair Kits
Tel: +44 (0)1362 668658
www.belairkits.com

Follow us on Facebook <https://www.facebook.com/pages/Belair-Kits/1448177428736984>

Dens Model Supplies



Traditional CL Kits including the ACE + Plug & Play Electric CL Starter Kit....just add glue and a battery !!



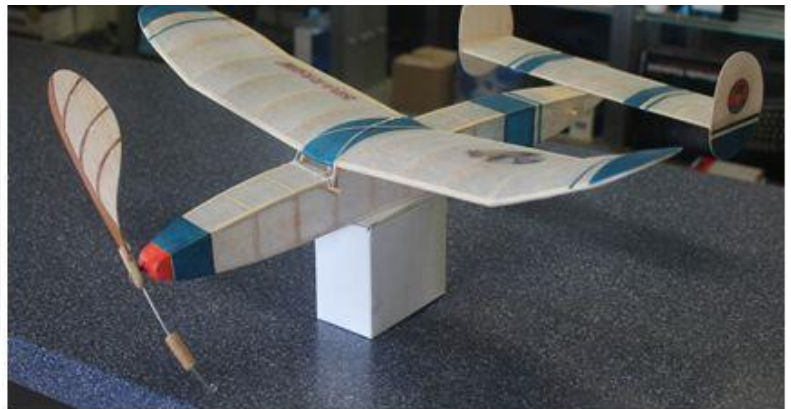
***Tinplate CL tanks....Bellcranks,
Lines, Handles, Cloth Hinge Tape,
Leadouts etc***



Cox Engines & Spares



Electronic Timers for CL & FF



Laser Cut - High Quality FF & RC Kits



***On Line shop at
www.densmodelsupplies.co.uk
Or phone Den on 01983 294182
for traditional service***