LAKE CHARLES

WOODWORKERS CLUB

John Perry, President John Marcon, President Elect Bob Ferguson, Treas. & Newsletter Editor

DECEMBER 1995

MEETING HIGHLIGHTS

The November meeting was held in the shop of Lawrence Walker with 26 persons attending, Fresh bignettes were also served by Phil Ribbeck. Thanks to Lawrence and Phil.

Our president, **John Perry**, reported that response to the survey has been good. There is still opportunity to submit a completed form, if you have not already done so.

There were many requests for "hands-on" workshops in which persons may receive training in the various woodworking techniques. This type of activity will receive major consideration for the club.

The question of liability became a major concern which tends to limit participation. With the assistance of member Russell Tritico, Jr, an attorney, a discussion of this vulnerability was held and it was pointed out that the use of dangerous equipment must be limited to the shop owner. Therefore, as a general policy, You Should Not Let Others Use Your Tools. In addition, since Murphy's Law applies (if an accident can happen, it will happen) and injuries can result from flying chips, etc., you might wish to request that a participant in a workshop sign an injury disclaimer. Russell Tritico has agreed to provide the appropriate form.

Our "Show & Tell" period included presentations by **Leo Parker** who displayed some of his father's old tools including a Henry Disston saw and a pocket knife. Leo also showed a wood rack and a family crest created from a plywood cutout. Norman Robinson showed his recent generation of perfume atomizers, Bill Tolin an ash tortilla bowl, Rich Couvillion a trimming square, and Bubba Cheramie displayed pictures of his recent

NEXT MEETING

December 9, 1995, 9:00 am in the shop of

Norman Robinson 708 Dolby Street Lake Charles, LA

This is a special event at a special time of year. Betty & Nemo Robinson extend a special invitation to the ladies to join us.

FUTURE MEETINGS

January 13 @ Gene Verret's

February 10 @ Dudley Harvey's March 9 (to be announced)

April 13 @ John Marcon's

creation, a bed and side table combination.

The meeting was concluded by the attendees taking a quiz on finishes. The quiz was provided by Ed Warabow of The Woodworkers Club of Harrison, Arkansas and was based upon an article by Bob Flexner on Finishing Myths in the August-September issue of the Workbench magazine. Although participants were not graded on performance, the exercise was very informative.

CRAFT SHOW

During the weekend of November 3-5 a number of our woodworkers participated in the Kiwanis Arts & Craft Show at the Lake Charles Civic Center. Displaying their wares were John Perry and the team of Larry, Curly & Moe (otherwise known as Jim Couvillion, Shelby Delaney and Bob Ferguson, but not necessarily in that order). Ray Krull was also present supporting his daughter at her booth. As usual, Jim Couvillion was cited for riding his horse (rocking) indoors.

NEW MEMBER

We are pleased to have Chris Brown as a new member.

MEMBERSHIP DUES

Membership dues of \$10.00 per person will be due in January for the 1996 club year. This year we hope to have all renewals in by the March meeting. Please note that you may pay in cash or by check at a club meeting or by mailing it to the Treasurer, Bob Ferguson. Please make checks out to Bob Ferguson, since we do not have a club checking account.

TIPS & TECHNIQUES

Enclosed with this month's newsletter is Part II of the information from Forest Manufacturing Co., maker of saw blades & dado sets. Entitled "Guidelines For Carbide-Tip Sawing on Table Saw and Radial Saws", Part II offers detailed data on sawing techniques for avoiding burning and other problems.

Saw Sharpening: Many members have recommended Tibson's on Orange Street (off Kirkman) for good sharpening service.

Computer Access: If you have a computer with modem, you might be interested to know that Woodweb has opened the gate to the information

highway for the woodworking industry. To access information use the following address:

http://www,woodweb.com

SAFETY CARTOONS

Beginning with this issue, our newsletter will contain a special series of cartoons emphasizing safety features important to woodworkers. These cartoons are the creation of Chips Turner, a member of The Woodworkers Club, Inc. of Harrison, Arkansas, who have given us permission to reproduce them. Our sincere appreciation goes th Chips Turner and to Ed Warabow, editor of their newsletter.

BUY, SWAP OR SELL

For Sale: One Shopsmith scroll saw. Contact Dudley Harvey at 479-9058.

Wanted: Bob Ferguson is still looking for an old card table which has sturdy and useable tubular metal legs. Call 478-1157.

FOR THE FUTURE

A number of things are planned for the future of this newsletter. If you would like to add to them, please contact Bob Ferguson.

Workshops: Because of interest in this area, an attempt will be made to locate workshops that could be attended by our members. Mack Gafford, at our last meeting, provided some information put out by the Woodcraft Supply Corp. on workshops in the Houston area. We will get on their mailing list and publish this type of info in future issues of the newsletter.

Lumber Sources: In recent months we have been advised of several sources for lumber. We will attempt to get the details on each and publish this in a future newsletter. If you have info of this nature, would you please share it with us?

BURNING CAUSES AND CURES -

1.) Kick Back: Major cause is a pinching and crowding fence.

Cure: See Figures 3,4 and 5 for BLADE & FENCE ALIGNMENT. THE FORREST WOODWORKER SMOOTH CUT series of blades with parallel side grind MINIMIZES TIP SIDES CATCHING AND THROWING WOOD BACK.

2.) Sawdust thrown in eyes: Often comes from the fence being too loose or too tight. This crowds wood against the rear side of the teeth, forcing a cut on the up rotation on the left or right side of the blade.

Cure: Adjust fence as above. The use of safety goggles or face shields is strongly recommended.

3.) A third major cause of burning: RUNNING THE BLADE TOO LOW (especially on hard woods).

Cure: WITH SAFETY GUARD in place, you may safely RAISE THE SAW BLADE 1" TO 2" above the surface of the wood and FEED FASTER. This produces 300° - 500° COOLER CUTS, LONGER LIFE, and STOPS SCORCHING. This is most effective on hardwood such as cherry and hard maple. On SOFT WOODS the blade may be kept LOW with no scorching occurring.

There are some very scorchy hardwoods such as cherry, maples and some oaks...be sure to use the HIGH BLADE/FAST FEED technique on these.

- 4.) Slow feed or stopping is especially bad. The blade rubbing at its 100 mph rim speed rapidly heats and scorches the wood surface. To prevent this keep moving!
- 5.) Too many teeth on blade when ripping causes slow feed and excess side friction. . . we suggest 24T 40T for ripping. . . 60T 80T for cross cut.
- 6.) "Rocking" of uneven wood bottom and side surfaces against table surface and/or fence:

Cure: Joint the wood flat on bottom or one side to allow straight feed.

- 7.) "Rocking" of wood from table level down into a depression where THROAT PLATE INSERT IS BELOW TABLE LEVEL.

 Cure: Carefully level entire throat plate with table surface using a straight edge with a light source behind it.
- 8.) Poor sharpening where:
 - A.) Tops or <u>cutting edges</u> are microfractured from dry grinding, coarse or medium-grit grinding, or too fast a grinding pass with vibration. Result Burning!
 - B.) Top <u>corners</u> of teeth are chipped away for above reasons, and cause heat and pressure when plowing thru against the wood sides. Result Burning!
 - C.) Dull sides occur because insufficient or rough grinding on the face did not remove enough stock to restore side edge sharpness or left ragged side edges. Result Burning!

SPLINTERING CAUSES AND CURES .

Ripping:

Edge splintering is usually not found on ripping with the grain.

Cure: Try a slower feed or use more teeth or a reduced face hook. You might also try lowering the blade. Check for a possible high tip on sides or top.

Cross-cut:

On <u>cross-cut</u>, it is more common to experience splintering along the bottom edge and up the final vertical surface. If splintering occurs on the top side, usually raising the blade 1/4" or so will stop it.

Cure: To help bottom splintering, lower the blade on a table saw and feed more slowly. Also, use a blade with more teeth and/or higher Alternate Top Bevels (ATB) instead of a square tooth or Triple Chip Grind (TCG - square and chamfered style).

BLADE SHARPENING:

Dull or poorly sharpened blades with raggedy edges and micro-chipped points also cause much splintering. Send the wood sample of the poor cut with the blade for a FREE microscope check to FORREST MANUFACTURING CO., 461 River Rd., Clifton, New Jersey 07014 and for usual 3-day reasonably priced sharpening on FORREST and on all makes of carbide-tipped circular saw blades.

INFORMATION ON SHARPENING

If your distributor does not sharpen or local sharpening seems questionable...

CALL TOLL FREE: 1 (800) 733-7111 or in NJ (201) 473-5236

FORREST sharpens, repairs and upgrades about 3,000 blades monthly on all makes of carbide saws, routers, cutters and jointer knives.

Why not give us a try on your blades? 3 Day Turnaround is normal.

NOTE: We use ultra-fine 500-600 grit diamond wheels, flood coolant and we microscope-monitor the finished edges and corners. You'll see the difference.



. Many of the same basic principles listed for the TABLE saw can be applied also to the RADIAL saw. Some special considerations are:

Problem: A BURNING crosscut on a Pull cutting stroke.

Usually the BURN is on the LEFT side of the blade or the RIGHT side, NOT ON BOTH SIDES. This indicates the blade is not set dead parallel to the overhead rails, but is cocked on one side slightly, causing the blade to "heel" or double cut at the rear of the blade on its UPWARD rotation on one side which causes the burn.

Cure: Gradually adjust the rear of the saw blade away from the burned side until the burning ceases. (See instructions for your machine for fine adjustments on the yoke).

If the BURN occurs on BOTH SIDES, on hardwood for example, try dropping the blade 1/4" to 3/45" thru the bottom of the wood and feed definitely faster. This cools the cut because of a shorter arc of contact on the wood and reduces power requirements and "jump in" overfeed tendency.

CAUTION - DANGER!!! If the operator ON HIS OWN DECISION AND AT HIS OWN RISK (holding the wood down with his left hand), determines he wishes to try to copy some of the European Radial saws which cut on the PUSH STROKE away from the operator, he will realize two benefits:

- 1.) By varying the amount of blade protrusion thru the bottom of the wood 1/4" to 1/2" he will reduce heat and always get a PERFECT NON-SPLINTERED BOTTOM EDGE.
- 2.) There will be absolutely NO DANGEROUS "JUMP IN" tendency of the blade overfeeding itself and climbing into the work as there is on the PULL CUT method.

---DANGERS --- However two provisions are ABSOLUTELY NECESSARY!!!

- 1.) With his left hand he must HOLD THE WOOD DOWN on the table and against the fence because the blade cutting on the UPWARD ROTATION as it is PUSHED THRU will tend to LIFT AND THROW THE WOOD, unless it is held down with moderate pressure.
- 2.) He must also keep the fingers of the left OUT OF THE PATH OF THE TRAVELING SAW (whether on PUSH CUT OR PULL CUT). Thoughtful use of safety equipment is hereby encouraged.

NOTES: If the operator momentarily forgets either of these two vital provisions, a serious accident could result!!! FOR THE RECORD THEREFORE, FORREST cannot recommend any operator to use this European "PUSH CUT" method unless the machine is designed to cut in this manner.

On Radial or Chop saws, High Alternate Top Bevel (ATB) blades give much better control of bottom splintering than a square top or TCG Triple Chip Grind blades.

SAW LIFE

- 1.) Use blades with harder C-4 carbide as normally they retain sharp edges longer.
- 2.) Get an inexpensive 10 to 20 power flash scope if possible (from FORREST or elsewhere) and scope and verify the quality of your cutting edges from your local sharpener.
- 3.) Raise the saw blade higher on Table saw and feed faster to minimize the arc of contact. This decreases abrasion and heat and the number of rotations required to cut the piece, especially on ripping plywoods with gluelines and particle board.
- 4.) The best sharpening is usually done in two steps:
 - a.) About .003" ground off the face (this sharpens the side cutting edges) with 270 or 320 grit (or finer) diamond wheels.
 - b.) About .010" ground off top to create a perfect edge and perfect corner point.
- 5.) Ultra-fine 400 to 600 grit diamond, flood coolant, and slow grinding should be used in the topping operation to create a perfect edge which lasts longer and reduces the number and frequency of sharpenings required.
- 6.) 10 to 15 sharpenings are usually possible with the average FORREST carbide-tipped blade.
- 7.) Flakeboard and formicas can be cut but will dull the blade much faster than soft woods or hard woods. When possible, use a cheaper saw or a dull blade for occasional flake/formica and keep the sharper blades for the pure wood cutting. If cutting mostly flake/formicas and thin melamines, contact FORREST or your distributor for recommendations.
- 8.) DO NOT CUT INTO NAILS OR STEEL. Avoid having saws touching each other on the wall or laying on a steel tabletop where fine chipping of carbide points can instantly occur. Use thin cardboard as separators.