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Barry Humphus, Editor, George Kuffel
Gary Rock, Jeff Cormier, Dick Trough

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

March Meeting Highlights

Ronnie and Sandy Kramer were our hosts this month and we thank them for doing this. We also had some guests this month: Ronnie Chavin, Milford Crumpler plus John and Ruth Miller. Both Mr. Crumpler and the Millers joined the Club.

Barry Humphus gave the Annual Treasure's Report in Joe Comeaux' absence (but Joe did show up a bit later coming straight from a job). Steve Thomas, Ray Kebodeau and Joe Comeaux were recent guests of the South East Texas Woodworkers in Beaumont.

Steve Thomas' safety talk included information on the SafeStart switch from SafetyGate. This device plugs into your electrical outlet and you plug your power tool into the switch. The device recognizes when your tool is accidentally left on and automatically puts up a protective "gate" that stops the flow of electricity, preventing a dangerous restart.

There was also a discussion of using small pieces of wood on a jointer. The answer is a big no! Any workpiece shorter than about ten-twelve inches is very dangerous on a jointer. In fact, it is best practice to mark two lines on the jointer table indicating at least 10 inches so you won't make a mistake.

There was some user information provided by those who have used the Drill Doctor system that Darex, Inc. donated to our club. All said it does a good job with twist drill bits, spade bits and even masonry bits. Keep in mind that it will not handle any bit smaller than 1/8 inch.

For Show and Tell, Sandy Kramer talked about her scrollwork cuckoo clock as well as her pyrography sampler. J.W. Anderson showed off a nice sassafras and mahogany bench. Pie Sonnier brought a neat wood child's candy machine. Jack Stegall showed off a walnut plack with a music theme.

Ronnie Chauvin, a carver, showed off a few of his beautiful carved duck decoys. They are made from cypress root with pepperidge (aka tupelo) for the heads. He uses both acrylic and oil-based paints.

George Carr showed a couple of nice trivets he carved from lemonwood and finished with a gel stain. Don Elfert had a cypress knee that looked like a pair of pliers

plus a mold he built to pour small yard crosses of concrete. Ray Kebodeau brought us a segmented turned serving tray of mahogany, poplar and walnut. Ronnie Kramer made some cool coasters out of end grain of many woods plus a great outdoor table of cypress.

Bob Theaux had a great bedside table with drawers



out of red oak with a poly finish. Steve McCorquodale had a sinker pine and cypress milking stool replica. The log was pulled out of the Sabine River and Steve said, because of the ring structure, the tree started growing in the late 18th or early 19th century. Steve Thomas did a solid walnut bowl from the wood he got from Steve Hedleski as well as a segmented and painted bowl that resembled some of the Roman pots I saw at the Getty Museum. Steve said the price went from \$200 to \$2 million.



Comming Up . . . Saturday, April 12, 2014 at the shop of Jack and Marie Stegall. Dr. Don Elfert will do a presentation LCWW content Copyright (c) 2013 Lake Charles Woodworkers Club, Inc.

Jointer Basics

Mention of using a jointer with short workpieces (DON'T), we thought it would be good to include an article about jointer setup. The jointer has the important capability of straightening wood, which makes virtually all aspects of building projects easier. However, jointers have limitations and you must understand them to make the best use of this machine. A jointer can machine a face or edge of a board perfectly flat and straight. It can also make adjoining surfaces square to each other. What it can't do is make any surfaces parallel to each other. That is the job of the thickness planer or in the case of edges, the table saw.

The jointer "sees" one surface of the wood at a time. The knives are set parallel to the outfeed table and the machined portion of the wood, sliding on that table is the only registration a jointer has. When squaring an edge, the fence comes into play but the outfeed table surface remains the only point of registration that keeps the edge straight.

The jointer has no way of keying of another surface to make a cut parallel to that surface. Consequently, while the jointer can make adjacent surfaces smooth, straight and square to each other, it has no way to make those cuts parallel to each other.

When working with edges, we often joint one edge straight and then go to the table saw to cut the opposing edge parallel. With the wide faces, after jointing one face flat, the planer is used to cut the opposing wide face flat and parallel to the jointed one. It is this combination of machines that allows us to produce perfectly straight wood with square, parallel edges. For the jointer to straighten boards, it must be set up properly. The fence has to be straight and properly aligned to the table at its various settings, the infeed and outfeed tables parallel to each other – known as coplaner – and the knives set at the proper height and parallel (front to back) with the outfeed table. The instruction manual that came with your jointer should provide specifications and procedures for checking and setting these alignments on your machine. The good news is that most jointers are very similar in construction.

Start by checking the fence to be sure it is straight. A good straight edge at least 24"-long, can be used to detect distortions along the machined face of the fence. Hold the straight edge against the fence and move it from end to end horizontally and diagonally. Watch for a gap at the middle of the straight edge as that will indicate a warp or twist in the face of the fence. Take your time, as these defects are usually very small.

If a gap is detected, a set of automotive feeler gauges can be used to quantify the size of the problem. Find the

thickest leaf of the gauge set that will slip between the straight edge and fence to measure a gap.

If the fence is warped or twisted, the only solution is having it machined flat. Most automotive machine shops can handle this job. Fortunately, a distorted fence is a relatively rare occurrence. If the machine is new, contact the manufacturer for warranty information.

Once the fence is known to be straight, it can be used as a base surface for the first check of the tables.

Sliding an accurate square down the fence will help show if the tables are flat and the fence adjusted properly. This is also a good time to repeat the process with an equally accurate 45-degree square if you have one.

Place a precision square on the outfeed table and adjust the fence so it is exactly 90-degrees to that spot on the table. This is also a good time to be sure the 90-degree stop on the fence is adjusted properly.

Holding the long leg of the square against the fence, slowly slide it down the length of the table, watching both legs to be sure they remain flush with the fence and table surfaces. Move the square to the infeed table and repeat the test, again watching both legs of the square to be sure they remain flush with both the fence and table surfaces. If a gap develops between the square and table at any point along the tables you have to determine if the table is warped or just out of alignment. We'll do a square adjustment instruction next month.

If a problem is detected on a table, use the straight edge to try and isolate it. If the straight edge does not show a gap on the surface, the table may be tilted on its mount. Your instruction manual may provide suggestions for correcting this or you may have to contact the manufacturer for suggestions.

Most jointers have "Gibs" screws but they are used to control the play between the tables and the runners on which they slide. These screws, in most cases, cannot correct a miss aligned table.

Most jointers have adjustment screws located along the seam where the tables meet the base on which they slide. In most cases, these adjust the play between the table and the runners on which it slides. Unless specified by the manufacturer, Gib screws do not change the angle of the table surface.

You also have to be sure the infeed and outfeed tables are on the same plane with each other, a condition called coplaner. Even though they operate on different levels, the infeed table lower than the outfeed, they must be level to each other.

Continued on Page 3

To check this, stand a pair of good framing squares, one on Joints Basics continued from Page 2 each table, long legs on the table surface and the short legs meeting above the knives. Make sure the cutter head is turned so a knife is not aimed upwards.

The short legs of the squares should meet above the knives with no gap between them. If a gap is found, note where on the squares it is. If the bottom of the squares touch but there is a gap at the upper ends, one or both tables are tilted down at their outboard ends. If the top of the squares is closed but a gap exists at the bottom, one or both tables are tilted down towards the middle at the cutter head.

A pair of accurate framing squares helps determine if the tables are aligned with each other. This type of problem is exceedingly rare, especially with better jointers.

While you have the squares on the tables, repeat this check with them at various points on the tables from the rear to the front edge of the tables. A gap appearing at one edge of the tables most likely indicates a twist in one of them.

In either case, discovering a gap is extremely rare. Most cast iron jointers, particularly the better ones have the base and tables assembled and aligned at the factory before a final surfacing pass is made. This insures they are perfectly aligned, or coplaner. Barring a serious accident in the shop or shipping, the tables will remain coplaner. It is also unlikely that these machines will have a mechanism for adjusting the tables individually.

A few jointers, particularly those with aluminum tables (like mine - a Delta) have provisions for correcting an alignment of the tables. If your machine has this capability, it should be described in the instruction manual.

Again, unless specifically stated otherwise by the manufacturer, the Gib screws cannot be used to correct a coplaner error. If a problem with this table alignment is discovered and the instructions do not provide a solution, contact the manufacturer.

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The alignment of the knives is critical and one of the more frequent trouble spots, particularly after the original knives are replaced or reinstalled after sharpening. Most jointer instruction manuals specify settings, often with the knives even with (height) and parallel to the outfeed table. This is a critical setting that impacts how well the jointer cuts as well as the life of the knives. When set perfectly, the knives work equally, last longer and cut cleaner.

I used the Oneway Multi-Gauge, a heavy, machined steel frame with a dial indicator mounted in it that makes setting knives a highly precise but surprisingly easy task. Being able to clearly see variations of less than 0.001" enables me to get the knives perfectly aligned with very little effort.

Waxing the table and fence surfaces is easy and makes this machine much easier to operate correctly. Plus, the wax helps protect the cast iron surfaces.

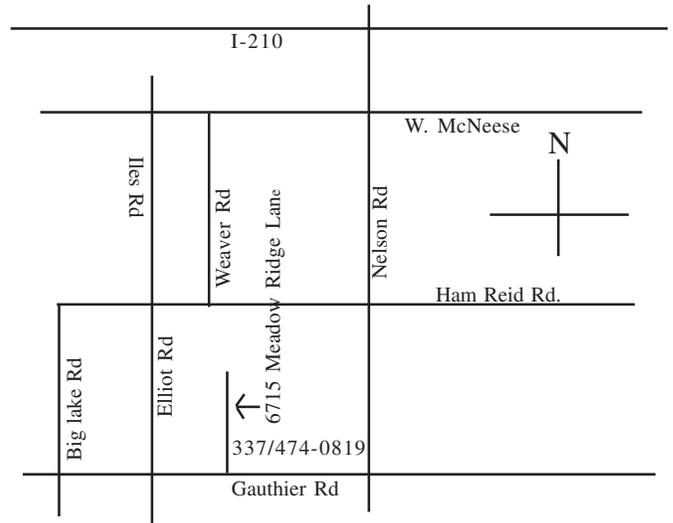
I have found it easiest to start with the knives set a little low and then, with the Multi-Gauge, carefully bring them up so they are level with the table across it's full width. I set each knife at a time and make sure that the cutting edge is at its highest point in the rotation of the cutter head. The accuracy of the Multi-Gauge means that if this procedure is repeated on each knife, they all will be perfectly aligned to the table and each other. *Barry Humphus.*

April Meeting Location

For the very third time, we are meeting at the shop of Jack and Marie Stegall. Jack is an excellent woodworker who does great boxes.

To get to his place, go South on Elliot Road (Note - Iles Rd turns into Elliot Rd) to Gauthier Rd and turn left. Go 1/2 mile and turn left onto Meadow Ridge Lane. Their place is at 6715 Meadow Ridge Lane. If you need further directions, give Jack or Marie a call at 337-474-0819.

Alternatively, you can take Nelson Rd South and turn right onto Gauthier Rd and then right onto Meadow Ridge Lane just before Elliot Rd. And like a couple of my early projects, this map is not to scale.



April 2014