## The Journey from Penturning to Penmaking

by Kurt Hertzog

## **Ditching the Centerband**



In today's market, 7mm pen kits are usually packaged to give the penturner everything needed to make a pen, except the "cladding." Included in the kit are the innards, the mechanics, the inkfill, and the external fittings. You add some glue, wood, a quick bit of turning, and voilà, you have a pen. Though following the kit directions allows you to produce a pen, clipped or clip-less, you are pretty much limited as to the sizes and shapes that can be made. Great for beginners, but pretty limiting for those who have moved a bit farther down the path.

The centerband exists to allow for easy assembly of the kit parts and to accommodate the twisting required to actuate the transmission. It is a dimensionally forgiving interface between the upper and lower barrels. As long as you get the barrel diameters pretty close at the centerband, it will look and feel okay. The problem is that it forces your design to meet the dimension of the centerband. Regardless of the pen shape, the centerband severely inhibits your freedom (see Fig. 1). Let's get rid of it. As an example, we'll take the ever-popular 7mm slimline kit, get rid of the centerband, and greatly expand the options.

Having decided to ditch the centerband, the next decision is whether you want the finished pen to be the original kit length or whether you would like it to be shorter. Without compensating for the loss of length of the center-



Regardless of the kit maker, the 7mm centerband really cramps your style.



Some different interface treatments compared to the usual 7mm kit.

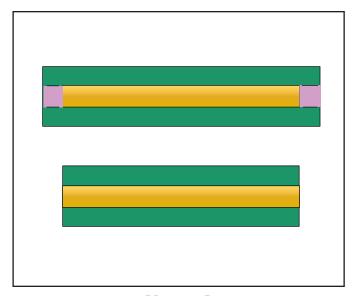
band, you'll have a pen that is 0.160, or about 1/6" shorter. If you like the slightly shorter pen, the task is simple. Glue up and face the pen blanks as usual, then turn the two barrels together on the mandrel without using the sizing bushing between the two barrels. Obviously, the clip and nib end interfaces still need to be sized properly to match those dimensions at the press-fits so you can use the bushings at the ends. However, the middle part of the pen can now be turned to any diameter desired. Gone are the "skinny minny," straight-walled 7mm pens, or the need for the endless beads and coves. You now can make a pleasing, plump pen that not only looks a bit more like a pen, but also has a heftier and more comfortable feel in the hand, as well as in the pocket. Nothing changed in the kit but the loss of the centerband. Assemble the kit

as usual, pressing the transmission to the required depth for proper inkfill extension. The pen will be identical in function, with the only difference being the minor change in length.

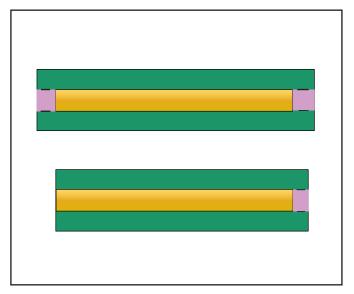
If you would like to make up the missing length, or would like to make it slightly longer than the original pen would have been, the sequence is as follows. Rather than facing the pen barrels on both ends flush to the brass tube

## **Color Key for Diagrams**

Green = Pen Body Material Pink = Open from Drilling Yellow = Brass Blue = Mandrel Bushings Red = Pen Mandrel



**Diagram A**Standard barrel faced at both ends flush to the brass tube.



**Diagram B**Face one end flush to the tube and face the other end proud of the tube.

16 • Woodturning Design Spring 2009

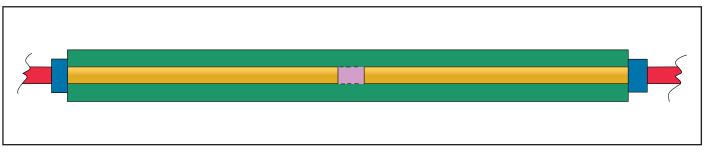


Diagram C

Turning both barrels on the mandrel without the center bushing.

(see **Diagram A**), you can leave this additional length on one end of one of the barrels or on one end of both barrels (see Diagram B). The final look of the pen will be different if you make up the missing length on only one barrel as opposed to a bit on both barrels. If you desire the pen to be longer, add some extra. Face the pen barrels as you normally would, so you have a perpendicular surface on each end. The difference is that one end of the barrel will be flush to the brass tube and the other end will have a short length of unsupported wood past the end of the brass tube. The ends of the tubes that are flush to the brass will be the nib and clip press ends. Orient the barrels properly on the mandrel to allow for this. If you use bushings, use the bushing on the nib and clip press end, and skip the bushing between the barrels (see **Diagram C**). The pen diameter in the middle of the pen is again your choice, not the kit makers.

The beauty of this method is that the dimensional match in the middle of the pen should be perfect. You'll be turning, sanding, and finishing the pen with that interface butted flush together. The fit should be flawless. I usually put an accent piece of material on the mating end of my pen barrels. I do this when I am prepping them. Since you will have a seam there, don't try to hide it. Accentuate it.

My method of adding an accent is to face that end of the barrel (leaving the extra material), glue on the accent material, drill through the accent from the other end using the brass tube as a guide bushing (a "D"-sized drill works nicely for the 7mm tube), and refacing the accent end to the desired accent thickness dimension. I use a pen mill for my facing operations, piloting on the ID of the brass tube. Accents at the interface can be a con-

Don't miss the Seventh Annual Penturners Rendezvous on Wednesday, May 13, 2009. See a day full of penrelated demos at the CSUSA Super Wednesday and then join us for the Rendezvous at 7PM at the Utah Woodturning Symposium site. See details at www.penmakersguild.com and www.utahwoodturning.com.

trasting color of wood or plastic (see Fig. 2). That interface can also be accentuated by chamfering the edges to highlight it. By breaking those corners, you'll also help prevent the inevitable ding that always seems to get put into any sharp corner. The thickness of the accent(s) can be anything you wish. If you want to make it appear that your pen has a centerband, make one integral to one barrel or the other. You'll have the freedom of material, diameter, and shape.

Getting rid of the factory centerband on a 7mm kit can help start you down the path of being a penmaker, rather than a penturner. You are now making the pen of your choice using the parts you want, as opposed to mechanically turning the crank on a kit. You always had control of the material. Now you can control the shape (size and length) and the interface location, as well as its appearance. You can take the simple 7mm kit and make it whatever you want. Experiment with the "centerband-less" pen and see where it takes you.



## **Kurt Hertzog**

Having been a turner for about 10 years, Kurt Hertzog is enjoying the entire continuum of wood-turning from making tools to photographing turnings. A regular columnist for *Woodturning Design* magazine, frequent demonstrator, and instructor on many facets of woodturning, he particularly enjoys teaching sharpening, workholding, and advanced penmaking. A past officer in several AAW chapters and current officer in two, Kurt is also one of the five council members of the Pen Makers Guild and past chairman of the Rochester Woodworkers Society. You can see examples of his work at www.kurthertzog.com and www.penmakersguild.com.