

Sticks and Tissue No 129 – August 2017

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.



Derek Foxwell's Novice E at Epsom Downs

Cocklebarrow Farm Vintage by Tony Tomlin.

Sunday, the ninth of July was the date of the first of the three R/C Vintage events planned for 2017 at the popular Cocklebarrow Farm site, near Bibury, deep in the Cotswolds.

The event as always was organised by the hard working Val and Paul Howkins [for the 29th year!] ably assisted by a few dedicated helpers [thank you all].

The weather on the days prior to the event could only be described as tropical, ie very hot and we hoped for similar weather on the Sunday. For once we were delighted, it was perhaps not quite as warm, but with a gentle breeze it was perfect for flying.

The fliers began to arrive early on Sunday morning [some very early!] and before very long the car park was filling up. Modellers came from far and wide, with the furthest from south west France.

One of the attractions of Cocklebarrow is the chance for modellers to get together after the long winter layoff. Very soon groups of modellers could be seen looking into the boots of cars examining models new to them. Some were looking for magazines/plans /engines for sale from the fliers who had set up [with the ok of Paul and Val] an outlet for not used and unwanted items.

Overall 52 fliers signed on with each bringing 2+ models. David Lovegrove was flying his Galloping Ghost equipped models that flew well, although the rapidly oscillating rudder and elevator surfaces caused a few raised eyebrows! It was David's lucky day, as his Swanee model that was lost the previous October, was returned by a friendly farmer, undamaged apart from the rubber tyres being nibbled by mice!

As always there were the bread and butter models flying with at least 10 Junior 60s, a Radio Princess plus Super 60s and Mini Supers. Models ranged from the very small, with three Eric Clutton designed Sharkfaces flown at what seemed close to the speed of sound due to their small size. Slightly larger were the Vic Smeed designs, with Chatterboxes, electric and I/C, the evergreen Tomboys and even a Pageboy! American designs were in evidence with two Joe Konofees designed 1940 Buzzard Bombshells seen flying in formation, plus a Red Zephyr, an Astro Hog and a Privateer. Larger models in evidence included a Majestic Major and the scaled up Mamselle of John Laird. It was good to see some gliders with either I/C or electric power assist, such as the Fillons Champion of John Bowring, the Scaled up KK Dolphin [7'6"] of Ted Tomlin and the Mercury Invader flown by K Diallingier.

A pair of Diesel twins were seen and heard flying together with the Taplin Twin powered Radio Queen and the 3.2cc inline twin, built by Derek Collin powering a Harry Hundleby Sparky.

There were a few unusual models flying, ranging from the Rhomboid wing, twice size Ace of Diamonds designed by George Woolls built and flown by Tony Tomlin and at the opposite end of the spectrum, the T Tray flying well and built by Spike Spencer.

The day seemed to pass quickly, as always, when conditions are perfect and it appeared there were no crashes! As is tradition the event drew to a close with the Raffle drawn by Val Howkins. We were lucky to have an excellent painting of Cocklebarrow painted and presented by Tom Payne, which was also raffled on the day with the resulting £104 being collected for the Air Ambulance Service. Tom has painted a number of paintings of Cocklebarrow in the past and our thanks go out to him. Thank you Tom.

All agreed that it had been a great days flying as we packed our models away for another day, and looked forward to the next meetings in August and October.



7'6" KK Dolphin by Ted Tomlin.



Double size Ace of Diamonds ready to go.



Spike Spencer /David Lovegrove's squadron with flightline behind.



Large Super Popsie busy flightline behind.



John Bowrings electric gliders.



Spike Spencer and piggy back setup.

From Dave Day

What colour were von Richthofen's aircraft?

Look around on the web and you will find that replicas of Manfred von Richthofen's 'All red' triplane seem to exist in every country. An Australian museum has no less than 7 replicas which they claim as representing Richthofen's 'Flying Circus'. In fact the Circus contained rather more than 7 aircraft. It's not clear where their information came from, but one of the aircraft is attributed to an unknown pilot. The point here is that all of the Red Baron replicas are different. Several have the crosses on a large white field and one has a white cowl. There are two types of crosses which seem to be used indiscriminately.

This is a subject that never really interested me until recently. However, when I was in my teens (60+ years ago) I knew a man who was at Richthofen's funeral. What I remember is that he said that the triplane was not 'all red'. I wish I had asked him to explain, but I didn't.

I recently acquired a Flyzone 'Albatros' which appears to be a fairly accurate 'Albatros DVa' apart from rather absurd, and non-scale, dihedral. This is claimed to be in an authentic colour scheme but the underside was white, which couldn't be right. There were also no crosses under the lower wing.

I knew that Richthofen flew the Albatros and thought it would be an idea to paint the model as one of his aircraft, if possible.

It is obviously difficult to sort out things like colour detail nearly 100 years after the event, especially when all photos are in black and white.

The crosses are a whole subject in themselves. At the beginning of WW1 the German cross had curved arms (Fig.1). This is known as a 'Cross Patee' and is used for the 'Iron Cross' award. Initially this was on a large white field and could be seen on early WW1 aircraft like the Fokker Eindecker. This was superseded by the cross (always black) with a narrow white outline. On April 18 1918 the order went out that the cross would be changed to a straightarmed (Balkan) cross with a narrow white outline (Fig.2). This date is significant because Baron von Richthofen was killed on April 21! Late in the war the white outline on the ends of the arms was deleted.

It seems incredible that such an order went out late in the war and that the entire German air fleet was repainted in a few days. No wonder they lost the war! Photographs show that von Richthofen's triplane (425/17) was indeed repainted and it seems that the fatal flight was the first with the new crosses.

Superstitious people have even blamed his death on the new cross.

Manfred Freiherr von Richthofen ('Freiherr' is actually a title, roughly translated as 'Baron'. Actually, his middle name was Albrecht), began as a cavalry officer and quickly became bored, so he applied for a transfer to Die Fliegertruppen des deutschen Kaiserreiches (Imperial German Army Air Service), later to be known as the Luftstreitkräfte. Initially, he served as an observer in two seater aircraft but soon applied for pilot training. His first solo flight ended with a crash, but he quickly distinguished himself as a fighter pilot, and during 1917 became leader of Jasta 11 and then the larger unit Jagdgeschwader (fighter wing) 1, better known as "The Flying Circus" or "Richthofen's Circus" because of the bright colours of its aircraft, and perhaps also because of the way the unit was transferred from one area of allied air activity to another - moving like a travelling circus, and frequently setting up in tents on improvised airfields.

The bright colours were the result of individual pilots wanting to make their aircraft look different, though anyone who survived flew many different machines.

Manfred's kills were unusually well documented. One of the links below gives a full list including details of the aircraft he flew, including the Halberstadt DII, Albatros DII, DIII and DV, apart from the Fokker F1/Dr1. This list is interesting because it gives the serial number of the aircraft he was flying (apart from the Halberstadt). It appears that he used 15 different machines to score his 80 victories. His 20 'kills' in the Dr1 used 5 different machines, only two of which were achieved in the craft in which he was killed. These victories are 'confirmed' ones. It is known that he had many unconfirmed kills, so the true total may well approach 100.

Early Albatros' were covered in Lozenge patterned fabric (pre-printed) with plain varnished fuselage. Later, all Albatros' were painted with sky blue undersides, plain varnished fuselage and the upper surfaces painted in shades of brown, green and mauve. Some of Richthofen's various DIII's had the fuselage and tail overpainted with red with the crosses showing through. At least one DV was painted overall red with the

camouflage and crosses showing through (Fig.3). One other probably had the undersides left in sky blue. Paint is heavy and it seems that the pale blue underside may have been the colour of the fabric.

As an aside here, when the rocket powered Me163 'Komet' made its first operational flight in WW2, the leaders aircraft was painted overall red in honour of von Richthofen. This added no less than 60Kg to the weight and seriously affected the performance. After one flight the paint was stripped off and replaced by the standard camouflage. One wonders what this did to Richthofens aircraft and others. After the war, Udet's mainly red BMW powered Fokker DVII was tested and found to be considerably down on the performance of a standard machine.

Richthofen flew a total of five triplanes which probably accounts for the confusion over the colour scheme. His first machine (102/17) was a development prototype designated F1 rather than Dr1. This had the standard stripy scheme on the top surfaces and fuselage (chordwise on the wings and vertically on the fuselage) and pale blue undersurfaces. It had the cross patee on a large white field and a white rudder. He scored 2 kills before the aircraft was passed on to Kurt Wolff who was shot down on 15 September 1917. He managed 2 kills in his second machine (152/17). This is where the colour scheme becomes confusing. There is a replica of the aircraft in the Gatow museum. It has the standard finish (as above) but with the upper surface of the top wing, the tail, cowl and wheels painted red. It has the cross patee with white outline. The original was preserved in the Zeughaus Museum in Berlin and was destroyed in an Allied bombing raid in WW2. It had the cross patee with white outline. The cross patee was overpainted and the one on the starboard side of the fuselage was badly done with part of the cross patee still visible. This aircraft must have an interesting history. It was an early machine, yet it survived the war - maybe in the museum.

Aircraft number three (477/17) was the one in which he scored most of his triplane victories (12). This machine was bright red on the upper surfaces and pale blue underneath. It had the cross patee with white outline. Its fate is unknown.

Number four (127/17) was only used for one victory. This machine had the standard colour scheme with the cross patee on a large white field on the wings and fuselage. Its fate is unknown.

His final machine (425/17) had the cross patee with white outline. This was changed to the Balkan cross immediately before the fatal flight. There is no doubt that this aircraft had blue undersurfaces, but other details are confusing. There are two excellent photos of this machine, but their authenticity is disputed. Various illustrations show blue struts, blue or white wheels and cowling. All seem unlikely. The original was destroyed by souvenir hunters.

It is known that Richthofen issued an order that all Jasta II aircraft should be painted bright red (not crimson) on the top surfaces and sky blue underneath. This was interpreted rather liberally by individual pilots. Like the Albatros, the Dr1 left the factory covered in pale blue fabric.

Going back to my Flyzone Albatros It was apparent that painting as a von Richthofen aircraft was going to add a lot of weight - and in the wrong place. Fortunately, Richthofen never flew a DVa so I was saved. It was claimed that the model was in an authentic WW1 colour scheme. I found an illustration of that same scheme on the web and it clearly stated that the colours were conjectural! That gave me a free hand so I removed the crosses, which were waterslide transfers, and made up my own crosses from DIY transfer paper (www.craftycomputerpaper.co.uk). I painted out the white field on top of the upper wing and painted the underside pale blue. This added 4.5 grm to the original 28.3 grm - more than enough. But it's not a Richthofen machine I'm afraid.

So, if you want to build a model of a specific Richthofen machine you have a lot of research to do. Or the world is your oyster and you can use almost any scheme with little chance of being contradicted. You can always say it's a model of a replica!

Links:

Richthofens book 'The Red Fighter Pilot': <http://www.richthofen.com/>

The Albatros DIII: https://en.wikipedia.org/wiki/Albatros_D.III

The Albatros DV/DVa: https://en.wikipedia.org/wiki/Albatros_D.V

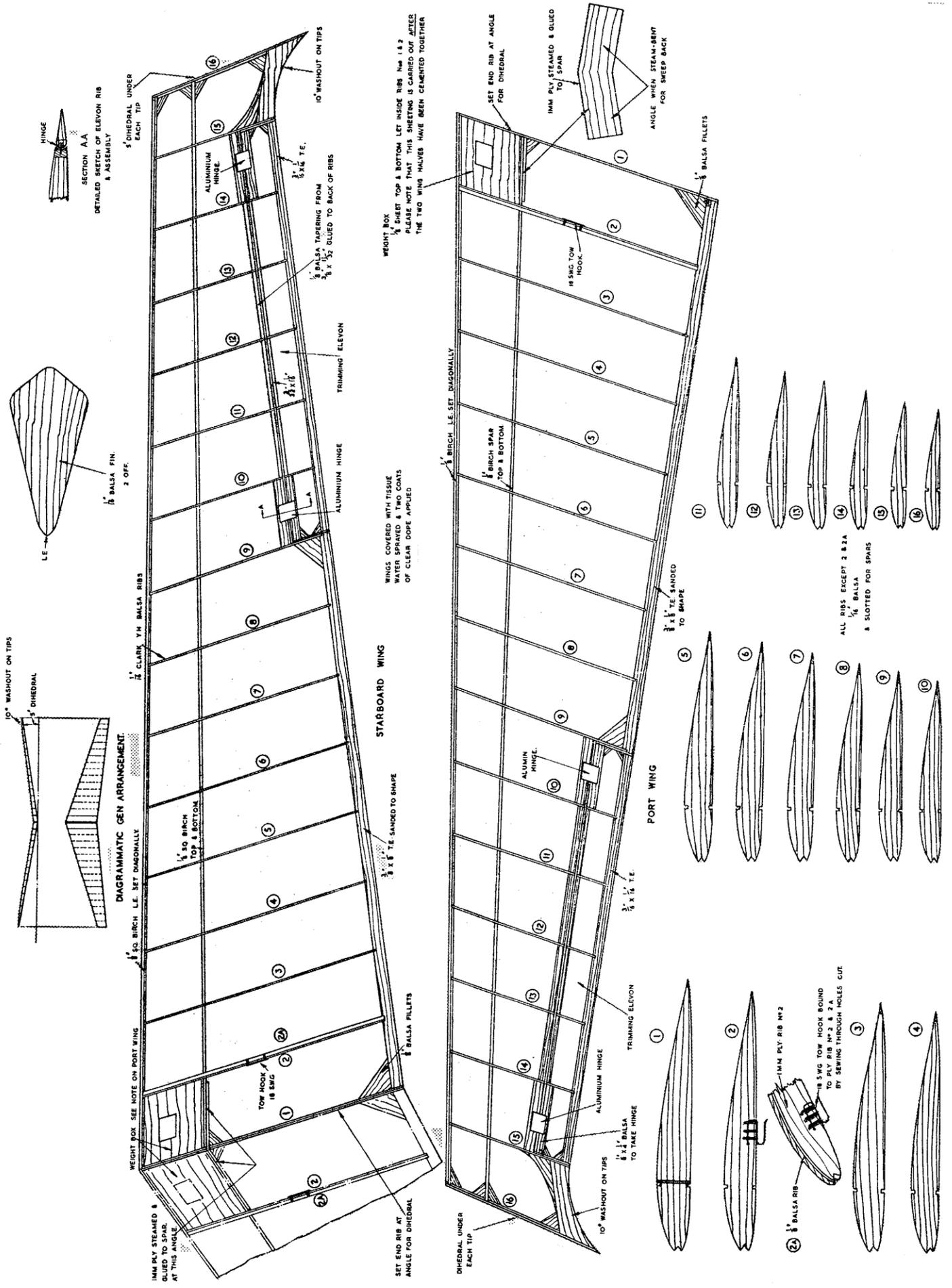
Fokker Dr1: https://en.wikipedia.org/wiki/Fokker_Dr.I

Manfred von Richthofen: https://en.wikipedia.org/wiki/Manfred_von_Richthofen

List of all Fokker Dr1's: <http://www.fokkerdr1.com/>

List of victories of Manfred von Richthofen:

https://en.wikipedia.org/wiki/List_of_victories_of_Manfred_von_Richthofen



HINGE
SECTION AA
DETAILED SKETCH OF ELEVON RIB
& ASSEMBLY

LE
1/8" Balsa Fin
2 OFF.

DIAGRAMMATIC GEN ARRANGEMENT

1/8" SO BIRCH L.E. SET DIAGONALLY
1/8" CLARK YH Balsa Ribs

1/8" SO BIRCH
TOP & BOTTOM

TOW HOOK
18 SWG

10° WASHOUT ON TIPS

1/8" x 1/8" Balsa
TO TAKE HINGE

10° WASHOUT ON TIPS

1/8" x 1/8" Balsa
TO TAKE HINGE

STARBOARD WING

1/8" x 1/8" TE SANDED TO SHAPE

WINGS COVERED WITH TISSUE
WATER SPRAYED & TWO COATS
OF CLEAR DOPE APPLIED

1/8" BIRCH L.E. SET DIAGONALLY

1/8" BIRCH SPAR
TOP & BOTTOM

18 SWG TOW HOOK

10° WASHOUT ON TIPS

1/8" x 1/8" Balsa
TO TAKE HINGE

10° WASHOUT ON TIPS

1/8" x 1/8" Balsa
TO TAKE HINGE

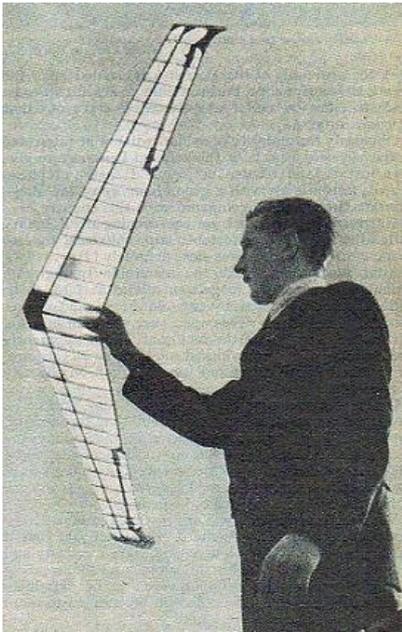
1/8" x 1/8" TE SANDED TO SHAPE

PORT WING

1/8" x 1/8" TE SANDED TO SHAPE

1/8" x 1/8" Balsa Rib

The Swallow a 60" span lightweight flying wing glider by G D Miles from Aeromodeller July 1947



Aeromodelling tyros anxious to make their first attempt at a flying wing design will find the Swallow just their cup of tea," with the additional attraction of a model that soars like a bird and no complicated trimming procedure to worry them. Seven minutes thirty-seven seconds from a three hundred foot line and a further time yet to be ratified as a British record should more than satisfy any doubts regarding performance, so here are the building instructions as specified by the designer :—

Building Instructions.

The ribs are first cut out of 1/16 in. medium balsa, and slotted for spars.

The tip rib is thinned down so that the top spars lie level.

The wing is then constructed in the usual way, making sure the ribs are set right. The trailing edge packed up

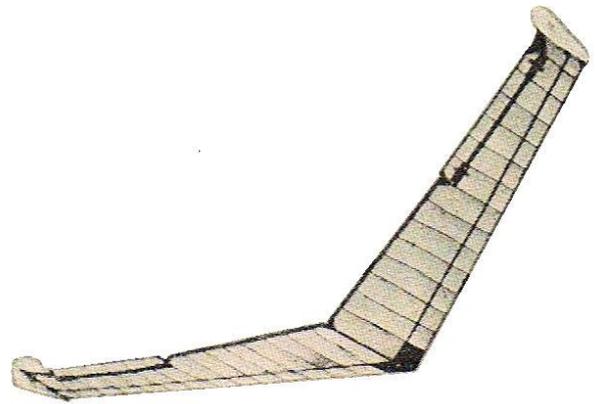
with balsa to suit rib shape. Whilst the wing is setting, the elevon is built inside it. The dihedral brace is steamed to the requisite angle and glued to the spars with Casco cold water glue. The brace also acts as the back of the weight box. The washout is steamed in whilst the wing is pinned to a

board. Insert 1 in. blocks under the tips at the trailing edge.

The model is then covered in tissue and given two coats of dope. Slots are cut for the tabs, and the elevon is fitted.

Trimming.

My own model flies with one tab level and the other up 1/16 in. for turn. The model should be weighted until a flat glide is obtained. Weight should be evenly distributed in each box. If the model is required to turn, the elevon inside the turn should be up. The model, once trimmed, is very stable and is recommended for the beginner.



Cocklebarrow Rallies *Important news*

In 1988 we answered the call for volunteers to run Cocklebarrow and we have been running this event ever since. However, we now feel the time is right for us to bow out and hopefully someone else will come forward to continue this great tradition. The August and October meetings will be our last ones.

Pam and Tony Tomlin have offered to run the Control Tent but are unable to transport and store the extras needed for the Rallies.

If you are interested in helping to run this event in the future please contact Paul and Val either by email howkins776@bt.internet.com or by phone 02476405126. We look forward to hearing from you.

Paul and Val Howkins

From Malcolm Ryley

Hi James, I have the Premier Lion shown in the photo cluttering up my hobby room. I bought it at auction as it had an Allbon 2.8 in it. It proved underpowered on it's first flight, as may have been expected, which caused a bit of damage to the undercarriage. The wings are one piece, a bit of a squeeze in the car. I would need a 5cc engine. It was probably more a poser than flyer.

I am unlikely to do much with it, so if any one is interested it is available, if not I will fit a 5cc sometime.

I am at RG27 8NA, Hazeley Heath, between Reading and Basingstoke.

Cheers, Malcolm.

malcolmryley@icloud.com



From David Lovegrove

S/C, Retro & Vintage + SAMs Fly-in, Wednesday 27 September, BMFA National Flying Site and Visitor Centre, Buckminster Lodge, Sewstern, Grantham NG33 5RW

As many of you know, every year the PANDAS club hosts the hugely popular "S/C and Retro events at Pontefract and every year there are requests for "more of the same", please!

Okay, so we're doing just that, at Buckminster Lodge, the BMFA's excellent new National Flying Site.

And we've decided to do it mid-week rather than a weekend, because weekends are always busy and anyway, most of us are retired!

Our particular interests are S/C, Reeds, Galloping Ghost, & Pulse, BUT - SAM members take note - we'll also be delighted to welcome all retro and vintage models with modern gear, including Radio Trimmed and Radio Assist models. And we'd love to see control-liners and small free-fighters.

In other words, there will be something for everyone with a penchant for the nostalgic* side of model flying.

The cost of entry is just £6 and the gates open at 10am. Refreshments will be available on-site, as is overnight camping.

We hope to see lots of old and new friends, so even if you're not a convert, why not come along & see what all the retro fuss is about?

*nostalgic – a therapy for late-life aeromodelling boredom

Contacts: thatbloke@garritys.net : philg.@talk21.com : david.lovegrove11@btinternet.com

or visit

<http://singlechannellersreunited.co.uk/phpbb3/viewtopic.php?f=18&t=968>

Good Afternoon James,

Sadly Roger Gleave died earlier this month. (ergav@waitrose.com - he may have written under his pen name of George Vale)

He enjoyed Stix & Tissue and wanted me to ask if you could offer two of his models to any reader who could collect from BB3 0LU.

There is a "Dolphin" ~133 cm long and "Southern Slicker" ~53 cm long. I'll attach photos.

Good wishes - Sue Gleave suegleave@waitrose.com



Epsom Downs June 2017 JP

Back in June I had an hour or two flying at Epsom Downs along with Stephen Powell (Down from Kings Lynn) Tony Tomlin and Derek Foxwell here are the inevitable snaps. I took along my Novice E, Derek Foxwell took his. These models designed by Sid King are really good fun.



I thought of an excellent caption to go with this photo of Tony Tomlin and Stephen Powell but resisted



Stephen's Junior 60



TT's Sparky with the Derek Collin built motor



Derek's Novice, I nearly got it all in the photo



Derek's Tomboy Senior

METRO 52 From Aeromodeller March 1952

The porting system introduced to model two-stroke engines by Ray Arden in the U.S.A. has been so widely copied in every country where model engines are made that it is only natural that this latest product from Germany should have 360 degs. porting and multiple transfer ports, coupled with crankshaft induction.

The Metro 52 is, however, very different in construction from the usual trend. Where other 2.5 c.c. engines of similar design employ milled ports to obtain larger exhaust areas for the desired timing, the Metro has a number of drilled exhaust and transfer ports. It also employs a flat-topped piston, and further evidence of the preference for drilling in place of milling is shown in the twin holes for the crankshaft valve.

Generally, one might expect inferior performance with the restricted port areas and earlier opening exhaust; but the output of designer Herr Schaub's Metro matches most favourably with other engines of similar capacity, and speaks well for its simplified structure and excellent German workmanship.

Several features of the engine show especial thoughtfulness; the dural prop-retaining bolt is a real crankshaft saver, the inclined needle valve reduces the personal risk in making adjustments and the unique wrench is the perfect tool for maintenance. One feature we might criticise is the cutting of the cylinder threads by the transfer ports. This does in effect make a thread cutting tap, and could, if ham-handed and cross threaded into the crankcase, wreck the threads at the cost of the crankcase.

With the big-end bearing bushed to fit the crank-pin, the little-end of the con-rod and gudgeon pin are seated in an alloy sub-piston. This fills the cast iron piston interior and is apparently riveted securely to the piston crown. Thus there are no gudgeon pin bearing holes in the piston itself, and a possible source of leakage is eliminated.

As the latest German model engine, the Metro is a credit to its manufacturers and should do much to advance the standard of power flying in that country.

TEST

Engine: Metro 52 Diesel,
2.47 cc.

Fuel: Equal parts, paraffin
oil, ether, castor oil
(maker's recommended
fuel). To bring the test in

line with that of other engines run on "pepped-up" fuel, I added 2 per cent. Amyl Nitrate.

Starting: Good, but did not conform to maker's settings, due, probably to the added Amyl Nitrate.

Running: Good at all tested speeds.

B.H.P.: As shown by the graph, this engine conforms to the average performance of moderm 2.5 c.c. class, except that the output is rather low at the lowest speeds. At 5,000 r.p.m. the b.h.p. is only .045, but rises well with speed increase until a maximum of .225 b.h.p was recorded at 12,600 r.p.m. The top of the curve is remarkably flat, so that there is little variation in power between about 11,000 and 13,200 r.p.m.

Checked Weight: 3.95 ozs. (This is as stated by makers.)

Power Weight Ratio: .92 b.h.p. / lb.

Remarks : The engine showed leakage between piston and cylinder, and this probably accounted for the low output at the lower speeds. Leakage usually affects performance at the higher speeds to a less extent, so that maximum performance is very good. The engine is of extremely clean design and light weight, which reflects in the high power /weight ratio.

CONSTRUCTION DATA

Manufacturers: W. Mayer & Sohn, Metallwarenfabrik,
(13a) Rothcnbrug ob der Tauber, Hessianstrasse 8
(U.S. Zone, Germany). L

Retail Price: DM 50 (4. 5s. 2d.).

Delivery: Ex stock.

Spares: Ex stock.

Type: Compression Ignition.

Specified Fuel: 34 per cent. Paraffin, 33 per cent.

Ether, 33 per cent. Castor Oil.

Capacity : 247 c.c., .150 cu. ins.

Weight (advertised) : 112 grammes, 3.95 ozs.

Mounting: Beam.

Recommended Alrscrews: 11 x 4 3/4 ins, for
Free Flight; 8 x 8 ins, for Control Line.

Flywheel: 2.36 ins, dia., 2.47 oz. weight.

Bore: 15 mm., .590 ins.

Stroke: 14 mm., .551 ins.

Cylinder: Cast iron. Screw fit into crankcase.

Cylinder Head: Light alloy. Screw fit over
cylinder.

Crankcase: Diecast light alloy.

Piston : Cast iron.

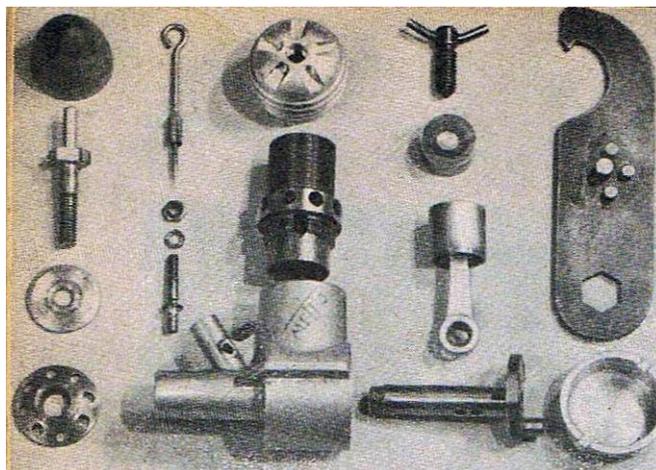
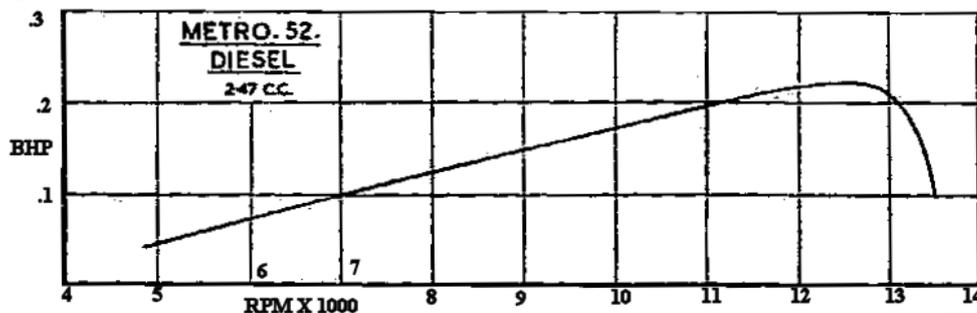
Connecting Rod: Light alloy.

Crankshaft: Steel.

Crankpin Bearing: Special alloy bearing material.

Induction : Crankshaft rotary valve.

Special Features: Dural propeller retaining bolt eliminates all risk of crankshaft bending. A unique wrench for dismantling is supplied with each engine. Boxwood Spinner supplied.



North Cotswolds MAC weekend 12 / 13 August 2017

It no sooner starts then it's over such is the pleasure of this weekend meeting. The site is a typical, too me, model flying field nothing fantastic nothing poor and thereby is the fascination with a good runway and field next door affording small model free flight and control line, the combination ensures a great weekend. The Saturday was a bit blowy but Sunday was perfect. Since we were "holidaying" in the Cotswolds the variety of models I could take was small so the Fun Cub useful in strong winds and Novice E were my choice, both electric as fuel and all the paraphernalia with IC powered was not practical and reticence to store in a holiday home. Li fe batteries made up the power for the Novice and a Li po for the Fun Cub. Stored outside under open shelter in a charge bag and ammunition case. I personally would use Li fe all the time but the range available is not extensive and often suppliers do not have them in stock which is a shame. Anyway a few did fly on the Saturday and numbers of those attending and flying increased dramatically on the Sunday. All types of models were flown but the awe was held for Peter Iliffe's models they are truly superb and have to be seen to be believed. Enough of the waffling now for the photos.

The following 6 photos were sent by Gray one of the organisers of the NCMAC meeting mine follow

We'll certainly be doing it again in 2018, we start planning again in a few weeks' time. Also, the following year, it'll be our club's 70th anniversary, so that'll be a special one. Gray



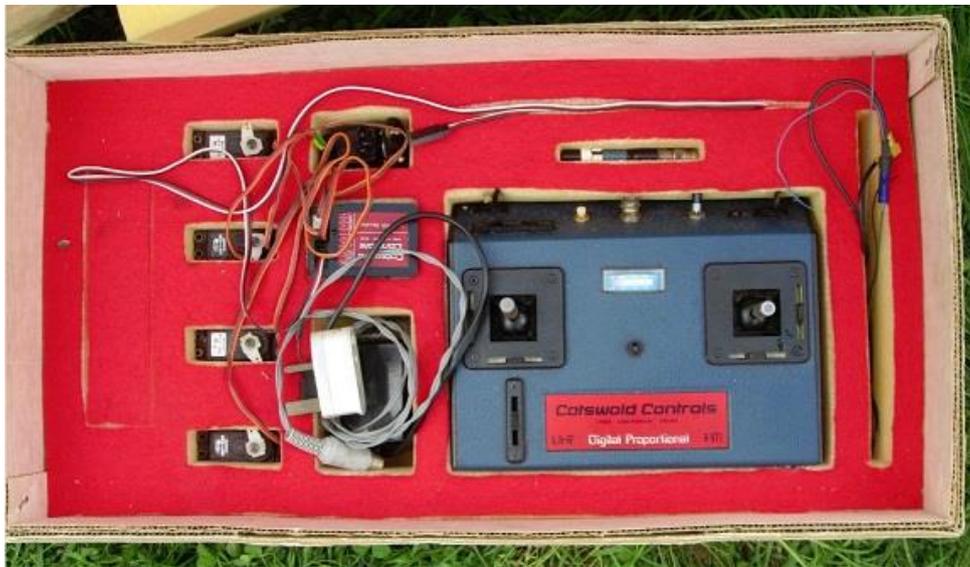




A few control line models Northwind, Gieseke Nobler, Yassenko Shark



Control line U2 Frank Warburton design



Pristine radio gear from another era



Stewart Hindle's CL Ray Malmström entry



Chris Hague's CL Ray Malmström entry



David Lovegrove's Wombat it flew really well in the breeze as did all his other models



David Lovegrove's Tadpole







David Lovegrove and Robot







Simon Roger's first flight will have wheels and decoration added as now a proven flyer





Stewart Hindle and his control line Hurricane



Bill Well's

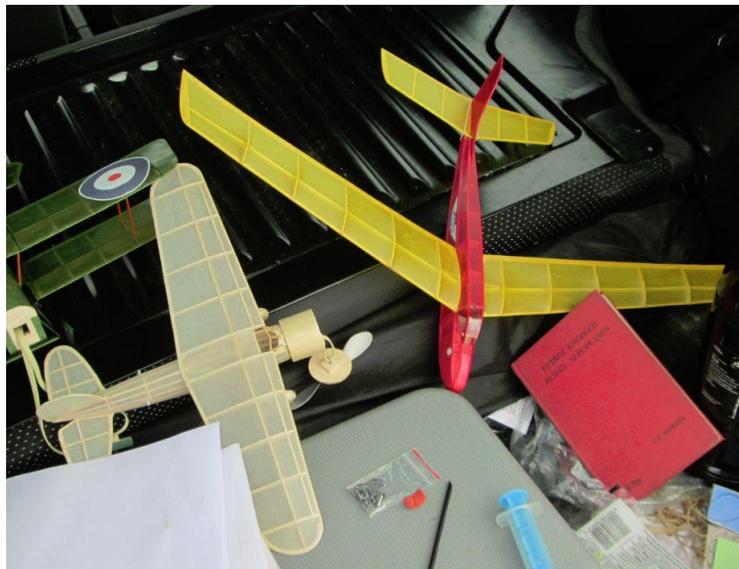


Bill Wells and a FOAMY model





Simon Roger's models



Simon Roger's SE5 yes twin finned experimental



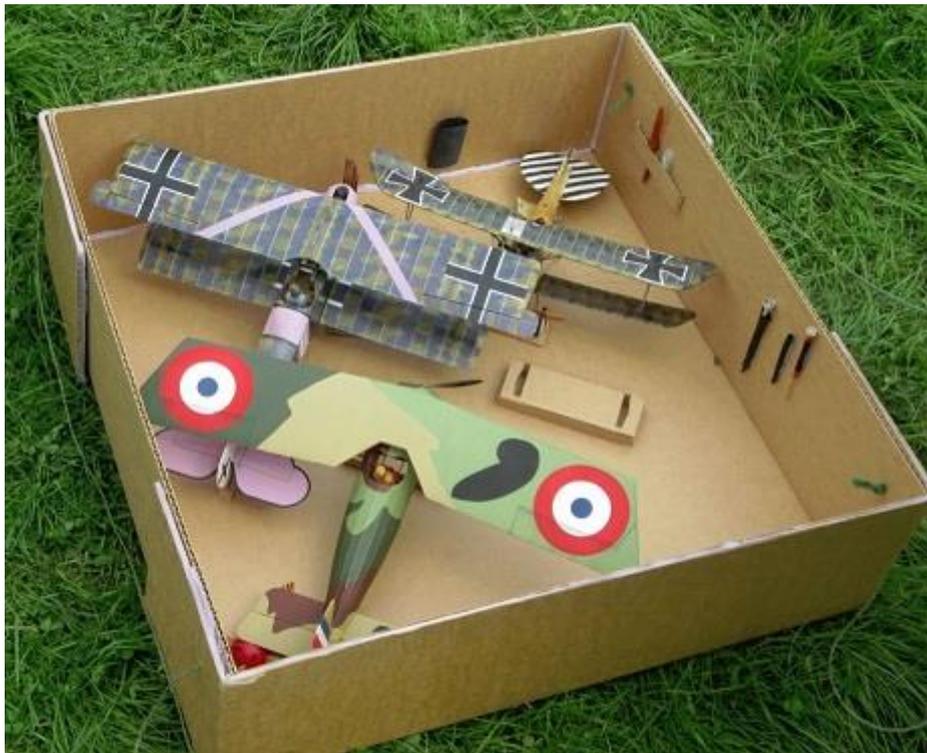
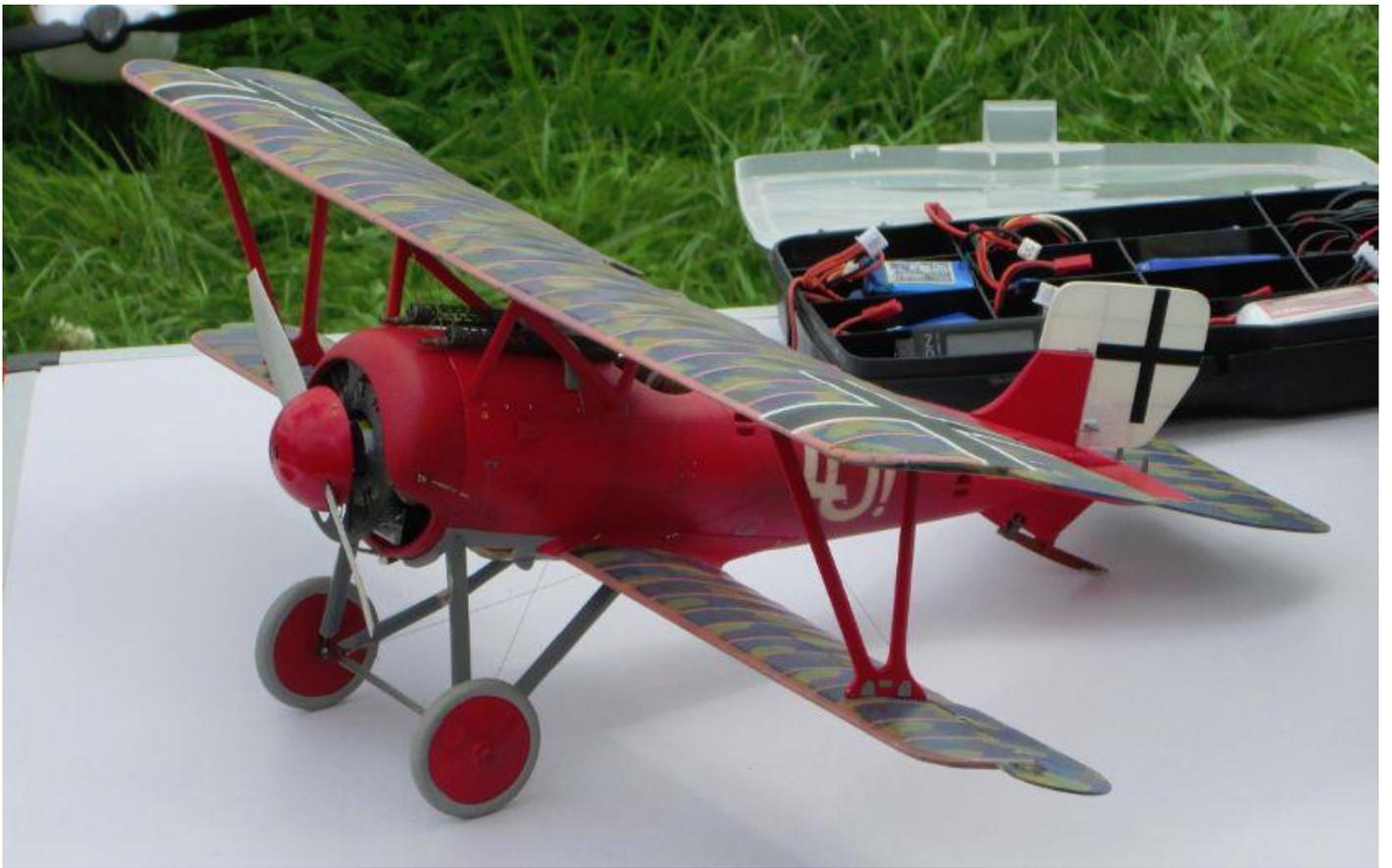
Peter Iliffe and his truly magnificent, I think it is a Brandenburg? Following are a selection of his models

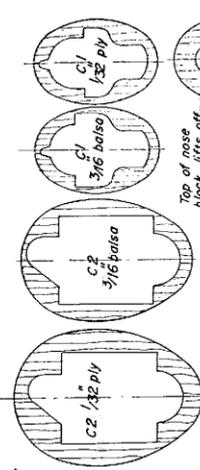




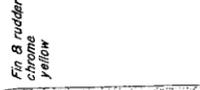








Top of nose block also 1/16" off. Locate with 1/8" dowels. Cowling construction laminate the balsa and ply pieces of each former Slide C2 on to fuselage & pin in position. Slide C1 on to engine bearings & pin. Sheet sides of cowling with 1/16" balsa & small strips of 1/16" to top & bottom. With 1/16" balsa trim sheet back to front of cowling. Build up with 1/16" balsa to finish sheet back to front of cowling. Carve cowling to shape. Remove nose block & hollow out to suit.



Fin & rudder chrome yellow

Cowling nose block from block balsa

Assembly of B1 & B2 Using 1/4" glue laminate the ply on either side of balsa. Carve B1 to form the BI. Carve B2 to form the B2. Assemble with cement control plate mount with control plate mounted in position.



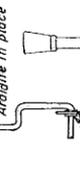
BI 2 off - 1/16 ply 1 off 1/8 balsa

B2 2 off 1/8 balsa

Stringer positions

Formers DEF 3/32 balsa

U/C detail Band from 1/4" wire first slip on brass torque tube and alum. oleo leg tube. Cut wheel arch from brass solder alum. tube in place. Cut brake cover from 1/16" ply & Araldite in place. Add card rings to leg. Carve leg formers from balsa. Araldite in place when model is finished.



Brass tube U/C bound to BI and B2 with thread Araldite in place



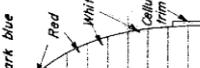
Washers Shim brass Brake drum cover

Side view B2 Rolled paper rings Alum. tube Shim brass

22g. shim brass index cone to elevator and stabiliser with Araldite

Ribs R1 R2 R3 R4 R5 R6 R7 R8

Fairchild CORNELL
MA C.P.G. WHELDON PT19
400 SHAN 26x34 LENGTH 21 1/2"
 POWER 1cc - 15cc 7/16"
 MODEL AIRCRAFT 1965
 © 19-20 NOEL ST. LONDON W1



Dark blue Red White Celluloid trim tab

Section

Rudder actuating rod

Rubber pin wheel

Leather glove (carve from balsa)

Tailwheel fork band from 20g. wire in two halves. Slip brass tube through wheel hub. Assemble two halves blind and solder. Band fork & araldite into fuselage.

Assembly of wheels Slip wheels on axes and solder washer in place then add wheel covers

BI 1/8 balsa

AI 3/16 balsa

22g. shim brass index cone to elevator and stabiliser with Araldite

Ribs R1 R2 R3 R4 R5 R6 R7 R8

Tail plate chrome yellow except fin. Fuselage fairing which is blue

1/8" connector between laminations

Ribs R1 R2 R3 R4 R5 R6 R7 R8

Trim tab mark with black ink

Elevators 2 - 3/32 laminations

Flap outline in ink on underside only



Brass hinge 1/4 soft sh.

Balsa block TP support.

Hand hold each side

1/4g. push rod

Leather glove (carve from balsa)

Tailwheel fork band from 20g. wire in two halves. Slip brass tube through wheel hub. Assemble two halves blind and solder. Band fork & araldite into fuselage.

Assembly of wheels Slip wheels on axes and solder washer in place then add wheel covers

BI 1/8 balsa

AI 3/16 balsa

22g. shim brass index cone to elevator and stabiliser with Araldite

Ribs R1 R2 R3 R4 R5 R6 R7 R8

Tail plate chrome yellow except fin. Fuselage fairing which is blue

1/8" connector between laminations

Ribs R1 R2 R3 R4 R5 R6 R7 R8

Trim tab mark with black ink

Elevators 2 - 3/32 laminations

Flap outline in ink on underside only



Hole for push rod

Fairing painted fuselage blue

1/4g. push rod

Leather glove (carve from balsa)

Tailwheel fork band from 20g. wire in two halves. Slip brass tube through wheel hub. Assemble two halves blind and solder. Band fork & araldite into fuselage.

Assembly of wheels Slip wheels on axes and solder washer in place then add wheel covers

BI 1/8 balsa

AI 3/16 balsa

22g. shim brass index cone to elevator and stabiliser with Araldite

Ribs R1 R2 R3 R4 R5 R6 R7 R8

Tail plate chrome yellow except fin. Fuselage fairing which is blue

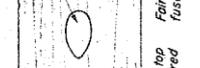
1/8" connector between laminations

Ribs R1 R2 R3 R4 R5 R6 R7 R8

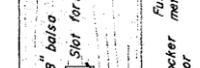
Trim tab mark with black ink

Elevators 2 - 3/32 laminations

Flap outline in ink on underside only



BI 1/8 balsa



BI 1/8 balsa



BI 1/8 balsa



BI 1/8 balsa



BI 1/8 balsa



BI 1/8 balsa



BI 1/8 balsa



BI 1/8 balsa



BI 1/8 balsa

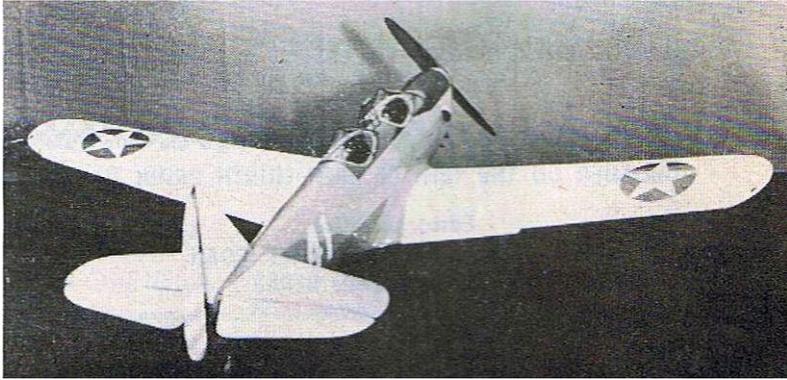


BI 1/8 balsa



BI 1/8 balsa

Fairchild PT-19 “Cornell” a control line scale model by Peter Wheldon for 1 – 1.5 cc engines from Model Aircraft March 1965



The Fairchild “Cornell series of primary trainers were perhaps the most widely used monoplane trainers of World War II. It was decided to use the Fairchild as a prototype for a scale model as being particularly colourful, with plenty of detail, and likely to be a good, reliable flyer. This latter point is, I feel, rather important with a flying scale model, as contests are nearly always flown in the worst of weather and a scale model that is “dodgy” to fly is a waste of time and

effort building. One may think that this model is rather small for scale work but it can, in fact, carry as much detail as is available, while still retaining the low cost and ruggedness associated with small models. The original is fitted with an AM.15 diesel turning a 7 x 5 in. wooden airscrew and, due to its inherent stability, is a dream to fly on 35/40 ft. lines—even in windy conditions.

Construction

General. The construction of the model, while not difficult, requires patience and care and is not recommended for the novice. It is based on the same “unit” method of construction used on my previous models, the central (key) unit on this particular model being the cockpit floor and associated formers. This part of the model should be built especially carefully and accurately.

P.V.A. adhesive was used for all joints (except as noted below) as this gives a strong, clean joint, without shrinkage and allows plenty of time to adjust components before setting. “Araldite” was used on all metal/wood joints and, although initially expensive, is far quicker and neater than other methods of making such joints.

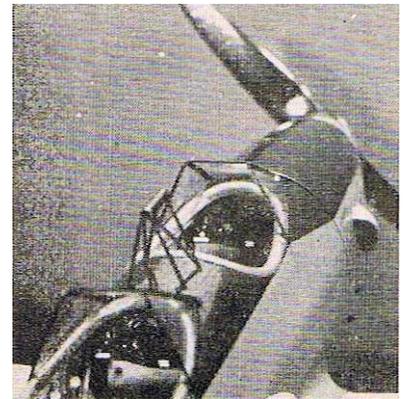
Fuselage. Commence construction by cutting out the cockpit floor and making up formers (A), (BI) and (B2). Note that due to the backward slope of (A) all holes and slots have to be cut on the slant “—this is best carried out after the former has been laminated. When formers are dry, (BI) and (B2) should be cleaned up and cemented to the cockpit floor, together with the control plate mount and control plate.

Carefully mark out engine bearer brackets from 1/16- in. ply and “Araldite” to the bearers. In one operation “Araldite” bearers to (A), fit fuel tank, bearer distance piece, and mount the engine. P.V.C. may be used here, but “Araldite” is recommended to ensure a long life joint. Check that the assembly is true, particularly the angle of the engine bearers to former (A). Remove the engine and cement this unit to the cockpit floor. Again check that the angle of former (A) is correct—engine bearers should be parallel to cockpit floor. Cement formers (B) and (C) in place. Add the keel and, when dry, cement the remaining formers in place adding rear fuselage backbone. Mark stringer positions on the rear formers by inserting stringers in front formers and sighting along them to ensure a smooth run down the length of the fuselage.

A small flat file is useful for cutting the notches (1/16 in. deep). Cement the stringers in place, being careful not to distort the fuselage. When the stringers are dry the fuselage may be filled in between the stringers with soft 1/16 in. sheet and the top decking sheeted over. When dry, sand well to correct section. It is important to note here that the sheeting must lie flat between stringers from former (B) aft. as this was fabric covered on the original machine. Forward of (B) sheeting gradually assumes a curve, representing metal covering on the original. The cockpit openings may now be cut out.

Tailplane, Fin and Rudder.

These are of conventional construction and require no explanation. Metal hinges are used on the elevator for durability as cloth hinges are apt to get damaged by accident during the finishing processes. Do not cement rudder to the fin until the model is painted. Hook up the elevator to the push-pull rod and cement the



tailplane and fin in place. Check movement is smooth and free. Fair the junction of the tailplane fuselage/fin with soft scrap balsa and filler.

Form the landing gear and bind and “Araldite” to (B1) and (B2), then check over the construction so far before proceeding with the wing panels.

Wing panels.

The wing panels should not prove difficult as the construction is quite straightforward. Do not forget, however, to fit the stranded lead-out wires through the port wing and cement the lead weight in the starboard one before covering with soft 1/16 in. sheet.

Cowling.

The cowling construction is explained fully on the plan. The engine contra piston adjusting screw is modified to allow a box spanner to be used for adjustments. A hole must be made in the bottom of the cowling to allow for the insertion of this.



Finishing

The ailerons, rudder, cowling and inside faces of the main wheels are painted separately from the model and assembled later. As all modellers have their own favourite method of finishing a model, only a few brief hints are given. After giving one coat of clear dope and sanding, the entire model should be covered in lightweight “Modelspan” to strengthen the structure and help to seal the grain. Use dark coloured tissue and, when rubbing down successive coats of filler, rub down until tissue can just be seen. This ensures a minimum thickness of finish—hence light weight and good performance. Only apply colour dope when satisfied with basic finish—use several coats (six or upwards) of thin dope—sanding between each coat—rather than two or three thick coats.

Use “Duraglit” wadding or similar for final buffing. Small stencilling—such as is found on the side of fuselage—can be carried out simply by utilising the edging from a commercial transfer, printing the lettering in white photographic ink, covering with a single “lick” of thin dope and, when dry, using as a normal transfer.

Commercial yellow transfers are used for the field numbers on the fuselage sides (1 1/2 in.) and cowling (1in.). When all decoration and lining is complete, give the model one coat of thinned down fuel proofer. If a glo-plug engine is to be used a heavier coat may be required.

Flying

The model should balance on, or slightly aft of, the leading lead-out wire. Fly on 35/40 ft. lines over a smooth surface. The large diameter wheels make take-offs and landings a dream and, suitably powered, the PT.19 is capable of mild manoeuvres such as wing-overs and loops.

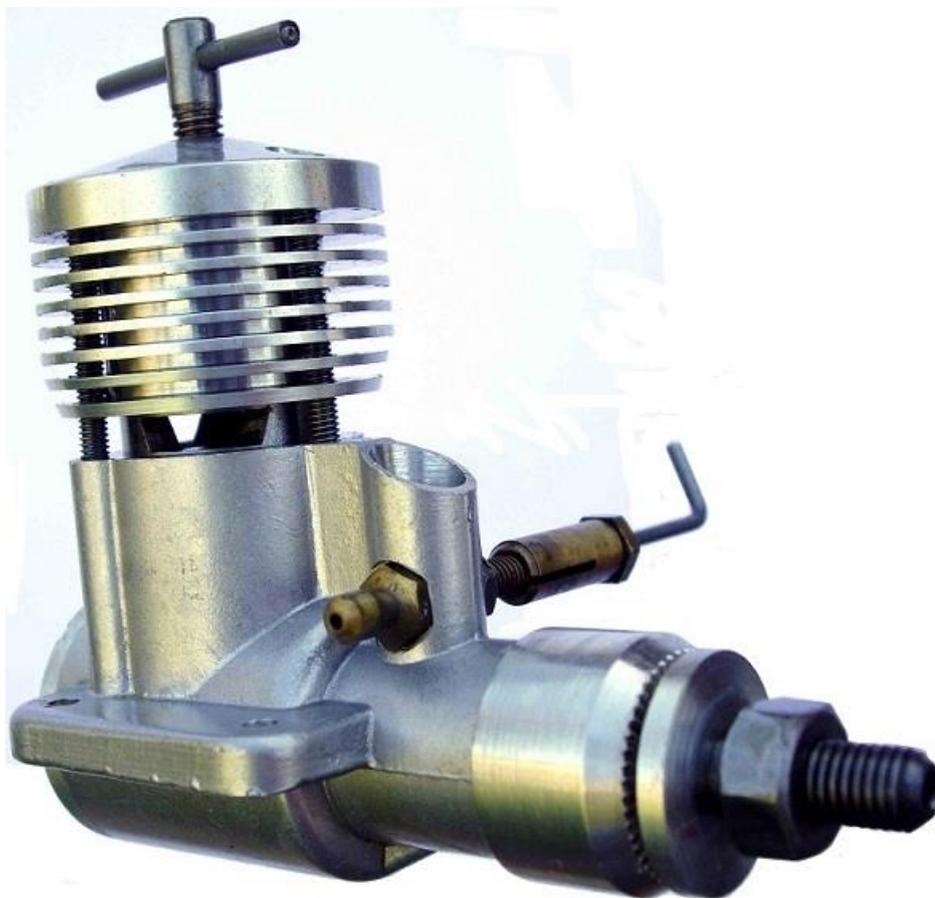
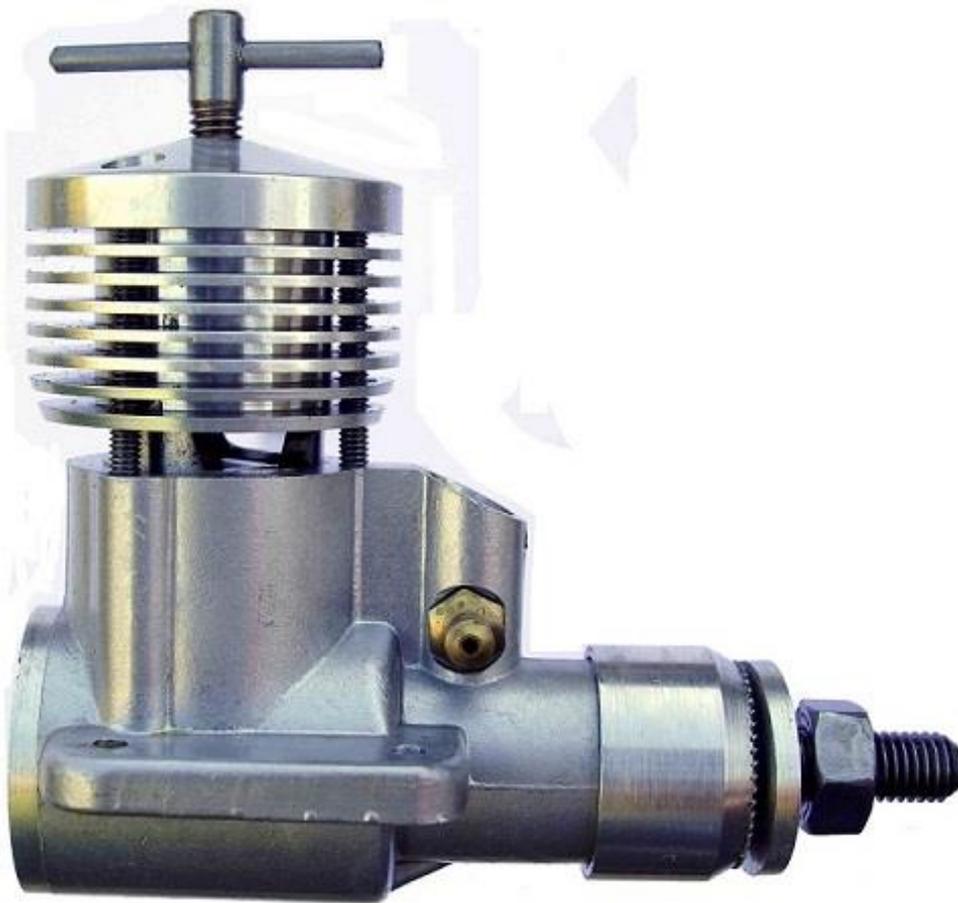
From Jörgen.

Hi James sending you some Pictures my Electric Pushy Cat and to of my single channels models the Soubrette with an RedFin tbr 0,5 and the Moppet with an NAVO 0,5 they all fly very well . The Pushy cat is from Belair and the other two is from Douglas Wass . The weather hasn't been so good this summer so it hasn't very much yet!



From Bill Wells

The P.A.W. Special Test Report in S&T 128 was interesting. PAW made the engine again in about 1995 when I bought my example. The Gig Eifflaender Special later version has a few external differences from the one shown in the 1957 Test Report. Further to my previous e-mail I have found the Gig Eifflaender Special Box. Interestingly both the box and the engine have a serial number. Strange because PAW do not usually have serial numbers! The serial number may have been added by someone else no doubt one of your readers will tell us why this engine has a serial number.





From Ronald in Belgium

After hanging for several years from the ceiling in my "man cave", I decided to put a 2.4 receiver in my Hepcat and fly her again. The PAW 1.49 BB was not really happy to be put to work again after being retired for so long, but in the end had to be cooperative and swung her 8x4 Super lustily (as the great W.O.O. used to say). So here are a few pictures of her first flight in balmy weather: 25° C and a cool northerly wind, force 2, an ideal situation to fly such an old timer.

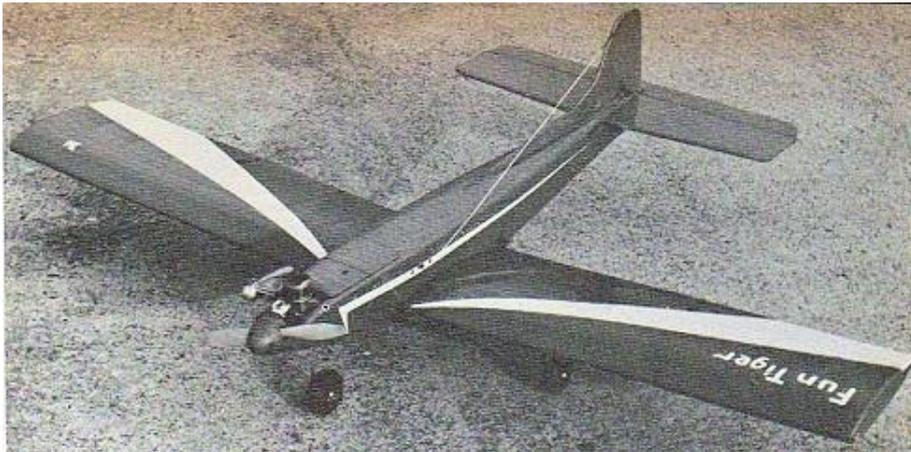








Fun Tiger by D R Hutson a medium sized sport / aerobatic model span 54" for .35 to .40 mptors from Radio Modeller March 1971



Here is a model that was designed specifically as a low-wing trainer. The idea was for something to supersede my much-modified Tauri, which had a Merco 35, shallow dihedral and strip ailerons. I wanted to fly a low winger but not the 10c.c. big chaps, at first, at anyrate. Unable to find a suitable existing plan, I had to sit down and dream up my own, which resulted in Fun Tiger.

The features I felt I wanted were as follows: first, a semi-symmetrical aerofoil section for the wing—the stall being less tricky than with a fully symmetrical section. (Not necessarily so, though a generally held belief—there are other considerations !—Eds.). Secondly, a structure that could be built very light which, again, would help to produce gentle stall characteristics. (Again—what is obviously meant here, is that the stalling speed will be lower—this doesn't necessarily mean that the stall characteristics will be gentle—Eds.).

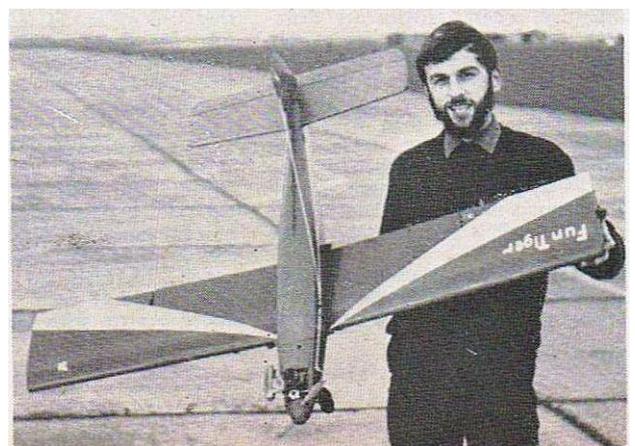
I used inset ailerons because I have found them to give less trouble than the strip types, in that they do not warp, and also that one can see at a glance exactly how they are set, relative to the rest of the wing. A full-span, one-piece elevator was employed, to obviate the possibility of asymmetric elevators, which one always risks with the joined-two-piece type. This also enabled a more tidy push-rod linkage to be used, as an extra bonus. Otherwise, generally, I wanted a sort of scaled-down multi-aerobatic type of model, for Merco 35—one that I could make the transition from high- to low-wing flying with, and yet be able to progress to some sort of schedule type aerobatics, without having a screaming bomb on my hands. Then, at a later stage, and when I felt like getting to grips with a .61 up front, I could make the further step, up to the standard acrobatic sized model with much less apprehension.

When complete, the model weighed some 4 1/2lb. I was a little worried when I saw it standing on the runway, ready to be fired up. It looked so small. Would it have the characteristics I'd hoped for? Would it fly at all? After all the usual pre-tlight checks, engine blipping and general excuse-making, the time came when I ran out of clichés, and gave her the gun.

After a run of about 75ft., holding in a little right rudder to keep her tracking straight, I pulled in a mite of up elevator—and Fun Tiger was airborne. I flew the model around for a few minutes, trimming out a slight right-turning tendency, then throttled down the motor and landed. This first landing was a good 150ft. away—but on all three wheels!

I use an exclamation mark here because, having thought that low wingers were difficult to fly, we were all more than a little amazed that I had managed to solo without help, and landed the model all in one piece. The slight right turn was eventually tracked down to the 1 1/2° of right side-thrust which I had incorporated (having been used to high and shoulder-wing models requiring this) and the model flew straight and level in its original trim once this had been removed.

Now that I have flown this model a great deal I can safely say that its flight characteristics are definitely suitable for those, like myself, who want to make the high-to-low wing transition—which is undoubtedly why I got away with soloing first flight, rather than with anything more neutrally stable. The 1 1/2in. dihedral under each wingtip obviously provides a certain amount of inherent stability, without affecting the model's manoeuvrability too much.



Fun Tiger has a pretty good rate of climb—though it cannot compare with, say, a Kwik-Fli, which (I find!) hardly gives the pilot new to this type of thing time to think! I can now quite happily perform most of the usual manoeuvres, and have sent along this article and the plans of Fun Tiger to your favourite magazine (flattery will get you any where! —Eds.) so that all those—and I am sure there are hundreds of you!—who feel as I do about not wanting to go the whole hog with a monster .61 motor and large-sized low-winger—will have the chance to do as I did. Not only is this size of model less awe-inspiring, for those making the break from high-wingers, it is more easily transportable—and less expensive to build!

CONSTRUCTION

Wing

Build this over the plan as two separate panels, adding u/c leg bearers, aileron bellcranks and 16g. aileron



linkages. Join the two panels, blocking up the tips for 1 1/2in, dihedral each side (or 3 in) under one tip with the other panel flat on the board), and fitting the dihedral braces. These are not plywood, but hard 1/4in. sheet balsa, which is quite adequate and much lighter. Cover top and bottom surfaces with 3/32in. sheet and, when dry, cut out the ailerons. (Do not hinge these permanently until after covering and finishing.) Finally add tips and sand overall.

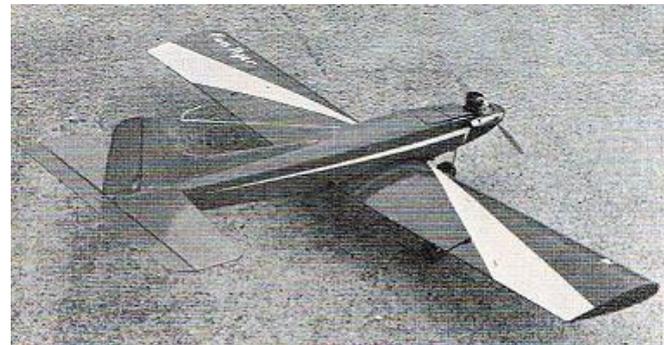
Fuselage

Commence by cutting the sides from good medium grade 3/16 in. balsa, adding the ply doublers— using either Evo-stik or one of the aerosol spray contact-adhesives, which are handiest for covering large areas like this. Now make and fit formers F1, F2 and F3, making sure that they are squared up accurately, and leave to set. The elevator push-rod exits through the extreme rear of the fuselage, so the appropriate gap must be left when fitting the fuselage stern-post. Now fit the cross-grain 3/32in. sheet fuselage bottom, followed by the 1/4in. sheet tank bay bottom, and hatch top. Sand overall, then fit the tail unit, again making sure all is square and true.

Double-check before finally leaving to set, that the fin is properly at right-angles to the tailplane, and that the whole unit is correctly aligned in plan-view. (Construction of the tail unit is self-evident from the plan and need not be detailed here.)

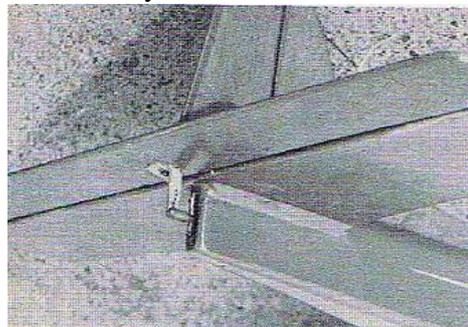
Finishing and rigging

The wing of my prototype was covered entirely with Solarfilm, but the fuselage, tailplane and fin were covered with heavyweight Modelspan tissue, clear-doped and then fuel-proofed with clear polyurethane. The second prototype is Solarfilined in its entirety and this is the one shown in the photo graphs.



Trimming and flying

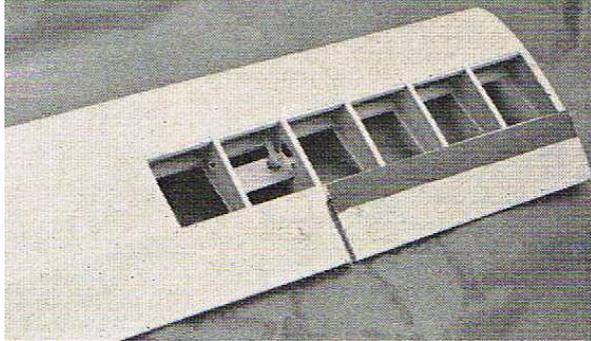
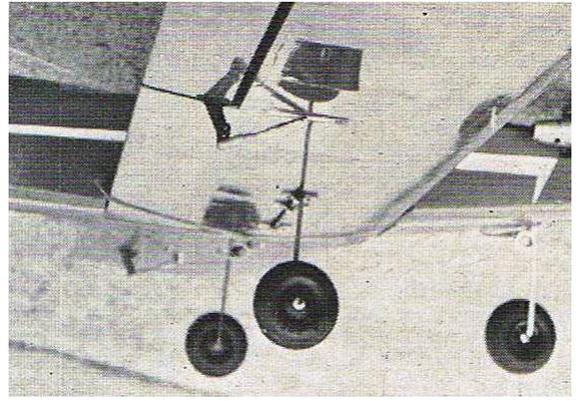
For a nicely stable model, make absolutely certain that you get the c.g. exactly at the position indicated.



To start with, use only the smaller of the control-surface movements shown on the plan—you can then increase these later when you are happy with your abilities, and the model's performance will then extend with your own. Assuming that you are making the transition, with Fun Tiger, from the high-wing cabin type model, or even the shoulder wing types, there are, of course, some differences in flight characteristics

to watch out for. The first of these is that a low-wing machine will tend to put its nose down more in turns. If you are also making the transition from rudder/elevator to aileron/elevator as the primary controls, this is especially important. You may still have rudder—but forget about it for all general flying purposes, except for take-off corrections, or special manoeuvres like stall-turns and spins. Make your turns by first banking the model, with aileron, then turning it by means of up-elevator. The sharpness of the turn will be proportionate to both the amount of bank and the amount of up-elevator applied. The trick is, of course, to

get the hang of just banking the model enough for the desired turn, and making the elevator work the rest of the time. Too much up elevator will produce a climbing turn; not enough will produce a gradual spiral dive. It is simply a matter of practice. A good idea, to help this coordination of aileron and elevator to become second-nature, is to keep flying a series of “S” turns. Do these a little way down-wind, and gradually work the model up-wind until it is nearly overhead. Then fly it to the starting position and do it all over again. You will find, eventually, that you are anticipating the model’s requirements, and pumping in the correct amount of elevator



(a little down-elevator, too, at certain parts of the turn relative to the wind) just a fraction of a second before it is seen to be required. In this way, real smoothness of flight pattern will be ensured. I don’t propose to talk about manoeuvres—plenty of much better qualified people have already done this in detail—but I hope the foregoing has at least helped you a little to make that jump, from rudder/elevator high-wingers, to aileron-elevator low-wingers . . . Fun Tiger will do the rest!

Showscene Dave Bishop.

Modelair at Old Warden.

I really think that Old Warden and Shuttleworth is a place that gives me a wonderful vibe that is totally satisfying. The Modelair events organised by Ken and Sheila Sheppard in particular have that special feel. It is the same as one gets at the BMFA National Championships where modellers of every discipline take along their latest model build, purely to have some fun with their many friends from all over at home and abroad. Well the last for this year’s Modelair events takes place later this month on September 23 – 24 at Biggleswade in Bedfordshire with the post code being SG18 9EP and should you happen to need it the telephone number is 01767 627927.

Some details of this end of season “must go to” event, starts with the title of Festival of Flight which includes Voetsak Control line racing and Rubber Bowden on the Saturday. Sunday will be a Belair kit special because it is a Vic Smeed Memorial and many of Vic’s model kits can be bought from the company boss Leon Cole, who trades at Old Warden with his family. Also this year there is a new event titled “The Rubber Bowden” which is a precision contest for cabin rubber models and for the rules and further details go to www.sam35.org or email johnashmole@yahoo.co.uk There is another email address where you can get more info which is www.modelair.info

The Blackpool Airshow.

I was treated by my wife Jan to a long weekend up north recently when the full size Blackpool Air Show was being held there on August 12 – 13. They have been staged there every year since 1909. Last year’s show was blessed by the show stopping Avro Vulcan finishing with the best display team in the whole world, the Red Arrows. My visit this year brought back memories of when I was first introduced to this superb seaside town some 65 years ago when I was in the RAF doing my square bashing at Weeton. You could go into the grand Winter Gardens and see a large screen film, and afterwards go on into the super ballroom for “proper” dancing all for half a crown or fifteen pence in today’s coinage. Many airmen learnt lot about life in those days as long for as you were in uniform the choice of cohabitating with the other sex was entirely up to you.

This year’s Blackpool free full size aeroplane display was held in very good weather with a packed crowd that filled up the whole area with many thousands of spectators. The PA was excellent with some 30 smallish horns spread out (like those that I use in my DB Sound business) that were set at “sound

reinforcement level” and not blasting out at a sound which gives everyone a headache. The contents of the show was varied and the opener was a superb £87million Royal Air Force Typhoon display from 29th Squadron, Coningsby. The pilot “did it all” with his twin exhaust jets on re-heat going full blast he certainly penetrated everyone’s wax in their ears with his awesome display. Most people I spoke to at the show were used to seeing this fly by wire aerobatic wizard delta shaped moustachioed aeroplane as I was told that they are built “up to road” from Blackpool. Then followed Peter Wells and Chris Burkett (Mike Williams duo partner) with their pretty aeroplanes, the SA 1100 Twister Aerobatic Team which is a German design of aeroplane that is similar in looks to a little Spitfire. A Bulldog and Chipmunk followed which took me back to my Air Radio Servicing days in the RAF. A Strikemaster and a Yak 50 followed and after those there were the show stopping Trig Aerobatic team of Richard Grace and Dave Puleston with their Pitts S1-D. Everyone then stood up for the Battle of Britain Memorial flight which was without the Hurricane but the display of a Spitfire and the Lancaster was good enough and they were a joy to see and that would have been enough for the thousands of spectators. But it was the magical sound of the engines of the two Boeing Stearman, Breitling sponsored biplanes piloted by David Barrell and Martyn Carrington that had the crowd thrilled for the next 18 minutes. The two girl wing walkers for this show were Gina Marshall and Katie Hobbs and from what I remember when they performed when I presented them at Kenley airfield some years ago they were not only stunning looking girls but were qualified in martial arts as well. This team has demonstrated almost everywhere in the whole world and are perfect in every manoeuvre that they perform. And the penultimate display each day was flown by Peter Troy-Davis in his Calidus Autogiro. What this aero flyer did was to almost turn his autogiro inside out. He almost stood the craft on its nose stopping the craft from any movement which was proof enough for those present that it could hover. (I remember at the beginning of the war that autogiros were used to calibrate the radar signals from the 320 feet high towers on the coast where I lived in those days. And then it happened at just after 4pm when the Red Arrows commentator wound the crowd up to welcome the world’s number one aerobatic team and we were asked on the PA to turn our heads to the Blackpool Tower. And “bam” they surely did come with the team leader just clearing the Union flag and his four each side, team mates streaming the matching red white and blue smoke, roaring right over our heads to start a 16 minute display that brought tears of joy and pride to us all. They are British of course! What a weekend it was and the weather on the Sunday was even better for the once again hundreds of thousands of spectators drawn to this free show. I don’t know if it was Rod Dene that directed show as there are no mentions of the main organisers in the excellent programme only lots of commercials about the Blackpool council and other things going on there but a huge well done to who-ever it was. I forget to mention the excellent Blades display team of the four Extra 300’s, flown by ex RAF pilots with one of them being the only girl pilot of the Red Arrows, Kirsty Stewart (now Murphy). There were quite a few stalls there including the popular Help for Heroes and the Royal British Legion.

The Aeromodeller.

The Aeromodeller has had a temporary editor namely Ken Sheppard whilst Andrew Boddington has some leave and Ken writes in the first edition under his pen (computer) that he wants modellers to write in with stories and pictures. Opening this “first edition” by Ken, you’ll find that it’s a cracking digest and a lovely mix of every part of our sport including an indoor flying radio controlled Micro Tyro. Tyro was designed way back by the best man at my wedding, David Boddington (Boddo) and the piece and plan that’s written is by a gentleman named Arnaldo Correia. Well done Ken.

Traplet Publications.

Well I expect like most of you, I was surprised and disappointed to learn that Traplet Publications had problems and what a pity it is for everyone concerned. I well remember our first contact with Traplet when a stunning blond complete with two young children Tom and Sally, appeared in the pouring rain driving a motor home at a show in Wales. Jane Stephenson introduced herself along with some new modelling publications (to us) like Radio Race Cars and also R/C Model World magazine. I was running the Family Model & Craft Show at Plumpton Racecourse in those days and one of the Traplet staff rang me and asked if we wanted to advertise our show. I immediately said yes please and a chap named Neil rang me and wanted to know all the details of what we had to offer. The result was a cracking advert and another 3,000 plus extra people that came to the show. From the MD Tony Stephenson right through this family firm of Tom, Tony Van Geffen, Kevin and a string of clever different editors and male and female staffs, it’s a great shame that Traplet has (apparently) ceased. I wonder if this sad news will have any effect on the excellent Wings &

Wheels annual show at North Weald aerodrome that has been staged by Jane for over 30 years. I do hope not.

Kenley Show.

I did mention in last month's Sticks & Tissue about an event taking place at Kenley airfield on Sunday September 10 inviting anyone with a "B" certificate to bring along their aeroplanes and have a fly in front of the public. Well at a cracking Croydon/Caterham clubnight "design, build and fly a model" evening recently, the main organiser of most things around our way, namely James Gordon, has told me that the flying part of the event has been cancelled due to most of the pilots going elsewhere.

Biggin Hill Festival of Flight.

I was away from home and therefore couldn't get to the Festival of Flight at Biggin Hill (which is one mile away from my house) organised by Colin Hitchins recently. This person knows how to organise those individual details that make his a great show to go and enjoy. For instance his team mark out the huge car parks with large alphabetical signs that make it easy to locate your vehicle at all times. A local engineer approached me saying that it was a really great show and "what a finish!" he said. Having previously looked at the super list of aeroplanes that would have been demonstrated there I suggested "the Belgian F16?" – "No" said he. "The Saab Gripen?" Again "No!" "Ah" said I "of course it was the Red Arrows?" "Nope!" "Well what it then?" said I. "The Spitfire!" was his answer. Now there's a true British gentleman! Well done Mr Hitchins.

The BMFA National Championships.

I was kindly sent an invite from the chairman of the BMFA to go to this year's National championships at Grantham but my Jan's right knee is giving her such agony that we were at Maidstone hospital instead and her having a noisy MRI scan. I was looking forward to having some fun on the Fun Fly flight line but I was reading the latest Aeromodeller in the hospital waiting room instead. Deepest apologies to all for my absence but as you all realise, my lady comes first. If the editor James Parry allows I'll see you all next month so all the best.



Yours truly some years ago at Kenley airfield after presenting the Breitling Wing Walking team to some 20,000 attendees.



This Old Warden Modelair control line Voestak "Sparkie" designed by Ron Moulton was a joy to watch flying and listen to the sound of the engine as well.



A super Croydon / Caterham clubnight was enjoyed recently when we were given one hour to design, build and fly a rubber powered model outside the clubhouse in the dark! Wonderful fun.



We all know the face from assisting in the Flitehook shop seen at one of Old Warden's Modelair events.



Always smiling is the Tooley family who are regular attendees at Modelair events at Old Warden.



This free flight, assist Dakota (from way back) with added rudder area seen at the free flight area at one of Old Warden's Modelair events.



It always pays to advertise and we all know the quality and quantity of Belair kits seen at one of the Old Warden's Modelair weekend.



The last flight of the Vulcan seen at last year's Blackpool free airshow.



Father and son team of Dave and Greg Hayfield in front of his huge scratch built biplane the Pitts Python at the Tom and Jane Stephenson's Wings & Wheels this year.



The Class 2 winning trio from this year's BMFA national championships with 1st Andy Ellison, 2nd Nick Lester and 3rd James Gordon.



This year's BMFA Nationals Fun Fly flight-line team at Grantham.



This year's Blackpool airshow said "good afternoon" with a bang from the RAF Typhoon on full re-heat! Picture by Trevor Lowe.



The Battle of Britain Flight (minus the Hurricane). Picture by Paul Watson. at Blackpool this year.

Dave Bishop of DB Sound. Email davedbsound@gmail.com

Wimborne MAC control line meeting 1 October Sunday

Yes it's that time of year approaching rapidly. Six grass circles, good weather and a portaloo what more could you want.

This twice a year event has been running a number of years now and good fun so get your gear ready and come along.

The site is at Cashmoor which is on the A354 between Blandford Forum and Salisbury. There will be signs on the road grass verge and entrance gate. Nearest location is the Cashmoor Inn, DT11 8DN. From the car park head towards Salisbury and approx. 300m on the right side of the road is a pull in and two gates, one will have signs on it. Drive up the track and there the site is.

For further information contact Chris Hague 750hague@gmail.com

Or James Parry 01202625825

HOT NEWS! SAM 35 DATES FOR YOUR DIARY

We're delighted to announce that SAM 35 has been granted permission to hold two Vintage Model flying events this Summer and Autumn at Middle Wallop - Europe's biggest grass airfield!

The dates are June 11 and October 8, both Sundays, and everyone - SAM 35 members and non-members alike - is welcome, subject to the conditions set out below.

The emphasis will be on fly-for-fun and, in addition to RC, we plan to have control-line flying - full details will follow in SAM Speaks. Brian Lever intends to CD a BeeBug Bash (details and rules on the Home page at sam35.org). More classes may be added.

Entry to the airfield* is from 9.30 am and there will be a Pilots' Briefing at 10 am.

Throughout the discussions, it has been clear that the MOD's H&S regime is now far tighter than ever before, hence we need to take particular care to ensure safe flying. Please therefore take note of the following conditions:

- **NO BMFA "A" OR "B" CERTIFICATES ARE NEEDED. HOWEVER, ALL FLYERS WILL BE REQUIRED TO REGISTER THEIR TRANSMITTERS AND MODELS AND SHOW A CURRENT BMFA MEMBERSHIP CARD - NO CARD, NO FLY!**

- **2.4GHZ RADIO EQUIPMENT IS TO BE USED EXCLUSIVELY**
- **THERE WILL BE RANDOM SPOT-CHECKS TO VERIFY CORRECT FAILSAFE OPERATION. PLEASE ENSURE THAT YOU AND YOUR MODELS ARE READY FOR THIS!**
- **THE MAXIMUM NUMBER OF MODELS AIRBORNE AT ANY ONE TIME WILL BE RESTRICTED TO FIVE**

The Museum of Army Flying will levy their usual charge at the gate* (probably £5 PER PERSON - TBC) for entrance to the airfield. *Note also that when you reach our site on the airfield, there will be a further charge of £5 per person. This is to help defray the cost of our Licence. The only exceptions will be wives and partners.*

* DIRECTIONS TO THE ENTRANCE GATE:

We should now enter the airfield from the usual place, i.e., the Museum Car Park.

That's all. If you have any questions, please ring David Lovegrove on 01491 200558 or email dflovegrove@hotmail.com"

"Under the terms of our Licence, freeflight is not permitted and please also note that the airfield authorities do not allow dogs on the site". Pop it in under the section starting "The emphasis will be on Fly-for-fun . . ."

**SEPTEMBER 2017 SHILTON
VINTAGE (FLY IN)**

BLACKWELL FARM

9 & 10 September 2017

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 6 p.m. Bring your sausages and burgers and enjoy an evening with like-minded people.

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

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

Caravans/Camping £10.00 for weekend
Flying £5 per pilot.

Local facilities are available in Carterton 3 miles away.

CONTACT: Nick Blackwell Tel: 01285 657610 (evening only)
Email: nick@nickblackwell.co.uk

OR Boycott Beale Tel 01993 846690
Email: bealekraft@outlook.com

Directions:

By road from the north:

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

By road from the south

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

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

Peterborough Flying Aces Nationals, Sunday 3rd September 2017
at Ferry Meadows, Nene Park, Peterborough PE2 5UU .

NEW EVENT ! BIG CASH PRIZES ! KK Elf Precision.

Precision flight time contest for the "Elf" model (Super complete kit available from The Vintage Model Company (VMC) or Brian Lever (blever@btinternet.com). Target times posted on the day at control.) Model must use a 6 inch Dia Plastic prop (spares available from VMC)

Note! The Elf is also eligible for the Rubber Ratio Contest (see below). Prizes, kindly donated by The VMC, will be determined by "Elf" Placings in **both** "Rubber Ratio" **and** "Elf Precision" (1st £50, 2nd £30, 3rd £20). **Photo by Aeromodeller of "World Record for Most Elfs"-12.45pm at Scramble location.**

Rubber Ratio: NO MAX. Any rubber powered model with wing span 16"-25" (tip to tip). Flight score is total time in secs (from 3 flights) divided by span in inches. **Cash Prizes** for "Elf" models! See above.

SCALE MODELS - NOTE! All scale models, except Masefield entries, are judged for accuracy, workmanship and flight profile. Please bring the plan or, if scratch built, the 3 view.

Open Rubber Scale- Any scale rubber model, to which Masefield-type bonuses will be applied. No flight judging, just duration plus bonuses. Please present model to control for processing.

Open CO2/Electric Scale "Stand off" scale judged against plan/ three view plus judged flight profile of launch/flight/landing. Any CO2 motor/tank permitted.

Kit Scale ANY rubber powered kit model up to 36" span. Model judged against kit plan plus judged flight profile. Cash Prizes, donated by The Vintage Model Company, for highest placed VMC models

Jetex/Rapier Authentic Scale Judged against model plan/three view and judged flight profile.

Jetex/Rapier Profile Scale Judged against model plan/three view and judged flight.

P-20. 20" span and length. Max 8" plastic prop, 6 gram motors (may be external)

Cloud Tramp 5 flights NO MAX. (best and worst times discarded, and the remaining 3 times totalled. Note! If fewer than 5 flights logged the best and worst are still discarded.

Tailless Rubber Duration: Max span 30" (tip to tip). Max rubber 10gm, Prop 9.5" max dia. commercial plastic. (may be modified.) No inflight movable surfaces except DT)

Frog "Senior" Rubber Duration (for plan <http://www.houseoffrog.co.uk> or PMFC see below

Catapult Glider: Catapult, max 2 grams rubber on a 6" max handle. This equates to a 280mm length of 3/16" rubber tied into a single (140mm) loop. Any model permitted.

TableTop Precision Precision flight time event for Rubber models which must Rise off Table.

36 inch Hi-Start Glider; Any glider up to 36" span launched by the supplied "Hi start" bungee. Also includes a prize for best performance of a **SCALE** glider (proof of scale reqd.)

Best Unorthodox: Must be seen to fly (by either Scale Flight judge)

Rubber Scramble: 20 minutes, use any rubber powered model that qualifies for one of the above events. Competitor must both wind and launch but may use a retriever.

Flying Swarm Mass launch for any non electric model that is eligible for one of the day's competitions. Last model down is the winner.

Young Flying Aces; Prizes for 3 best Juniors (Junior - 17 years or under on 31/08/17)

World War One Tribute event: Until 2018 we will award a prize for the best scoring model of a **WW1 combat aircraft** flown in any of the scale competitions.

Prizes for 1st place: **Scrolls** for 1st, 2nd and 3rd: **Raffle** Including Kits donated by The Vintage Model Company.

Note: this is a Free Flight event: strictly no Radio Control: Proof of Insurance required for all flyers.

Revel in the special atmosphere created at this unique event.: Discounted parking. Toilets, café, and Park Visitors Centre. For more details of events visit the Peterborough MFC Website at www.peterboroughmfc.org OR contact Brian Waterland on 01778 343722 (07717 461000 on the day)

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
Tel. No. 02380 861541

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

2017

10th September 2017
8th October 2017
12th November 2017
10th December 2017

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

2018

Sundays 10.00a.m. to 4.00p.m.
14th January 2018
11th February 2018
11th March 2018
8th April 2018

Tony Penhall Vintage & Antique model Aircraft plans

Prices of plans and postage do fluctuate, upwards, so check with Tony, details below		Plan	P&P
		£	£
1935	KING BURD Cabin high wing American Gas model 60" span	8.95	1.50
1934	WAKEFIELD by R.T. Howse Bristol club member 48" span	8.95	1.50
1937	WAKEFIELD as above but 31" span	8.95	1.50
1936	SKYROCKET by AK Brooks (BMAS) 90" span petrol model	11.95	3.00
1933	BLUE DRAGON 1934 Sir John Shelley Cup winner designed by Captain CE. Bowden a pioneer petrol engined models	11.95	3.00
1938	EAGLET by Ben Shereshaw a pretty American Gas model 44" span nice performance with the Brat .16 petrol motor	8.95	1.50
1939	Cloud Models Dorking ELF petrol model span 52" by R.J. O'Neil	8.95	1.50
1946	SWALLOW or MONOCOQUE MIDGET a very pretty elliptical wing petrol model for the Elf or Ohlsson .23 engines	8.95	1.50
1936	A little known 72" petrol model, named PETIT DRAGON ROUGE by Captain. CE Bowden	11.95	3.00
1946	KANGETTE SENIOR a monocoque fuselage biplane span 44" by Captain CE. Bowden	9.95	3.00
1946	MIDGET At 23" span this tiny cabin design by Bowden gives stable sparkling performance with .5cc diesel .	6.95	1.50
1936	PORLOCK PUFFIN designed and built in a single night by Bowden and his lifelong friend JFP Forster for the Elf or 2.5cc Spitfire 60" wing span with fine performance	8.95	1.50
1936	PLW 5 Captaln Bowdens fifth low wing petrol model for the Elf petrol engine, span 54"	8.95	1.50
1938	CLUB CONQUEST a fine flying cabin model at 68" span for the 6cc Drome Demon petrol engine	9.95	3.00
1946	NEPTUNE FLYING BOAT by J. F. P. Forster his favourite bus! This classic design from a Master spans 62" for Brown Junior or Ohlsson .60 petrol engine with Radio Control	17.00	3.00
1936	CL OUD, CRUISER by American Harry Moyer with strut braced wings stringered fuselage and open cockpit this design commands skilful exacting building. A fine semi scale light plane type	11.95	3.00
1935	MISS AMERICA Frank Zaic design in conjunction with his friend Carl Schmidig superb performance from this cabin high wing classic	11.95	3.00
1936	TREVETHICK MONOPLANE by Richard Trevethick at 58" wing span this model placed second in the Sir John Shelley Cup Competition that year fitted with the Brown Junior engine and rudder bias gear	11.95	3.00
1935	MILTON SPECIAL Wakefield entry from Australia 42" span	6.95	1.50
1946	BLACK MAGIC Fred Hemsalls classic cabin model for Ohisson 23	8.95	1.50
1940	J.L. Sadlers PACEMAKER Ultra stable low wing model at 78" with very fine performance .	11.95	3.00
1935	HONEY The Little 36" span high wing prototype for the ELF engine as designed by American pioneer Dan Calkin in the USA	7.95	1.50
1938	ALPHA CORSAIR a reduced scale model of Joe Beshars design with wonderful performance for the Junior Brown Junior engine	8.95	1.50
1940	SKYLARK An interesting out of the rut Gull Wing model by American Louis Garami for Ohlsson 23 or Bantam .16 engne 51" span	8.95	1.50
1938	PRIVATEER by Charles Lutman cabin high wing for 2.5cc petrol	8.95	1.50
1938	M.S. BEE 47" cabin high wing model by Lutman	8.95	1.50
1938	M.S. WASP 39" span open cockpit biplane again from Charles Lutman	8.95	1.00
1938	DALLAIR SPORTSTER. This American beauty has superb performance at 108" span and is suited to free flight or RC conversion	14.00	3.00
1946	KEIL KRAFT SOUTHERNER MITE Pretty Bill Dean job for the Amco .87 diesel	7.95	1.50
1939	NEW RULER: A 72" span polyhedral wing, open cockpit semi scale design by Henry Struck USA Two piece plan requires joining. Brown Junior power or similar 8cc or 10cc engine	10.95	3.00
1938	AIR TRIALS SPORTSTER A stable high wing cabin model, another great little 46" span	8.95	1.50

	design from the hand of Ben Shereshaw		
1938	PRIVATEER SENIOR 72" span cabin petrol model sister to the 54" span junior model by Charles Lutman of The Model Shop, Newcastle	11.95	2.50
1938	COMODORE by Ben Shereshaw USA 72" monocoque a very fine cabin job for brown Junior engine	11.95	2.50
1938	SCIENTIFIC MERCURY Ben Shereshaw again 72" cabin	11.95	2.50
1946	WORLD RECORD flying wing by Josh Marshall for 1 cc diesel	8.45	1.50
1940	THUNDERBIRD 45" span from the USA	8.95	1.50
1972	Post vintage Asymmetric flying wing by P Fisher X-AC-5	8.95	1.50
1947	SCARAB by Albert hatfull for Amco .87 diesel	8.95	1.50
1938	BERRILOID trophy winner by D Coover USA 72" span	11.95	2.50

All plans are posted by return where possible

You are strongly advised to contact Tony to confirm prices of plans and cost of post and packaging

T Penhall
62 Gordon Road
Little Paxton
Cams
PE19 6NB

Phone 01480 472658



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

Here are just three of the growing collection see all the others on our website

Martinsyde Elephant - electric scale 50 inch

Ref: res-martele

The latest design in the Belair range of small electric scale models. Parts Set for the Peter Rake Martinsyde Elephant.

The Martinsyde "Elephant" G100, a single-seat fighting scout, was large and unwieldy - hence one explanation for the nickname "elephant". Originally introduced as a long range fighting scout it proved unsuitable in this role and from 1 July 1916 it was used predominantly for bombing duties.

Our Parts Set includes full size 3 sheet detailed construction plans, plus laser cut parts, including fuselage sides, bulkheads, formers, wing ribs, tip shapes, scale control horns, wing tip scale outlines, fin/rudder and tailplane parts, wheel cores, plus many smaller items. Builder to add their own stripwood and covering.

Specifications

Scale 1:1.325, wingspan 50.35 inches. All wood construction, for 400 size brushless motor setups and 3 cell lipoly. 4 channel - ESC, Rudder, Elevator and Ailerons



Price: £60.00 Inc VAT
66.00 USD | 71.03 EUR

Fokker DVII Parts set and plans

Ref: res-fokkd7

The Fokker D.VII was a German World War I fighter aircraft designed by Reinhold Platz of the Fokker-Flugzeugwerke. Germany produced around 3,300 D.VII aircraft in the second half of 1918.

The D.VII quickly proved itself to be a formidable aircraft.

Our Fokker DVII is modelled at Wingspan 38" span and a scale of 1.3"=1ft. It is suitable for 400 size brushless motors and the kit includes laser cut parts in balsa and plywood plus a multi sheet plan. Builder to supply their own stripwood and wire.

Price: £60.00 Inc VAT
66.00 USD | 71.03 EUR



Price: £60.00 Inc VAT
66.00 USD | 71.03 EUR

Bellanca Skyrocket - 42 inch Electric Parts Set and Plan

Ref: res-bellsky

From the Golden Era of flight, comes the elegant Bellanca Skyrocket. With a wingspan of 42 inches, the design is traditional all wood construction and modern CAD design features.

A full size multi-sheet plan is included and the laser cut parts set includes all the balsa and plywood parts required to build the basic airframe, such as fuselage sides with spar slots and wing position holes laser cut for accuracy, formers, bulkheads, cowl components, wing ribs, shaped spars, tip shapes, trailing edges, struts plus many smaller items.

Specifications

Scale 0.9" to 1ft, 42 inch wingspan for 400 size electric brushless motors and 2 cell lipoly batteries. Rudder, elevator and motor function.

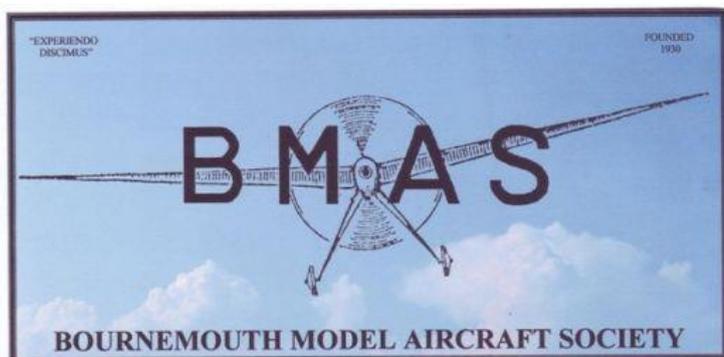
Image of laser cut parts is not for the Skyrocket, but is typical of kit contents. Builder to supply stripwood and covering to complete basic airframe.



Price: £60.00 Inc VAT
66.00 USD | 71.03 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>



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

25th July
22nd August
19 September
24 October
28 November

Dens Model Supplies

Traditional and Electric Control Line kits and accessories for the Sports Flyer

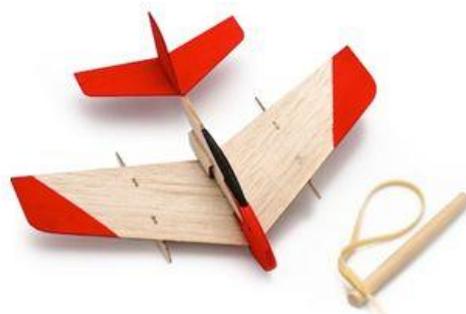
*Exclusive UK Stockist of the range of E-Zee Timers
For Control Line – Electric Powered FF – Servo DT Only*



E-Zee Timers

Black Hawk Models

stevensTM
aeromodel 



Kits and Cox 049 Engines from under £20...CL Cox 049 Starter Package £60....Electric CL Plug and Play Starter Package £80.....Glow Plugs from Merlin....hard to find CL accessories at sensible prices.....E – Zee Timers from £12

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