



The "Kelling Flier" No7

Hi again and welcome to Issue 7! Don't forget, if there is any item or article, that you would like to share with your fellow members, please forward it to me at awjenkins@sky.com.

Thanks and thank you to all of you for your items to date! Andrew

STANS QUIZ CORNER



Here are the answers together with another group of aeroplanes for you to identify. Good luck!

Keep balsa bashing, Stan!

QUIZ 7 - WHAT'S THE AEROPLANE ?

1. Ding! That reminds me - Hayley had one in the sky.
2. Willy's swallow sure was fast.
3. Another street trader and this had 'done a runner'.
4. Our overseas cousins have come swinging back.
5. 'Bolt your cranium' and see stars.

Answers to Quiz – 1. Avro Lancaster, 2. Bell King Cobra, 3. MIG Farmer, 4. Short Seaford, 5. Fairey Flycatcher.

Stan reminisces over his experiences with a vintage glider.

As a teenager, free flight models were 'the thing'. Money was saved for the latest kit of the best. I saved, from my pocket money, enough to purchase an A2 competition sail plane called the Norseman. It had a very flat glide but it was a pig on the line.

Comes the club glider competition, I thought I could win, if only the thing would allow itself to be towed up. One of the club's experts suggested moving the tow hook back a bit and then "shock horror" didn't he know, the further back the hook, the greater the towing difficulty. However, I was persuaded to move the hook back. We bodged a temporary one for the competition and WONDERS, the Norseman went straight up to the top of the line. Wow!



"The Norseman" as remembered by Stan



After two flights, I was in the lead. I only needed 24 seconds on my last flight. (No problem). I could see myself as the club champion. (Aah, youth!). The 'no flight' rule was 21 seconds. I started to tow the model, going up fast and straight and then PING, the temporary hook parted company from the glider. The Norseman was in a 45 degree climb and, of course, it stalled. It proceeded to come down in a series of stalls and landed with a time of 22 seconds. No re-flight as it was over 21 seconds and under the 24 seconds needed.

Close, but no cigar! - Stan

I have attached an advert from the 1950 edition of the Aeromodeller (at 1 shilling and sixpence !!!) featuring Stan's prized Norseman together with a sketch by Stan as he remembered his beloved aircraft! The plan for this model is still available at :- <http://www.ebay.co.uk/itm/MERCURY-NORSEMAN-GLIDER-PLAN/133036990>



A NORDIC CONTEST MODEL BY MERCURY

THE recent announcement of the new International Contest for Nordic A2 class sail-planes will soon see thousands of modellers enthusiastically building for this season's contest and those who choose the Mercury Norseman will be assured of building a machine with the finest possible performance and with structural design to stand up to the heaviest going.

designed for the highest standards of competition flying. It will please the most critical, and the kit being complete in detail assures the builder of the Norseman that his model is strictly to Nordic A2 standards when built to plan. Ask your Mercury dealer to let you see the full size plan included in the kit with its real photo views of the fuselage construction. They instantly reveal the Norseman to be a model of outstanding merit from every point of view. The complete kit with pre-cut and pre-printed balsa costs 17/6, from all Mercury dealers.

AND THE PERFECT GLIDER FOR BEGINNERS



Go to your Dealer and examine the Magpie Kit. You will see at once that this 24" glider needs absolutely no previous experience, and that someone can build this first-class flying model. The kit is complete and includes pre-printed balsa, simple step-by-step and building instructions, and a complete set of plans to follow to fit.

MERCURY MAGPIE 3/9

This is the model chosen by Rev. F. Cotton as suitable for beginners in his article in this journal.



TRADE ANNOUNCEMENTS

The following items have been added to the Mercury Range since publication of the 1950 Mercury Catalogue. A height meter should be available through Mercury Dealers.

- BURPH 4/9** A new Class 1 Diesel by a famous maker. 59/6
- YULON - 29** A really 'hot' Glider. Plans for all sizes taking 5 c.c. engines. Hand finished to highest standards. 77/6
- YULON - 49** A super 49 c.c. Glider. Plug Engine with terrific engine. 79/6
- MUSKETIER 19/4** A height meter should be available through Mercury Dealers.
- TRIPSTRIK** In 10-inch bands, 12" x 17" long 17 bands. Choice of 6 combinations. Per set 44/-
- TEAM RACING TANK** Exact to S.M.A.E. specifications. Every one guaranteed correct. 1/6
- FUEL TANK** This new Mercury Pressure Feed Tank has built-in fuel gauge. To be used with the 'magpie' or 'Norseman'.
- MIVAC** One of our best pre-filled sub-miniature valves - the best of its kind - 17/6

MERCURY MODEL AIRCRAFT SUPPLIES LTD., LONDON, N.7

Telephone - North 4272 and 3. Copies limited from home and overseas buyers. Catalogue and list on request.

BUILDERS BOARD



Dave Frank's Dornier

The picture of the Hirobo Dornier 335 Arrow of Dave Franks from Issue No 3 brought to mind Andrew Taylor's own version of 1984 and was his first attempt at foam cutting for all of the flying surfaces. The model had a wing Span of 60 inches and weight of 14 lbs and was powered at the front by an OS 60 using an OS geared reduction unit with 13x8 prop, whilst, the rear motor was an OS 40 FSR. With a balsa planked fuselage and all

sheeted wings, the finished model was tissue covered and painted. Top secret, the fuselage is a little smaller than the wing scale to allow it to fit in the car for transportation purposes. Andrew adds that it flew well (by his standards at the time!) and was a very pleasing project. The full-size aircraft was noted as being the fastest prop driven (experimental) fighter plane of the time. Thanks for the article and pic! (Andrew's Chipmunk wheels can be seen in the in the background.)



Nick Kirk takes us through part-one of his transformation of his Black Horse Hurricane.....



A couple of years ago whilst attending one of Andrew Taylor's fly-ins, I watched a very nice Hawker Hurricane being flown. After it had landed I went over to the pilot and asked him about the model. It was a Black Horse ARTF of about 88" wing span.

The Model at Muckleburgh, as it comes, factory finished

On the Monday after the event I placed an order with Pegasus Models. 2 days later I went to Norwich to collect a very large box containing my new Hurricane. Assembly was just a simple follow the numbers exercise. The only departure from the standard fit out was to replace the air operated retracts with electric driven ones.

The model is finished in a sort of self-adhesive heat shrink pre-printed film covering. All markings are pre-applied on the film with the camouflage before being attached to the all wood-built model. Consequently, all the Black Horse Hurricanes look the same. I like my models to be a little different.



Picture showing the S-Guns under the wing

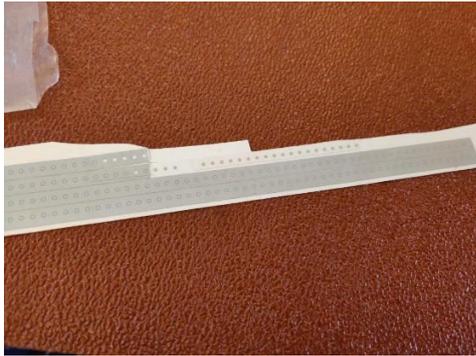
Vickers 40mm 'S' Gun



So a decision was made to transform my

Hurricane into a MK11D tank buster Hurricane, nicknamed the "Flying can opener". So called because of the armament the aircraft carried. Two Vickers 40mm S-guns, and two .303 machine guns. One of each in both wings. I had made the decision early on to add as much detail as was practical, to make the model more realistic. This included panel lines and rivet detail, a bit of work in the cockpit area and making some S-guns for under the wings. Larger Vokes tropical air filter under the cowl.

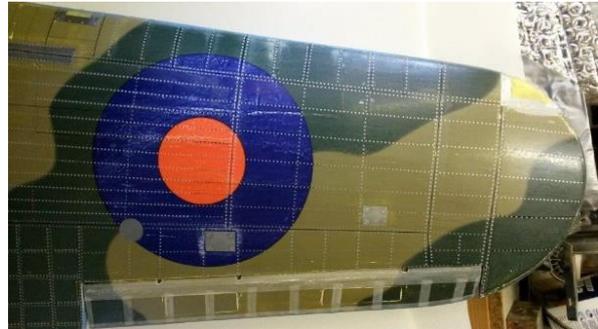
The first thing to do was to rub down the plastic covering with fine grade, I used a sanding pad, used dry. It was all too easy to sand through as I found to my cost later on. I started with the wings, a nice flat surface to get my hand in, so to speak. When the wings were finished, I made sure that the covering was still intact and patch any hole where the rubbing down had been too enthusiastic.



Mick Reeves rivet system

I had downloaded some drawings by Arthur Bentley to help with the locations of panel lines, rivets and hatches. Anyone who is thinking of making a scale model should have a look at his list of drawings, they have a lot more details than can be got from just old photo's.

I used a ballpoint pen pressed into the film to make the panel lines,



being careful not to press too hard. It's surprising how long it takes measuring and drawing the lines on. I had done a rivets before, but these were the flush type not mushroom head as fitted to the hurricane. Mick Reeves does a rivet system that consists of sticky backed plastic (SBP), laser cut along its length into 6mm strips, within the strips are very small laser cut circles. After finding out where the rivet lines are on the model it's time to apply the rivets. The method I used, was to carefully remove the 6mm strips of SBP (leaving the tiny circles on the backing for later) and sticking the strip onto the model. Then using a Humbrol silver paint, just paint over the holes left in the strip of SBP. I found that 2 coats thickly applied was enough. When dry gently rub over the strip with sand block and remove the SBP strip and there you have it, a nice row of perfectly spaced mushroom rivets.

The small circles are removed from the backing by placing ordinary sellotape on top of them then



cutting the sellotape into strips and after firmly rubbing over the rivets remove them now attached to the sellotape from their backing. The tricky bit is stopping the sellotape now with the row of rivets on the sticky side from curling up. Position the tape with rivets over the rivet line on the model and stick down with a firm pressure, slowly and carefully remove the sellotape, I found peeling it back on itself was the best way to make the rivets

stay on the model and not come away with the tape. The odd rivet that stayed attached to the tape was easy to pick it off with a scalpel and applied to the model. One wing with a combination of stick on and painted on rivets and inspection panels. To replicate the fabric covered ailerons I used laser cut rib tape, again from Mick Reeves. These look like solar-tex. They come in a pack of various sizes, you just pick the one is right and iron it on. If you can zoom in on the picture you may be able to see that the edges of the rib tape has a zigzag finish. Nav lights on the wing tips were made from clear plastic sheet 1mm thick. My method to make these is as follows. First draw the nav light on the wing tip with thin felt marker pen. Then get your plastic sheet and heat with a hot air gun until it goes floppy then quickly pull it over the marked area of the wing tip where the nav light is, Let it cool and go hard again. Mark through the plastic sheet and cut out the light. Remove the wood from the wing tip and add any detail inside, then glue on the tip light glazing, trimming to fit.

On the under side of the wing I tried making the rivet detail using white glue and a syringe, I never did get the affect I was happy with. My rivets were all different sizes unequally spaced or with air trapped in them. I lost count how many times I tried with thicker or thinner white glue, different size needles. I even tried just silver paint.



Tool for colour nail dots

As I was having my nails done in Cromer..... No, that's another story.....

Back to the rivets. I next tried a cocktail stick, dipping into the white glue and applying them one at a time. Still not the result I was looking for. If I could get the cocktail stick to hold more glue I might be able to do more than one at a time. Back to the nail bar. There was a picture in the window of multi colour nails with dots on them. These dots were very uniform in size and shape. So, swallowing hard I went in and asked to see how the dots were applied and if there was a tool for the job.

It's just like a cocktail stick with knobs on the sharp ends. I got a set of five from "Bangood". You can load the end of the dotter with glue and place it on the model just where it should go. No bubbles and with practice very close to being all the same size. It can hold enough glue for about 5 or 6 rivets..... Bliss.

(More building projects in the next instalment and part two of Nick's Hurricane!)

Geoff Cleall continues his Citroen 2CV rebuild



While beginning to scout around for replacement body panels, I started work on the engine. It seemed to be in good nick having shown excellent oil pressure and no smoke from the exhaust. 2CV engines are pretty bullet proof. They are twin cylinder and are air and oil cooled. The crankshaft/con-rod arrangement is unusual. The one-piece con-rods complete with big-end sleeve have to be fitted to the crankshaft. For this to happen the crank shaft is made up of separate crank pins and webs. The pins are temporarily shrunk by immersion in liquid nitrogen, the con-rods and webs are slipped on and it becomes a robust and solid unit once returned to normal temperature. They very rarely fail. The picture shows the engine from the front. The cylinders are finned as are the missing cylinder heads. The substantial oil cooler is mounted across the front.

I was able to buy pattern part replacement floors, sills and bulkheads and I welded them in. I cut out all of the other rust and made up the replacement parts from mild steel sheet and welded them in too. I'm a bit short of pictures on this but I've got a picture of me welding in a door sill. The body tub is on its side supported by scaffold tubes running across the garage.



It was about this time that I decided to change the colour. I didn't really like the acid green of the Bamboo Model and went for another Citroen 2CV colour, Bleu Celeste. However, The Bamboo Special Additions are rarer so it probably would have been worth it to keep the green. I also decided to brush paint the car. This was because my compressor wasn't big enough and I wanted to avoid overspray in the garage. After preparing the metal, I brush painted six coats of cellulose primer over the panel in the 'Union Jack' fashion. ie, first coat brushed vertically, second coat brushed horizontally, third coat at 45 degrees one way and 4th the coat the other way so as to minimise brush marks. I left it for a couple of weeks to get really hard and flatted it back with 400 wet and dry used wet with soap. The cellulose gloss coat was the same except that I used retarder to slow the drying time and I used 400, 800, 1000, 1200, 1500 wet and dry followed by polishing compound. That rubbing back process on a wing would take a morning and the end result was that it looked as if it had been sprayed.

There was much to do in the rebuilding of the chassis but I'll just pick out a few interesting points. The rear brake drums contain the wheel bearings and they are held on by a massive nut that has to be done up to 250/300 lb/ft. It required a suitable socket, a massive 'T' bar and about 6 feet of scaffold tube. The front brakes are inboard discs. Inboard is good because it reduces unsprung weight. Each disc has two pads for the foot brake and two smaller ones for the hand brake. So, with the hand brake on the front wheels, handbrake turns are a no-no.

The steering rack was in good order but the king-pins and the track rod ends were in a sorry state. I made up a copy of a Citroen special king-pin extractor to help. I mentioned the suspension in Part 1.



Well, the rods that come from the suspension arms to the springs are adjustable in length and by such means it is possible to change the ride height at the front and the back.

The last pic shows the body tub mounted on the galvanised steel chassis, duly repainted with the re-con gearbox, suspension, brakes and steering fitted. Next, I chased about the countryside tracking down the

remaining body panels. More of that in the final part.....

Andrew Taylors airfield

For those of you not on "Whatsapp, Nick has been in contact with Andrew Taylor today. He has very kindly agreed to let us fly at Binham again on our usual Thursday afternoon and evening slot. Please leave your noisy models at home. If you have not used this fantastic flying site before, please contact Nick or another committee member for directions. It is an outstanding site and you will be very impressed.



"Your article" – Could be here in the next instalment! So get scribing and emailing and share it with our fellow modellers

For all you hungry aviators.....

ALBERT'S MUM'S CAKE

The following recipe is from the Haynes Owner's Workshop Manual for the SE5. It is for Albert Ball's mum's fruit cake passed

down through his sister to the RAF Museum. It seems that Albert was very partial to it and apparently wrote to his Mum:

'I was so pleased to get your ripping cake, but I have nearly finished it.
I love to take a huge piece with me when I fly'



Albert Ball, VC, DSO & Two Bars, MC (14 August 1896 – 7 May 1917) was an English fighter pilot during the First World War.

At the time of his death he was the United Kingdom's leading flying ace, with 44 victories, and remained its fourth-highest scorer behind Edward Mannock, James McCudden and George McElroy. The Germans called him "the English Richthofen"

Ingredients:

- 225g caster sugar
- 225g softened Butter
- 3 eggs
- 225g sieved plain flour
- 225g raisins
- 110g chopped dates
- 110g chopped plums (fresh not dried prunes)



,Cooking:

- Cream together the softened butter and caster sugar, then slowly add the eggs to the mixture. Once mixed,
- fold in the flour and begin gradually sprinkling the fruit into the mix as you fold.
- Heat the oven to 160 deg C (gas mark 3) and place a tray of water in the bottom.
- Pour the cake mixture into a 9" loaf tin and bake on a higher shelf for 50-60 minutes until deep brown with a discernible crust.

It makes a very substantial and hearty cake. Just the job to keep you going during a visit to Muckleburgh! (My wife has made it for me and I thoroughly recommend you all try it! – Andrew)
Enjoy!

Mini 1S Watt meter

Chris Bott has designed and sourced all the parts for a small 1S LiPo watt meter for indoor electric power set ups and is selling kits, or a finished assembled unit, for those who do their winter flying indoors. There is a thread on the RCM&E forum here;

<https://www.modelflying.co.uk/forums/postings.asp?th=156406> a very useful bit of kit if you are mixing and matching indoor FF and RC power set ups. It is a cottage industry offering, so please respect that Chris is doing this to help us out and is making the kits to order.



Three of Chris' Watt Meters, the first ones off the production line.

Identify the Item!

So what was the item in the last newsletter? Robert Folan identified it correctly as a magnetic prop balancer. Well done Robert.



See if you can guess this one!
Email me with your ideas and the first correct answer will get a mention in the next issue.



Suggest a caption!

This an amazing photo of Colin Woollacott's glider at Andrew Taylor's, but can any of you suggest a caption? I'll post them next issue!, So get thinking.



and finally..... A word from our Chairman

Hello All,

I hope that you are keeping well and have been able to enjoy some of the good weather we have had lately. There seems to be maybe ten of us going flying at the moment and last Thursday saw our first use this year of Andrew Taylor's flying field. Six of us were there from mid-afternoon to early evening, there was brilliant sunshine but the wind was strong and gusty and certainly challenged our piloting skills. Despite this we got in quite a bit of flying and all the models went home intact; so all in all a good afternoon out. We will be back again next Thursday, weather permitting, and it would be good to see a few more familiar faces if you feel able to. (See the attached photos of the models in action)



Earlier in the week I was at Muckleburgh and had a mishap that was a reminder of the need to make sure we check over our models regularly and highlighted a basic assembly error. I was flying my trusty old Acro-wot which many of you will have seen. It was about ten years old and has been used a lot. I'd already had two flights with it that morning and on the third time up I put it into a big arching wingover. All was going well until I went to

pull out on the downward leg. The model didn't respond to the elevator, although the other controls were working. The inevitable happened and the photo shows the end result. When I checked over everything the culprit was soon evident. As shown by the next photo, the elevator pushrod had unscrewed itself from the quick link on the servo. I hadn't fitted a locknut.....dummkopf! A salutary lesson and a mistake I won't make again. If any of your models have a pushrod with a quick link at both ends it would be worthwhile checking that you have used a locknut and preferably some Loctite to prevent the same thing happening.



Nick Kirk was also at the airfield that day and had brought along his newly finished Focke Wulf 190 mentioned in the 'Builders' Board' of the last newsletter. As the photo shows, it's a great looking model and it was an ideal day for its maiden flight. The photo of it flying doesn't do it justice, it was taken with my phone, but it looked the part. Nick plans to make a few tweaks to it and hopefully we should see it again soon.



Finally, I'll sign off by saying thank you to all of you who have contributed towards making this newsletter a great success. However, there are still quite a number of you that we haven't heard from and it would be good to hear about some of your projects.

Cheers, Steve

Our first Thursday at Andrew Taylor's.....



And they all went home with smiles on their faces!!

