Lake Charles Woodworkers Club, Inc. September 2010

Dick Trouth, President Joe Comeaux, Treasurer Officers and Directors

Barry Humphus, Editor, Bubba Cheramie Gary Rock, Jeff Cormier, Chuck Middleton

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.

August Meeting Highlights

Velma and J.W. Anderson's shop and park in DeRidder was our meeting place this month. While it's a long drive there and back for the Lake Charles area, several folks did some ride sharing. We called a few people to be sure they got a ride if needed. My memory is that Velma and J.W. always fixed up a special treat for the meeting.

Unfortunately, Barry and Joe had to be elsewhere and we could not arrange for anyone to take notes or pictures, so we don't know what went on but trust that folks had a good time and that there was good discussion.

September will be the same insofar as your regular note-taker and we've asked Joe Comeaux to take notes (he does a good job, by the way) particularly as the meeting is at his nice shop. Turns out that both Barry and George Kuffel have to be in Galveston that weekend at our beach house for some work and this was the only time it would be free.

This is the 250th issue of the LCWW Newsletter and the 200th one I've done. Bob Ferguson did the other 50. We keep an archive of at least the past ten years issues on the website under the Newsletter link on the left side of the web page. Always feel free to go back a few years to see what we were doing and making in our shops.

It was just 5 years ago that we got hit by Hurricane Rita. I'm certain all of you remember the hot sultry days that followed the storm as you cleaned up your house, the yard and in some cases, the neighbors yard and even the street as well. In the Oct/Nov 2005 issue we reported all that we knew about the condition of members' lives and homes after the storm. There were articles on generators and chain saws.

We were able to borrow a generator from a friend in Houston as we were coming back for some relief as mine refused to start. You may want to take a look at the article I wrote for the Oct/Nov 2005 issue (the only combined issue we've run) on generators and chain saws and another in the December 2005 issue about electrical cords and surge protectors and how they should be used with a generator.

In the February 2006 issue we did a long article on how to reinforce your home's roof structure to better handle very high wind loads.

As the height of the 2010 hurricane season is here,

think back what you did right or wrong or had not planned for 5 years ago or even a year ago for Ike. For instance these days I run my generator every two months during the 'off' season and once a month during hurricane season. This is easy to do and will save your hide if you need that generator to run. Check the oil first (small gasoline engines use oil at a prodigious rate and are very hard on the oil), pour a cup of fresh gas into the tank and prime as needed. Once it is started, plug a shop light into the generator's electrical output. This will verify that the generator part is working and you should always run a generator with at least a small load.

One of the problems I had during and after Ike was the short run time of my unit (about 1-1/2 hours). In the October 2008 issue I wrote an article that shows you how to keep a small portable generator going for up to 9 hours or more. The cost of the parts for this was under \$50, and can all be purchased at Wal-Mart or Academy. The critical part of this is to check the oil, less you burn up your generator. In part 2 of the article, I discussed various fuel alternatives including LPG and natural gas for use in a portable unit. Reread these articles before the next hurricane hits home as you may get a couple ideas.

A few years back I did an article on caning - no, not beating your dog with a stick, but installing cane into a chair. One member thought the article should not be in the LCWW Newsletter. I ask him to contribute an article - that was almost a decade ago and haven't heard back. Perhaps the articles mentioned above should not have been included either, but many members over many years have appreciated something that is not just wood dust, glue and flying blades.

Another long-running issue - actually a joke on meare the little maps I include each month on how to get to the right shop at the right time. Most of the time they work (somehow except for Gary Rock's shop!) and with the easy availability of a GPS for your vehicle, they are not needed very much these days. So think of them as little cartoons (sometimes they read like one), but meaningful at times.

Coming Up...Saturday, September 11, 2010 at 9:00 A.M. at the fine shop of Sandra and Joe Comeaux.

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Thermally Modified Wood

The holy grail of outdoor woods is that it must be rot-resistant, weather-resistant, insect-resistant, strong, and dimensionally stable. To make the quest more challenging, add beautiful, non-toxic, and sustainable. Impossible, you say? Well take a look at thermally modified wood. That elusive and legendary perfect wood for outdoor projects might be closer than you think.

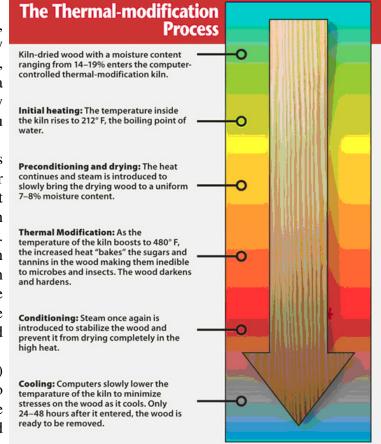
The idea of thermally modifying wood is nearly as old as toolmaking. Early hunters heated wooden spears over the fire to harden them. But it wasn't until the 1990s that Scandinavian wood processors and kiln manufacturers, such as Stellac Oy, took the process into the lab for closer scrutiny. The resulting technology has been employed for years in Europe, but is only recently making its way into North American retail markets via such companies as Radiance Wood Products (radiancewood.com), EcoVantage (ecoprem.com), Bay Tree (purewoodproducts.com), and Northland Forest Products (cambiawood.com).

The thermal modification process (see the illustration) starts where kiln-drying leaves off, subjecting the wood to temperatures near 500° F. This "bakes" the sugars in the wood, making it unpalatable to rot-inducing microbes and wood-munching insects. Components in the wood's cell walls that normally absorb and release moisture become permanently water-insoluble during the process. The wood becomes not only less vulnerable to decay, but also more dimensionally stable and resistant to warping. Like those spears of yore, the wood hardens as the cell structure is transformed.

The end-product is a lightweight, strong, durable, stable, and chemical-free wood. The process imparts a rich brown color that permeates the board and a pleasantly sweet, baked smell. The wood is machined into deck boards, siding, or dimensional lumber after undergoing the process, and most of its tendency to warp gets left behind.

The thermal-modification process works on any species of wood, but most manufacturers utilize Southern Yellow Pine because of its low price and sustainability. The chemical-free process leaves behind no chemical waste at the kiln and nothing toxic to leach from the wood into your backyard soil.

One manufacturer, Radiance Wood Products, carries the green aspect a step further by adding a resin-based, volatile-organic-compound-free finish called One TIME in the factory. Bond Distributors, maker of One TIME recommends refinishing with their product within seven years. Thermally modified wood weighs so little, a truck can hold more than two times the number of board feet compared to



pressure-treated wood, saving fuel and reducing emissions. (Although the latter is offset somewhat by the increased fuel necessary to heat the kilns.).

The process that leaves the wood harder also reduces its splitting resistance; several manufacturers recommend predrilling screw holes, especially near the ends of boards. The wood becomes more vulnerable to UV light, fading to a silver-gray faster than unmodified wood, so refinishing is necessary every year or two but only if you want it to remain brown.

One other caveat: Because the process is fairly new, most products have not yet been certified for ground contact. So for now, you'll still need to build your deck framework with pressure-treated lumber. That's why most manufacturers are focusing their product lines on 5/4 deck boards, posts, balusters, and railings, rather than standard dimensional lumber.

Currently, thermally modified wood is making its way into lumber yards and specialty decking stores, with limited inroads into home centers. Its cost lands somewhere between that of cedar decking and composites. Warranties range from 20 to 30 years. Watch for increased availability and possibly lower prices as companies rev up production and distribution. The cost is about \$2 per linear foot vs. about \$1 per foot for pressure treated. Barry Humphus edited from several sources.

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Spiral Bits

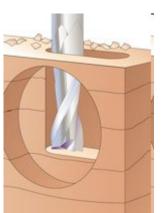
They look a little like the striped pole in front of a high-tech barber shop, but spiral bits do more than take a little off the top. Use them wherever you'd use a straight bit -- and get cleaner cuts.

Spiral-fluted router bits leave the edges of your cuts virtually fray-free because, as they turn, the two corkscrewshaped cutting edges stay in contact with your workpiece longer than the vertical cutting edges of a straight bit. This results in a shearing action instead of the rapid chop-chop-chop-chop of the traditional double-fluted straight bit.

Unlike most router bits that have a carbide cutter brazed to a steel bit body, spiral bits are solid carbide. Carbide, however, is harder than steel, but also more brittle, so you must work with more care than with non-carbide bits. Don't force the work, and avoid sudden plunges or starts.

Let's take a look at the three kinds of spiral bits, and how to choose the right bit for the task at hand.

Downcut Bit. As the name implies, the cutting action



of this bit is downward, or away from the router base. That shearing motion imparts a clean edge on rabbets, dadoes, grooves, shallow mortises, and plunge cuts in both sheet goods and solid stock.

When cutting grooves or dadoes deeper than the diameter of the bit, don't try to take the full depth at once. Instead, make several progressively deeper passes. A downcut bit tends to pack the wasted mate-

rial down into a deep cut, rather than ejecting it, and shallow cuts reduce the problem.

Upcut Bit. This bit wasn't designed to leave a clean



edge like a downcut bit, but rather to remove the chips created in a deep plunge cut. That makes it ideal for plowing out a deep mortise in solid stock. Tear-out caused by the upward shearing will be hidden by the tenoned workpiece.

You also can use an upcut bit in your router table for any edge treatment that you perform with the workpiece face up, such as jointing solid or highly figured stock. (Remember that in a router table, the upcut bit is now

cutting down.).

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Upcut/downcut or compression bit. The unique geometry of this bit cuts from the top down and the bottom up at the same time, and it's ideal for cleaning up the edges of hardwood plywood or melamine-coated particleboard (MCP). For such easily chipped materials, it is best to first cut the pieces oversized on the tablesaw, leaving an extra 1/16" on all sides. Then load up a compression bit in the router table, setting the center of the bit's cutting flutes to about the middle of the workpiece's thickness. Finally, offset the outfeed fence 1/16" and joint away the chipped edges. Edited from an article in *Wood Magazine*.

For Sale or Trade

Jim Couvillion has a few times for sale. He wants to buy something new and also wants to raise the cash to do so. Some of the items include:

12 Inch Planer from Foley-Belsaw (they also manufacture the Sears 12 inch planer - basically the same unit);

15 Inch Hatachi Sliding Compond Miter Saw - this is a big one as most are 10 or 12 inches;

36 Inch Sears table lathe - I guess if you want to try out a lathe, this could be a starter. Gary Rock still has one;

16 Inch Dewalt Radial Arm Saw - this is actually Jim's son's machine. Call Jim at 562-2779 to discuss.

Jim said that prices are negotiable and you need to drop by to see them and make an offer.

Ron Perkins gave me a call last month and asked that I put a notice in regarding a scroll saw he has for sale. This is a Sears Craftsman 12 inch model, a good starter unit. He's asking \$175.00 for it, but give him a call at 477-6571 and see what he can do.

