Lake Charles Woodworkers Club, Inc. August 2010

Mentoring Program - If you have a project, a problem in any woodworking area, these members have volenteered to help. Give them a call. Jeff Cormier: 582-3278; George Kuffel: 478-2707; John Marcon: 478-0646; Chuck Middleton: 625-3134; Gary Rock: 433-1679; Eltee Thibodeaux: 436-1997; Dick Trouth: 583-2683. Each have years of experience and knowledge.

July Meeting Highlights

The shop of Kay and Tom Bergstedt was our meeting place and a fine shop it is. Their property is large and the home is a gracious one. Thanks to both for providing an opportunity to visit.

Both Jim Couvillion and Robin Richard are recovering. Robin has had a recent knee replacement.

Drawings were held for both the Show and Tell as well as the Bring Back Item Jeff Cormier was awarded a Stines Gift Certificate for the Show and Tell and Jack Stegall won the Bring Back Item (a purple heart bowl by Barry Humphus). Dick also passed around a magazine that featured some of Gary Rock's bowls.

For Show and Tell this month, Pie Sonnier brought us a Rubber Tired Backhoe, a tractor with a front mounted loading bucket and rear mounted digging bucket or hoe. Some of the woods used in this project included cherry, maple and black walnut.

Mr. Thibodeaux:: Eltee had four projects: The first was what he called a unity cross or marriage cross. The cross is made with up of two crosses. According to Eltee the two are joined together and made into a single cross or "unity cross" when the mother of the groom and the groom join the two after the wedding ceremony. The scoll saw project was using sassafras wood.

Eltee also had two pine boxes with hinged lids which were hinged using dowels rather than metal or mechanical hinges. The second of the pine boxes also incorporated dove tails to joint the pieces. Eltee's fourth project was a sample leg joint for a table. He used through dove tails and a bolt and wing nut to hold all the corner together.

Jack Stegall had a business card holder that he made using a highly figured piece of black walnut he had acquired from North Carolina.

Barry Humphus was not present (but sent his bring back project to the meeting - he was at a workshop in Salzburg, Austria). Barry sent a bowl turned from a piece of purple heart for the Bring Back Item and won by Jack Stegall.

Donald Elfert had two projects the first being a coffee table made from scrapes of Redwood from a home remodeling project. Donald's second project was a round table made of pine and ¾" plywood. The round top of the table was surfaced with a large stick on linoleum floor tile.As always, Don had copies of drawings for the projects for those who were interested. Just contact Don if you are interested. He is a master draftsman and can certainly give you a hand at layout and design or drawings should you need this.

Ray Kibodeaux had a gun stock and forearm project made of Fig Nut with a finish that gave the pieces the appearance of molded plastic.

Larry Eagle had a flower vase that was made of ceramic and wood. The ceramic vase was mounted in wooden base made of 4" X 6" pine. The wooden base was milled to receive the ceramic base and was locked into place using keyhole slots and screws. The pine was finished with a wipe on stain.

J. W. Anderson had another one of his fine bench projects. This bench was made of sassafras and magnolia. J. W. used a poly stain for his finish. J.W. should build all of our occasional furniture as it is always impressive, well designed and functional.

Jeff Cormier presented a guitar stand made for his Taylor guitar. Jeff used red oak, cypress and sycamore on this project. A dark stain finished off the project. Jeff plans to build additional guitar stands for friends with Martin guitars. Tom Bergstedt introduced those present to his English style planning horse made from red oak cut from a tree downed by Hurricane Rita. Tom has lots of access to wood, so if you need a plank or two, he is the person to call.

Gary Rock brought more of his turnings for us to admire. Pine/Cypress bowl with brass tubing filled with a colored epoxy embellishing the bowl. The pine bowl was embellished with lacing. A sycamore bowl lidded finished with a wipe on finish and buffed out. The sycamore box as well. Aspen bowl - a rather large bowl which was turned and cut to make it oblong shaped and holes cut for handles. Gary then used a Danish oil to finish. The sycamore bowl was turned and cut much like the aspen bowl then finished with the Beal system.

Coming Up . . . Saturday, August 14, 9:00 A.M. at the shop of J.W. Anderson in DeRidder. Come join the LCWW members at this graet shop in the woodlands.

Choosing a Drill Press

A woodworking Drill Press is an essential device for drilling accurately spaced holes or boring to exact depths. With the right set-up, you can drill at almost any angle without the drill bit walking. With the correct part, you can use a drill press as a spindle sander. Given their versatility and relatively low cost, these woodworking power tools, drill presses, are an excellent investment for most any shop.

For total shop woodworking tools, there are two basic models: Bench-top drill presses are compact. They are fine for small shops. Floor-model drill presses usually have more power, more attachments, and superior material handling capacities than bench-tops. The extra versatility makes floor models good choices for serious woodworkers.

When you are looking for a woodworking drill press, compare the following:

Horsepower (HP) - Higher horsepower allows you to drill larger holes through demanding material. Drill presses range from 1/4 HP and up.

Drilling Capacity - Normally, manufacturers state the size of a drill press in terms of swing. They define swing as twice the throat distance. The throat distance is from the center of the spindle (quill) to the closest edge of the column. A 16" drill press can drill a hole up to 8" from the board to the column or at the center of a 16" diameter circle.

Variable Speed - this allows you to drill different diameter holes through different materials without damaging the material or drill bits. The more speed settings, the more versatile the drill press.

Tilting Table - Better drill presses have large, tilting tables. The tilt allows you to drill horizontal to vertical or any other angle. On most drill presses, you can raise or lower the table along the column.

Quill travel determines the depth to which the drill press can bore holes. Greater quill travel allows you to bore deeper holes. My 16½" Delta has 4 7/8" quill travel, so you don't have to change table height as much.

Depth-stops control the depth to which the quill moves down. This limits the depth of the hole. Depth-stops are good for repetitive drilling. The more precise your depth-stops, the more accurate your drilling operations.

In summary, look for the following additional features: Fences attach to the table and help position stock for repetitive holes.Sanding drums attach to the chuck for sanding irregular edges or patterns. Planer heads attach to the chuck for squaring the edges of stock or cutting rabbets.

Woodworking drill bits are the most important part of the drill press. Without quality, well-maintained bits, the best woodworking drill press will not function accurately. When choosing your bits, match the bit to the material you are drilling.

Steel bits are inexpensive and work well for boring in softwood. Steel bits dull quickly in hardwood.

High-speed steel bits (HSS) are harder than steel bits and stay sharp longer.

Titanium coated bits cost slightly more than HSS bits, but their titanium coating is tougher so the bit stays sharp longer than HSS or steel bits.

Carbide-tipped bits are more expensive than other bits, but they stay sharp much longer than steel, high-speed steel or titanium bits.

Cobalt bits are extremely hard and dissipate heat quickly, they're most commonly used for boring in stainless steel and other metals.

Recomendations - bench-top: Delta drill presses are top rated by many. The most popular bench top drill press is the DELTA DP300L 12-Inch TwinLaser Crosshair Drill Press. The Delta DP300L looks like a basic benchtop drill press but it's loaded with features seen on high end machines. The Twin laser pod is fully adjustable and the red crosshair light will help guide your bit contact point. The 1/3 HP 120V motor provides smooth performance and is reliable. The table tilts so you can do angled drilling if necessary. Speed changes are smooth and easy and the adjustable-position, locking depth stop is great accurate, repetitive drilling. Owners say the pivoting motor mount will maintain the correct belt tension when changing speeds. Overall customers say things like "great for home use", "nice 12 drill press", and "very pleased with the performance". The Grizzly G7943 is another popular benchtop drill press with positive reviews.

Recomendations - floor-model: While Delta may dominate the benchtop models, the Jet and Grizzly floor drill presses are considered the top rated products in this category of stationary drill press. The Grizzly G7944 is one worth looking at. It's a 12 speed, 14" floor drill press that is heavy duty and priced at around $265. The Grizzly stationary drill press is powered by a 3/4 HP, 110V, single phase motor. The range of speeds (all 12 of them) go from 140 RPMs up to 3050 RPM with small increments in between. With a spindle travel of 3 1/4" the Grizzly is very versatile. A more capable drill press is the JET JDP-17MF - this 16 1/2 inch drill press has a 13 3/4" table that tilts 45 degrees right and left. The 3/4 HP motor offers up 16 speeds from 200 to 3630 RPM. Owners report that the drill press is solidly constructed and very sturdy, although some do question it's accuracy. Another model worth considering is the JET 354170/JDP-20MF 20-Inch Floor Drill Press. *Barry Humphus from various sources.*

Checklist to follow before sawing

Of the 720,000 injuries per year associated with woodworking, 42 percent happen at the tablesaw. Yet common sense, proven practices and tried techniques will keep you from harm's way.

That tablesaws rank high as the cause of many woodworking accidents shouldn't be surprising. What woodworker doesn't have one? And it's probably the most frequently used power tool in the shop. Because of that use, it'll pay you healthy dividends to always be on guard around this indispensable machine.

A multi-toothed blade whirling at 7,000 rpm should spur a sense of caution and respect. It shouldn't instill fear. Armed with the advice, rules, and techniques you'll find below, you'll have the confidence to get the best out of your tablesaw, and safely, too.

Begin a habit-forming checklist to follow before sawing California Polytechnic Institute has developed a Code of Safe Practice for a number of woodworking machines as a guide for operators and supervisors in the industry. I suggest you always follow the checklist before doing any cutting with your tablesaw in the shop.

Remove from the saw table all scrap materials, tools, fasteners, and other debris. Also clear a 2' perimeter all around the saw (more where you'll stand if ripping long stock).

Use the blade that best suits the job (never a crosscut blade for ripping or vice versa), and make sure it's sharp. Check the arbor nut for tightness and the blade itself for chipped teeth, cracks, and other defects. Do all of this with the machine unplugged.

Set the blade height. Flat-ground blades should extend no more than 1/4" above the wood. Hollow-ground or planer blades must be raised as high as possible to avoid binding.

Inspect all of your saw's safety devices (the blade guard, splitter, and anti-kickback device, if present) for proper operation. The blade guard must move up and down freely to accommodate different wood thicknesses.

Double-check the location and condition of the on/off switch. Realign the electrical cord to avoid tripping over it.

Set the fence to align parallel to the blade at the width of the cut.

Have safety glasses ready to wear, or if cutting material that tends to chip, a full-face shield.

Because a tablesaw gets so much use in woodworking, turning it on to make a cut becomes as automatic as flipping on a light switch. But it shouldn't.

Ponder this advice as well:

Never run your tablesaw when you're tired. Fatigue leads to errors in judgment and mistakes. In fact, studies have shown that many serious tablesaw injuries occur to woodworkers when most other people are getting ready for a good night's sleep. Also, stay away from the saw if you're on medication or have been drinking alcohol.

Don't rush. Plan all your cuts.

When ripping stock, always anticipate the possibility of kickback. Plan to minimize any damage from it to you or the workpiece. For instance, don't stand directly in line with the blade, but off to the side of it. To make sure your pushing hand won't accidentally run into the blade, hook the small and ring fingers of the your pushing hand over the fence to slide with the wood.

If you're planning to rip boards longer than 3', get a helper to support the wood after it passes through the blade, or use an off-feed table or roller.

All cuts should incorporate either the fence or the miter gauge. Never attempt freehand sawing. Turning the stock on the blade even slightly causes it to bind in the wood and kick back. On the other hand, never use the fence and miter gauge together. If you try to crosscut with the miter gauge using the fence as a stop, for example, the cutoff piece trapped by the blade may fly back at you.

Don't remove the blade guard from your saw unless absolutely necessary to make a specific cut.

Make sure you have a pushstick handy for any cuts that require your hand to pass within 6" of the blade. See designs on the next page in part 2 for two tried-and-true pushsticks you can make easily.

If you have doubts about making a cut, don't do it.

You've got everything on hand, you've gone through the checklist and you've thought through all your cuts. You're set to saw. And as you do, keep the following in mind.

Stand with your weight equally balanced on both feet. If the board should suddenly give, you don't want to run into the blade.

Be absolutely sure that the blade never comes between your body and your hands, either front to back or side to side.

Use a feather board to hold stock against the fence. And make sure you have a firm pushing grip on it.

As you saw, don't reach over the blade to push stock. Always keep your hand as far away from the blade as practical.

If need be, use a pushstick.

If you're making repetitive cuts, stop frequently to take a break. Many accidents happen after boredom lulls a person into carelessness.

After completing the cut, let the blade come to a complete stop on its own. Don't push scrap wood against the blade to stop its rotation.

When you've finished sawing, turn off the tablesaw and lower its blade below table height.

From California Polytechnic Institute, Code of Safe Practice, edited by Barry Humphus.