

## Sticks and Tissue No 136 – March 2018

If you can contribute any articles, wish to make your point of view known etc please send to or phone 01202 625825 [JamesIParry@talktalk.net](mailto:JamesIParry@talktalk.net) The content does not follow any logical order or set out, it's "as I put it in and receive".

Thanks to Mark Venter back issues are available for download from <http://sticksandtissue.yolasite.com/>

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



*Rubber motor meeting Schafisheim, 17.3.2018 Peter Ziegler.  
Piper PA - 15Vagabond More below*

## From Peter Ziegler Schafisheim, 17.3.2018

Despite the uncertain weather conditions, we (Peter Hunn and the author) have decided to hold the meeting as planned.

The morning was quite passable. The announced "Bise" (Wind from north-northeast) had not arrived, yes the wind was weak and turning. But, that was the most important thing - it was dry. At nine o'clock the comrades arrived and were welcomed by Peter Hunn with coffee and croissants.

Afterwards the area, which was new for all of us, was examined. Grass grazing for and for! Big enough to fly powerful models. Clear that soon the first started in the cloudy sky. Not without first taking a look towards the flags or the smoke plumes of the chimneys in order to recognize the current wind direction.

The eight athletes started the most varied models and were rewarded with beautiful flights. The ninth person had come with no model for "snooping" with one of the comrades.

By noon, the wind freshened and turned east. It had to go to start ever further into the terrain, because now the models were quite offset. There were also tree landings with appropriate salvage.

Around 12:30 o'clock then also the hunger became noticeable and after the obligatory group photo it went direction "written house" where besides the culinary also the technical around the rubber engine did not come too short.

Everyone agreed: It was a good occasion and not doing it would have been a pity. The airfield is ideal for our purposes and it would be nice to use it for further meetings. According to Peter Hunn, who organized this event, the chances are not bad.



*Condor*



*Double start*



*Felix*



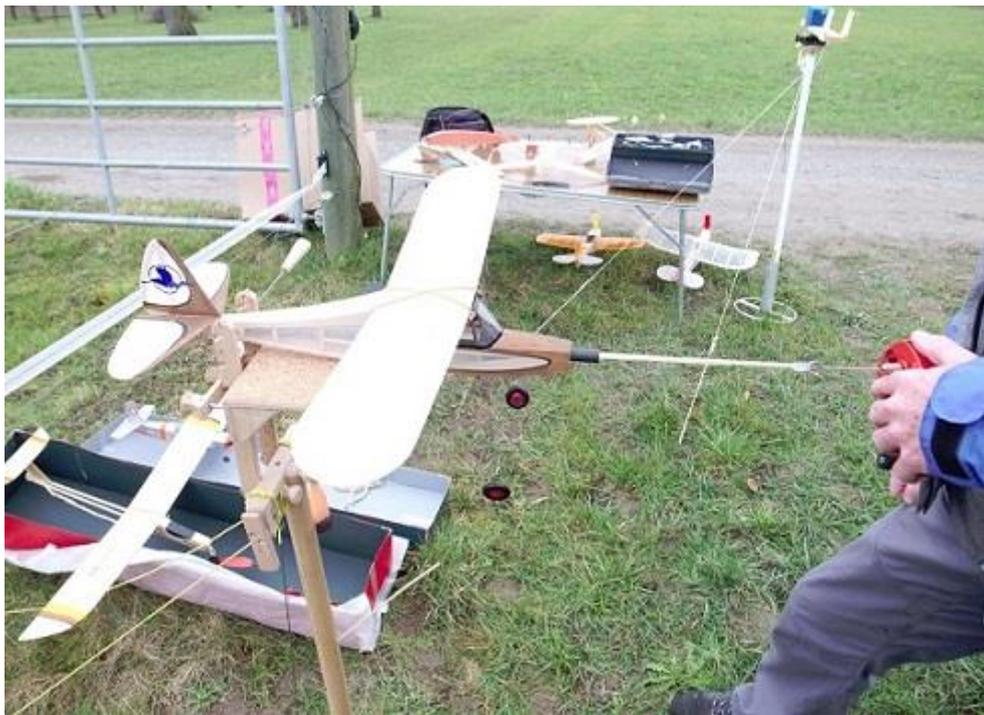
*Frog Redwing*



*Graupner Sternchen*



*Jawelin*



*Marabu*



*Members*



*Model Fleet*



*Reflections*



*Supply Position*

## From Bill Wells

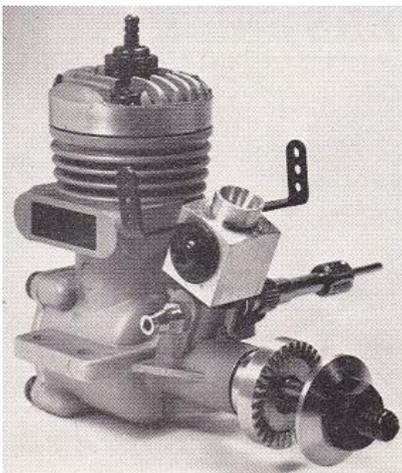
For quite a few years I didn't have anywhere to fly my models so I concentrated on collecting and fixing the older engines. Most of the engines that I have got my little grubby mitts on I could never have afforded when they were new. Unlike serious collectors who seem to turn their nose up at anything less than pristine un-run high performance engine set in its as new box I am content with a small collection of usually well used engines. Sometimes I feel a bit like a scavenger rummaging around in bins in the hope of a find. In September I went to Old Warden for a change on the Saturday instead of the Sunday so arrived as the new bins of engines emerged from the car boots. I didn't find what I was looking for but near the bottom of one bin was a Ueda 09 a short hagggle later it was mine for £7-50. It was quite clean on the outside but locked solid with castor oil residue. That night with the back plate off the engine was immersed in cellulose thinners. The following morning the engine was still locked solid so after drying it off it was into the oven at Reglo 6, that loosened it up. The lollipop stick trick failed to remove the liner but left enough exposed after a reheat for it to be pulled out using the three jaw chuck on the lathe. After cleaning everything and reassembling it with a new back plate gasket, glow plug and venturi 'O' ring I was able to run the engine on Sunday afternoon.

I don't like taking engines apart just for the sake of it but in this case it was so badly gummed up I had NO option so I took advantage of the situation to take a snap shot of the parts.

If you want to know more about Ueda engines Adrian C Duncan's website tells you everything you are likely to want to know about them. [http://adriansmodelaeroengines.com/catalog/main.php?cat\\_id=45](http://adriansmodelaeroengines.com/catalog/main.php?cat_id=45) My engine has flats on the prop drive instead of a taper and the venturi insert isn't very refined so I guess it is an early engine. For a very modest outlay I have 50 year old engine that runs. Who said collecting engines was expensive?

I couldn't find a test report for my engine but here is Peter Chinn's Test on the Ueda 09 R/C.

## UEDA .09 From Aero Modeller



The UEDA 09 engine, made by a firm of sub-contractors to the Japanese car industry, first appeared three years ago, in both standard and R/C versions, and aimed at the beginner' market. As the following report shows, our test unit — an R/C model — was no record breaker as regards power, but did have most of the attributes of a good beginner's engine. We found the Ueda very easy to handle and — of obvious importance to the average young newcomer to the hobby — it is moderately priced. Ueda engines are sold in the U.K. by the Modelradio Company, Newcastle-under-Lyme, Staffs., who are currently offering the standard 09 at only 3 gns.

The design and construction of the Ueda 09 R/C is, in general, quite orthodox. It is assembled around a single casting that embodies the crankcase, complete cylinder casing and the front bearing housing. The latter is rather thin walled, but is braced vertically and laterally by triangular webs and has a cast-in bronze bushing for the crankshaft. Large beam mounting lugs are provided, and it should also be relatively simple to adapt the engine to radial mounting should this be preferred. The crankshaft is finely ground on its working surfaces and, on our test unit, was a good fit in the bearing. The shaft is counterbalanced by cutaways each side of the crankpin. A rectangular valve port is used in conjunction with a quite large bore (6 mm.) gas passage through the 8 mm. dia, main journal. The valve gives a 190 degrees induction period, starting at 35 degrees ABDC. The shaft has two flats on a 6 mm. dia, for the prop driver and terminates in a 5 mm. threaded length for prop attachment.

A plain, unhardened cylinder liner, with identical exhaust and transfer ports, is employed. It is flanged at the top where it drops into a recess in the cylinder casting, and is locked in position by the cylinder-head. The latter is secured to the casting with four screws and has no gasket. As on most Japanese engines, the head has a cast-in brass thread insert for the glowplug. No special efforts have been made with regard to combustion chamber shape. The head surface projecting into the cylinder bore is flat with a recess to accommodate the piston baffle.

The cast-iron piston has a parallel lapped skirt, but has a .010 in. relief immediately below the crown so that the effective exhaust and transfer periods are, respectively, 130 and 100 degrees of crank angle. The piston has a flat crown, straight baffle, and continuous gudgeon-pin band. The gudgeon-pin is of unhardened steel, solid with domed ends. A simple diecast aluminium unbushed conrod is employed.

The R/C type carburettor consists simply of a machined aluminium body, containing a brass throttle barrel, with a standard spraybar beneath it. The spraybar, in fact, is used to retain the body in the intake boss. Throttle arms are fitted on both sides of the barrel, retained by screws and are, therefore, adjustable. No throttle stop is provided, however, and there is no means of adjusting idling mixture strength.

#### Performance

The Ueda company does not offer a silencer for this, their smallest, model and our tests were, therefore, carried out without a silencer fitted. We understand, however, that Messrs. Modelradio can offer a suitable Ross silencer for this engine at moderate cost.

Starting qualities of our Ueda 09 were very good. In fact, the test engine was just about as easy as one could wish for. No instructions were received with this particular unit and so we had to 'guesstimate' the needle setting.

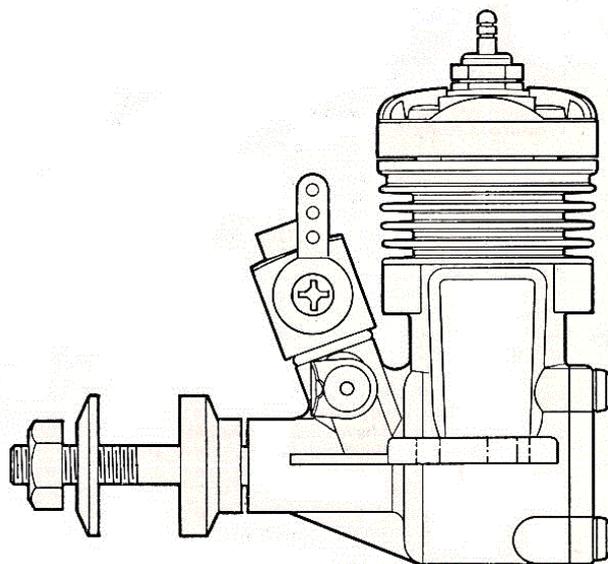
After removing the plug, to make sure that the applied voltage gave the right amount of 'glow', we sucked the fuel up with a couple of choked turns of the prop and primed the cylinder with a few drops of fuel through the exhaust. On connecting the plug lead, the engine then started on the very first flick of the prop. This ease of starting was maintained throughout the tests. Warm restarts required no more than one preliminary choked turn, after which the engine almost invariably started first flick.

Running-in could probably have been ignored. The Ueda ran perfectly well from new with no sign of over heating or loss of power when leaned out to the optimum two-stroke setting. However, as a courtesy to new parts, we gave the engine a total of 30 minutes intermittent running at a slightly rich setting before making any attempt to take performance readings.

Fuel used was our usual R/C test blend, containing 5 per cent pure (equivalent to 7 per cent commercial blended grade) nitromethane and, on this, the Ueda ran quite steadily. Substantially larger proportions of nitro-methane resulted in only a slight power increase. Using a mixture containing 25 per cent nitromethane, extra power released was only sufficient to raise r.p.m. on a Top-Flite 8 x 3 1/2 by about 200 r.p.m. The user will probably feel that ordinary mild grade commercial glow fuels are adequate for this engine.

The maximum b.h.p. determined on test of approximately .085 is, of course, quite modest for an engine of over 1.5 c.c. However, this power is reached at a 'usable' speed, i.e., just under 10,000 r.p.m., a figure that should be reached in flight on an 8 x 3 1/2 Top-Flite. Static r.p.m. achieved on this size were 9,400 r.p.m., while an 8 x 4 Tornado was turned at 8,700 r.p.m. We would not recommend the use of props much larger than 8 x 4, if reasonably good performance is expected, as the b.h.p. curve is fairly peaky' and power drops off appreciably at lower speeds. Similarly, there is little point in using a very much smaller prop, as, on a 7 x 3, for example, in-flight r.p.m. are likely to approach 12,000—well past the power peak and doing little except wear the engine more quickly.

When throttled down, the Ueda ran rich and since there is no airbleed or other compensating device, the



minimum safe low speeds on the test unit were not much below half-revs' — i.e. around 4,200 on an 8 x 4 or 8 x 31/2. Such speeds may not be low enough to allow engine-on landings, but the throttle control is good enough to provide a reasonable range of power for climbing and level flight cruising with a simple single-channel R/C model.

In all, we would rate the Ueda as a pleasant little motor. When compared with some more refined small R/C

engines of similar size and/or weight, such as the OS. Max-10 or Webra Sport-Glo, it lacks power and does not throttle well, but one must remember that (especially by comparison with the Webra) it is a good deal cheaper.

Its strong points are its ease of starting and general docility.

Power/ Weight Ratio (as tested):

0.36 b.h.p./lb.

Specific Output (as tested):

54 b.h.p./litre.

#### SPECIFICATION

Type: Single cylinder, air-cooled, two-stroke cycle, glow- plug ignition with throttle control. Crankshaft type rotary-valve induction.

Bore: 12.7 mm. (0.500 in.) Stroke: 12.4 mm. (0.4882 in.)

Swept Volume: 1.5708 c.c. (0.0958 Cu. in.)

Stroke/Bore Ratio: 0.976:1

Weight: 108.6 grammes —3.83 oz.

#### General Structural Data

Pressure diecast aluminium alloy crankcase/cylinder/main bearing housing unit with cast-in bronze main bearing bush. Hardened steel counter-balanced crankshaft having 8 mm. dia, main journal, 6 mm. bore gas passage and 4mm. dia. hollow crankpin. Lapped cast-iron piston with baffle and fully-floating .35 mm. dia. solid gudgeon-pin. Pressure diecast aluminium alloy connecting-rod with plain eyes.

Non-hardened steel drop-in cylinder-liner located in cylinder casing by flange at top and locked by cylinder-head.

Pressure diecast aluminium alloy cylinder-head with cast-in brass insert for glowplug and secured to main casting with four screws. No head gasket. Pressure diecast aluminium alloy crankcase backplate secured with four screws. Machined aluminium alloy prop driver, keyed to two flats on crankshaft ahead of main journal. Machined aluminium alloy carburettor body retained in intake boss by plated brass spraybar assembly. Ground brass throttle barrel with actuating arms on both sides but no throttle-stop or provision for adjusting idling mixture. Beam mounting lugs.

#### TEST CONDITIONS

Running time prior to test: 30 minutes

Fuel used: 5 per cent pure nitromethane, 25 per cent

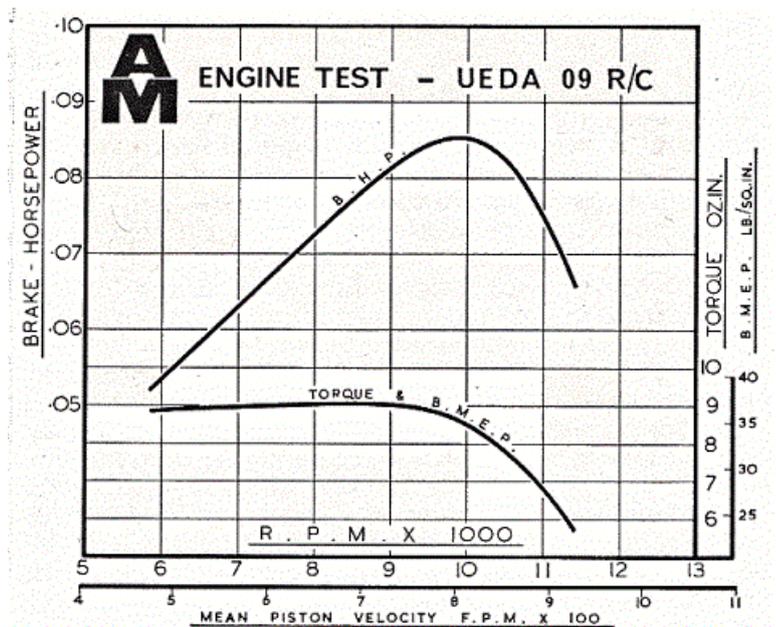
Duckhams Racing Castor Oil, 70 per cent ICI methanol.

Glowplug used: Ueda bar type, medium reach (3/16 in.). platinum filament.

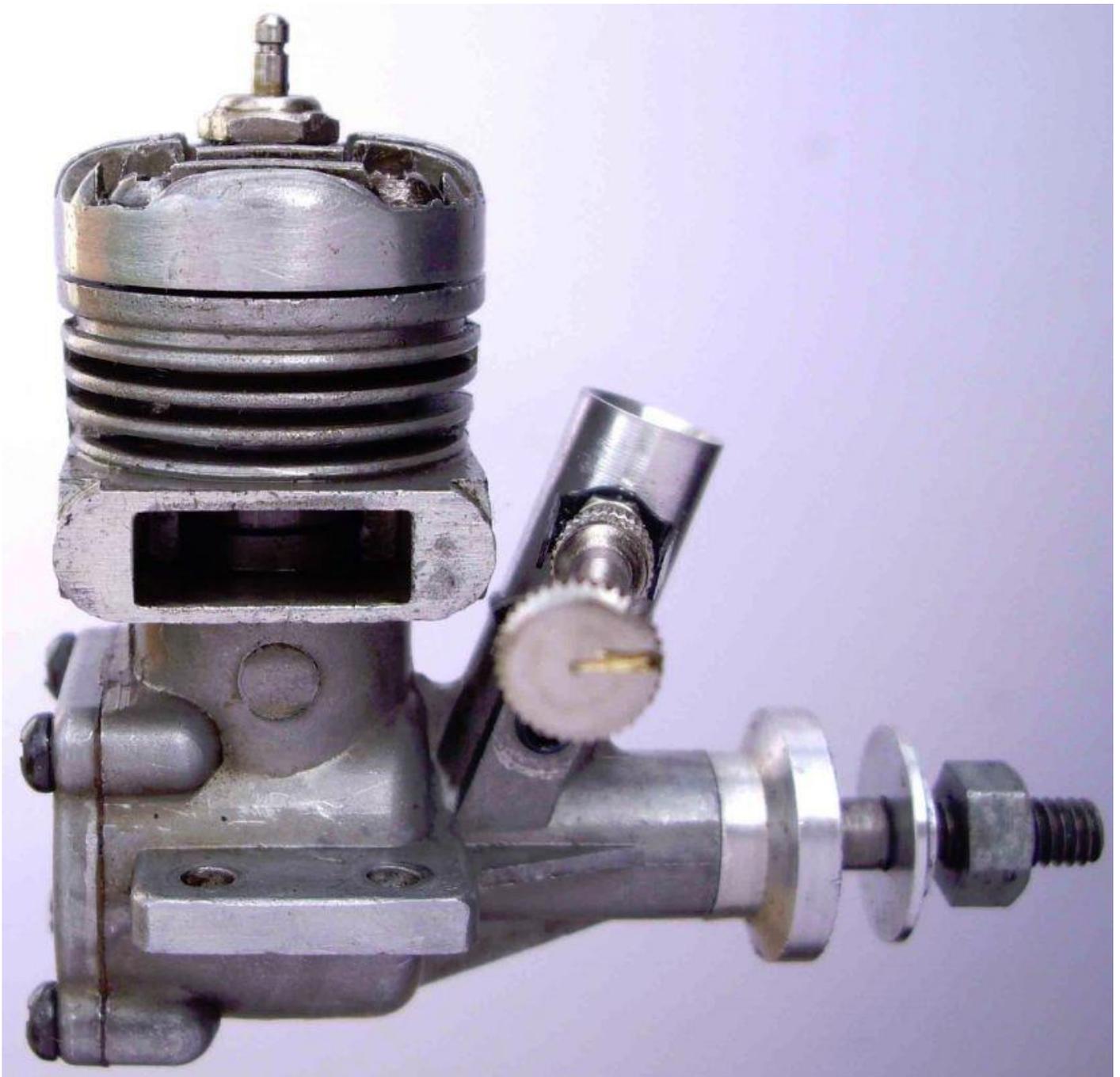
Air temperature: 50 deg.F

Barometer: 29.90 Hg

Silencer: Nil







### **From Brian Austin**

Have you seen the following nostalgic link <https://www.youtube.com/watch?v=3da0uz3rlrk>

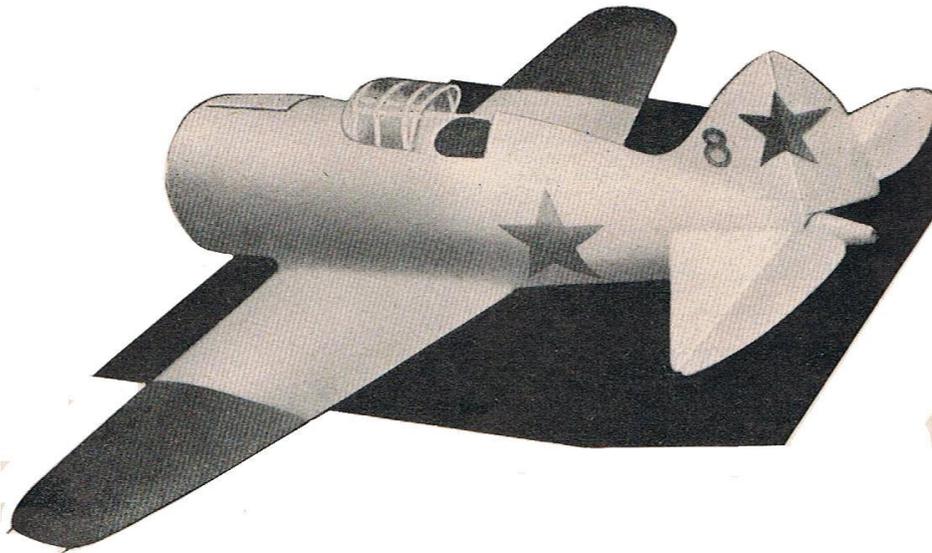
*This is well worth watching JP*

Interested to read in the latest edition, the piece on Ken Merryfields Flying Banjo. He was in the Anglia Club in the late 60's-70, but wondered what happened to him as he disappeared in 72.

He was one of the first with Dave Platt, who made models for other flyers, the original Buy it/Fly it brigade. One of his I remember was a design called the Bush Baby, bit semi scale Bird Dog in looks, also Crackerjack aerobatic model for 60 engines made for selling to people with cash and no time.



## ZKB-20 1-18 control line Russian fighter span 22" by G Brittain Model Aircraft February 1955



The Russian ZKB-20 1-18 fighter operated with the Spanish Government Air Force during the civil war. It was powered by a Russian built Wright Cyclone 1,200 h.p. radial engine, operating a two bladed metal prop, top speed being 300 m.p.h. Construction was all metal stressed skin with fabric covered movable control surfaces. The under carriage retracted inwards. Armament consisted of two .30 Browning machine guns fixed outside the airscrew disc. ZKBs operating in

Spain were identified by the Government markings of red, yellow and blue concentric circles on wings and fuselage, and similar coloured horizontal bars on rudder. Those used by the Russians in World War II were, in summer, all green or mist grey with a red five-pointed star outlined in white on wings, fuselage and rudder. In winter, they were all white except for the top outer wing panel, which was a vivid red for easy identification on forced landings.

### Construction

All balsa unless otherwise stated. Cut out formers FA to FC; FB is 1/8in. ply. Cut holes for engine bearers in FB, C and D to suit engine to be used. Take two 1/8 in. X 1/4 in. strips, cut to length and cut away at rear for horizontal tail unit. From plan, mark on these strips the former positions.

Starting from FB, cement formers in position, pulling the 1/8 in. X 1/4in. strips together at tail and cementing securely. Cut engine bearers and drill to suit engine, and also hole for control plate. Fit bottom bearer in place and bolt for control plate. Fuel tank is now placed in position followed by top bearer. Now cement both bearers in position and secure fuel tank in place. Fit 1/8 in. X 1/4 in. strip between FB and FD, similarly underneath between FB and tail. Cut stationary portion of horizontal tail surface and fix in place, followed by fin, but not offset rudder. Now fit the two pieces FH.

Plank in top half of fuselage with 1/2 X 1/16 in. strip starting either side of the 1/8 in. X 1/4 in. longeron and working upwards. Cut out cockpit and sand to shape. Fasten three control wires to control plate and bolt control plate in position using two nuts between bearer and plate to drop plate to approximate centre of wing.

### Wings

Wings are each made separately over plan. First cut required number of ribs, the two shaped 1/2 in. strips for leading edge and the two 3/4 in. shaped for trailing edge. Pin leading edge in position, also trailing edge, packed at rear with 1/8 in. scrap. Cement ribs in place.

Now fit wing tips, starboard tip being 1/2 in. sheet, whereas port tip is made up of three 1/8in. pieces with tube for control wires passing through centre. Slide port wing into position with control rods passing through ribs.

Place fuselage upright on building board and pack up wing tip 3/4 in. for dihedral. Before cementing wing, ensure free movement of control rods. Fit starboard wing in same way. Pack between leading edge and FB with scrap. Ensure wings are firmly cemented in place.

Plank in top leading edge and capping strips from 1/16in. sheet as shown, also between W1 and fuselage. Plank in underside of fuselage with elevator control rod passing through hole in port side. Cut Out movable elevators, sand and join the two portions with dowel. Bind metal tube with linen in place, also to fixed tail surface as shown on plan. Fit ply control horn.

### Tail Unit

Join the two portions of tail by passing pieces of wire through tubing and then cement pieces of scrap balsa

on outside to prevent wires coming out. Join control rod to control horn. Next fit rudder with 10 deg. offset. Fit ply tailskid. Fill in both sides above and below horizontal tail surface with scrap and sand to shape. Now cement FA to bearers and fit engine bolts. Fill port side with 1/2 in. strip fitting flush with engine bearers, forming fixed cowl. Starboard movable cowl is shaped from block balsa, which is held in place by dowels which fit into holes in fixed cowl.

Sand whole aircraft to smooth finish then cover wings with heavy weight tissue and remainder with lightweight. Give two or three coats of clear dope and sand smooth. Fit cockpit cover, then colour dope to taste. Guns and drop off under carriage may be added if desired but original model was hand launched.

## **From Dave Day**

Can you put a note in the next S&T that an updated version of my article on the colour of von Richthofens aircraft, complete with diagrams and photos can be found here:

<http://www.iroquois.free-online.co.uk/Richthofencolour.htm>

Also note that if you click on the 'Home' flag at the bottom of the page, you will find details of my current websites and new material.

*Photos from Peter Renggli taken by Urs Brand and Urs Rindisbacher of the MG-Bern*

















### **Showscene, from Dave Bishop of DB Sound.**

A story, for a change.

The morning had dawned with a stunning blue and cloudless sky and little wind that promised a beautiful day for many friends who had planned a special day out to an airshow. I too was looking forward to enjoying presenting some of the country's best radio control scale flyers in the United Kingdom to an appreciative audience who were be thrilled at seeing and hearing the one and only surviving flying Vulcan bomber. Added to that, "our" slot at the airshow was a nicely timed one starting at 12.30 and ending at 13.15 in one of the most beautiful settings one could ever wish for. I left my Tatsfield home at 0700 as my sat-nav told me that I would be arriving at Shoreham Airport at 7.55. Just the job as there was plenty of time to park the car, grab a bacon bap complete with a squirt of HP sauce, plus a mug of tea to wash it all down. The A23 was a joy ride in my Fiat car before turning right just short of reaching Brighton to join the A27 for the short mile to get to the entrance gates and show my commentators pass to the gate crew. There was a long queue in the left hand lane that trickled slowly along that meant I finally arrived at the entrance at 8.40. I was guided by a yellow coated official on a motor bike to the commentary area and with thanks I bought my very much looked forward to breakfast from an enticingly smelling stall. The date was August 22 – 2015 and it was a perfect first Sussex day of a two day charity airshow organised by the well-known and very much loved ex RAF Hunter pilot Rod Dean. (Rod's "must read" book is titled "Fifty Years of Flying Fun".) Near to the centre of the airfield's flight line, I met the team of well-known show scale modellers who were busy readying their aeroplanes for the near lunchtime start. I also found Mike Williams with his stunning wife Michelle and their son Charlie. I knew that I would need her to sort out the sequence of necessary paper work that I wanted for our 45 minute show piece. There was dear old Les Eagle appearing once again as flight line show director who was busy making sure that all the crowd safety things were taken care of. He pointed out where their aircraft were to be placed when starting engines and where to fly for the best crowd viewing audience to appreciate how good they were. Several full size aeroplanes gave excellent displays with excellent commentators most of whom I knew in the aeroplane circuit so they all knew their stuff. They

were addressing a huge summer clothes clad crowd who were very appreciative of everything that was being presented. Our model slot was timed to start after a particular lady pilot was interviewed by the senior commentator. She was shortly going to fly solo from the UK to Australia.

The time came so quickly for our flying slot and promptly on the button at 12.30 Les Eagle gave the signal to begin flying. I had a microphone in my hand ready to rock and roll but the senior commentator carried on talking to the lady that stopped my model commentary for some ten minutes. He finally stopped and I started "working" and telling the crowd what we were all about with Michelle sitting beside me adjusting the sequence of applicable paperwork.

From the flightline the radio controlling lads did us proud with their excellent displays and the crowd were now getting the feel of this special day. I have mislaid my notes made on that day so what follows might need correcting both with the pilot and his aeroplane. So as far as I can "remember" the team that flew in that slot on that day that come to mind are Paul Camilleri and Paul Smith both with the jet turbined Futura's, Simon Potter with his Slick 50, Adam Boxall with his Hurricane and his father Andy with his Yak. William Filamanco had a prop Thunderbolt that had engine problems. I could have sworn that Mike Donnelly was there with his with his MB335 in Canadian colours. (Note; I might be wrong here and Mike was maybe not there but I have included a picture of his aeroplane anyway because it takes some beating both on the ground and in the air). The cream of the slot was left till the end when the duo of Mike Williams with his one third scale radio model flying Extra 330, along with the full size Extra 330 of Chris Burkett performed to the appreciative crowd complete with RCM&E logos in full view. The spectators really loved the precision flying that the two of them gave to the show with the result that had me on my feet shouting into the microphone like mad at the quality and excellence of these two show stoppers. At the end of our slot and with me interrupting the terrific applause from the dense crowd I shouted into the microphone "now are you looking forward to seeing the Vulcan at just after two o'clock this afternoon?" The crowd roared their approval and I repeated it again. The response was much louder now and I shouted huge thanks to them all for being such a good audience and goodbye from us. I said my thanks to Michelle and went to thank the pilots for their splendid efforts whilst they were "unwinding".

My mobile phone started to play "Bye Bye Blues" which has been my DB Sound signature tune for the last 60 plus years that I have played opening and closing when presenting the airshows. Calling me on my mobile was my wonderful nephew and DB Sound team member Paul Moore loudly singing out my praises and telling me that he and his family were somewhere in the crowd. I thanked him and said I would come to find him shortly. It was now just after two fifteen and an announcement went out that a two seater Hawker Hunter T7 was coming in to demonstrate. The Hunter flew along the flight line from the left hand side of the airfield quite low and fast and completed a pass to the right. It then pulled up and did a low loop followed by a roll. It then zoomed down back towards us ending up with a high angle of attack as it crashed onto vehicles travelling along the A27 road. There followed an incredible fireball which was filled in with a massive long line session of black smoke accompanied by a sound like "crump". I knew that this was the ninth fatal aeroplane disaster that I had witnessed at various aeroplane shows over a period of some 60 years.

This ex-military warbird aircraft (according to various sources) caused the death of 11 people and injuring 16 others and it was the deadliest air show accident in the United Kingdom since the 1952 Farnborough Airshow crash, which killed 31 people. The pilot, Andy Hill at the Shoreham show, survived the crash, and was placed in a medically-induced coma. As a result of the accident, all civilian-registered Hawker Hunter aircraft in the United Kingdom were grounded, and restrictions were put in place on civilian vintage jet aircraft displays over land, limiting them to flypasts and banning high-energy aerobatic manoeuvres. The official investigation by the Air Accidents Investigation Branch concluded that the crash resulted from pilot error. Hill was recently charged with eleven counts of manslaughter by gross negligence and one count of endangering an aircraft in connection with the crash and he is due to appear before Westminster magistrate's court on 19 April - 2018.

The airshow was stopped immediately following the crash and we learned that the A27 towards Brighton was closed. All of the public stayed where they were and they were told in carefully hand written up dates half hourly on the PA system, as to the situation. I eventually managed to get away earlier than many spectators and was escorted from the Shoreham airfield by a motor cyclist by a specially prepared narrow exit at 7.45pm that evening. At that time there was only one way out of Shoreham airfield which was to the left towards Worthing. I managed to finally go up north back home, after reaching Angmering.

I have been in conversation about the Ashby family who when I tell modellers that we used to fly in competition against Graham and David Ashby (both who have worked as editors of the RCM&E magazine,) they have never heard of Maurice. Now Maurice was their father and he designed and built super single channel radio controlled aeroplanes. He was also a competition winner as his flying was brilliant

Show Dates for this year 2018.

The 32nd Wings & Wheels show at North Weald aerodrome is being staged on 23rd & 24th June - 2018 at North Weald Airfield, Essex, CM16.

Weston Park Model Airshow is on June 15 -.16 -.17 - 2018

The three Modelair Old Warden events are on May 12 -13 - May fly. July 21 – 22 –Scale and September 22 – 23 which is the Festival of Flight.



*Michael Donnelly's MB339 in Canadian Colours which in Michaels hands is a joy to see in the air.*



*Maurice Ashby the father of Graham and David Ashby.*



*Mike Williams and Chris Birkett doing their “thing” with their Extra 330’s. Mike’s is the one third scale vertical prop holding model and Chris is piloting in the horizontal full size of this amazing duo’s performances.*

# New Range of Quality FF and RC Kits now available from Den Saxcoburg

It's well known that excellent aeromodelling items are often to be found in Czechoslovakia.....the kits offered by Rudolf Heisbok are a good example.....innovative designs using traditional materials.....laser cutting to a very high standard.....and all at a competitive price.

Rudolf produces a wide range of kits for sport FF and Electric RC, here are some examples

Vyrábí a dodává  
**Hiesbök s.r.o.**  
Brodská 97  
582 63, Zdicec n/D





Robin

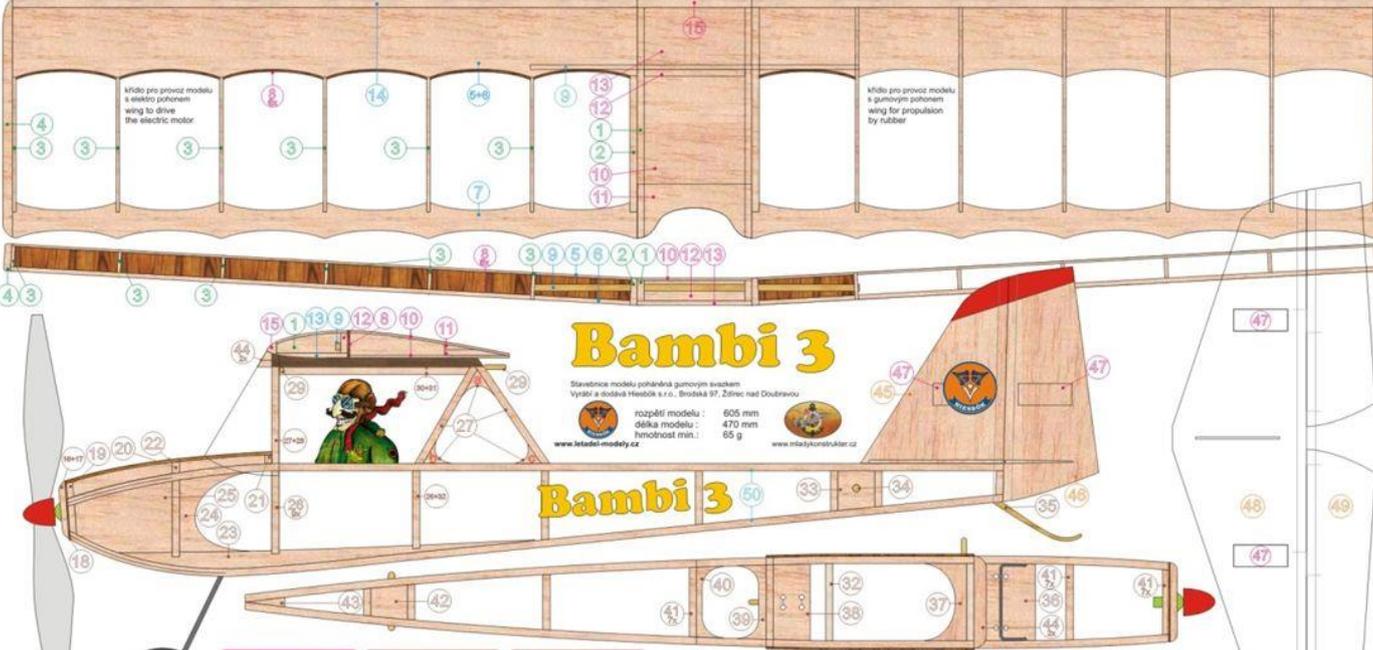
kluzák kategorie **A3**

Rozpětí 890 mm Plocha 11,49 dm  
Délka 680 mm Hmotnost min. 150g

design by Hiesbök © 2015

Robin

www.mladykonstrukter.cz



Bambi 3

Stavebnice modelu poháněná gumovým svazkem  
Vyrábí a dodává Hiesbök s.r.o., Brodská 97, Zdicec nad Doubravou

rozpětí modelu : 605 mm  
délka modelu : 470 mm  
hmotnost min.: 65 g

www.letadel-modely.cz      www.mladykonstrukter.cz

C
č.8. 14x
č.10. 2x
č.11. 2x
č.12. 1x
č.13. 1x
č.15. 1x
č.47. 4x

D
č.16. 1x č.17. 1x
č.18. 1x č.19. 1x
č.20. 1x č.21. 1x
č.22. 1x č.24. 2x
č.23. 2x
č.25. 2x č.29. 2x
č.30. 2x
č.31. 2x
č.33. 2x č.34. 1x

E
č.26. 1x č.28. 1x
č.27. 1x
č.32. 1x č.35. 1x
č.37. 1x č.36. 1x
č.38. 1x č.39. 1x
č.40. 1x č.41. 2x
č.42. 2x č.43. 2x
č.44. 2x

H
č.1. 2x
č.2. 2x
č.3. 14x
č.4. 2x

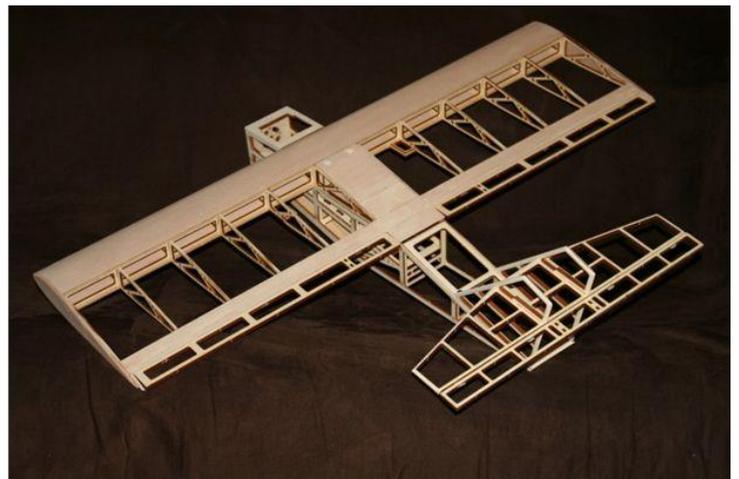
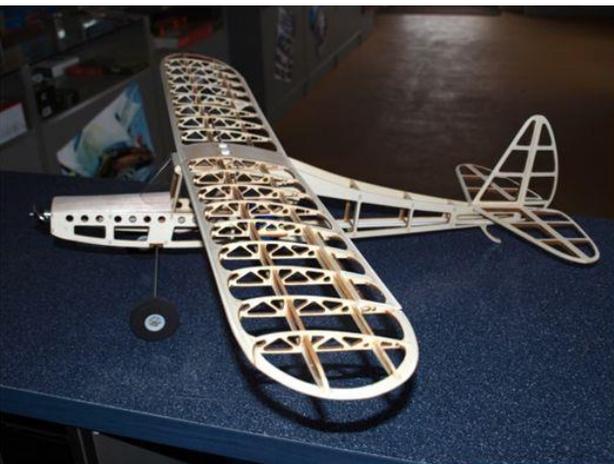
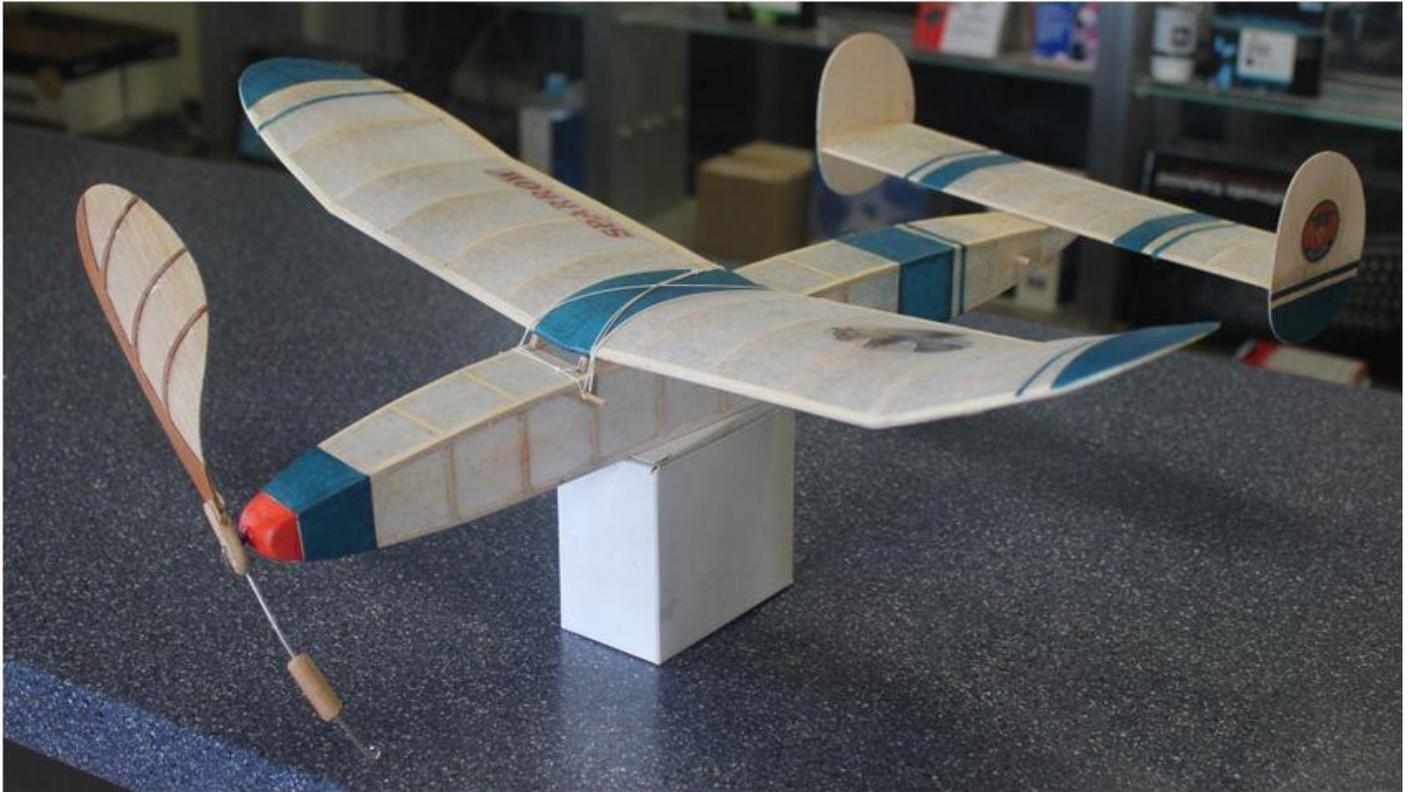
A
č.45,46,48. 1+1+1
č.49. 1x

F
č.5. 6,7,14 4x2

B
č.50. 5x
č.9. 1x

G
č.50. 5x
č.9. 1x

Design by Hiesbök © 2016





As you can see Rudolf often uses ply in his larger designs....but components are carefully designed to be as light as possible.....the standard of laser cutting is very good....edges are a brown and free of soot....plan and kit presentation is excellent.....components are supplied bagged or bundled with appropriate colour coded tags that identify their use on the plan....here are the contents of a typical kit



Sample price guides (p&p Extra):-

**Robin** £18.50

**Sparrow** (yes that lovely prop is included) £34.60

**Bambi 3** (crying out for micro RC) £34.60

**Pirat** (RC Yellow Hooligan *Thing!*) £59.50

Marabu (RC Sensible Design) £62.00

I'm pleased to announce that I am now the exclusive UK agent for Rudolf's kits.....I will be stocking a few of his products shortly.....the range is wide so have a look at Rudolf's site here:-  
<https://www.hiesbok.eu/>

If any particular designs take your fancy please let me know and I can advise on price and delivery.

You can contact me on 01983 294182 or Email [den@denandtheartof.co.uk](mailto:den@denandtheartof.co.uk)

## **Hello Aeromodellers,**

This is a reminder that the 26th Annual World Wide Postal Contest, begun by Jim Moseley, will wind up on June 30, 2018. Get your entries in or do some flying. You can fly at any time, including at other contests, but read the WWP rules and report your times accordingly. Maxes may be counted differently. There are many events, find something you like.

<http://www.endlesslift.com/26th-annual-world-wide-postal-competition-2017-2018-including-sky-bunny/>

Also, don't forget this year's MIMLOCT on Saturday, 4 August, 2018. Get your Cloud Tramp ready, or buy a kit from one of the two kit manufacturers.

<http://www.endlesslift.com/the-23rd-charles-hampson-grant-memorial-international-mass-launch-of-cloud-tramps-2018/>

You might know some young people who would be inspired by the new AMA Alpha. Encourage them to enter the AMA Alpha Postal Contest.

<http://www.endlesslift.com/ama-alpha-postal-contest/>

Share this information with friends, club members or publish as you see fit.

Good flying,

Gary Hinze





The Luscombe Silvaire is a natural choice for a free flight scale design. The first all-metal light plane ever produced in any volume, this American aircraft is both good looking and aerodynamically suitable

for model work. Two versions of the 2-seater Silvaire are in existence—the standard 8-A and the more powerful de-luxe 8-E. Our plans are for the latter model and were prepared from original works drawings and photographs kindly supplied by the Luscombe Corporation of Dallas, Texas.

Externally there is little difference between the 8-E and the 8-A. Omit the rear window and spats and for all practical purposes you have the standard 8-A. Both versions are left in the natural silver finish of the metal, the trim being maroon on the 8-E and blue on the 8-A. If you really go in for detail, landing lights may be added (to the 8-E) mid-way between the wing/strut junction and the wing tip. Both models should be fitted with a tail wheel, although we substituted a skid for this on our own model.

Before starting on the building instructions, we shall give a brief description of the full-size machine. The outstanding feature of the Silvaire is the all-metal wing, which is composed of just nine easy-to-replace panels. Designed around two metal spars, only two ribs are used in each wing. A single strong, non-welded strut between the wing and fuselage replaces the “V” strut common to most other high wing monoplanes. Apart from providing easier access to the cabin and reducing drag, this type of strut allows better downward vision. The cabin is wide and luxurious, with plenty of leg room. A large baggage compartment can be reached from inside and all instruments and controls are well positioned for both occupants, who sit side by side. The semi-cantilever (knee-action) undercarriage is fitted with hydraulic shock absorbers.

The 8-E cruises at 112 m.p.h. and climbs at 800 feet a minute. Landing speed is 48 m.p.h. On full tanks—30 gallons—the range is 650 miles. The powerplant is an 85 h.p. 4-cylinder Continental—Operating costs work out at approximately the same per ground mile as a medium size American car. For those who like to add cockpit details, the interior colour scheme is in maroon and beige.

A four-seater Luscombe—the Sedan—has become quite popular with American builders recently. Although similar in many ways to the two-seater models, the Sedan has a much wider fuselage and a dorsal addition to the fin. This aircraft is definitely not so attractive as the 8-A or 8-E and much of its popularity must depend on the fact that it is the most recent Luscombe design.

So much for the full size job, now to get on with the model. The original has been flown with both the Kalper .32 diesel and the American K & B Infant. Any other similar size powerplant may be fitted. The plans on the adjoining page have been reduced to 1/3 scale. Either draw them up full size or send off to the publishers for a print of the plan. Full-size formers, ribs and tail surfaces are given at the back of the book. .

#### FUSELAGE

Commence by cutting out all the formers, side members and the lower keel from 1/16 sheet balsa (medium). Attach the formers to the side members, then slot in the lower keel. This gives a sturdy basic structure which can be handled quite easily. Next add the stringers—1/16in- square- on the, top and sides and 1/8” x 1/16” on the bottom. Before adding the lower stringers, insert the 2A formers. Use the lower part of former 2 for the pattern for 2A.

Bend the undercarriage to shape from 18-gauge wire and fix in the U/C assembly position, This consists of two side frames meeting in the centre of the fuselage and held in place by the piece of grooved hard balsa. The spreader bar and axle are all one. Place in position and then solder the joint shown. Fill in the side panels with 1/16” sheet. The spats are made from scrap pieces of 1/8 sheet laminated.

The decking between former I and 1A and the side window frames are covered with 1/32 sheet.

The nose piece is carved from 2 pieces of medium block lightly cemented together on the thrust line. Carve the outside to shape, then separate. Hollow the top section out to a thickness of 1/8". The bottom section is also hollowed out. However, if the Kalper is to be fitted, sufficient wood must be left to act as bearers. The writer has found that two wood screws screwed into balsa are quite sufficient to hold this engine in place. In order to harden the wood at this point, balsa cement should be squeezed into the screw holes before inserting the screws.

If the K & B Infant is used a 1/16 plywood bulkhead is fitted, as shown on diagram.

#### Tailplane

This is constructed of 3/16 soft balsa and is set at "zero" incidence to the thrust line. Then is constructed of soft 3/32 and sanded to a streamlined section.

#### Wings

These are of conventional construction with a 1/32 sheeted leading edge. The tip soft block.

The wing strut is fixed in position by passing the thin wire through a rib and is liberally coated in cement. The struts are held in place by passing a rubber band through the paper tube in the fuselage. Hold the wing in position with a second band passing over the centre section, keeping the wing tongues in place.

#### Flying

Balance the model 1" back from the leading edge of the wing. Test glide over long grass and alter the tail incidence if necessary to achieve a fairly fiat glide. When the glide is right, put a little fuel in the tank and start up the motor. The original model gives its best performance when- trimmed to climb to the right. Keep the motor run short as this design climbs quite fast for a scale type.

## From Keith Hynds

Mike has asked me to send you as much info on the Cardinal kits that we are selling on eBay to include (at your discretion) in the sticks and tissue.

If I send you what we include in the eBay advert and you modify it however you see fit for inclusion to S and T.

If your readers type the Title below in to the eBay search bar and make sure the seller is Keithh2408 they will be able to purchase the kit in the pictures,

## R/C VERON CARDINAL by Phil Smith (THIS IS A FULL LASER CUT KIT ) Not a Tomboy.

Another FULL kit produced by Vintage Model Works.

Built a Tomboy? Why not build a Cardinal? Try an R/C version of Phil Smith's popular F/F design from 1951 with some modifications suggested by him.

Perfect for small-field flying with a 35 inch wingspan.

Power with an up to 1cc diesel/glow motor, or if preferred, electric conversion details are included with the plan.

#### **Includes:**

Laser-cut parts. All sheet & strip wood.

Piano wire & cabin glazing. Mylar hinges.

Wheels. Plan.

Needed to complete will be: Covering material, Glue and a Motor.

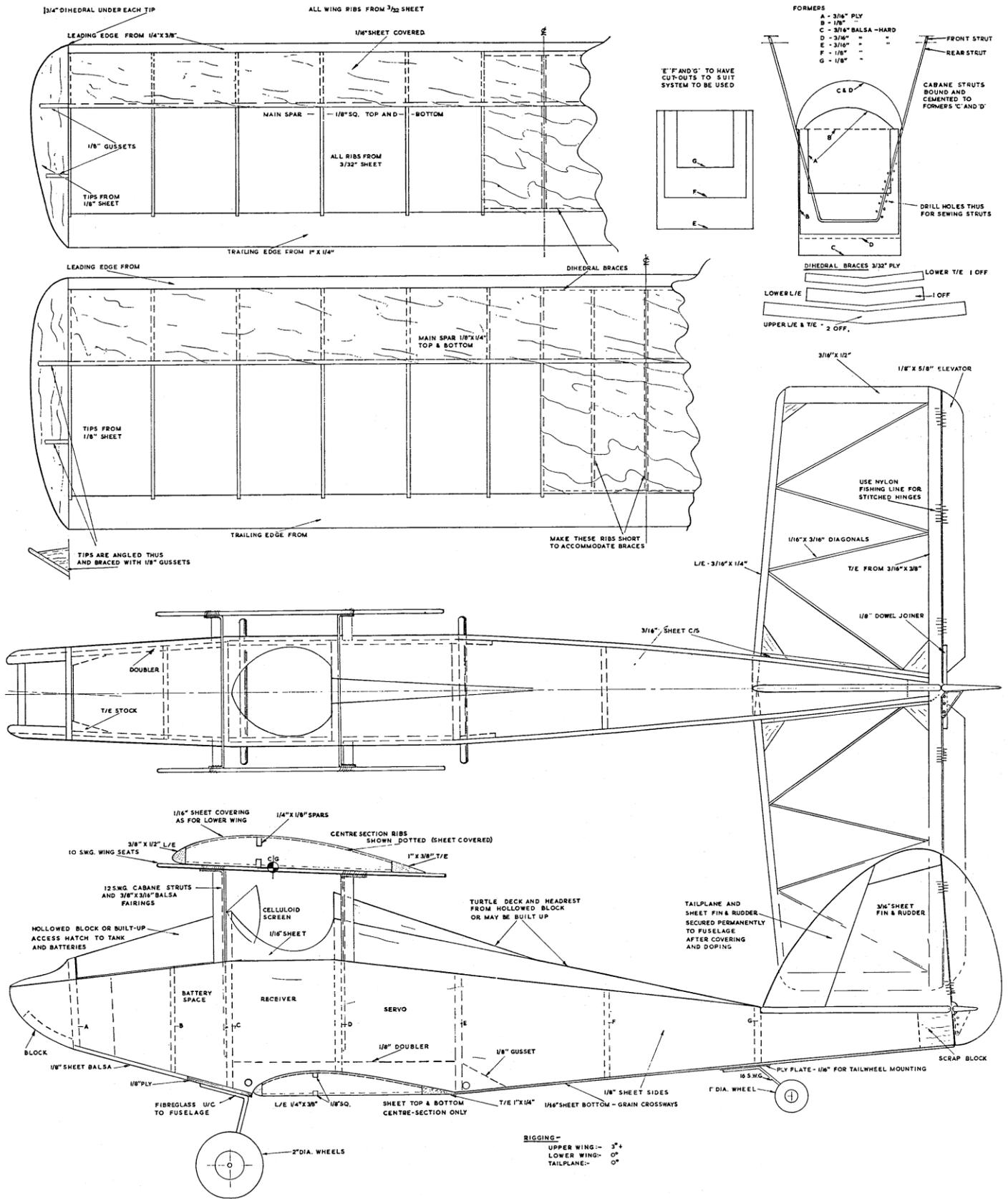
A more complete kit than others being sold on eBay and excellent value. An ideal first construction kit and an easy model to fly for the beginner or relaxed flying for the expert aero modeller. For further details, refer to,

<http://www.vintagemodelworks.co.uk>

**the kits are £39.99 plus £5.99 P & P**







**Gigi a 36" biplane for Galloping Ghost and 1.5 cc power by D G Thomas from Radio Modeller November 1966**



*Heading picture shows designer Dave Thomas with original "Gigi" and the R.C.S. galloping ghost transmitter he found so successful for the Mighty Midget servo he used.*

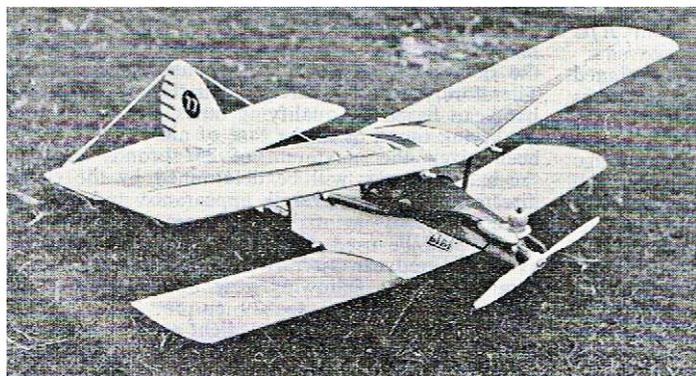
Gigi is my first successful "G.G." controlled model, after many unsuccessful projects. The reason for my success with this model is due mainly to the acquisition of an old R.C.S. pulse-proportional transmitter—and the change over to push-rod control of the flying surfaces in the model, instead of the usual torque-rod and "bird cage" at the rear end. This ironmongery type of control fitted to a model is, I think, the reason why so few modellers seem able to cope with "Galloping Ghost." The bending of the "bird cage" and the positioning of the hinge-lines relative to each other, is something which has to be spot on if it is to work correctly, whereas the push-pull system used in Gigi is simple to install and gives completely independent adjustment of rudder and elevator. Of course, the whole external set

up is much neater and allows scale type tail surfaces to be used.

Gigi herself was an attempt to capture the lines of the old fashioned "cobby" biplane shape, without too many frills in construction. With a 1.5c.c. engine the model is very nippy and can be flown in fairly strong wind conditions. The original model started life with a Webra Record, but the present power unit is something of a veteran, being a reconditioned 1.8cc. Elfin PB Nevertheless it is giving excellent service.

#### Construction

This should not offer any difficulty to the average modeller, the assembly of the cabane struts to their respective formers being, perhaps, the only part of the construction requiring special attention. The struts themselves should be bent to shape and secured to their formers with nylon thread. The stitched parts are then covered with strips of fine fibreglass matting (about tin. wide) through which balsa cement is worked with the fingers. The fine matting is similar in thickness and texture to heavyweight Modelspan tissue and



this method of attaching wire parts to balsa or ply is both quick, easy and results in a very strong bond. The undercarriage and tailwheel strut are fastened to the fuselage using the same method or substituting fibreglass resin. The under-cart was originally secured with the usual rubber bands round dowels but, as one or two rough landings on grass resulted in its "retracting" back into the lower wing, the permanent method was deemed more satisfactory. Apart from occasionally having to straighten one of the legs, this method has given no trouble. The fore

and aft struts on the cabane assembly, which support the upper wing, are left until the fuselage has been completed, when any small error in the strut assembly, which could result in an incorrect incidence angle, may be put right. "G.G." installation.

The Mighty Midget motor is mounted across the fuselage and has a pin Araldited into the main gear wheel—1/4in. throw is ideal. This is the rudder crank, to which the push-rod is attached. A suitable stop is arranged on the Mighty Midget base-plate to restrict the rudder crank to a total movement of 270 deg. At the pulley end of the motor's main drive, another crank is soldered on, again with lin. throw, at 90 deg. to the rudder crank. As well as being the attachment point for the elevator push-rod, this also serves as the attachment point for the rubber-band tensioner. The tension of this band need only be sufficient to bias the crank towards centre and does not have to be strong enough actually to pull the crank back to the centre position. The servo on the original hardly moves at all from either extreme throw under rubber-band tension, yet it works perfectly through all positions of the transmitter control-stick. Connections at the actual

control-surface ends are by way of the usual nylon horns and adjustable devices available at most model shops.

#### Trimming and flying

The model has no bad habits, if trimmed and balanced as shown on the plan, and can be flown quite easily on rudder only. Thrust-line may vary according to the engine used, but 3 to 5 deg. down and 3 deg. side-thrust should be adequate for most motors in the 1.5c.c. range.

As with most biplane layouts Gigi recovers from a stall without any fuss and, with ordinary rudder turns, she will stay “glued” in a turn until opposite rudder is applied—very handy for pylon racing! My own method of trimming for “G.G.” control is to balance the model slightly tail-heavy—enough to give a safe climbing angle with the Tx control-stick centred. For straight and level flight, a forward stick position has to be maintained (i.e. down elevator) and, of course, this means a faster overall pulse- rate, is used, which helps to eliminate any “gallop” present in the set-up. This may sound a little strange, but it does work in practice and, indeed, most of our club members who fly G.G. use this trim with complete success.

Who’s for pylon racing? Small-model pylon racing is catching on fast in the Liverpool club, and Gigi is ideal for this sort of event, being a very pretty sight when rounding the pylons at about 10ft, up—if you have the nerve!



With a good transmitter and servo set-up, Galloping Ghost control is not as difficult as some modellers think and, in my opinion, is even superior to 4-channel reeds! True proportional control is available —and, with the new American G.G, servos coming onto the market, proportional engine control is now also available.

### From David Bintcliffe

Hopefully attached are photos of a ? Biannual Aero Meeting at Schlappin near Klosters Switzerland .The event takes place on snow ,at the top of a narrow valley,with difficult approach!

Berghaus Erica is a beautiful cozy mountain hut .The story goes that a German ex fighter pilot met his girlfriend there in a Piper cub.( see propellor fixed on the wall)

Nice colourful planes and skilled pilots

David Bintcliffe. Ski Club Of Great Britain rep





## **Control Line at Wimborne MAC club site, Cashmoor**

### **April 8 Sunday**

Sport flying all day

Off the A354 between Blandford Forum, and Salisbury

Six grass circles

Portaloo

Bacon Butties

More information from Chris Hague [750hague@gmail.com](mailto:750hague@gmail.com)

Or

James Parry [jamesiparry@talktalk.net](mailto:jamesiparry@talktalk.net) 01202625825

### **Cocklebarrow dates for 2018 are confirmed as:**

8<sup>th</sup> July

19 August

30th September

For more details contact Tony Tomlin [pjt2.alt2@btinternet.com](mailto:pjt2.alt2@btinternet.com)

### **Middle Wallop**

Event is for SAM type radio assist plus Control Line

Herewith dates for Middle Wallop

Sat & Sun 4 & 5 August

Sat & Sun 8 & 9 September

Sat & Sun 6 & 7 October

Event coordinator Bill Longley [tasuma@btconnect.com](mailto:tasuma@btconnect.com)

## North Cotswolds MAC 2018 Fun Fly

The North Cotswold MAC's Fly For Fun 2018 will be held on August 11th and 12th at Far Heath Farm, Moreton-in-Marsh, Glos.

We'll be running all our regular features and the models chosen for our Designer's Events this time will be:

On the Saturday - the Keil Kraft Super 60

On the Sunday- designs by the late Dereck Woodward (we're revisiting this one as the first time we ran it, the event was hit by bad weather).

In both events, models of any size, variation and power will be welcome.

Gray

### SHILTON VINTAGE (FLY IN)

BLACKWELL FARM

Saturday 26th May 27th Sunday 27th May 2018

Details and directions for the Shilton Vintage meet on 26<sup>th</sup> and 27<sup>th</sup> May 2018.

Flying all day Saturday and Sunday.

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

BMFA members only. Proof of Insurance required.

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

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

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

Caravans/Camping £10.00 for weekend

Flying £5 per pilot.

Local facilities are available in Carterton 3 miles away.

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

Email: [nick@nickblackwell.co.uk](mailto:nick@nickblackwell.co.uk)

OR Boycote Beale Tel 01993 846690

Email: [bealekraft@outlook.com](mailto:bealekraft@outlook.com)

*Directions:*

*By road from the north:*

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

*By road from the south*

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

## FLITEHOOK

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

Café on Site

Contact Flitehook  
E-mail [flitehook@talktalk.net](mailto:flitehook@talktalk.net)  
Tel. No. 02380 861541

**Flyers £8**  
**Juniors & Spectators Free**  
**Sundays 10.00a.m. to 4.00p.m.**

**2017**  
10<sup>th</sup> September 2017  
8<sup>th</sup> October 2017  
12<sup>th</sup> November 2017  
10<sup>th</sup> December 2017

**Friday 29th December 2017**  
**10.00a.m. to 4.00p.m.**

**2018**  
**Sundays 10.00a.m. to 4.00p.m.**  
14<sup>th</sup> January 2018  
11<sup>th</sup> February 2018  
11<sup>th</sup> March 2018  
8<sup>th</sup> April 2018

### Aeronautical Models

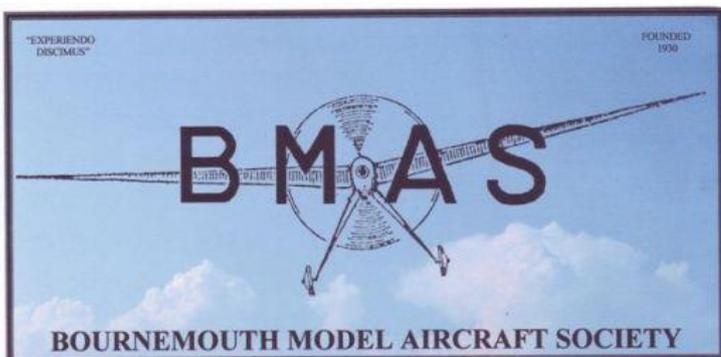
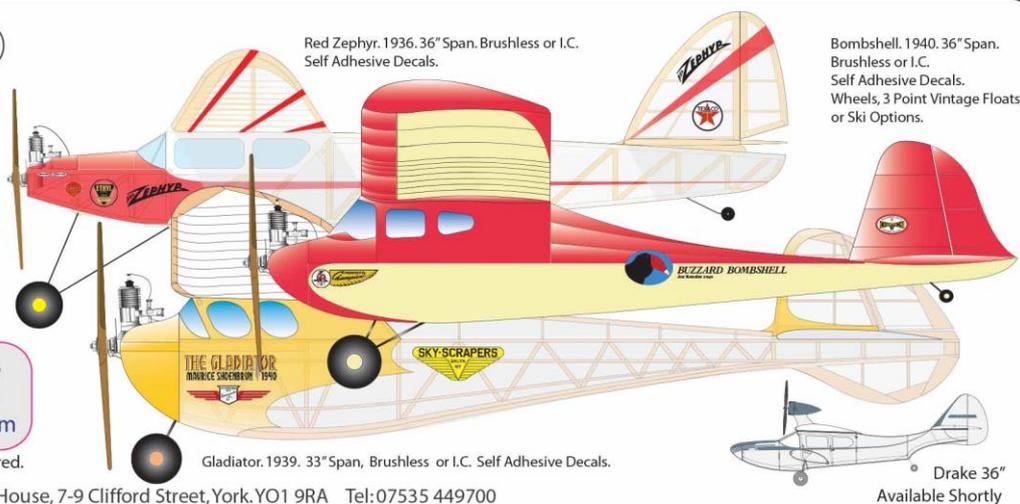
- > Classic Golden Era Designs for beginner or enthusiast.
- > **Some Full Size** or 1/2A Versions.
- > Machined From Finest Quality Materials.
- > Floats & Ski Gear Available Soon.
- > Brushless or I.C. Power.

**PayPal** No Problem

For further information please forward your email address to [aeronauticalmodels@gmail.com](mailto:aeronauticalmodels@gmail.com)

Your Information is secure and not shared.

Aeronautical Models, 265 Clifford House, 7-9 Clifford Street, York. YO1 9RA Tel: 07535 449700



**INDOOR MODEL FLYING 7pm to 10pm**

**FREE FLIGHT ONLY**

ALLENDALE CENTRE  
HANHAM RD. WIMBORNE BH21 1AS  
FREE CAR PARKING IN PUBLIC CAR PARK  
IN ALLENDALE RD

COMPETITIONS incl GYMinnie CRICKET & SERENE LEAGUES  
ALL FLYERS MUST HAVE BMFA INSURANCE FLITEHOOK NORMALLY IN ATTENDANCE  
Adult Flyers £5 Spectators £1.50

CONTACTS: JOHN TAYLOR 01202 232206

All dates are Tuesdays

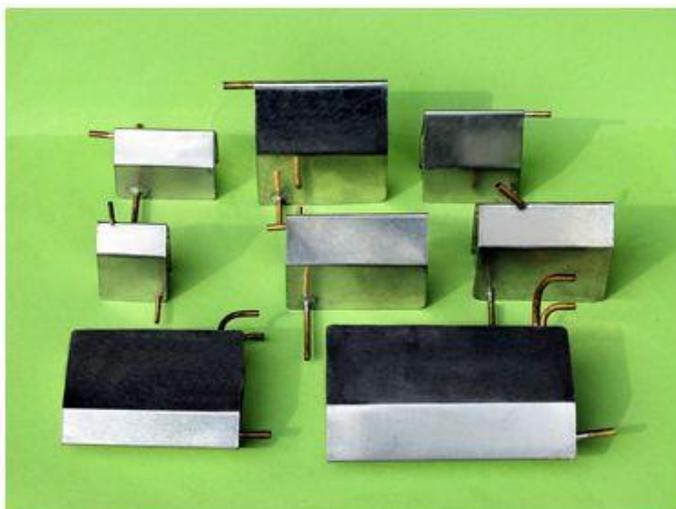
24 April

22 May

# Dens Model Supplies



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



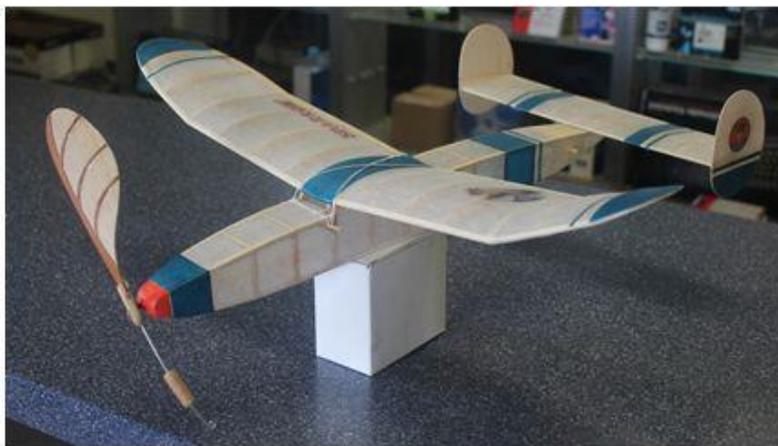
***Tinplate CL tanks....Bellcranks,  
Lines, Handles, Cloth Hinge Tape,  
Leadouts etc***



**Cox Engines & Spares**



**Electronic Timers for CL & FF**



**Laser Cut - High Quality FF & RC Kits**



**On Line shop at**  
**[www.densmodelsupplies.co.uk](http://www.densmodelsupplies.co.uk)**  
**Or phone Den on 01983 294182**  
**for traditional service**



### **Small Electric Scale**

Belair Kits are very pleased to have commissioned renowned scale designer, Peter Rake to produce a range of small electric scale models.

Wingspans are typically around 36 inch (1m) and all suit the economical 400 brushless motors and

mini servos. All airframes are of traditional all wood construction and no mouldings are required. Each aircraft has been thoroughly flight tested and are all proven fliers.

Call Belair on 01362 668658 or visit their online shop at [www.belairkits.com](http://www.belairkits.com)

[See all the collection on our website](#)

## **Veron Combateer - Parts Set**

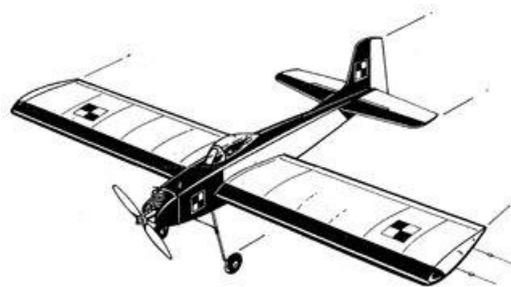
Ref: ot-vcomb

Parts set for the **Veron Combateer**. Makes an idela sport combat model or advanced trainer. Easy to build all wood design is even easier to start with a Belair Parts Set that includes fsuelage sides, doublers, tailplane, fin/rudder and elevators, wing ribs, bellcrank mount, wing sheeting & wing tips, bulkheads, formers. Parts set includes facsimile of plan, **Vac-formed canopy to original design and bellcrank**.

Specifications

### **Combateer**

by Phil Smith from Veron 38in span



Follow our build of the Combateer on our facebook page -

<https://www.facebook.com/Belair-Vintage-Models-1380499095530234>

Veron Combateer - Parts Set

Price: £50.00 Inc VAT

55.00 USD | 59.19 EUR

## **Sukhoi 26 48 inch CL Stunt - Parts Set and plan**

Ref: ot-uhk26

Parts Set for the top performing **Sukhoi 26 Control Line stunt model**. Features laser cut parts set with fuselage, doublers, tailplane, fin/rudder, plus ribs and wing parts, all accurately cut and ready to use.

Full size plan included. 48 inch span suiting Fox 35 or similar. Flapped wing.

Proven design capable of flying the F2B schedule and winning. **Originally featured in Model Builder magazine 1988.**



Price: £65.00 Inc VAT  
71.50 USD | 76.95 EUR

## Small Electric Scale

Belair Kits are very pleased to have commissioned renowned scale designer, Peter Rake to produce a range of small electric scale models.

Wingspans are typically around 36 inch (1m) and all suit the economical 400 brushless motors and mini servos. All airframes are of traditional all wood construction and no mouldings are required. Each aircraft has been thoroughly flight tested and are all proven fliers.



### **DH82 Tiger Moth - small electric scale range**

Ref: res-dh82

We are very pleased to add the DH82 Tiger Moth to our small electric scale range - a truly iconic aircraft.

Our Tiger Moth is designed to 1.23": 1ft with a wingspan of 36 inches. It suits 150 watt brushless setups with 2 cell lipoly batteries and three channel control - ESC, Rudder and elevator.

Designed exclusively for Belair Kits by Peter Rake, this model is a proven flier and quick to build. Its size means it can be left in one piece and fits in even small cars.

The parts set includes many sheets of graded balsa and plywood sheets, accurately laser cut, plus a three sheet plan and build manual.

### **Model Specifications**

36 inch wingspan for 150 watt brushless motors, 2 cell lipoly batteries and small electric radio - ESC, Rudder and Elevator.

Price: £70.00 Inc VAT    77.00 USD | 82.87 EUR



### **Albatros DV - 39" electric scale parts set**

Ref: res-ald5

Our Albatros is modelled at 1.31"/1' with a wingspan of 39.3 inches. Designed by Peter Rake exclusively for Belair, the model is fully CAD designed and features laser cut parts. Construction is straightforward and features modern methods.

Includes balsa, plywood and basswood parts for fuselage sides, formers, bulkheads, wing ribs, trailing edges with rib slots cut, outlines for all flying surfaces, interplane struts, tail skid, fuselage crutch, tail skid, plus smaller handy parts. Fuselage is built on central crutch system.

Specifications of the Albatros DV

39.3 inch span, scale 1.31"/1' for small electric power setups of around 150W. 4 channel radio required - ESC, rudder, aileron, elevator and rudder. Full size 3 sheet plan with constructional guide included

Price: £70.00 Inc VAT  
77.00 **USD** | 82.87 **EUR**

Regards,  
Leon Cole  
Belair Kits  
Tel: +44 (0)1362 668658

[www.belairkits.com](http://www.belairkits.com)

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