



# WOOD FORUM

Newsletter of the Sonoma County Woodworkers Association

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March 2014

## An Evening with our Resonant Expert

by Art Hofmann

Our next meeting will take place on Tuesday, March 4th at 7 pm at the shop of Tom Ribbecke, whose archtop guitar won Best of Show at last fall's *Artistry in Wood* show. Tom will be hosting us at his smaller, private shop in Healdsburg, where he makes his ultra high end guitars. The address is 886 Limerick Lane, Healdsburg, CA 95448.

Tom writes that he has a unique project underway, the "Diana Bass," essentially an archtop bass with new technology for the amazing Jack Casady of Hot Tuna and Jefferson Airplane. This instrument presented many difficult design and woodworking challenges. As a topic, the project covers client interface, design, technical execution and guitar building all at once. He promises a slide show presentation in addition to the hands on aspect. The new instrument, which is still in progress, will be there for the meeting.



### Directions

Directions are pretty much the same whether coming from north or south. Take Hwy. 101 to the Healdsburg Avenue exit. If coming from the south, double back under the freeway and go south. (Foppiano Vineyards will be on the right). Take the next left, Limerick Lane, over the freeway this time. Proceed less than .8 mile. There is a white picket fence, a sign that says "Residents and Guests only" and a group of mailboxes and garbage cans. Make a right turn onto the gravel driveway. Tom's address, 886, is the last house at the end of the road on the right. Tom cautions us to drive slowly, because animals have been killed on this road. So, drive to the end. The shop is the red barn behind the house. Please don't knock on the house door first.

*Photo by Tyler Chartier*

## Sonoma County Woodworkers Association Officers Meeting December 3, 2013

A meeting of the Officers of the Sonoma County Woodworkers Association was held on Tuesday, December 3, 2013 at 6:20 pm at the Cotati Cottages. SCWA Chairperson, Bob Moyer presided over the meeting. All other officers were present including Larry Stroud, Art Hoffman, Bill Taft, Jim Heimbach, Joe Scannell, and Steve Thomas. Michael Wallace, Scott Clark, and Walt Doll attended as guests.

The minutes from the June 21, 2013 officers meeting were read and approved as submitted.

### Agenda Item #1: Officer's reports

#### Chairperson: Bob Moyer

- Life and death of the SCWA/2014 – a discussion on the status of the organization for the coming year and beyond.

> Bob, Art, and Larry do not want to continue as officers in 2015. Ideas were discussed on how to get SCWA members to volunteer for board positions. All officers agreed to promote being an officer with SCWA members. Officers should also make an effort to personally greet guests and new members at meetings, to make them feel welcome and to encourage their active participation in the SCWA.

> A communications officer may be necessary for updating the website, maintaining social media sites, taking surveys, etc. The position was not formally described nor was a motion made to change the bylaws to add the position as an officer position.

> Bill Taft moved that all officers are responsible for writing up at least one meeting presentation. The motion was carried unanimously.

> Walt Doll stated his willingness to fill the secretary position. Bob will bring it up for a vote at the January meeting. Abolishing the position of Secretary was discussed.

- Association priorities: Education/meetings, show, newsletter, website/social.

> Bob suggested we begin monthly meetings with Q & A sessions, perhaps with a short demonstration of something new a member is working on. Members could also pose questions on how to solve a wood-working problem. Bob will demonstrate his idea with a mini demonstration at the first meeting in January.

> All officers agreed that finishing meetings by 9:00 p.m. should be an objective.

#### Program Chair: Art Hofmann

- Art provided a list of speakers, some already lined up and a few yet to confirm. The budget for the confirmed speakers is \$1,200, not including judges for the show.

#### Treasurer: Jim Heimbach

- Jim passed out information on SCWA finances. Does not include account balance.

### Agenda Item 2 – Website review: Michael Wallace

Michael passed out a handout with a summary of the current website's status, and a draft proposal for a new website. Michael will refine the project plan and return to the board in March with a final budget and plan. All officers greatly appreciated Michael's thoughtful work on the proposal and encouraged him to incorporate ideas and goals voiced by the officers when refining his proposal.

#### Announcements

- Next board meeting: TBA

- Topics for future meetings:

> Review our policies and fees for presenters and providers of facilities to help assure high quality events.

> Board communications and guidelines

The meeting adjourned at 8:25 pm.

## Welcome to New Members

The 2014 Membership Renewal campaign has concluded and we have the following new members to get to know:

Cyriaque Beurtheret from Santa Rosa

Shoshana Fein from Santa Rosa

Clyde Hanford from Santa Rosa

Jeffery Mecredy from Sebastopol

Joseph Merz from Glen Ellen

Daniel Morse from Santa Rosa

John Burgess from Santa Rosa


David Smith from Tiburon.

Welcome aboard, and please let us know your expectations for our organization as we navigate through 2014 and into the future.



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## Letters to the Editor

The letterbox is still open, so when you've completed that rosewood escritoire, test drive it with a letter to your friends at Sonoma County Woodworkers. 

## February 4 Membership Meeting

The regular membership meeting began with Chairman Bob Moyer extending a warm welcome to the several guests present, inviting them to come back and join the club, indeed, offering the chairmanship as a signing bonus. Also present was Tom Richards, a returning member. Special thank-you's were extended to Scott Borski for hosting last month's meeting, and to Bill Hartman for graciously allowing the members



to conduct this meeting in his shop classroom. One of Bill's students was also present. Bill told us this was his tenth year of teaching shop here, and 130 students pass through this classroom every day, each one fired up and eager to create something. When a freshman enters his class, Bill assigns the student one of the standard projects to begin with, but from sophomore year onward the students generally come up with their own project designs, which they work on with relentless enthusiasm, often spending their lunch hour in the shop. The students pay for the materials they use,

and Mount Storm Forest Products in Windsor helps by selling at reduced prices, and occasionally throwing in a "freebie."

The meeting turned to a Q&A session, and Scott Clark led off by inquiring whether anyone present had experience in steam-bending wood. It seems he has a project involving a round frame for some stained glass work, and he is exploring methods for generating some of the parts. One member suggested looking on YouTube for help, but Scott pointed out that "everyone on YouTube is an expert," and it is hard know who to trust. Another suggestion was to search for information through the Fine Woodworking online resource, which the speaker deemed well worth the modest annual subscription price.

Photos by Jose Cuervo



Mike Wallace was looking for some cherry for a project, and was dissatisfied with the selection locally available. Larry Stroud mentioned he was very satisfied with cherry he had purchased online and had delivered from Pennsylvania. In spite of shipping costs, it was still competitively priced.

The chairman again reminded members of the need for authors willing to produce a write-up of one of the

membership meetings (of which this article stands as an example). A willingness to help the organization and modest writing skills are the only requirements. (We have an editor, and he has a proofreader; you need only provide the ink).

Our new Treasurer, Bill Taft, reported that we now have 114 members, which includes those from last year. Of those, 55 (including 7 new members) have renewed for 2014. The organization has \$6500 in the bank, a portion of which surplus was generated by increased dues. Bill pointed out that all monies are derived from dues and *Artistry in Wood* entry fees. The dues this year are the same as last, but the show entry fee may be a little higher.

Scott Clark, the Show Chair, announced September 12 would be the opening date of the 2014 *Artistry in Wood* show at the Sonoma County Museum, and he

was pleased to say that this year we would be exhibiting in the main hall on the ground floor, which has more room, better light, and much superior ventilation. However, because financial support for the museum is strained, we may be called upon to underwrite some of the costs.



# The Quest for a Perfect Finish

by Joe Scannell

Program Chair Art Hofmann introduced our guest speaker for the evening, Ron Ashby, who is a well-regarded expert in the field of furniture finishing and refinishing. Residing in Napa, he operates a business there called Shellac.Net, which, not surprisingly, lives at [www.shellac.net](http://www.shellac.net) on the web. Ron has been in the business of supplying finishing materials to woodworkers for 30 years, as well as providing consultation for businesses wanting to improve their product output.



Ron Ashby

Ron began with a survey of the needs of those present: how many cabinet makers? Antique restorers? What sort of challenges? Some of the replies: making old cabinets look new, hand applied finishes, making new cabinets look old, food-safe finishes, prepping for fine finishes, reflowing. This last drew a quick response from Ron, who simply said, “Don’t do it. It is fakery. It will fail because the original finish is worn out.”

Ron said he could not possibly do finish work in this (classroom) environment, because the lighting was almost completely shadowless. One of the most important pieces of equipment in a finishing room is the lighting. It must be directional, from an incandescent point light source. There is a basic law of optics which states that the angle of incidence is equal to the angle of reflection, as illustrated by his diagram at right.

As long as the surface is perfectly flat, all the light from the point source will reflect at the same angle, and the viewer sees the surface as smooth. However, if there is an irregularity such as a bump or scratch, the light rays hitting this area will reflect off at a different angle, drawing the viewer’s eye. In a finishing room, a point light source is essential to make surface flaws visible. Because a fluorescent tube emits light along its entire length, there are light beams reflecting in countless directions, and flaws become indistinct. To be effective, the point light source must be located so that the reflection, as shown in the diagram, is directed towards the finisher/inspector.

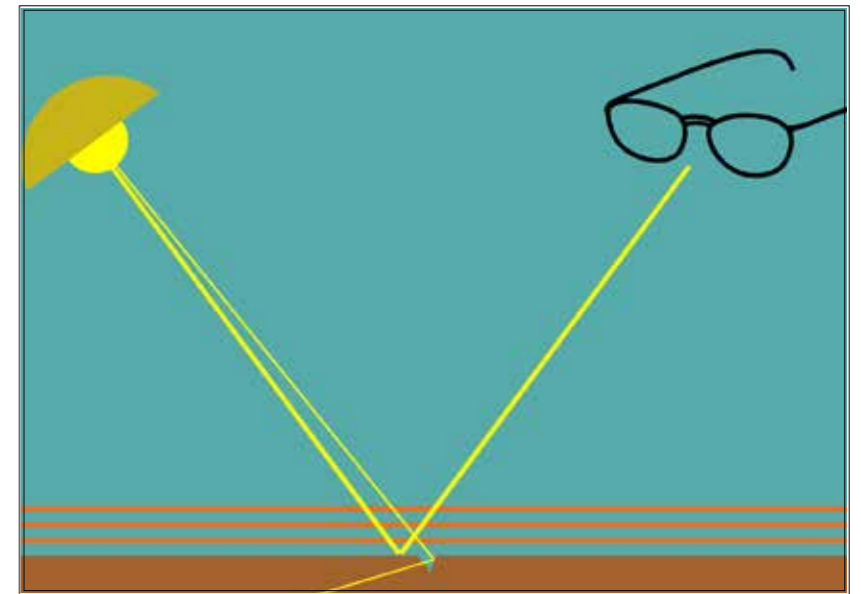
Ron conceded that for general work, fluorescent lighting was a viable arrangement, but he spoke persuasively in favor of full spectrum daylight tubes, as opposed to cool white or warm white. These latter are less expensive, but the full spectrum daylight are really a necessity to properly evaluate the color of a piece, particularly when selecting a stain or a colored varnish or shellac. As artists have long known, the best option would be indirect daylight, but we all can’t work outdoors.

Ron asked rhetorically, where do you start finishing? At the lumber yard. Buy the right wood for the job. If color matching is important, avoid highly figured wood, which can be a real challenge.

And when do you start finishing? Ron suggests the best time to start is when you have begun your next project. Put on a coat, then go work on your new project for a day or so. Then come back and do the next step, then more work on the new project. Following this sequence allows the finish to properly dry between coats. On this Ron was emphatic: “The key ingredient in finishing is *patience*. Avoid ‘good enough’ - it won’t last.”

## It’s about chemistry

Ron pointed out that finishes dry in three ways: evaporation (e.g. shellac), oxidation (e.g. oil), and polymerization (e.g. polyurethane). Because these are chemical reactions, there are three factors which a finisher must control: temperature, humidity, and airflow. Chemical reactions slow down significantly at low temperatures,



so temperature is the first thing to address. The finishing room must be warm. Ron mentioned a situation familiar to many of us - finishing in an unheated garage - and told of moving the work into the house for 24 hours prior to applying a finish coat. After warming the work for a day, it was then put in the garage and

the finish applied. Because the wood itself was warm, it radiated enough heat to dry that coat of finish nicely. Then the process was repeated, until the job was complete.

Airflow is also important, and this may be the most critical factor with waterborne finishes. Drying time and recoat time are manufacturer's laboratory specifications based on 70 degrees Fahrenheit and 40% humidity.



*Mike Wallace*

Ron also offered some advice on surface preparation. One problem he sees is wood that has been burnished by a dull cutter or planer. Such a surface is difficult to stain, because the burnished surface makes penetration difficult, with a splotchy finish the result. He emphasized the importance of sanding, and of not overusing the sandpaper. Sanding with hot sandpaper is not effective and wastes time - better to get a fresh sheet. He also reminded us not to skip grits on the way up. The purpose of sanding is to remove the scratches left by the previous (coarser) grit. Once those scratches are gone, move to the next finer grade. Jumping over a grade just makes for more work with a finer grit less well suited to the task.

## Base, Build, Top

The strategy Ron follows for finishing a piece begins with a good **Base** coat, usually a sanding sealer that will fill the pores and make the nibs stand up so they can be sanded off flat. When dealing with a very porous wood or a knot, several light coats may be necessary to achieve that sealed surface. Avoid the temptation to drown the wood with a deluge of the finish, because it greatly extends the drying time, and in fact it may never dry completely, resulting in bloom or blush. It is much preferable to apply many light coats, allowing each to dry before applying another.

Ron likened the Base coat to a good foundation for a house. He said the universal sanding sealer is shellac, and the typical hardware store sanding sealer is blond shellac in 190 proof alcohol. On top of this base



*Rick White*

he applies a minimum of two **Build** coats of a clear glossy finish (NOT satin or matte) to achieve depth. To use a light-scattering product (satin or matte) at this stage would muddy the finish, hiding the beauty of the wood. He sells a number of dewaxed shellacs in different colors, including blonde, platina (a.k.a. platinum blonde), orange/amber, ruby, garnet, and super blonde, any of which can be used either one layer at a time or blended with another to affect a color shift. Ron almost always mixes colors (one color per layer)

to get the effect he wants. He even sells a black shellac, derived naturally from the raw materials (no additional pigment is added), for situations calling for dramatic darkening. Three coats of this produce a deep blackish-purple. This ability to use shellac to directly produce a specific color tone with great depth and richness is its strongest selling point. To accomplish this using lacquer would require using NGR dyes, which can quickly become quite complicated, especially when the lacquer itself can cause further color shift.

With translucent & clear furniture finishes, light travels through all the finish layers and is reflected off the wood or substrate. The observed finish color is a



*Victor Larson & Art Hofmann*

combination of all the color tones in the various finish stain & dye layers combined with the wood color. When fine tuning finish color to produce a specific color tone, the most important color overall is the color of the wood itself. For a better understanding of color management, Ron suggested members read his discourse, "Color Theory for the Furniture Finisher & Woodworker," which is available on his website: <http://www.shellac.net/color-theory-for-woodworkers.html>.

To the question of how soon another coat could be applied, Ron replied the time varies depending on temperature and humidity, but for shellac 20 minutes would be a good ballpark guess. If you scuff the surface with sandpaper and it makes dust, it's ready for another

coat; if it clogs the paper, it is not. Ron related a story of how he became acquainted with tack rags and realized they can pick up dust that other methods like brushing or vacuuming miss. Now he never applies a finish without using one first.

Ron said that when the finish has been built to the desired depth and color, then is the time to apply the **Top** coat(s). The top coat is the adjusted coat, which he uses to produce the desired finished appearance. If the customer wants a satin or matte finish, now is the time to bring out that satin polyurethane or lacquer. These products create their luster through the use of entrained microscopic particles of crushed silex (silicon), which scatters light as it enters the finish. To achieve an even distribution of the scattering effect throughout the finish, it is important for the person applying the finish, whether by spray, brush, or rag, to frequently mix the solution to keep the particles in suspension. The purpose of all this is to replicate a hand-rubbed finish, of which there is still nothing better.

## Dyes

A dye is not a finish. Ron likened the use of dyes to buying the right color wood to begin with. He favors the NGR (non-grain-raising) dyes currently on the market. They can be mixed to produce virtually any color in the spectrum. He also mentioned Van Dyke crystals, which he described as an Old World water-borne dye made from walnut hulls, and when applied give wood an aged look in a basic brown tone. So you need to match old wood, for example in a repair? Try potassium dichromate, which is an oxidizer. It reacts with tannins naturally present in woods like oak, ash, and some others, and overnight your wood can age 100 years. And if your project wood does not contain tannin, he sells tannin crystals that you can pretreat the wood with. Or, as Terrie Noll pointed out, you can use tea bags. With either of these, Ron suggests letting the wood dry overnight before applying the potassium dichromate.

Another good tip Ron offered was this: to improve absorption when using a water-borne dye, he first pre-moistens the wood with a sponge dampened in warm water that contains a splash of color (the color helps him avoid missing a spot). Then he applies the dye over the whole project, first brushing cross-grain, then with the grain. The result is an even, uniform color.



Pigmented oil wiping stains are useful for accentuating the grain of porous woods; the fine ground pigment particles lodge in the pores of woods like oak and ash. If you like the color on your sample board (or your project, if that's what you're using for a sample board) but it's too dark, try using Behlen's Pre-Stain Clear Wood Stain Base, which, you guessed it, Ron also sells. It is essentially a wiping stain without the pigment. You can use it to dilute that stain you liked but found too dark, or you can tint it with Behlen's Master Colors or

with artist's oil paints to create a stain of virtually any color. And you can even use it by itself, as a pre-stain wood conditioner, to control blotchiness when working with oil stains on soft, porous woods.

## Applying shellac

Ron likes to use a Lily varnisher's brush, which is of essentially uniform 1/4 to 5/16" thickness from ferrule to tip. He stressed the importance of flowing the shellac on to the surface in one direction only. Brushing back and forth through previous strokes, which have already begun to dry, introduces a ropey look to the surface. He generally starts with a two pound cut: two pounds of flakes dissolved in one gallon of 190 proof (95%) ethanol. Subsequent coats can be more dilute.

The Behkol Solvent that Ron sells is a proprietary blend of alcohols offering longer working time than regular denatured alcohol. He also carries a retarder which is very helpful in warm weather, and virtually mandatory when spraying shellac. And for spraying, he suggests a conversion HVLP gun, or for small jobs the Binks 115 touch-up gun with an 8 oz. cup.

## Wax, and the Key Ingredient

To the finished surface, Ron often adds an application of Renaissance microcrystalline wax, his preferred wax. He stresses the importance of allowing the wax sufficient time to dry before buffing. All commercial waxes contain solvents designed to make them easier to apply. If you buff too soon, you are removing the wax you just applied.

If there is one key ingredient in producing a superior finish, say Ron, it is patience. When you reach the point where you think you're done, do one more coat - it will be better a year from now. Finishing is a combination of little details; take care of those little details, and the big picture takes care of itself.



*All photos this article are by Jose Cuervo*

# Prepare for Judgment Day

Judges for our *Artistry in Wood* 2014 have been selected. The date of the meeting at the Sonoma County Museum is Wednesday, September 10th.

And the judges are...

**David Welter** has long been identified with the College of the Redwoods Fine Woodworking program in Ft. Bragg, where he administers and instructs in the program. He has helped successive generations of woodworkers attain high skill levels.



**Jim Rodgers** is from the East Bay. He learned turning from respected local and international artists but is mostly self-taught. He is a full time turning instructor for Mt. Diablo Unified School District. His specialty is segmented wood turning, and hollow vessels. He has served on the board of numerous turning associations, plus the American Craft Council.



**Paul Reiber** is a carver from the Mendocino coast, who specializes in sculpture and relief carving on benches, tables, mantels, doors, and frames. His work is collected internationally and may be seen at the William Zimmer Gallery in Mendocino, California, and Gallery One in Half Moon Bay, California, or at his studio in Fort Bragg.



*Photos by Tyler Chartier*

## Officers of the Association

<u>Chairman</u>	Bob Moyer	762-3713	<u>Secretary</u>	Walt Doll	206-2664
<u>Program Chair</u>	Art Hofmann	542-9767	<u>Guild Chair</u>	Larry Stroud	823-1775
<u>Treasurer</u>	Bill Taft	794-8025	<u>Show Chair</u>	Scott Clark	578-0331
<u>Editor</u>	Joe Scannell	(415) 892-9104			

Wood Forum is the monthly newsletter of the Sonoma County Woodworkers Association. Please feel free to submit articles and photographs for inclusion in the publication. You can send your submissions to the Wood Forum Editor at [joejakey@comcast.net](mailto:joejakey@comcast.net) or at [SCWAMESSAGES@gmail.com](mailto:SCWAMESSAGES@gmail.com). Advertisements are also accepted with a per-entry cost of \$5 per column inch.

## Membership Application

I would like to join the SCWA to meet other people interested in the craft, the art and the business of fine wood-working. Enclosed is my check in the amount of \$35 for the annual dues. I understand that this fee entitles me to attend monthly meetings and to receive the Wood Forum newsletter by email or via the SCWA's website.

I am enclosing an additional \$15 to receive the Forum by regular mail.

Name \_\_\_\_\_ Email \_\_\_\_\_

Address \_\_\_\_\_

City, Zip \_\_\_\_\_ Home Phone \_\_\_\_\_

Cell Phone \_\_\_\_\_ Work Phone \_\_\_\_\_

Please send check and completed application to:

Sonoma County Woodworkers Association, PO Box 4176, Santa Rosa, CA 95402