

LAKE CHARLES WOODWORKERS CLUB, INC. FEBRUARY 1999

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Bob Ferguson, Treas. & Newsletter Editor

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MEETING HIGHLIGHTS

The January meeting was held in George Kuffel's new shop (well, relatively new) with 27 persons attending. Our president, Brent Evans, reported on the survey which was taken several months ago wherein we were attempting to determine the major interests of our members so that future programs can be held which best meet our needs. The survey results are still being digested (we need more input) and will be announced later, but one thing stood out: that "Show & Tell" is important to everyone and should continue.

The main program consisted of a working demonstration of scrollsawing by John Perry and Aaron Andrepont. John uses a Skill unit and Aaron has a DeWalt machine. Both individuals demonstrated the techniques which are effective and result in quality workmanship. Some things that we learned were: The best saws are virtually vibration-free, and a large, tilting table is a desirable feature. The blade must be perpendicular to the table for normal work (use a square to be certain), and tension must be high (some claim that you cannot tighten it too much). Also blade choice is most important. Although the Universal #5 is a popular choice, there are other excellent blades depending upon the type of work being done. Pin blades are normally considered too wide for fine cutting.

Both of our demonstrators brought their own "Show & Tell; a wide selection of outstanding and creative fretwork. Incidentally, our club has quite a few members who are engaged in this type of craft work and who could be of help to you, if you are just starting out.

MEMBERSHIP DUES

Membership renewals have been coming in at a high rate: two thirds of the membership has already renewed. Thanks for such excellent response.

If you are part of the other one third, won't you react now so that we can complete this part of our business and get on

with other things? Please send your \$20 to Bob Ferguson or bring it to the next meeting.

Bob Ferguson
2326 22nd Street
Lake Charles, LA 70601

ABOUT OUR SPEAKER

Dr. Robert Cooper is a Professor of Languages at McNeese State University and received his Ph.D. from the University of Missouri. His love of art and history led him to purchase an old painting. It badly needed restoration so he learned how to do this. Today he still teaches and does research at McNeese but spends his time professionally restoring fine art and frames. Dr. Cooper will show and discuss some of the techniques used by restorers that are applicable to any type of restoration project from old furniture to fine art.

NEXT MEETING

Feb. 13 9:00 a.m. at the
Calcasieu Parish Central Library
Ernest Street
Lake Charles, LA

Subject: Painting Restoration by
Dr. Bob Cooper.

FUTURE MEETINGS

Mar. 13 Planes & chisels - How
and when to use them.

April 10 Lathe demonstrations
by Steve LeGrue.

NEW MEMBER

We are pleased to welcome the following new member:

Michael (Mickey) W. Hart
584 Arsene LeBleu Road
Lake Charles, LA 70607
(318)-598-2519

Mickey, an employee of Lake Charles Carbon Co., considers himself to be a beginning weekend woodworking hobbyist. He is just starting out trying to learn about woodworking and what goes with it. This is another opportunity for us to share our knowledge. Please look for him at our meetings.

SHARPENING SERVICE

Editor's Note: The January issue of The Dovetale, the newsletter published by the Woodworkers of Southeast Texas, contained an article submitted by their member, Richard Hicks. With sincere appreciation to our fellow club members in the Beaumont/Orange area, I am passing this information on to you.

For those of you that own a premium saw blade (like a Forrest or Freud) that needs sharpening, I would like to recommend you try Ballew Saw & Tool, Inc. located in Springfield MO. John and Rebecca Phelps suggested I try them after I had several bad experiences getting Forrest to re-sharpen my Woodworker II blades.

I packaged my blade in a double layer of cardboard and enclosed a copy of their order form (just a simple piece of paper will work) that include my name, address and phone number - along with a credit card number to cover the sharpening and return postage. It cost \$4.00 to send it First Class at the post office. I mailed it the afternoon of 12/3 and I received the sharpened blade back on 12/16. The total charges - \$19.20 (\$13 for the sharpening and \$6.20 for packaging and shipping). Unless you specifically request it, they WILL NOT replace damaged teeth unless more than 10% are bad (more than 4 teeth on a 40 tooth blade). They claim the cut will still be satisfactory with 10% of the teeth missing. I tested the resharpened blade against a new blade, and the cuts were almost identical. The returned blade was well packaged, and the tips were protected by a plastic coating. The speed of their service, the quality of their work, and the low price were impressive. Give them a try!

Ballew Saw & Tool Co. 1-800-288-7483
325 South Kimbrough
Springfield, MO 65806

Ed.: Thanks Richard Hicks, and John & Rebecca Phelps.

FOR SALE

Our member, Brian Wood, has the following like-new equipment for sale:

12 1/2" DeWalt Thickness planer with spare belts and blades.
DeWalt Electric Hand Planer
DeWalt Trim Router

Brian is offering this \$844 value for \$550. If interested in this tremendous value, call him at 433-5480.

TREASURER'S REPORT 1998 Annual Report

Income:	Dues	\$ 1,175
	BBQ	360
	Total	\$ 1,535
Expense:	Copying	\$ 258
	Postage	353
	Rent (Library)	160
	Refreshments	20
	Misc.	155
	BBQ Supplies	406
	Total	\$ 1,352
Net Income for 1998		\$ 183

Current Treasury Balance (2/1/99)
\$ 972

INTARSIA

Thanks to the efforts of Charlene and Chuck Middleton, we have been introduced to the marvelous world of Intarsia. They have brought examples of their outstanding work to recent meetings and some of us would like to incorporate this technique into our projects.

A source of patterns and general information can be obtained from **The Intarsia Times**, a newsletter published by Judy Gale Roberts. You can obtain your copy by contacting:
Roberts Studio
P.O. Box 4718
Sevierville, TN 37864
1-800-316-9010

Web Site On the internet: <http://www.intarsia.com>
E-Mail: jerry@intarsia.com

Editor's Note: The following is a condensation of an article extracted from the internet web page of Popular Woodworking.

The Truth About Polyurethane Glue

By Christopher Schwarz, PW staff

After the country's major glue manufacturers introduced their polyurethane glues at the Chicago Hardware Show two years ago, we came back to our shop here at Popular Woodworking excited about trying this new "wonder" product. The polyurethane promise was enticing. We were told that it's stronger than yellow glue, it's waterproof, it fills gaps, it's stainable and it will bond almost any two materials together. The downsides were that it is more expensive, can be messy and it has a shelf life of about a year after the bottle is opened.

After 18 months of use in our shop we were pretty impressed with some of the properties of polyurethane glue. But we weren't sure that the adhesive was living up to all of the hype we read in the catalogs, advertisements and heard from friends. So we talked to the glue experts about their products to see if they could help us separate the science from the stuff you might hear from your woodworking buddies.

Is it stronger? Some polyurethane glues advertise themselves as "super strong" and "the toughest glue on planet Earth." Other polyurethane glues don't make any claims about glue strength on the bottle. What gives? Frankly, glue manufacturers seem divided on this issue.

Dale Zimmerman, a technical specialist with Franklin International, which manufactures Titebond Polyurethane Glue, says that his company's tests don't show that polyurethane glue is any stronger than yellow glue. Here's how they tested the adhesives: They glued together 1"-square blocks of hard maple using a long grain-to-long grain joint -- the strongest type of glue joint for wood. Then they attempted to break the blocks apart by testing the joint's shear strength, which basically means they tried to break the bond by pushing one block up while pushing the other block down.

And what did they find? Zimmerman says that the joints made by the polyurethane glue failed around 3,510 pounds per square inch (psi) of pressure. Franklin's Titebond, a popular yellow glue, failed at 3,600 psi. And Titebond II, their exterior-grade outdoor glue, failed at 3,750 psi. *(Ed: Not a significant difference.)*

"Polyurethane glues stick well and hold odd materials, but they generally aren't stronger than yellow glues," Zimmerman says. "Yellow glue makes a bond that is stronger than the wood. So while the polyurethane glue might actually be stronger, it doesn't matter because the wood will always fail first. It's not a stronger joint."

Other glue manufacturers disagree. Mark Singer, the founder of Gorilla Glue, says that polyurethane glue is actually stronger than yellow glue when you use it in types of joints other than the one that Franklin International tested. Franklin, he says, used a long grain-to-long grain joint, and that's a joint where traditional yellow glues already excel. **Singer says that the real strength of polyurethane glues is in an end grain-to-end grain joint or an end grain-to-long grain joint, which are two joints where yellow glues have always been lacking.**

"Shear strength is not polyurethane glue's strongest feature," he says. "In end grain-to-end grain the stuff is incredible. It far outperforms (yellow glues) in end grain. If you coat both surfaces with polyurethane glue, I've seen it (the glue) migrate 2" into wood."

Zimmerman at Franklin says that his company hasn't tested polyurethanes in this manner either, but it would make sense that polyurethane glue would be stronger in a joint with end grain. "End grain is like a bunch of soda straws," Zimmerman says. "So they suck up yellow glues, which contract when they dry, and this makes a poor joint." That's not the case with polyurethane glues, which expand as they cure, preventing the end-grain joint from becoming glue-starved and weaker.

Does it fill gaps? Again, some manufacturers advertise on their bottle that their polyurethane glue "expands to fill gaps" and "expands as it dries," which suggests that the glue plugs gaps much like a two-part epoxy. Unfortunately, this is not the case.

While it's true that polyurethane glues expand as they cure (the squeeze-out actually foams up like aerosol insulation), glue experts agree that polyurethanes cannot fill a gap larger than 1 or 2 millimeters. After a millimeter or two the foam has no strength, so it is merely a cosmetic filler. "If you look at the squeeze-out there are a lot of air bubbles in there," says Barry

Brewer, marketing manager for the DIY channel for Loctite Corp., the manufacturers of Wood Wizard. "Those bubbles are in any of your gaps, so you're not going to get strength from those bubbles. On small gaps, polys fill a gap and make it cosmetically appealing. It's great for the woodworker at home like me. I don't have a planer or a jointer so it's sometimes difficult to get the absolute perfect joint.

"But it will not fill a gap like epoxy," he says. Zimmerman with Franklin International agrees. "We don't make an epoxy at Franklin," he says. "But I tell people that if they are going to repair a wobbly chair, use epoxy because it fills gaps."

Can you stain it? Every polyurethane glue manufacturer advertises that their glue accepts stain better than yellow glue. This, we thought, was going to be a great feature of the glue. But we've had mixed results with polyurethane glue in our shop at Popular Woodworking. For example, we used polyurethane glue to assemble the case of the maple Chippendale Secretary featured in the April/May issue. As the polyurethane glue cured, it squeezed out a bit, which is completely normal. We scraped it out of the corners using chisels, cabinet scrapers and sandpaper. We thought we had removed all of the glue. But when we colored the wood with an aniline dye, the areas where the glue squeezed out wouldn't accept stain. In all honesty, however, we've stained other projects built using polyurethane glue without encountering this problem.

The bottom line, experts say, is that polyurethane glue is much more stainable than yellow glue because it sits on top of the wood and doesn't seal the pores of the wood the same way that yellow glue does. "Polyurethane glue is not foolproof," says Zimmerman with Franklin International. "But it eliminates the first 90 percent or more of problems you might have with staining." So what should you do if you have this problem? Singer recommends using a rag with some lacquer thinner on it to clean up the squeeze-out before it cures. Lacquer thinner thins polyurethane glue and allows you to wipe it up more easily.

Is it waterproof? Does it really stick to almost everything?

Manufacturers say polyurethane glues have excelled in these areas so well that some they are looking to challenge epoxies in the boat-building and home-repair markets.

"It's a single-component glue that's a replacement for epoxy -- not a replacement for yellow glue or our Probond," Kon says. "It's great for that situation where you want to glue a piece of baseboard back into place. You don't think you should use yellow glue, so what do you use? Polyurethane glue will do the job."

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