

NEWSLETTER



INTRODUCTION TO SEGMENTED WOODTURNING

Bob Silkensen, Terry Moore, and Bill King

“Cause there is a little segmented wood turner in all of us!!!”

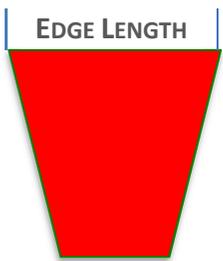
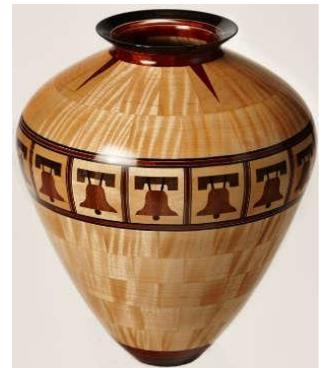
What is a Segmented Turning?

A project you construct from a series of pieces of wood rather than from a single chunk of wood.

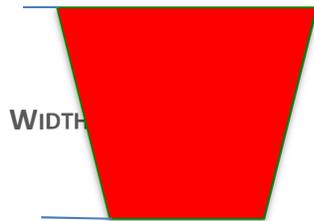
Basic Segmenting

- A number of pieces (Segments) = a Ring
- A number of Rings = a project
- Ring size is dependent on project design
- All Segment angles must total 360 degrees

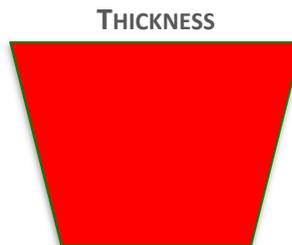
Segments are described by edge length, width and thickness



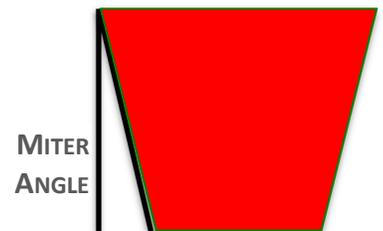
EDGE LENGTH DETERMINES RING DIAMETER



WIDTH DETERMINES WALL THICKNESS



THICKNESS – DETERMINES HEIGHT OF THE RING THUS HEIGHT OF PIECE



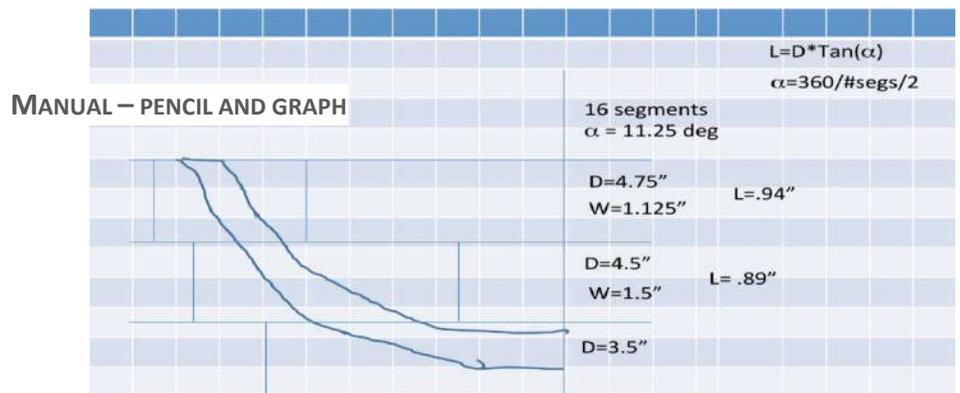
MITER ANGLE – IS DETERMINED BY THE NUMBER OF SEGMENTS IN EACH RING

Computing Miter Angles: Segment Angle =  $360^\circ / \text{Number of Segments per ring}$ ,  
Miter Angle = Segment Angle/2

For example a 12 Segment Ring:  $360^\circ / 12 = 30$  degree segment angle,  
 $30^\circ / 2 = 15$  degree miter angle

For an 11 Segment Ring:  $360^\circ / 11 = 32.72$  degree segment angle  
 $32.72^\circ / 2 = 16.36$  degree miter angle

Segment Design is achieved in many ways. Here are a few:



- Woodturner PRO (Woodturnerpro.com)
- Segment PRO (Woodturnerpro.com)
- Lamination PRO (Woodturnerpro.com)
- Segmented Project Planner (segmentedturning.com)

Cutting Summary Untitled

Row	Type	Segments	Board Thickness	Diameter (A)	Diameter (B)	Segment Edge Length	Vertical Spacer Width	Board Width	Economy Board Length	Miter Angle	Blade Tilt	Slope
3	Flat Bubinga	16	3/4"	7-1/4" od	5-1/2" id	1-7/16"	0"	15/16"	22-5/16"	11.25°		
2	Flat Canarywood	8	3/4"	6-1/2" od	3" id	2-11/16"	0"	1-7/8"	17-1/8"	22.5°		
1	Disk Bubinga		3/4"	4-1/2" od								

od = Outside Diameter, id = Inside Diameter, od = Upper Outside Diameter, id = Lower Outside Diameter

Format Painter						
Clipboard		Font			Alignment	
E3		=TAN(D3*PI()/180)* B3				
A	B	C	D	E	F	
Layer	Dia of Ring	# of Segs	Cut Angle	Seg Length	Seg Width	
1	4.5	disc		4.5"	4.5"	
2	6.5	8	22.5	2.69		
3	7.25	16	11.25	1.44		
Seg Length =		TAN(Cut angle * Pi / 180) * Dia				

DEVELOP YOUR OWN SPREADSHEET

### No Math Method:

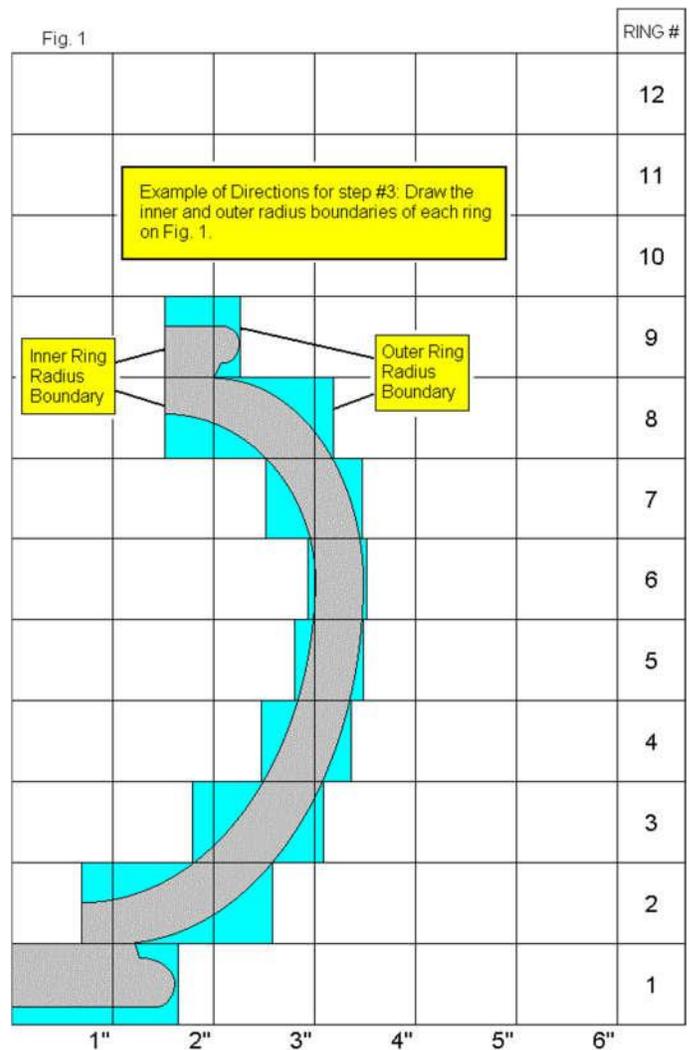
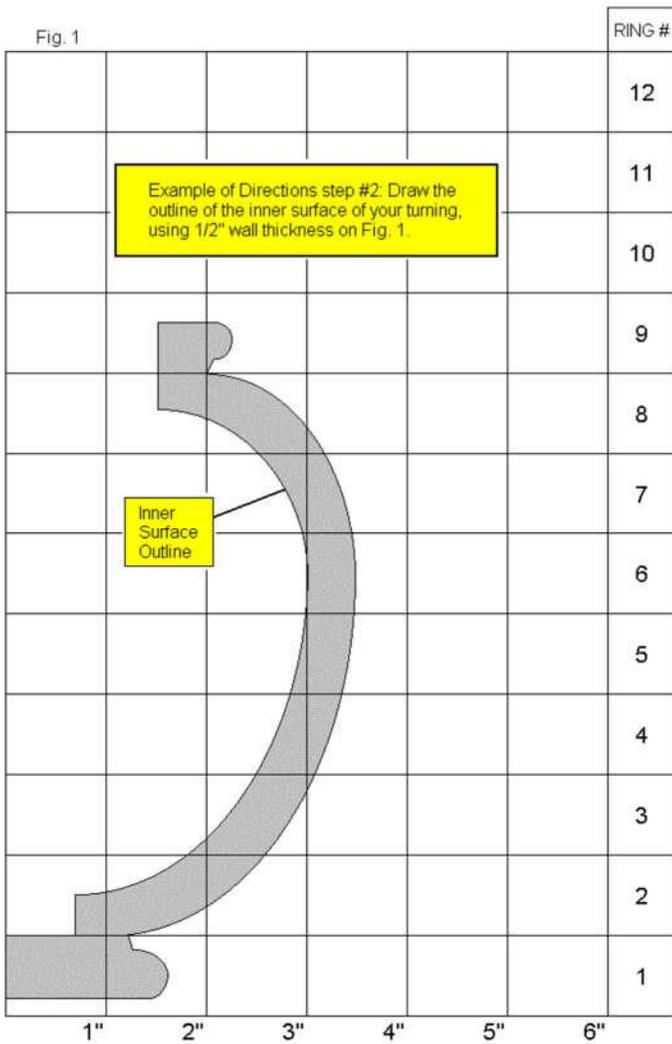


Fig. 2 12-sides (set miter gauge for 15 degrees)

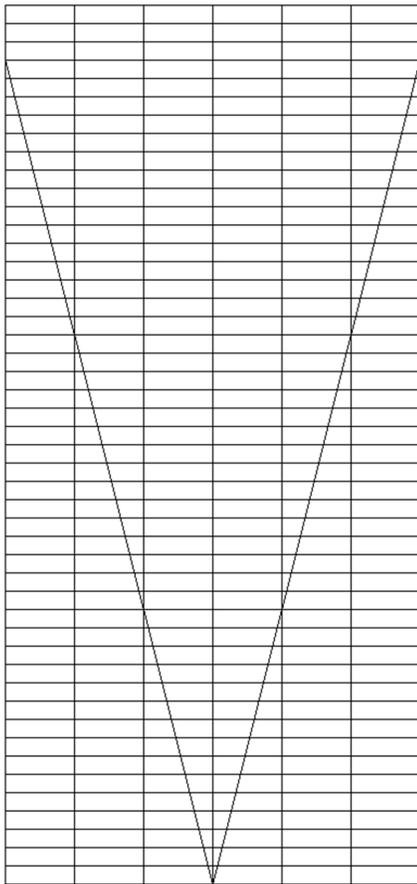


Fig. 2 12-sides (set miter gauge for 15 degrees)

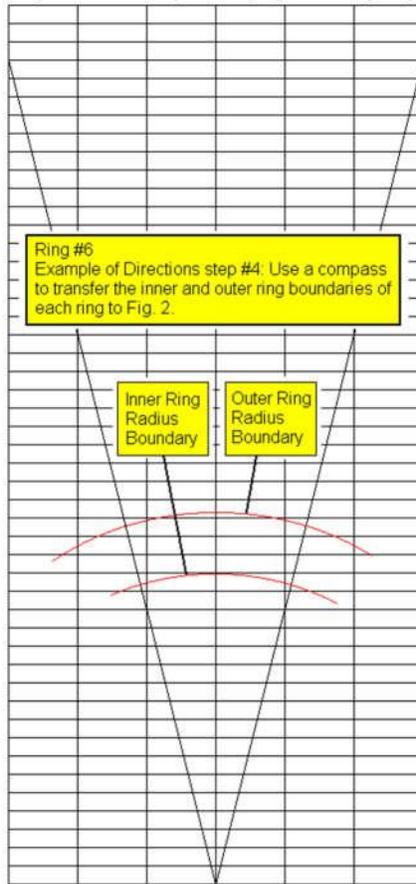
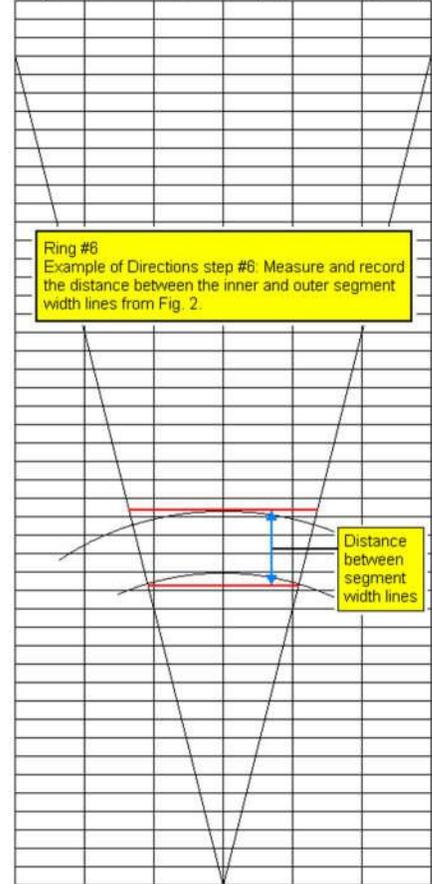


Fig. 2 12-sides (set miter gauge for 15 degrees)



## Cutting Segments

### Select Wood and Rip to Size

Band Saw – Accu-Slicer <http://www.accu-slice.com>

Miter Saw – zero clearance backstop

Trial and error is your friend

Table Saw - many sled designs are available

Make your own

SegEasy Sled (Segeasy.com)

Design your own

Bill Kandler's Segmenting Sled (<http://www.segmentedturning.com/table-saw-miter-sled-plans.htm>) was shown and his book "Segmented Turning – A Good Start" mentioned. "The Art of Segmented Woodturning – A Step by Step Guide" by Malcom Tibbetts is considered best by many. See <http://www.tahoeturner.com> for further information. Many other devices and sled designs are available including the "Dubby" from Inline Industries. Also: <https://www.woodturningonline.com/articles.php?catid=21>

Article on Segmented Woodturning: [http://aawcontentsource.org/aaw\\_cs1\\_pdf/AW3005p18-21.pdf](http://aawcontentsource.org/aaw_cs1_pdf/AW3005p18-21.pdf)

"Turning Your First Segmented Bowl," by Jim Rodgers, from the October 2015 issue of American Woodturner.

(You must be logged into the AAW website to access this article.) Also from American Woodturner is a series of three articles on segmented turnings starting with the Winter 2005 Issue.



**ADJUST USING THE HALF RING METHOD**



**GLUE THE HALVES TOGETHER**



**SANDING SEGMENTS**



**GLUING STRATEGIES**

- TWO SEGMENTS
- HALF RINGS
- THE "FULL MONTY"



**FLATTENING RINGS**

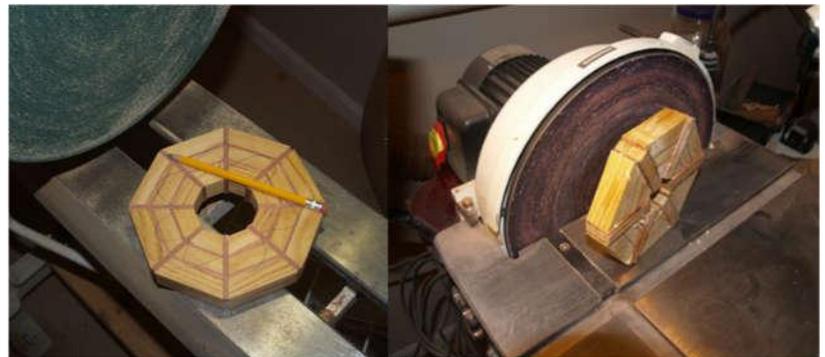


**FLATTENING RINGS**

**Sanding and Gluing**



**MOUNT BASE ON WASTE BLOCK**



**FLATTEN ONE SIDE**



GLUE TO BASE



CONTINUE WITH REMAINING RINGS

## Accents



ACCENTING WITH RINGS AND OR COLOR



ACCENTING WITH EMBELLISHMENTS



ACCENTING USING VENEER

## AAGE'S WOOD

During our March meeting Bruce announced that a number of roughed out bowls from Aage Rendalen's shop are available for members to take, finish and return to the April meeting.

On April 29, Dawn will be taking The Forest Project to the VCU Rice River Research Center for a fundraiser benefiting ecological research. She will take any bowls turned from Aage's wood and sell them next to The Forest Project. The bowls will be displayed together on a set of shelves that Dawn made from salvaged wood, with signage that says "Richmond Woodturner's Work donated in loving memory of Aage Rendalen". All the proceeds from the Woodturners work will go to the Research Center. She will be picking up the donated bowls at the next meeting on April 19th.

Thank you! Dawn

## WOODTURNING COMPETITION AND EXHIBITION

The Competition and Exhibition is this month, Saturday, April 21st. 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 19th. Entries after Thursday will be placed in the Exhibition category. The Committee will set up tables at Woodcraft at 5 PM before our meeting to facilitate receiving entries.

Demonstrations on April 21st will be:

- 10:00 Bowls from Green Wood – Ray Deyo
- 11:00 Baseball Bats – Dan Luttrell
- 12:00 Turkey Calls – Rick Crook
- 1:00 Decorative Spinning Tops – Ray Melton
- 2:00 Lidded Boxes – Dick Hines

# SHOW-AND-TELL PROCEDURES

To enhance our monthly Show-and-Tell, turners will complete an identifying tag for each turning. Blank tags (example below) will be available on the Show-and-Tell table. The filled-out tag will accompany the turning throughout the evening and accomplish several objectives:

- Help the photographer identify the turner of each piece thereby giving all members the appropriate credit deserved in the newsletter and on the web site,
- Streamline this portion of the meeting leaving more time for demos and discussion,
- Streamline distribution of lottery tickets,
- Make it easier for fellow members to identify the turner of a particular piece for questions and conversation during the evening, and
- Through a new opportunity to exclude Show-and-Tell pieces from the presentation process, help expand the number of items shared each month, control the time allotted for presentation and help our newer members and/or turners share their accomplishments within a personal comfort zone.

**Here is the process we ask all members to support:**

- 1) Upon arrival with a Show-and-Tell\Challenge piece, the turner will fill out a tag for each turning. Tags will identify the turner, wood used, finish, size and optional comments such as a title, technique, or collaborator’s name. If the turning is *not to be included* in the presentation (the “Tell” portion), simply check the “display only” box.
- 2) The turner will then take the piece with its associated tag to the photographer.
- 3) The photographer will take a picture; write the picture number on the tag, then give the turner a lottery ticket.
- 4) The turner will place the turning on the Show-and-Tell/Challenge table with the tag close by. If the tag can be put inside the turning, this will help keep the process organized.
- 5) When it is time for the Show-and-Tell presentations, designated helpers will bring each turning (not marked as “display only”) to the front of the room.
- 6) The turner will stand in place (at their seat) to talk about their piece. To help control this segment of the meeting, if multiple pieces are shared, select one to present to the group.
- 7) At the end of the presentations, a lottery ticket winner will be drawn and announced.
- 8) At the conclusion of the meeting, please return the tags to the photographer.

We are very excited to see a definite growth in Show-and-Tell participation and hope everyone appreciates this minor change to the process, which will provide room for expansion and leave more time at the meeting for technical presentations.

Thanks for your support.

RW Board of Directors

Show and Tell/Challenge	
Turner’s Name:	_____
Wood (species):	_____
Finish:	_____
Size:	_____
Comment:	_____
<input type="checkbox"/>	Display piece only

# 1<sup>ST</sup> QUARTER CHALLENGE – 3 OR MORE SPECIES

**Vase**

4 \$ kinds of wood, from the top down, 67 pieces total

- Mahogany, 1 piece
- Bradford pear, 16 pieces
- Bradford pear, 16 pieces
- Mahogany, 1 piece
- Walnut, 16 pieces
- Mahogany, 8 pieces
- Mahogany, 8 pieces
- Cherry, 1 piece

Challenge

Turner's Name: CHUCK HORTON

Wood (Species): Mahogany Bradford Pear Walnut Cherry

Finish: ?

Misc. Comment: pieces cut with bandsaw



**CHUCK HORTON, MAHOGANY, BRADFORD PEAR, WALNUT & CHERRY, PIECES CUT WITH BANDSAW, 1" X 1 1/4"**

**Hollow Form**

5 kinds of wood: from the top down, 54 pieces total

- Olive, 1 piece
- Bradford Pear, 1 piece
- Walnut, 16 pieces
- Bradford Pear, 1 piece
- Walnut, 16 pieces
- Bradford Pear, 1 piece
- Mahogany, 16 pieces
- Olive, 1 piece
- Walnut, 1 piece



**CHUCK HORTON, OLIVE, BRADFORD PEAR, WALNUT & MAHOGANY, PIECES CUT WITH BANDSAW, 1" X 1 1/4"**



**BILL WALTERS, MULTIPLE WOODS, FRICTION FINISH, LAMINATION, 5 1/2"**



**TERRY MOORE, PADAUK, PURPLE HEART & POPLAR, GENERAL FINISH, 14" X 13"**



**ROLLIE SHENEMAN, OAK, MAPLE & WALNUT, 3/8" TO 1" THREADS ON BOLTS AND NUTS**



**CHUCK BAJNAI, OSAGE ORANGE, AFRICAN BLACKWOOD & ELM, FRICTION POLISH, MOVING PARTS**



**CHUCK MOSSER, CAMPHOR, MULBERRY BURL & PURPLE HEART, WATCO OIL**



**JIM ZORN, WALNUT, HOLLY & OAK,  
WIPE-ON-POLY, 8¾" X ¾"**



**CODY WALKER, RIMU, WALNUT &  
PADAUK, PENS PLUS**



**BRAD MILLER, LOQUAT, WALNUT  
& CHERRY, BOILED LINSEED OIL &  
DENATURED ALCOHOL, AFTER  
FINISH, RUN THRU AS WITH BOILE  
POLISHER**



**BILL JENKINS, RED OAK, WHITE PINE & MAPLE, MILK  
PAINT**



**MAC DERRY, MAPLE, WALNUT & PURPLE  
HEART, SPRAY LACQUER, PEN, 5½"**



**ROYAL WOOD, MAPLE, WENGE & PURPLE HEART,  
AUSSIE OIL FINISH, 14" X 2"**

Photos are not available  
for the following turnings:

Chuck Horton, Mango,  
Cedar & Cherry, Design by  
Ann, 2 inches

Peter Osborn, Ebony,  
Maple, Purple Heart, CA  
finish

Georgia Wood, Cherry,  
Zebra, Brazilian Walnut,  
Walnut Oil, "The Degas  
Bowl"



**TIM WARREN, MAGNOLIA,  
HOLLY, WALNUT &  
UNIDENTIFIED, SPRAY LACQUER,  
5" X 2"**



**ROBERT GUNDEL, WALNUT,  
HONDURAN MAHOGANY, HOLLY,  
PADAUK & BEECH, 2½" X 6"**



**STEVE SCHWARTZ, SYCAMORE,  
PADAUK & EBONY**

## SHOW AND TELL



**JIM O'HANLON, WALNUT,  
WATERLOX, 6" X 4½"**



**JIM O'HANLON, CHERRY,  
WATERLOX, 6" X 2¾"**



**DICK HINES, HOLLY, GESSO,  
4½" X 5¾"**



**DICK HINES, CURLY MAPLE, DEFT,  
5½" X 6"**



**CHUCK HORTON, ASH, WIPE-ON-POLY,  
8" X 2½"**



**CECIL BARRETT, PINE & LOCUST,  
PUZZLE**



**BOB SILKENSEN, SYCAMORE, SPRAY LACQUER,  
10", BASKET ILLUSION RIM**



**STEVE SCHWARTZ, RED OAK, WIPE-ON-POLY, 15" X 3"**



**ROB BLADER, WALNUT, LIBRON WAX, 10" X 3½"**



**ROBERT GUNDEL, PALM, 12" X 6"**



**ROBERT GUNDEL, PALM, 10" X 4"**



**BRAD MILLER, OAK, WAX**



**MARK STRANG, BIRD'S-EYE MAPLE, WATERLOX,  
8½" X 2", MICHIGAN WOOD**



**MARK STRANG, BIRD'S-EYE MAPLE, WATERLOX,  
9¼" X 4", MICHIGAN WOOD**

Photos are not available for the following turnings:

- Charlie Hamilton, Maple, Walnut Oil
- Charlie Hamilton, Elm, Walnut Oil, 13"
- Mac Derry, Magnolia, Forest Project, unfinished, 5" X 4"
- Bruce Robbins, Pear, 3¾" X 2¼"
- Dan Luttrell, Front Yard Maple, Mineral Oil, 13" X 4"

## FROM OUR PRESIDENT

Not long after our last club meeting we lost one of our longer term members. In 2005, Aage Rendalen joined the club as the 35th member at a time when the meeting space was smaller and each member had to pull a little more weight in order for it to grow to the 100+ organization it is today. In retrospect I wish I got to know him better but just from the comradery at the monthly meetings I felt enough of his presence to eulogize him. As a turner, he was creative. I distinctly remember the show and tell from one of my first meetings when he shared a unique bowl with quite a thick wall and many holes while others were seeing how thin they could make theirs. This wood seemed to talk to Aage and for some reason has stuck in my mind as an inspiration for what I may make someday. Not that I want to copy his work, but wish that I could look at a piece of wood and tell what it wants to become.

Aage was a frequent demonstrator at the club. The two I remember the most were his potato chip shaped natural edge bowls and his cedar gnomes, the latter he could not make enough of for holiday sales. He was elected resource manager in 2011 and served 2 terms as first vice president starting in 2013. When he wasn't working as a board member, he was working the crowd at meetings, welcoming newcomers and offering help to whoever asked. In our January 2015 newsletter he offered his woodturning resume: "I began turning in 2003 when my wife got me a Jet mini-lathe in order to turn some gnomes. She got her gnomes, and I moved onto an intermediate lathe and bowl turning before settling on a PM 3520 a few years later. I have my own workshop—small (10 x 18 feet), but adequate—and over the years I have turned so many bowls and platters that I've had to start selling them at craft shows. Since I'm semi-retired, I'll be happy to help out anybody who would like some practical help with their turning skills."

As his health deteriorated and he could no longer turn, Aage sold his Powermatic to one of our members. It wasn't surprising that included in the sale was a gift of at least 50 rough turned bowls and platters. Rob Blader took inspiration from Aage and offered these to club members for completion hoping that we could find a worthy charity. I can't think of a better way to memorialize him - giving back to the earth that gives us the raw material for our hobby. If you did manage to get one or more of these, please bring your finished piece to the club. We have one potential event to donate the proceeds of any sales at the end of April and ideas for others with any left overs and stragglers.

RIP Aage.

Happy and safe turning,

Bruce

## MEETING NOTES OF 15 MARCH 2018

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

The Competition and Exhibition to be held on April 21 with last entry at April 19<sup>th</sup> meeting

Aage's wood (mostly bowls) to be finished and returned at the next meeting

17 new chairs were purchased for use during our meetings

Women in Turning – Meg Turner is our liaison to AAW

Challenge for 1<sup>st</sup> quarter of 2018 is due tonight – a turning using 3 or more kinds of wood

## JUST FOR YOUR INFORMATION

The picture that is in the frame on the wall behind George Tyler's lathe (see the For-Sale item on page 19) is a magazine article about the Aluminaut, the first commercial deep-sea research submarine built by the Reynold's Aluminum Company. George was part of the team that designed and built this deep submersible (test depth of 15,000 feet) in the early 1960s. In 1966, the Aluminaut, along with its Navy counterpart the Alvin, were used to recover a nuclear bomb from a depth of 3,000 feet. George spear-headed the team that eventually got the Aluminaut transferred to the Science Museum of Richmond where it is presently on display. George knows a little bit about building specialty tools. Look up the following for more info: <http://www.navsource.org/archives/08/08508.htm> and <https://www.jamesrivernurseries.com/the-latest/211-aluminaut-science-museum-of-virginia>

Jim Marstall



## **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  
Nick Cook  
Graeme Priddle  
Joe Fleming  
Mike Sorge

Rudy Lopez  
Barry Gross  
Mark St. Ledger  
Dick Hines

Donna Banfield  
Frank Penta  
Lyle Jamieson  
Fred Williamson

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 there!**



Women in Turning (WIT) is the newest committee of the AAW, bringing together women worldwide who share a passion for woodturning. WIT is dedicated to encouraging and assisting women in their pursuit of turning, to sharing ideas and processes to further members' skills and creativity, and to increasing participation of women in the field of woodturning.

There are no "members" of WIT since it isn't a chapter. WIT itself is a committee of the American Association of Woodturners. The AAW WIT committee consists of a chairwoman appointed by the AAW President and the committee which she selects. If anyone has ideas, suggestions, questions or wants to volunteer for something (such as holding a regional meeting or helping at the symposium)



*Fruits of Our Labor*, 2016  
Collaborative Project (pictured  
here).

WIT's 2016 *Fruits of Our Labor* catalog is  
available for purchase at

<http://www.lulu.com/content/paperback-book/fruits-of-our-labor/19308683>

## Women in Turning Contacts

Linda Ferber (AAW Liaison): [Linda@woodturner.org](mailto:Linda@woodturner.org)

Kathleen Duncan (Chair): [woodspinner@gmail.com](mailto:woodspinner@gmail.com)

Sally Ault: [sallyault@cox.net](mailto:sallyault@cox.net)

Dixie Biggs: [dixie@dixiebiggs.com](mailto:dixie@dixiebiggs.com)

Jean LeGwin: [jlegwin@ec.rr.com](mailto:jlegwin@ec.rr.com)

Andi Wolfe (Newsletter Editor): [andiwolfe@yahoo.com](mailto:andiwolfe@yahoo.com)

Elizabeth Amigo: [efamigo@msn.com](mailto:efamigo@msn.com)



## Club Officers

President: Bruce Robbins  
Vice President: Bill King  
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  
Jim Bumpas

## Committee Chairpersons

Charlie Hamilton Chairperson of the Social Media Committee  
Barbara Dill Chairperson of the AV Committee  
Jim O'Hanlon Chairperson of the Turning Competition Committee

## 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](mailto: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".

## Meeting Schedule

April	4/19/2018	October	10/18/2018
May	5/17/2018	November	11/15/2018
June	6/21/2018	December	12/20/2018
July	7/19/2018	January	1/17/2019
August	8/16/2018	February	2/21/2019
September	9/20/2018	March	3/18/2019



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

Fax: 804-355-2532

Email: [richmond-retail@woodcraft.com](mailto: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>

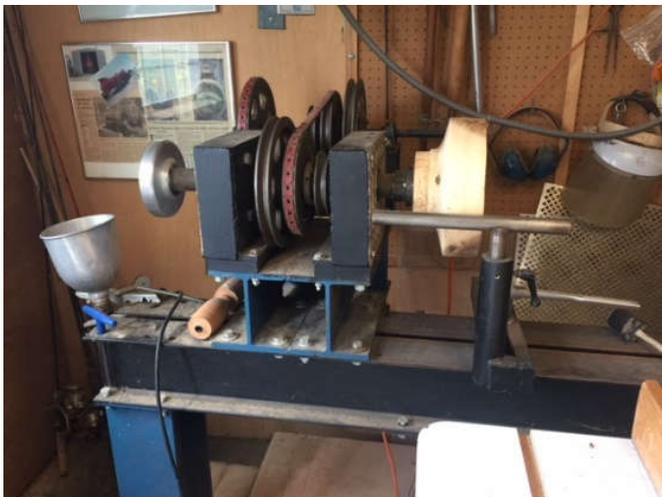
Look for classes taught by Ray Deyo, Clark Brummett, David Sterling, Brian Noble-Marx and others.

## FOR SALE

**This lathe was made by George Tyler in Louisa. And it is for sale. His number is 540-967-5401**

**I would be pleased to get \$1,000 for the lathe. It has a 2 HP variable speed/reversible motor. There are three pulley ratios using vari-belts. Overall length is 60", spindle to bed is 12", between centers is 30". Spindle has a #2 Morse taper on each end with 8 TPI threads.**

**It comes with two combination chucks, faceplates, different tool rests, and an assortment of tools. It is dismantlable for transport.**



**Dewalt model DW735 2-speed wood planer. It comes with in feed and out feed trays, mobile Dewalt base, a capture bag, and an extra set of blades. The machine is in excellent condition. New machine with these accessories costs around \$900. I am asking \$600. Call or email Jerry Fisher at 540.895.5287 or [seven7js@msn.com](mailto:seven7js@msn.com).**



*For Sale, Grizzly 15" planer, 220 volts on mobile base with spare blades, asking \$400. Call Ron Bishop 540 412-0229.*