

TideWater WoodWorkers Guild
August 28, 2006 Regular Meeting Meeting
Minutes

The Regular August 2006 Meeting of The TideWater WoodWorkers Guild was held in the JANAF WoodCraft Store, Norfolk, Virginia on Monday 28 August 2006. Called to order by President Andy Steinberg at 7:05 P.M. EDT, Members and Visitors present were welcomed by President Andy, other officers of the Guild were introduced, as were new members and visitors. The President also thanked the officers and other supporting members for their help during the past several months, his home having been under renovation and the painters having begun the final phase of the work today.

The podium was then relinquished to Vice-President and Program Chair Bret Lancaster who, in turn, introduced member Gene George who would demonstrate his method of making Box Joints using shop-built jigs and other tools essential to the production of quality joints.

Before his demonstration of this technique however, Gene showed the membership a small drawer/tray/box attractively lined with green material, every bit of which is available from stock in our host store. The box itself is a small (approximately 6"D x 8"W x 1"H) open-topped box with box-jointed corners and lined with green flocking. The box is made as the following demonstration would illustrate, and finished (i.e. flocked) by placing it in a home-made "garage" (a used cardboard box approximately 14" H x 24"W x 14"D, open in front) and spraying the flocking material onto the interior sides of the wooden box, using a simple "squeeze tube" containing pre-packaged flocking, which interior surfaces have been coated lightly with an oil based enamel paint in a color to match the flocking, This paint acts as an adhesive for the flocking material. After drying overnight, any undesired flocking is removed by a light sanding.

Proceeding with the demonstration, Gene stated that, while some authorities distinguish between *Box Joints* and *Finger Joints*, the same authorities refer to the *Fingers* of the *Box Joints*, so he uses the terms interchangeably. Box joints and dovetail joints are both strong and handsome, making them both popular; and in some cases it is virtually impossible to make a hidden box joint.

If one is to produce a quality box joint, it is wise (or essential) to use an *adjustable* jig, to calculate with care, and to make practice runs using scrap material. It is important to mark mating surfaces so as to avoid accidental mismatches, and to dry-fit so as to avoid improper spacing of fingers. It is also important to make cuts on the front and back members *before* making cuts on the side members, since any (unavoidable) variance will then be slight, more slightly and easily dealt with by a bit of light sanding. It is important to note, too, that front and back members should have *closed* joints at top and bottom; and if the box is to be made with a closable top (sawed from the bottom after box is assembled) measurements must take into account not only space for glue (approximately .003" - .004" per cut) but the saw kerf as well.

Discussion of jigs for cutting box joints was an important aspect of this program. The jig used by Gene George is shop-made, using plans published in the March 1993 issue of *ShopNotes* (reprints available). Another shop-built jig was shown by Dr. Bob Waddell and

featuring infinite adjustability. Because measurement is so important and cutting demands so precise, a variety of jigs, both shop-made and commercially produced, is available, each (as with every internal combustion engine) with its own peculiar characteristics, advantages and disadvantages. The principle in all is the placement of the guide pin: it must be of the correct thickness and placed so that the first cut is in the precise location; all following cuts are simply a matter of placing the previous cut over the pin, making the cut, placing the cut over the pin and cutting until all cuts are complete.

Because the jig must travel repeatedly over the blade it is essential that the jig-and-member assembly be constantly in the same relationship to the blade; and therefore the jig must be attached to the fence, table or mitre guage in such a way as to maintain this relationship. This is commonly accomplished by attaching the jig to the mitre guage, or by shop-making a sled to which the jig is attached. One way of building the sled is to cut a pair of slides to fit precisely into the mitre guage tracks, dressed to the depth of the tracks less one US 1-cent coin, and attach the slides to the underside of the jig-bed using wood screws, dress the screw heads to meet the slide surfaces, and maintain a smooth wax finish. This will maintain smooth operation and a fixed relationship to the blade.

Since the width of fingers is usually the same as thickness of the stock being used, adjustability is essential and precision is critical; therefore variability in adjustment methods - marks most differences among them. Another important consideration is *tear-out*, making some a sacrificial surface (*e.g.* 1/8" fiber board) important on the following edge of the cut. For precision spacing of cuts a variety of gauges is available (*e.g.* drill bits, machinists gauges, dial micrometers)

Cutting technique itself is a matter of jig-adjustment, cutting the front member, setting the first side member firmly against the edge of the front member and making the first cut, laying the front member aside and finishing the side cuts, setting the back member firmly against the edge of the first side member and making the first cut; setting the first side member aside and completing the cuts to the back member, setting the second side member firmly against the back member and making the first cut thereto, and cutting the remaining cuts to the second side. If all measurements and adjustments have been correct, very little sanding should be required for near-perfect fit. Blades for cutting fingers are commercially available.

Gene uses TightBond-3 glue for joining the corners, because it is somewhat slower curing than others, an advantage to assembly time. Because the corners must be square, a variety of clamps, forms and other devices (shop made or commercial) are available for achieving this goal. Final sanding should always be done *with* the grain.

Further items included announcements that the next Regular Meeting will be on 25 September 2006; that the August Newsletter was unclear, so the contest mentioned therein will not close as scheduled; some Porter Cable parts are available at the Black and Decker repair station; we have no new members and one (1) visitor present ; TWWWG Ball caps are available for purchase; the Delta presentation was well enough attended that there will be additional such programs, held at the WoodCraft Store; that through the generosity of the WoodCraft Store Management, TWWWG members purchasing tools there may may request that a copy of their

store receipt be placed in our TWWWG envelope located at the register counter. These club receipts are tallied every quarter and a gift certificate in the amount of 2 percent of our purchases is issued to our club. Finally, some mention was made of a possible Winter Solstice Festivity (Hanukkah? Christmas? Bacchanalia?)

The meeting was adjourned by President Andy at 8:20 PM EDT.

Appended to the meeting was a demonstration of the new Saw Safe table saw used in the demonstration in cutting finger/box joints.

Respectfully submitted,

Bill Hoffman, Recording Secretary