November 2013 Meeting – John Cuckow

John is a member of the Suffolk Mid-Coastal Club at Dallinghoo and chose to demonstrate turning pens.

Before he started he mentioned that he always uses the same supplier for his pen kits as the tube dimensions can vary between different suppliers. He said that as with most things, you get what you pay for it. The cheap kits are nowhere near as good as the more expensive ones.

The first stage is to cut two sections from a length of 25mm square blank. The length of each section should be equal to the length of the tube insert they will hold plus 4mm (2mm for each end). The next step is to drill an appropriate sized hole down the length of each section. A chuck fitted with long-nosed jaws is mounted on the lathe and the square sectioned blank held firmly in it. A hole is then drilled using a bit in a Jacobs Chuck mounted in the tailstock. John recommends drilling a pilot hole first and then to final size. He says that this stops the drill from "wandering". The drill bits he favours are manufactured by "Colt" and sold by Axminster.

With the holes drilled the next stage to glue the brass tubes into the holes that have just been drilled. To ensure a good bond between the tube and the glue, the outside of the tube is roughened with coarse abrasive. Glue is applied to the tube and some is placed inside the hole. The tube is pushed into the hole. John explained that various costly jigs can be used for this but he uses a simple system he made himself which consists of two turned discs, each with a morse taper turned to fit the lathe. The blank is held against one disc and with the other disc in the tailstock an even pressure can be applied to insert the tube. The tube should be inserted so that the end is 2mm inside the wooden block. As the glue sets it foams and expands so the ends of each blank need cleaning and a barrel trimmer mounted in the Jacobs Chuck is used for this.

Having trimmed both ends of both blanks with the barrel trimmer the two blanks are mounted onto a "pen mandrel" with appropriate sizing bushes between and at each end. The two blanks were then roughed to a cylinder with a spindle roughing gouge and final shaping done with a skew chisel. When the final shape had been obtained John then carefully sanded through the grits and ended by sanding with the grain. He then cleaned the surface with white spirit to remove any dust.

John then explained that any finish could be used but he was going to demonstrate was the use cyanoacrylate. He used 3 drops of a medium grade CA glue on a piece of tissue and quickly rubbed it over the surface of the turned wood. He followed this with a "mist" of accelerator. This process of applying glue followed by accelerator was repeated several times to build up a reasonable layer. When satisfied with the number of layers the surface was cut back by sanding lightly with 180 grit and then working through various grades of micromesh. To get the final finish John applied burnishing cream and then buffed it up.

The pieces were removed from the mandrel and then the pieces of the pen were assembled starting at the nib end and sequentially adding the rest of the components until the pen was completely assembled as in the photo.

Other pens made by John.