



NEWSLETTER



ADVANCES IN PEN MAKING



BRUCE ROBBINS

Bruce Robbins and Bill Walters presented a spectacular show of the latest techniques of pen making. Bruce started the presentation with a slide show and explained some of the newest features of penmaking. The slideshow started by describing the various types of pens and some of the tools that are used in the production of them. Several photos of these pens and of the tools were included. The process of making a pen was explained followed by making the special blanks that are used to make a pen. The making of the blanks provides the 1000s of variations available verses using a plain piece of wood or other homogeneous material. A few of the ways to make special blanks includes segmenting materials, 3 D printing, casting and carving the blanks. Use of a **computer numerical controlled (CNC) machine** was a highlight of the presentation with great explanations of the process of using them to make blanks. Several shop made machines were presented with photos of the pens made with blanks made by these processes.

Bill Walters continued the presentation by showing some of the ways he uses segmentation of materials in the making of pen blanks. He described some of the materials and techniques that could be used. The Slide Show follows:



SLIDE 1



BILL WALTERS

3 Types of Pens

- Ballpoint (uncapped)
 - Cross style or Parker Style refill
 - Twist or Click mechanism
- Roller Ball
 - 2 piece capped pen (so ink won't dry out)
- Fountain Pen
 - 2 piece capped pen (so ink won't dry out)
- Many designs and platings for each type available or make your own

SLIDE 2

Ball Point



SLIDE 3

Roller Ball



Smooth writing
Limited colors



SLIDE 4

Fountain Pen



Many colors and types of ink
Numerous nib types and grinds
Variable line width for expression



SLIDE 5

Basic Kit Components



SLIDE 6

Steps to making a pen

- Select a type
- Select a style - \$ to \$\$\$\$\$
- Select/Design/Make a “Blank”
 - 5/8 to ¾ square; up to 5” long
- Drill holes to fit brass tubes – Glue tubes in

SLIDE 7

Steps to making a pen (con't)

- Mill/sand ends perpendicular to tube



- Mount on mandrel with appropriate bushings



SLIDE 8

Steps to making a pen (con't)

- Turn to finished diameter and finish



- Press in fittings

SLIDE 9

Making Pen Blanks

- With kit style pens, if you choose a simple wood or plastic blank, you can make a pretty pen showing off the grain, a burl, or a fancy plastic. Its very difficult to identify the maker as most will look similar
- What differentiates the good from the better is the design and execution of blank making. Tonight, we will show you several methods to show off the 2 – 4 inches of canvas available in a pen.

SLIDE 10

1000's of variations

If you can drill it, cast it, or glue it to a tube

you can make a pen



SLIDE 11

A few of the many ways...

- Segmenting wood/plastic/metal
- 3 D printing a patterned mold and filling with resin (Polyester/Urethane/Epoxy)
- Casting a patterned mold
- Carving patterns with CNC and filling some with polymer clay or colored resin

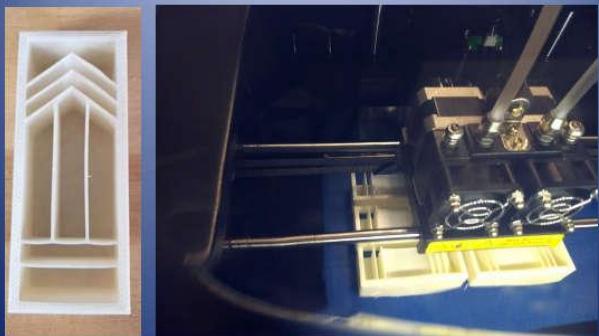
SLIDE 12

Segmenting with wood



SLIDE 13

Using a 3D Printer to make molds



SLIDE 14

Filling the mold with colored resin



SLIDE 15

If you don't have a 3D printer...

- Get a silicone mold and cast the "mold"
- Unlimited color variations for exterior and interior



SLIDE 16

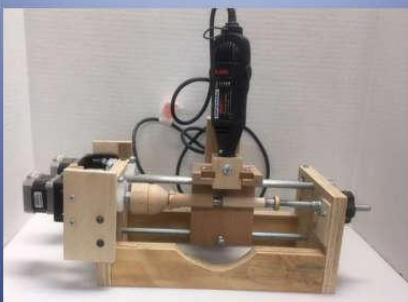
Casting Resins

- Polyester – Lowest Cost – has odor
- Polyurethane – higher in cost – requires pressure pot
- Epoxy – higher in cost – may require pressure pot



SLIDE 17

2 Axis CNC



Jim Zorn Design

Does everything the \$350+ Beall Pen Wizard and more
For less than \$100

SLIDE 18

2 Axis CNC



SLIDE 19

Some examples



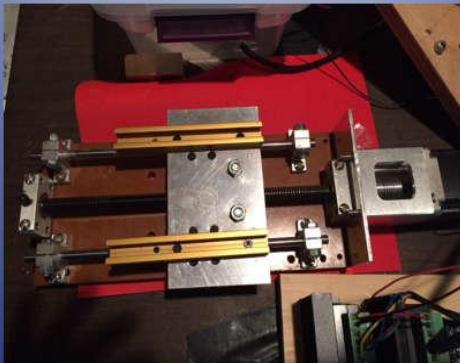
SLIDE 20

Another 2 axis CNC



SLIDE 21

X - Axis



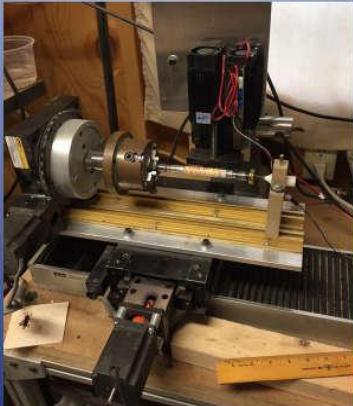
SLIDE 22

Scaled up Rotary Axis



SLIDE 23

A 4 Axis CNC



SLIDE 24

Stepper Motors and CNC programs

- 3 things to tell the stepper:
 - How far
 - How fast
 - What direction
- Most steppers have 200 steps per revolution
- Modern stepper drivers can use up to 32 microsteps giving 6400 steps per revolution

SLIDE 25

Stepper Motors and CNC programs

- These machines use Arduino microcomputers loaded with free GRBL control software and a free visual universal GCode sender; GCode being the language of CNC
- The X axis is calibrated for horizontal movement in inches; the Y axis is calibrated in degrees of rotation. If the Z axis were controlled with a stepper, 3 D carvings are possible.
- These particular machines are calibrated for 1 speed with manual Z depth.

SLIDE 26

GCode

- Written as a single line of text or in a file of multiple command lines
- To make a spiral of 1 inch with 1 simultaneous rotation code is: X1 Y360
- To make a 2 inch spiral with 3 rotations and cross hatching code is
X2 Y1080
X0 Y2160

SLIDE 27

When done carving...

- Leave textured, fill with polymer clay or colored epoxy
- Bake if clay
- Sand down and finish



SLIDE 28

SHOW AND TELL



BETSY MACK - OAK WITH WOOD TURNER'S FINISH



CHUCK HORTON - MONKEY POD WITH WIPE ON POLY FINISH, 6" x 2½"



BRUCE ROBBINS - PENS



PETER OSBORN - BOTTLE STOPPERS,
ZEBRAWOOD AND PURPLEHEART WITH
AUSSIE OIL FINISH



DAVID BUSHMAN - GENERAL FINISH, 9"



CHUCK HORTON - GOLDEN MEAN RULE,
KOA, UNFINISHED, 6 "



GREG GLENNON - POPLAR WITH AIRBRUSH FINISH, 4"



DAVID GRAY - DRINK MUDDLER (MIXER), BOXWOOD WITH WALNUT OIL FINISH, 10"



DAN LUTTRELL - AMBROSIA MAPLE WITH CARNAUBA WAX FINISH, 12" X 3½ "



PHIL DUFFY



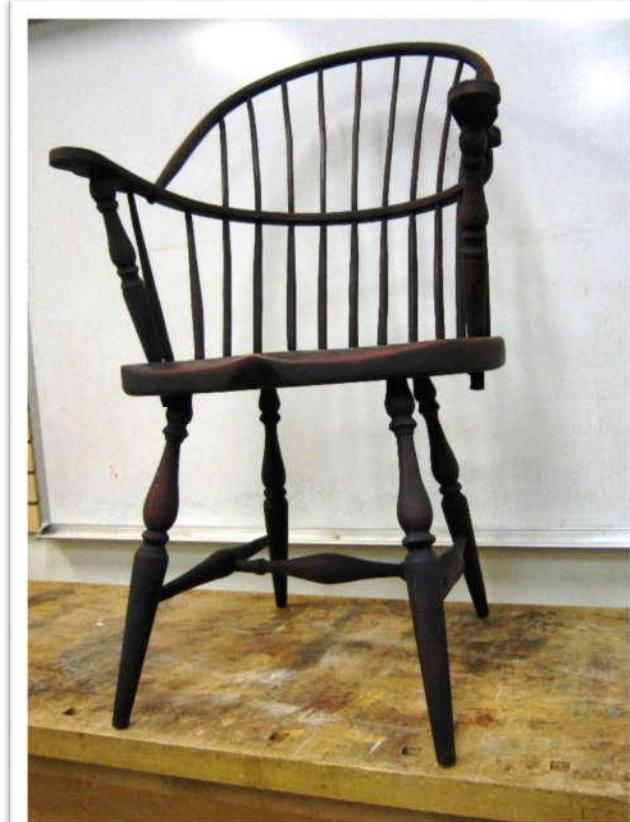
GENE MILSTEAD, "TORCHE" (CANDLE TABLE/STAND)



BOB MARCHESE - RED OAK, UNFINISHED, 14" x 15" HIGH



BILL JENKINS - WINDSOR ROCKER, PINE & OAK WITH MILK PAINT FINISH



GORDON KENDRICK - WINDSOR CHAIR, BEECH, MAPLE, RED OAK, WHITE OAK, YELLOW PINE, AND HEART PINE WITH MILK PAINT FINISH

FROM OUR PRESIDENT

I hope all of you have been having as much fun as I have being in the shop this summer. I have a number of new things I wanted to try and hope some come out good enough for a little show and tell. I had hoped to have a few progress pictures of some thin wall turnings but after a winter of drying as a roughed-out shape and a few hours in the shop this morning, my thin wall got a little too thin. At this point with only a few small scrapes on my hand, I thought it better to go inside and write my monthly story and search for some safety equipment to prevent a bruised ego. Not my first destroyed piece, but likely one that I had too much time into. I keep telling myself there is no shame in failure and it was a learning experience, but there are some things I would prefer not to learn.



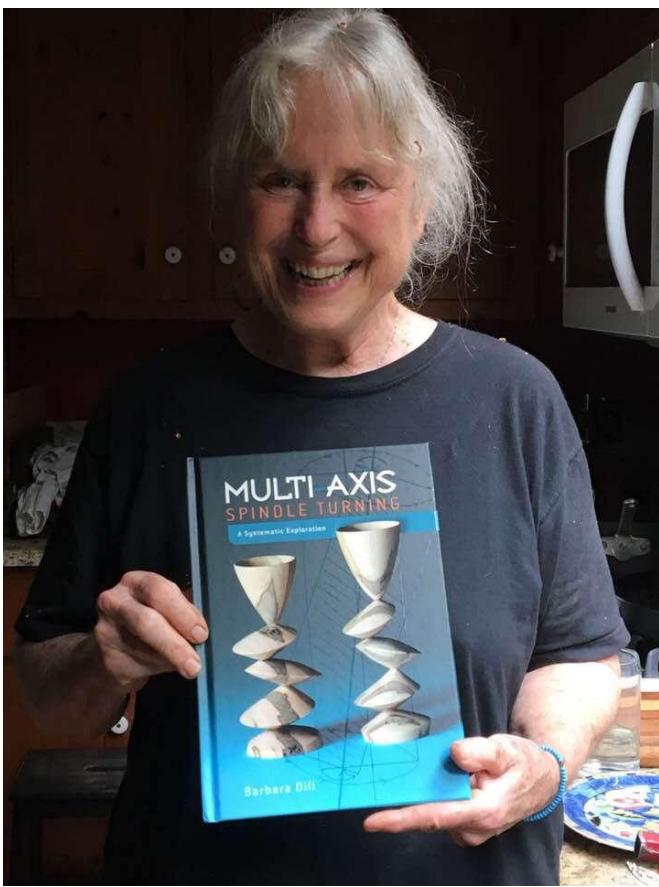
The good news is that I followed my advice and roughed out two identical pieces last fall, so I still have a chance. If I screw that one up, maybe I'll be a little better turner next year and I still have some stock waiting to be roughed out. I've also come up with what I think are a couple of killer concepts for pen stands so there is hope for me. And while the summer is going well, it's really the fall that I look forward to. Yes, the weather is my favorite, but for woodturning it's as close to heaven as we get.

Starting off with club activities, we already are booked for the State Fair and Makerfest. This will be our second time at the fair in recent times and our third trip to Makerfest. If you haven't already, and want to have some fun, please consider demonstrating for one of these events. The State Fair demonstrator list is open for volunteers and Makerfest will soon follow. In addition to these, we also have some regional events coming such as the Virginia Symposium in Fisherville. This looks like an excellent opportunity to get some tips and tricks from the many professionals attending. And if you're not up for travelling, just come to the club meetings. It's been a while since we've had a pro demonstrate and it looks like several are on the docket in the coming months.

Happy and safe turning (or don't do what I do),

Bruce

BOOK SIGNING – BARBARA DILL



BARBARATHE DAY I GOT THE FIRST COPY

Barbara will be available during our meeting on Thursday, August 16th to sign your copy of her latest book! She will have copies for you to purchase for \$30, cash is preferred, but checks will do.

Master the art of multi-axis spindle turning! This book offers a strategy for understanding multi-axis turning and the many options available to create unique forms. Dill, a self-professed "experimental turner," takes readers step by step through this complex area of turning. Working in multiple axes on a spindle can be confusing, but as Dill teaches the "hows" of turning spindles as systematic building blocks for future work, turners can finally make this skill their own. Hundreds of photos and diagrams offer detailed guidance, and explain the variables—axis placement, profile, orientation of the new axis to the center axis, and so on—and how they apply to each "quadrant" of multi-axis work. Split and thermed turning methods, planning tips, tricks of the trade, and a three-sided goblet project help you succeed. Concepts come to life as Dill shows examples of not only her work, but the work of other expert turners.

MULTI-AXIS SPINDLE TURNING

This trio is the result of playing with simple ideas such as alternating beads or coves or v-cuts. The tall walnut sculpture on the left is from a split turning. (See chapter six.)



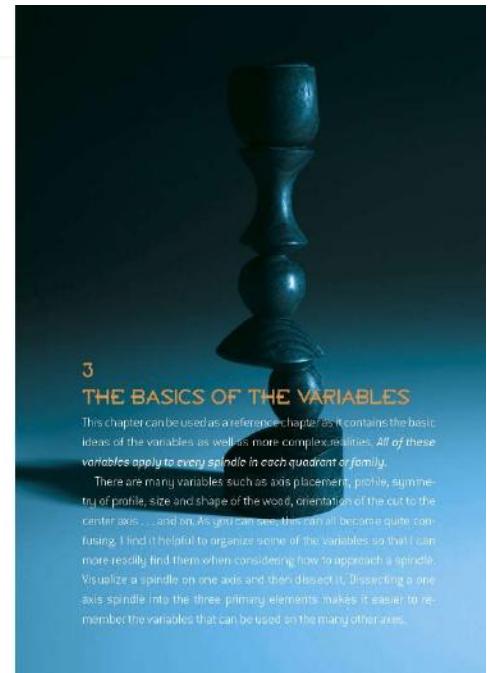
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3

THE BASICS OF THE VARIABLES

This chapter can be used as a reference chapter as it contains the basic ideas of the variables as well as more complex realities. All of these variables apply to every spindle in each quadrant or family.

There are many variables such as axis placement, profile, symmetry of profile, size and shape of the wood, orientation of the cut to the center axis . . . and on. As you can see, this can all become quite confusing. I find it helpful to organize some of the variables so that I can more readily find them when considering how to approach a spindle. Visualize a spindle on one axis and then dissect it. Dissecting a one axis spindle into the three primary elements makes it easier to remember the variables that can be used on the many other axes.



MEETING NOTES OF 17 JULY 2018

Bruce opened the meeting at 6:30 and discussed the following topics:

Next board meeting September 10 - 5:30

- Holiday party planning

- Board election preparation

- AV status and potential upgrade

- Competition planning and review

Lee Scarbrough – chair of election committee – see him if you want to run

Upcoming events were listed

Upcoming demonstrations were listed

UPCOMING EVENTS

Stratford Hall – September 15th & 16th. See Dan Luttrell

State Fair – Friday Sept 28th through Friday Oct 5th with sixteen 4-hour demo slots – Free admission/parking no sales. See Dan Luttrell

Mid-Atlantic Woodturning Symposium – Sept 28th & 30th

Makerfest – Saturday Oct 6th with eight or more demo slots, we can display our works– no sales

Virginia Woodturning Symposium – Nov 3rd & 4th

Richmond Cultural Arts Calendar

Our club meeting and events can now be incorporated into the Richmond Cultural Arts Calendar which is a community-based organization that supports local arts organizations and individuals by highlighting events, performances, etc. Our current page can be accessed at the following link:

http://calendar.richmondcultureworks.org/event/richmond_woodturners_monthly_meeting



SAVE THE DATE!!

Virginia Woodturning Symposium 2018

November 3 & 4, 2018

Expoland - Fishersville, VA

Mark your calendars to reserve the dates for the Virginia Woodturning Symposium!

There will be 41 rotations held at 7 different stations covering a number of turning techniques during this exciting 2-day event! This is an awesome opportunity to enhance your knowledge base!

Some of the demo topics include-

Fabulous Finials, Pen Making Start to Finish, Fun with Spheres, The Airbrush Demystified, Natural Edge Winged Bowl, Basic Bowls, Techniques for Deep Vessels, and many other fantastic sessions!

The following demonstrators are on the schedule:

Cindy Drozda	Rudy Lopez	Donna Banfield
Nick Cook	Barry Gross	Frank Penta
Graeme Priddle	Mark St. Ledger	Lyle Jamieson
Joe Fleming	Dick Hines	Fred Williamson
Mike Sorge		

The symposium is a great place to meet woodturners from other clubs, learn new skills, and talk with vendors about your tool and supply needs! There are also opportunities to work on your techniques with experts at the Skills Center, and an Instant Gallery where you can view or display turnings!

If you pre-register before October 26, 2018, the price is only \$80 for the weekend!

Check us out for details on the web at: <http://www.virginiawoodturners.com>
Stay tuned for more details in the months to come and **MARK YOUR CALENDAR!!**

We look forward to seeing you in November!

UPCOMING DEMONSTRATIONS

August – Natural Edge Bowls – Dick Hines, Chuck Mosser
Short presentation from Woodpeckers
September – Design in Woodturning – TBD
October – Alan Leland – Ornaments
November: Trent Bosch – hollow vessels (remote demo)

1st Time Visitors

Mack Maleta, Glen Allen
James Giblin, Chester

New Members

Chick Kleman, Fredericksburg

Returning Member

August Snacks & Drinks

GEORGIA WOOD.....ICE/COOLER
JOSEPH BOYLE.....2 LITER COKE
KATHERINE HARRIS...2 LITER PEPSI
KNAVEY MOYHER.....2 LITER DIET COKE
LARRY PLATING.....2 LITER CAF FREE SODA
LEE SCARBROUGH.....SALTY SNACK
MAC DERRY.....SWEET SNACK
MARGARET TURNER...CHIPS
MARK STRANG..... COOKIES
MARLIN FEGELY..... SALTY SNACK

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

Richmond Woodturners Quarterly Challenge

The Challenge are regularly scheduled for the third month of each quarter (March, June, September, and December). Entries will be placed on a table separate from the Show-n-Tell table.

3rd Qtr. Hollow Form

4th Qtr. Shop tool

2019 1st Qtr. Jigs

Financial Report

Our current balance is \$7516.81. The balance has not changed since last month. No activity

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".

Committee Chairpersons

Charlie Hamilton	Chairperson of the Social Media Committee
Jared Parker	Chairperson of the AV Committee
Jim O'Hanlon	Chairperson of the Turning Competition Committee

Club Officers

President: _____ Bruce Robbins
Vice President: _____ Jim Bumpas
Secretary _____ John Anderson
Treasurer: _____ Cody Walker

Directors

Activities Director: _____ Georgia Wood
Resource Director: _____ Chuck Bajnai
Information Director: _____ Stan VanDruff
Membership Director: _____ Dan Luttrell
Newsletter Editor: _____ Bob Marchese

Past President Directors:

Lee Scarbrough
Rey Deyo

Meeting Schedule

August	8/16/2018	February	2/21/2019
September	9/20/2018	March	3/21/2019
October	10/18/2018	April	4/18/2019
November	11/15/2018	May	5/16/2019
December	12/20/2018	June	6/20/2019
January	1/17/2019	July	7/18/2019



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 Woodturners, Penturners and carving clubs would not exist if it weren't for the kindness of their sponsors. We are blessed and grateful to have the Richmond Virginia Woodcraft store supporting us and our activities.

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 taught by Ray Deyo, Clark Brummett, David Sterling, Brian Noble-Marx and others