



Finishing Tips and Tricks

Five members participated in the March finish demo covering preparation and finish types and warning labels with a concentration on water borne, oil, buffing and urethane finishes.

Ray Deyo - Preparation



Finishing starts with the preparation process beginning with tool sharpness as the very first step. Sharpness can determine the length of time spent on sanding and what grits can be eliminated by maintaining a sharp edge and riding the bevel. He also reviewed an alternative grind to eliminate bevel heal marks. (See photos on page 2)

Sanding was the next step in the finishing process with a review of the four types of sand paper (aluminum oxide, silicone, ceramic and garnet). Typically woodworkers use the aluminum oxide and garnet with the oxide papers better due to their self-sharpening ability (friability), anti-clogging characteristic and durability. It was pointed out there are over 25 different recipes for aluminum oxide paper with the type of glues and abrasives used. Therefore, not all oxide papers are equal. Silicone paper is the best for sanding between finish coats due to its moisture resistance. Additionally, skipping grits will only extend the sanding time and can unknowing create sanding marks once the finish is applied. Four recommendations were shared:

- 1) Do not skip sanding grits,
- 2) Take the sanding process higher with dense, oily exotic woods,
- 3) Hand sand the last two grits WITH the grain, and
- 4) If using folded sand paper, insert a small piece of scotch bright pad between the folded sides to avoid rubbing and dulling of the unused portion as well as protecting finger pads against heat.

Ray then addressed the benefits of pre-coating with sanding sealer, especially with more porous woods. Sanding sealer will reduce the finishing coats needed and increase the smoothness of the final result. Any thinned finish can be used as a sealer coat, however, thinned dewaxed shellac is the best because it is compatible with any other finish applied and can be used between different finish types on the same piece.

Finally, through an actual example, he debunked the idea that placing gloss finish first on figured woods before applying a less shiny coat will increase the visibility of the figure. With four coats of satin on one side of a test piece and three coats of gloss with a final satin coat on another, both sides of the figured wood were identical in final appearance.



Ray's additional bevel to eliminate bevel heal marks

Ron Bishop – Finish Types and Warning Labels



I've been turning for 30 years and retired after 45 years with PPG Industries, the world's largest coatings company and the maker of Deft, Sikkens, Olympic Stains and many other products. To follow on from Ray Deyo's presentation, surface preparation to achieve a scratch and blemish free appearance is an important first step. The coating you apply penetrates and seals the wood on all the surfaces and fills in the gaps between the scratches. It clearly follows that fewer coats are needed if the scratches are shallow to the point of imperceptible, i.e., the finer the sanding grit the less coating that is needed. It is generally not wise to use a thick coat of a clear finish as it can wrinkle or cure incompletely. Waxes don't really penetrate the wood, but lie on the surface and provide a protection from dirt and fingerprints.

There are three basic types of wood finishes: Chemically cured coatings that react with another material to form a film. Some of those are epoxy finishes (two components), urethanes (react with water) and acrylates, Super-glue (react with water).

Oxidation cured coatings where the diluting solvent, petroleum distillate, water, etc., evaporates and exposes the finish to oxygen and crosslinks to create a continuous film. The solvent and wood finish is absorbed into the wood on the first coat to seal it and produce the rich wood look. Subsequent coats fill in the valleys from the wood grain and sanding process.

Drying oils from vegetable fats, like linseed oil from flax seed and tree saps have been around since the Egyptians. Tung oil, also know at Chinawood oil has been around since the time of Confucius, 500 BC and was used to waterproof boats and the paper parasols the Chinese use. Other drying oils include walnut oil, soya oil, and safflower oil. Linseed oil is a better waterproofing material but dries slower than Tung oil; yellows

with age and can grow mildew. Tung oil is a bit harder, yellows less and does not generally mildew. In the late 19th century chemists began making varnishes by "cooking" the drying oils and some animal fatty acids with alcohols to create varnishes that are more durable, form thicker films and protect against corrosion of metals. Polyurethane varnishes are a more recent varnish technology development in the last 75 years using isocyanates to replace some of the animal/vegetable fatty acids in the resin reaction. Acrylic coatings were developed in the 50's/60's and are chemical reaction products that are waterborne emulsions, but cure by evaporation of the water and then crosslinking with itself. Because they are waterborne, they do raise the grain on the sealing first coat.

Terry Moore – Water Borne Finishes



A rather simple introduction to water born finishes is provided by Rockler. The article posted on May 14, 2013 is titled "Waterborne Wood Finish Basics" and is quoted here:

Finishes that clean up with water are often referred to as "water-based", which is a little misleading. From a technical standpoint, "waterborne" is a much more fitting term. In fact, the term "water-based" it has been a hindrance to the reputation of many finishing products over the years. And understandably so: If a finish were truly "water-based" it would wash off with a wet rag no matter how long you let it dry, and wouldn't be much good for anything. But in reality, water plays only a supporting role in the process that turns waterborne finish from a liquid into a durable protective film.

Understanding how a finish that cleans up in water can adequately protect a wood surface is easier when you know a little about how the chemical process works. A waterborne finish is composed of minute spheres of resin (most commonly acrylic and polyurethane) suspended in water along with a slow evaporating solvent, such as glycol ether. When you spread a waterborne finish out in the open air, the water begins to evaporate. The solvent, which evaporates slower, stays behind and softens the protective coating on the tiny resin "latexes", causing them to bond into one continuous film. Since the solvent is the active ingredient the curing process, and not the water, the protective coating that results is not affected by moisture, and often has considerable resistance to a variety of other substances.

Further information could be gained by continuing to read that article at <http://www.rockler.com/how-to/waterborne-wood-finish-basics/>.

Additional information can be found at two articles: November, 1995 issue of *Fine Woodworking* magazine, author and finishing expert Chris Minick and a follow-up with many test results, also by Chris Minick in the November, 2006 issue of *Fine Woodworking*. The internet, of course, also has much to offer on this topic.

Bob Marchese

Wally Ubik – Using Oils Finishes



An oil finish is a wipe-on finish: Danish oil, linseed oil and Tung oil are the common types of oil finishes.

- Safety Warning: Used applicators (rags) are a severe spontaneous combustion threat. Incinerate immediately after use, store in an air-tight container until incineration, or air-dry in a single layer and dispose of when dry.
- Danish oil is classified as an ultra-thin oil varnish. It is also considered a reactive finish.
- An oil finish will build - see YouTube videos for examples. It usually requires a minimum of 3 coats. It looks really nice with 5 (or more) coats.
- Oil usually imparts a color to the wood. Test before using (this applies to most finishes, anyway). If you don't like the color change, use a different finish.
- You do not have to worry about cutting through the

finish when buffing, since the finish is thin and in the wood.

- I use lint-free cotton rags and old tube socks. I air dry (single layer) and then put in the trash. They can be burned. Store in air-tight containers or air-tight water-filled containers (water evaporates) until incinerated.
- Danish oil bleeds when used on large-pored woods, like oak or ash because it soaks into the pores and the expansion from drying forces the finish out of the pores. Use multiple thin coats, and let dry completely between coats. Or use a different finish.
- Rule of two, for furniture: Using your bare hand, rub in oil twice a day for a week, twice a week for a month, twice a month for a year, twice a year for life.
- Some turners use a homemade combination of oil and beeswax and usually apply while the piece is turning. Another turner (initials RR from Down Under) applies boiled linseed oil while lathe is off and then puts on a thin layer of beeswax while the lathe is turning. Using a soft cloth, he 'buffs' the piece, with the excess oil/wax mixture rubbing off on the cloth.

Oil finishes are thin and offer little protection. But they are easy to apply and impart an appearance that is pleasing to us. They are also easily repairable. However, they do color the wood, so you have to consider the aesthetics of the piece.

Videos: Search YouTube for 'Applying an oil finish'.

References: *"The Woodfinishing Book"*, Michael Dresdner, *"Turning Bowls with Richard Raffin"*

Bill King – Beal Buffing System



If you are looking for that “showroom” finish, consider using the Beall Wood Buffing System specifically to give wood a fast but spectacular finish. The Beall System is a complete finishing system that utilizes buffs and compounds to produce a high quality finish or to augment your existing finish.

The system is simple to use. Just sand your work through 400 grit, apply a coat of penetrating oil finish or sanding sealer, and let dry. With the lathe set at a high speed (the manufacturer recommends 1800 rpm’s), simply buff the work with the a linen buff using the Tripoli Bar to remove sanding scratches, then polish with the Linen/Flannel Buff and the White Diamond Bar. The final polish uses the all Flannel Buff and Carnauba Wax. The finish will appear very close to a multi coat lacquer finish.

Urethanes

Finally, Ray concluded the demo with a brief review of why he uses urethane and the advantages/disadvantages of that type of finish. While the curing time is longer and repair more difficult, it is self-leveling and very durable. Like other finishes, there is a selection of sheens and it is food safe once cured. Caution about oil based urethanes changing the color of applied dyes was also shared. It was also pointed out that any CLEAR finish, once cured, is food safe. Curing can typically require up to 30 days and is the process of flashing off its solvents. If you can’t smell it, it is cured.

SHOW AND TELL



Ray Melton, Natural, maple, 8¼ x 4



Jim Zorn, Various Finishes and Woods
Sizes: Bracelet 3¼, pen 4, jewel 1½



Rollie Sheneman, Maple,
Poly Finish, 2 x 5



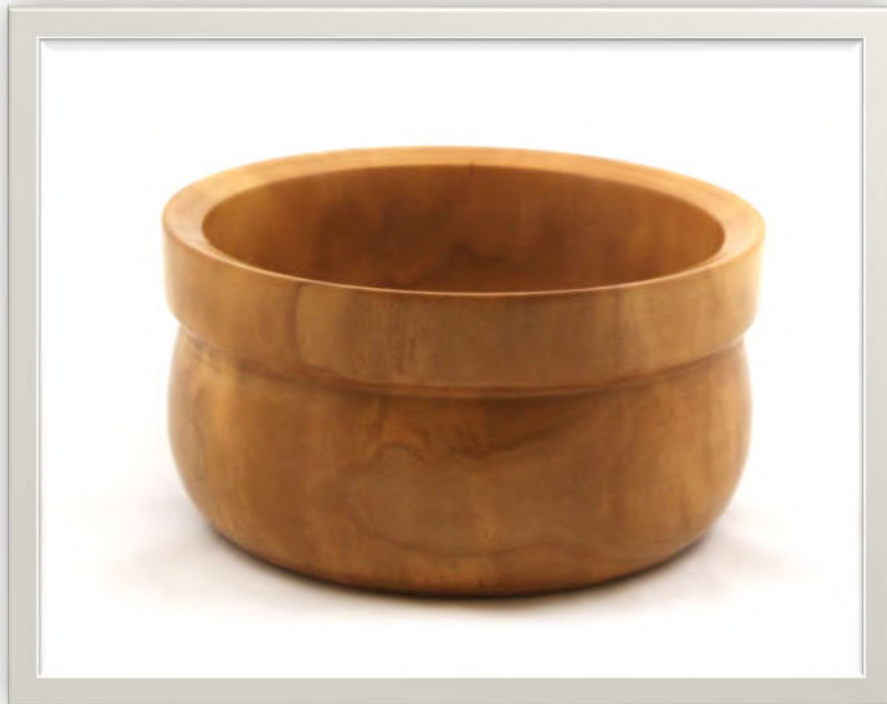
Terry Moore, Spackled Maple
General Finish, 6 x 16½



Bob Silkensen, Maple, Poly
11½ x 1¾



Chuck Mosser, Popular Burl, Lacquer, 11½ x 1¾



Alan Harrell, Unknown specie, my lands finish, 7 x 3½



Jim Bishop, Red Cedar, Liberon oil, 10 x 5



Rob Blader, Spalted maple, Wax, 8 x 4



Bill Jenkins, Maple, unfinished, 22 x 1½



Chuck Horton, Black cherry, Friction polish, 3 pieces
(not glued)



Dean Cox, Rainbow Shower,
Brushed Lacquer, 8 x 2½

THE 1ST QUARTER CHALLENGE PHOTOS

Longest finial; greater than 6", not thicker than 1" and one continuous piece - gets the prize.



Galen Rice



Ray Deyo

R I C H M O N D W O O D T U R N E R S



Jim O'Hanlon



Joanne Fisher

R I C H M O N D W O O D T U R N E R S



Chuck Horton



Bob Marchese



Jerry Fisher



David Gray



Mac Derry



Jim Bumpas $41\frac{1}{2} \times \frac{15}{16}$



Dan Luttrell $43\frac{1}{2} \times 11\frac{5}{8}$



Dan Luttrell - detail

THIS IS MY SHOP - ALAN HARRELL

Alan is requesting help for organizing his shop



Here is my lathe setup (after a dramatic cleanup ...and it won't stay that way long). I am looking for some ideas on tool storage for the varied gouges, scrapers, and other tools, etc. As we are all aware they come in different lengths, shapes and sizes. I find myself simply stacking them on the closest bench after use and then can't find them when I need them a few minutes later (just as we have all seen in the club demonstrations at times). Am I doomed to this being my fate going forward? I have no organization method other than sticking them in a box. Surely more than one of our members has come up with some alternatives and solutions for storage and organization of tools when in use and when stored. Sharing that knowledge would be an immense benefit for me and likely other club members. Thanks in advance for what you can share. Contact Allen at 804-282-1675 and at alan_harrell@verizon.net.

“THIS IS MY SHOP” IS A NEW SERIES OFFERED
IN THE NEWSLETTER — ARE YOU INTERESTED?

UPCOMING 2017 DEMONSTRATIONS

The First Ever Richmond Symposium

Join us in April for the first ever Richmond Symposium (not counting the AAW one held here a while back). We will be setting up 4 stations in the two meeting rooms. Each station will present three rotations of thirty minutes each. You can pick and choose what you want to see. Come and enhance your skill sets with some of our featured demonstrators.

Station One - Powermatic

1. Ron Bishop - Hollowing with the Ellsworth System
2. Matt Baker - Hollowing with the Jamison System
3. Chuck Mosser - Making Turtles

Station Two - Main Meeting Room (Jet mini)

1. Barbara Dill - Turning a Simple Multi-Axis Piece
2. Jerry Fisher - Christmas Ornaments
3. Barbara Dill - Turning a Simple Multi-Axis Piece

Station Three - Snack Room (Light Box side) (Jet Mini)

1. Bruce Robbins - UV Cured Finishes
2. Bill King - Basic Stave Construction
3. Ray Melton - Photographing Your Work

Station Four - Snack Room (Jet mini)

1. Phil Duffy - Basic Pen Turning
2. Cody Walker - Making Pens Without Mandrels or Bushings
3. Bill Sampson - Making and Turning a Hybrid Abalone/Acrylic Blank

And coming in May - Don't miss the magic and prestidigitation of our very own Bob Silkensen as he performs his famous Basket Illusion.

FROM OUR PRESIDENT

There are many reasons why each of us belongs to this club, but I believe one is that we all want to get better at what we do. As I watched the finishing demonstrations last month, I was reminded of a technique I used for vegetable gardening that always led to continuous improvement using a system of champions and challengers. Each year I would plant two varieties of tomatoes. The one I liked best from last year was the champion. The other was a new one to challenge the champion. If the challenger was better it would be the new champion. Fortunately, for woodturning, we don't have to wait until the next season. We can start anytime. The technique can easily be applied to wood species, finishes, as well as designs.

For pen making, I now have three favorite woods. For a light color, I use olive wood, for medium my preference is amboyna burl, and for a dark wood, I normally reach for desert ironwood burl. I have challenged the ironwood with rosewood burl and it's a close second. Other challengers were padauk, mesquite, curly maple, and snakewood. My go to finish is CA which is currently under challenge from a UV curable recently discovered. Challengers have been Wood Turners Finish, Dr's Workshop, Aussie oil, boiled linseed oil with CA, and a dipping lacquer. Many of these are available in sample sizes so it's quite easy to experiment. I use a similar philosophy when I make pens from kits. I have one preferred source for ball points, and another for roller ball or fountain pens, a far cry from when I first started and wanted to make one of everything available.

Though I'm not a prolific bowl, spindle, or hollow form turner, I can easily see using the champion/challenger approach to any of these art forms. We all have our go to favorites but sometimes it's nice to go out of our comfort zone just to explore. I'm told that wood harvested in the spring turns and ends up different color than wood from the fall. And that's just one species. There are different parts of the tree that turn and look different. Crotches, burls, end grain, cross grain, sections with and without pith are all choices we make when we load a log onto the lathe. Being an experimenter at heart is perhaps what I like so much about wood turning. Someone said variety is the spice of life and we woodturners seem blessed with so many choices. Not just in the material selection but also in the design. Will I ever have time to try all this? Absolutely not, which goes back to my premise. There's always something new to try which may or may not be better than what we have done before. What a great hobby.

Happy and safe turning,

Bruce

WOODTURNING COMPETITION AND EXHIBITION

The Competition and Exhibition is this month, Saturday, April 22nd. Entries can be submitted now at the Woodcraft Store. Entry forms are available on our club website and at the Woodcraft Store. All entries for the competition must be submitted by the end of our meeting, April 20th. Entries entered after Thursday will be placed in the exhibition category. The C&E Committee will set up a table outside our meeting room at 5 PM before our April meeting to facilitate receiving entries.

NEW WEBSITE FEATURE

Member Photo Galleries on the Richmond Woodturners Website

The Richmond Woodturners website (<http://richmondwoodturners.org>) has an exciting new feature: individual member galleries. If you are a member, you can have a gallery page devoted exclusively to your turnings. Michael Hyland, one of our newest members is the first to take advantage of this opportunity. To see his gallery, visit the main photo gallery and scroll to the bottom, or use this direct link: http://richmondwoodturners.org/galleries/michael_hyland.shtml

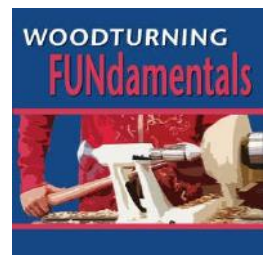
If you would like to join Michael in having your own gallery page, contact Information Manager Stan VanDruff at amaluthier@gmail.com. Our galleries are not self-serve like Instagram or Flickr, but Stan will take 6–24 of your JPG or RAW photos, edit/crop them as needed, and create a page for you. Photos should be well-lighted, sharp, and as large as possible. If you don't have your own photos, but have some of your turnings in the Show-and-Tell galleries, let Stan know which photos they are and he can build a gallery from them. If you ask nicely, Ray Melton might be willing to photograph additional turnings for your new gallery.

FROM AAW - TWO NEW PRODUCTS

Discover Woodturning is a web-based learning experience that introduces the art and craft of woodturning to visitors. Discover Woodturning enables the general public to learn about woodturning, its origins, appeal, and how to get started. [Visit Discover Woodturning.](http://woodturner.org)



Woodturning FUNdamentals is a members-only online learning portal for building strong woodturning skills and essential techniques. Designed for new turners, it complements the Woodturning FUNdamentals digital publication. [Visit Woodturning FUNdamentals online!](#)



UPCOMING EVENTS

October 7 - Makerfest 2017 – Richmond Science Museum – Richmond Woodturners will have a booth with live demonstrations

October 27 - 29 Mid Atlantic Woodturners Association Symposium – see below

2017 Challenges

2nd Qtr: A turning where one piece fits into another (not permanently glued)

3rd Qtr: Turn something out of a tree branch less than 3" is diameter

4th Qtr: Turn a mixed media piece (must be primarily wood but includes other media (i.e.: polymer clay, metal, glass, anything))

May 27 - Stratford Hall - "Traditional Trades: 18th Century Furniture Making" Richmond Woodturners Demonstrations



Location: Great House and immediate grounds

Event Overview: May 27, 2017 Traditional Trades: 18th Century Furniture Making

2017 trades fair will facilitate understanding of significant elements of 18th furniture making through the use of:

- Free tours of the Great House
- Kids Scavenger Hunt with prizes
- Grist Mill open to the public
- Handout explaining <10 chosen pieces within the Great House
- Most products people in the industrialized nations use today are turned out swiftly by the process of mass production, by people (and sometimes, robots) working on assembly lines using power-driven machines. People of ancient and medieval times had no such products. They had to spend long, tedious hours of hand labor even on simple objects. The energy, or power, they employed in work came almost wholly from their own and animals' muscles. Ray Deyo (makeitround@comcast.net) is our point of contact for the Stratford Hall event.

Mid Atlantic Symposium

Planning for the 2017 Mid Atlantic Woodturners Association Symposium is well underway with this year's event scheduled for October 27, 28 and 29th at the Lancaster, PA Marriott Hotel. We have a wonderful slate of professionals lined up for this event. Demonstrators include:

- Stuart Batty
- Cynthia Cardon Gibson
- Ashley Harwood
- Avelino Samuel
- Curt Theobald
- Hans Weissflog
- Jakob Weissflog

Registrations for the Symposium will open in early April. Please watch for future email updates, or like us on Facebook at <https://www.facebook.com/MAwoodturners> or <http://www.mawts.com/>

Looking forward to seeing you there!

Please also remind your members that we will need volunteers to help staff the event. Contact Ron Sheehan, Volunteer coordinator if you are able to help in any way. Ronsheehan39@gmail.com

Ron Sheehan

**RICHMOND
WOODTURNERS
QUARTERLY CHALLENGE**

The Challenge will now be regularly scheduled for the third month of each quarter (March, June, September, and December) with the subject announced at the beginning of each quarter and included in the newsletter. Entries will be placed on a table separate from the Show-n-Tell.

April Snacks & Drinks

Georgia Wood	Ice/cooler
Ed Wood	liter diet coke
Eris White	liter coke
Galen Rice	liter Pepsi
Gary Peterson	chips
Gerry Campbell	Sweet snack
Gordon Kendrick	Sweet snack
Herb Walke	Salty snack
Jack Hayes	Salty snack
Jared Parker	cookies

You can switch with someone if you are unable to bring those items for the month assigned.

1st Time Visitors

- Susan Hillyer, Tappahannock
- Michael Hyland, Mechanicsville
- Terry Wright, Mechanicsville
- Steve Kukwa, Richmond

Returning Members (from 2016)

- Charlie Hamilton
- Dick Webb

Meeting Schedule

April	4/20/2017	October	10/19/2017
May	5/18/2017	November	11/16/2017
June	6/15/2017	December	12/21/2017
July	7/20/2017	January	1/18/2018
August	8/17/2017	February	2/15/2018
September	9/21/2017	March	3/15/2018

2017 Elected Board



- President: _____ Bruce Robbins
 - 1st Vice President: _____ Bill King
 - 2nd Vice President: _____ Georgia Wood
 - Treasurer: _____ Cody Walker
 - Secretary _____ John Anderson
 - Newsletter _____ Bob Marchese
 - Resource Manager: _____ Chuck Bajnai
 - Membership Manager: _____ Dan Luttrell
 - Information Manager: _____ Stan VanDruff
- Past President Board Members:
 Dick Hines
 Lee Scarbrough
 Jim Bumpas
 Dan Luttrell

Left to right – Front Row: Stan VanDruff, Georgia Wood, Bob Marchese, Chuck Bajnai
 Back Row - Bill King, Cody Walker, Dan Luttrell, Bruce Robbins, John Anderson

Committee Chairpersons

Barbara Dill Chairperson of the AV committee

Jim O’Hanlon Chairperson for the Turning Competition committee

Financial Report

Balance\$9,142.55

For sale or trade

If you have any items to list in the For Sale or Trade Section,
 Please email me at forsale@richmondwoodturners.org.

Please remember that each item needs a description, price, city, seller's name and contact info (phone/email).

You can include pictures if you like. They will run 1 month unless notified to “re-run”.

AAW Membership:

Experience the remarkable world of woodturning with the American Association of Woodturners (AAW). With the largest portfolio of woodturning-related material in the world, AAW is the go-to source for woodturners of all skill levels. A membership with the AAW can help you learn and thrive in your woodturning experience, as well as connect with others who share your passion.

General: \$60 annually worldwide

Family: \$65 annually worldwide
Includes up to three family members who live in the same household.

<http://www.woodturners.org>

**OPERATION CHRISTMAS
CHILD SPINNING TOPS**

Thanks to all who turned tops.
For 2016 we turned in 1,330
Let's get started for 2017.

Here is a link to a video to show just how easy they are to make if interested....

<http://youtu.be/UWpV9dBpbME>

RICHMOND WOODTURNERS INFO

Dues: \$25 individual, \$35 family & \$15 student. Member applications are available upon request at meetings or via email.

Library: Contact the club librarian to borrow tapes and other publications related to woodturning. The list is on the website. Lose it and you bought it.

Website: www.richmondwoodturners.org Updated regularly and contains links to other VA clubs.

We meet at the Woodcraft Store - 9862 West Broad Street, Glen Allen, VA 23060

On the 3rd Thursday every month.



Where we meet

Contact the store at [804-355-3945](tel:804-355-3945)

Fax: 804-355-2532

Email: richmond-retail@woodcraft.com

9862 West Broad Street
Glen Allen, VA 23060

Organizations such as the Richmond Area Turners would not exist if it weren't for the kindness of their sponsors. We are blessed to have the Richmond, Virginia Woodcraft store supporting us and our activities. If it wasn't for their kindness, the Richmond Area Turners might still only be an idea. Please remember this and support them at every opportunity!

For the classes provided at this location see: <https://www.woodcraft.com/stores/richmond/classes>

Look for classes by Ray Deyo, Clark Brummett and David Sterling

FOR SALE

Please put this in the next newsletter. A friend of a friend is a widow who would like to dispose of her deceased husband's tools. I looked them over and they appear to be in good to very good condition.

A partial list includes: a fairly late model Shopsmith MK 5 w/ Pro Fence and a SS bandsaw, and a SS belt sander attachment, a Craftsman 12" sliding miter saw, a Dewalt biscuit joiner, a Penn State dust collector with hoses, a Craftsman router table, a Burnzomatic micro torch, a Hitachi air powered Brad nailer, a Workmate folding work table, a woodworkers bench, and a 16' aluminum ladder.

There are also miscellaneous hand tools, nails, screws, etc. and a couple of tool boxes, manuals and woodworking books. She indicated she would sell the lot for about \$1500, but some items have been individually priced.

Interested persons should contact her directly at Barbara-sg@cox.net/[757-564-1888](tel:757-564-1888). Miss Barbara lives in Williamsburg, VA

Chuck Horton