



# The "Kelling Flier" No.8

Hi all, I Hope you are all keeping safe well and starting to get out with the relaxation of restrictions. Thank you again to all of you who have contributed. ALL your items will be used. Please continue to submit all items to me at [awjenkins@sky.com](mailto:awjenkins@sky.com).

Thanks, 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 8 - WHAT'S THE AEROPLANE ?

1. Up by the Canadian border, a horse is hanging up.
2. The cook burnt the dinner and then did it again!
3. In the West Country, we find the owner of flying licence no. 1
4. Top of the Christmas tree and glowing in the dark.
5. 'Whose' is the well-dressed water bird?

Answers to Quiz No 7 – 1.Bell Aircobra, 2.Messerschmidt 262 Swallow, 3.Hawker Harrier, 4.Commonwealth Boomerang, 5.Lockheed Constellation.

## BUILDERS BOARD

Edward Allen has sent in this update of his Silver Spitfire which is now ready for its maiden flight. As Edward writes, the Cambrian Models Fun Fighter kit (with an OS 25FP), was bought some 15 years ago. His son 75% built it after school before going to university and it sat unfinished until Lockdown. It has been covered to commemorate Richard Younghusband who died flying a silver Spitfire out of Langham in 1954.





The full-size replica will be erected at Langham Dome hopefully for Battle of Britain Day on 13th September, rules permitting. It is at present in our barn at Langham being readied for the mounting/ swivelling structure. *A fitting tribute and great looking model along- side its full-size counterpart, thanks Edward.*

Langham Dome, which sits on the edge of the former base, is one of only six remaining training domes in the country and was built in 1942. The others are at Pembrey, Limavady, Mildenhall, Wyton and Shoreham. Film of enemy planes was projected onto its walls for target practice.



**Nick continues the transformation of his Black Horse Hurricane.....**

**Painting the model.**



I did not want to use spray paint. I hate the mess and all the cleaning up of equipment. It take ages to mask up and prepare just a small part to be sprayed. What I wanted was the effect of a spray finish. The method I used was with a small 2" foam roller with enamel paint from Kings Lynn models.

They do a range of paints for both Allied and Axis aircraft in sensible sized tins. Thinning down a bit and testing on a scrap piece of depron foam I found that all the egg shell finish you can get with a roller flowed out, 2 coats of azure was enough to cover the bottom of the fuselage and wings. The top of the wings and upper fusealage was done in the same way, 2 coats slightly thinned. Where the 2 colours met, the roller was held at a slight angle which left a nice fuzzy sprayed on effect.



*Paint used on my Hurricane*

## Fuselage.

The same procedure of rubbing down on the fuselage as the wings. On the open structure stringer section between the cockpit and tail group I rubbed a bit too hard and sanded through the film in several places, too many to patch. I removed what was left of the affected area exposing the built-up structure. I have to say that the build quality of the model is quite good, I found no glue less joints.

I had to get some fabric for the rear now naked fuselage, I chose silver Ora-tex. It's just like Solar-tex, heat shrink fabric. It ironed on well and shrunk down well, more importantly has stayed tight.

Panel lines and rivets were done using the same method as for the wings. The only difference was that it was much harder to work on not being flat like the wings.



*Supplied canopy*



*DB canopy*

The canopy supplied with the kit is not a very good likeness of the real thing so it was replaced by one from DB Sport and scale. If you look at the photo's you can see what I mean.



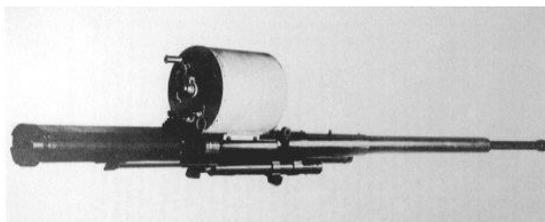
A cockpit instrument panel and gun sight, both from Mick Reeves were added, whilst the cockpit frame was made from SBP and painted over. The pilot is not dressed for desert ops, he may be a bit warm in that gear! Laser cut and painted kit from Mick Reeves. Small details add to the overall finish.



*Detail showing instrument panel*

## The S-Guns

Two of these were fitted, one under each wing. Each held only 15 rounds of ammo. They could be fired off one at a time or like a slow firing machine gun. I read that the pilot would first fire



the .303 machine guns and watch for the fall of shot, when bullets started pinging off the

target he would let go with the big guns. The pilots often flew very low to the ground which made them vulnerable to even small arms fire from the enemy, many planes and pilots were lost.



*S-Gun under wing showing removable barrel*

My S-guns are made from blue foam and a small amount of plywood, are held onto the underside of the wings by a plywood tongue and very strong magnets from an old brushless motor. The foam was first covered with light weight fibreglass attached with 3 coats of ronseal floor varnish rubbing down between each coat. Then painted and weathered. The white patch can be seen on the picture of the real hurricane's S-gun. I think it's where the spent brass cartridge was ejected from the breach after firing. The patch was made from paper and attached with dope or glue that when the gun was fired the cartridge would break through. It was necessary to keep sand out of the guns workings during taxiing and take-off.

#### **Vokes air filter.**

The Vokes tropical air filter was also made from blue foam, sanded to shape and finished in the same way as the S-guns. It was attached to the underside of the cowl with epoxy and faired in with a little filler. All of the modifications to the hurricane airframe had an adverse effect on performance, top speed and rate of climb.

*Final part and reveal in two weeks!*



**(More building projects in the next instalment!)**

## **Following Stan's article with his vintage glider in the last issue Andrew Taylor writes.....**



Stan's experience of a pig of a glider on tow rather mirrors my own with Kiel Kraft Dolphin of the same period but smaller than an A2 of course.

This came back to haunt me recently as I still had the plan of the 33 inch model which I have now scaled up three times to be more in keeping with the 60cc petrol glider tugs that visit Binham. The new model was a pig on tow as it `Dutch rolled` all of the way up the line. A very few tows later something had to be done by way of modification. The polyhedral on the wing was done away with and a small amount

of dihedral added at the centre section together with ailerons. This eliminated the tendency to roll which I think was caused by the acute dihedral on the outer wing panels of the original design and exacerbated by maybe an overly fast tow.

The model fuselage uses foam board top and sides. The tail plane and fin/rudder are conventional balsa, all one piece and 'tex' covered. The wing is cardboard with foam ribs and hardwood spars. Undercarriage from a KK Outlaw. The model needed a massive amount of steel in the nose but Roy Salter was on hand and suggested moving the wing back a bit, which obviated the need for any more. It has turned out to be a useful machine as a glider towing experience builder, and still glides pretty well. *Nice model and great article- thanks Andrew!*

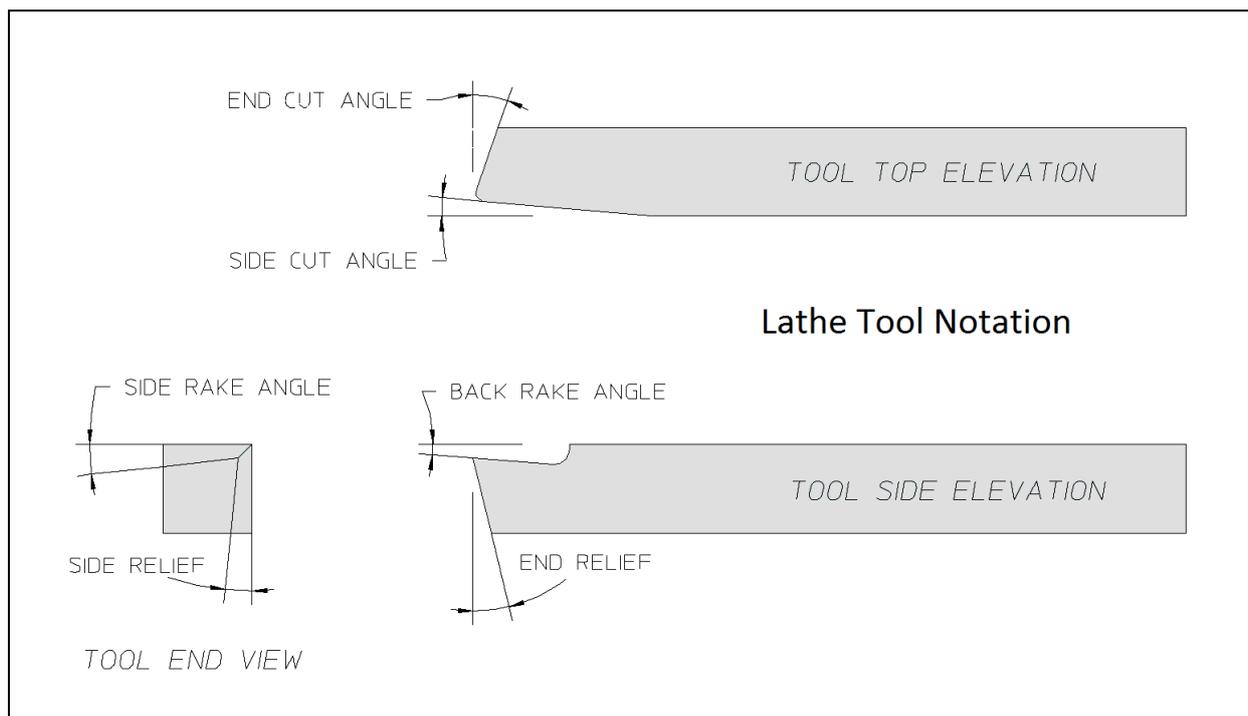


Andrew with his "Dolphin" giving scale to the upsized model

## George Dean shares an article to our lathe enthusiasts...

George has spent most of his working life using lathes and milling machines and has a great deal of knowledge and experience to offer. This item covers lathe tools and I would suggest anyone with any queries regarding the subject to get in touch with him for assistance. George's main lathe is a Myford 3.5 x 20 inch Tri-leve with a full screw-cutting gearbox. In addition to this he also has an IME 'Ideal' 3.75 x 20 inch which he doesn't use much as well as a Perris 1.5 x 6 inch and a hefty Elliot milling machine. *Quite a collection, I think you'll agree!*

## Tool Grinding Data



## Suggested Tool Angles

Material	Side Relief	End Relief	Side Rake	Back Rake
Aluminium	12°	8°	16°	35°
Brass	10°	8°	5° → -4°	0°
Bronze	10°	8°	5° → -4°	0°
Cast Iron	10°	8°	12°	5°
Copper	12°	10°	20°	16°
Steel	12°	8°	12° → 18°	8° → 15°
Tool Steel	10°	8°	12°	8°
Stainless Steel	10°	8°	15° → 20°	8°

### Tool Grinding Sequence

- Side relief and cut angle
- End relief and cut angle
- Radius tip
- Side and back rake angles

## Right and Left hand Cutting tools

### Right handed cutting tool (Tool Cutting towards Chuck)

A right-handed cutting tool, the common one, can remove material while moving leftward (take only top view keeping rake surface at top). The name is derived from its analogy with human right hand. As shown in the picture, the thumb direction represents the tool feed direction. The principal cutting edge of the tool must be at left side of the tool, as shown below.



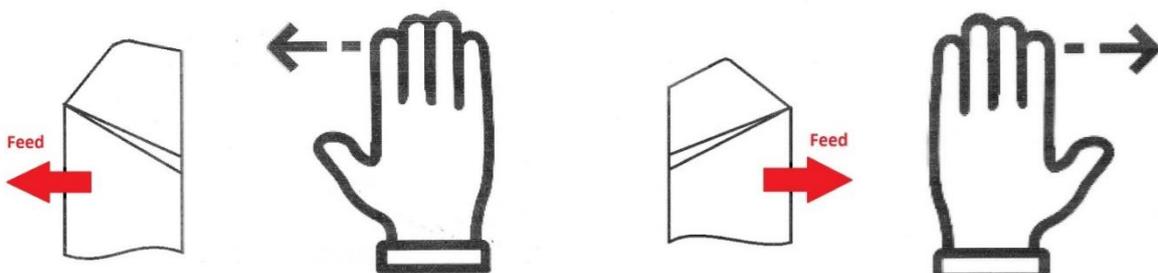
*Myford 3.5 lathe*

### Left Handed Cutting Tool (Tool Cutting towards Tailstock)

Opposite to the right-handed cutting tool, a left handed cutting tool can remove material while moving rightward (here also take only top view keeping rake surface visible). The name is derived from its analogy with human left hand as the left-hand thumb direction indicates the tool feed direction. Therefore, the principal cutting edge should also be at the right side.



*Myford Tri Lever lathe*



## Geoff Cleall finishes his Citroen 2CV rebuild



I started to look for second hand replacement panels. I needed a new rear wing and four doors. After contacting the 2CVGB Club, members began throwing them at me and I soon had a good wing and 13 doors to choose from, all in different colours. The



doors were not rusty but with a skin thickness of only 0.7 mm they all had many small dents. They sometimes split along the top edge and getting rid of dents is like working on a large biscuit tin lid. The front doors are on hinges but the rear ones are held on by gravity and can be slid off vertically. I was able to keep the bonnet and that too has no hinges and can be slid off sideways. The existing boot lid was good.



Removing the rear windows was quick. The doors are flat and if you lay them on the ground, stand on the glass, which is a little above the concrete, there will be a bang and the glass is out and the seal is undamaged. The flat windscreen is more difficult.



I learned that you can be pretty brutal whacking in toughened screens but laminated ones won't take the slightest degree of bending. Mine was laminated and I cracked it.

I picked up the door from North Walsham, the wing from Peterborough and the replacement screen from Huntingdon. The hood and the upholstery were new after-market parts both replicating the originals. The hood, just like any soft top, had to be tensioned carefully. I also had to re-rubber the saggy and cigarette burned seats before fitting the covers.

The distributor is a strange device. It fires both plugs at the same time. One is on the compression stroke and provides power and the other is wasted on the exhaust stroke. It is a make or break arrangement that is extremely simple. It still has to advance and retard though. The distributor lurks behind the fan and lots of cooling ducts all of which have to be removed in order to change the points. I fitted a 123 Electronic Ignition because it is 'solid state' and can be left alone for life. I also fitted a stainless steel exhaust and new wheels and tyres.

I took five years rebuilding the car, working off and on, drove it for five years and then sold it. I often regret the sale. It was simple, different engineering and good fun. I bought the car for £100 and sold it locally for £4,000. I spent £2,900 on parts so unusually I made £1,000 profit not counting labour all of which was DIY. If I sold it today it would probably get £7000+ because the cars are getting rarer.



The last car away. Charles Clark Classic Car Rally 10.07.2011.

The new owner rang me up soon after he had bought it and said "Hello old boy, I was driving along the other day and there was a Gawd almighty bang!.....only joking. If you ever want to borrow it for the day, just say the word." The final picture is of me being flagged away on the annual charity Charles Clark Classic Car Run. There were lots of awards at the end of the Rally,

but the 80 other entrants voted my car as the 'Fun Car of the Day'. The question is. What next?  
*Brilliant conclusion to a great article – thanks Geoff.*

## Something from John Well's kitchen.....



Following the recipe of "Albert's Mum's Cake" in the last issue, John Wells has been using the "lockdown" time to great effect with some baking and he has recreated the war time treat, with mouth-watering results as can be seen in the picture. *Looking forward to tasting future bakes!*

## Identify the Item!

So what was the item in the last newsletter? George Dean was the first to guess a teaspoon. Well done George. See if you can guess this one which has been supplied by John Wells! It is from WW2 and you **WONT** find one in your workshop! Email me with your ideas and the first correct answer will get a mention in the next issue.



Don't forget, if you have an unusual object in your workshop or of interest to our readers, take a photo and send it in!

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



### **HELP!! - Caption still needed!**

This amazing photo of Colin Woollacott’s glider at Andrew Taylor’s from issue 7, deserves **AND** still needs a caption, so put your thinking caps on chaps and email them to me and I’ll post them next issue!, So get thinking.

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

Hello All,

I hope that you are continuing to keep safe and well and that you will soon be able to take advantage of the lifting of restrictions in addition to the good weather and join us at the airfield. Don’t forget that we are able to use Andrew Taylors flying field on Thursdays. It is great to see the variety of items and articles that our members have supplied to the “Flier” so please keep them coming! My DH71 has progressed and I will be sharing an update with you all soon. Nick and I paid a recent visit to the airfield and have given it a good cut as can be seen from the attached photo. (thanks *chaps* and its looking great- Do you do hair-cuts! Ed!)



Thanks, Steve.

