Long Island Woodturner's Association Newsletter

May 11, 2019

Introduction to Segmented Turning
Pete Richichi

LIWA is a chapter of the American Association of Woodturners. Our purpose is to foster a wider interest and appreciation of woodturning on Long Island and in the Metropolitan area. We generally meet on the third Saturday of each month from 9:00 AM until Noon at the Old Bethpage Village Restoration, Bethpage, L.I. See listing below for 2019 scheduled meetings:

Upcoming Meeting Schedule for 2019. All meetings run from 9:00 am to 12 noon

June 22 (Don Lindsley, Mineral Inlay)
July 20 (Bob Urso)
August 24 (Picnic, Steve Fulgoni)
September 14
October 19
November 23
December 21

Current Club Officers
President Les Hoffman (516) 431-2280
Vice President Peter Richichi (631) 218-2481
Secretary/Newsletter Barry Dutchen (516) 443-5342
Treasurer Joe DeMaio (516) 766-5189

Thanks to Bob Fentress for taking photos.

Summary of meeting
The meeting was called to order by Les Hoffman, president. Les announced that the "TR Project" (Friends of Sagamore Hill and the Superintendent) "may be a go" (details to follow).

New Members/Visitors
Welcome to Daniel Moore, Setauket and John Halsey, Water Mill.

Treasurer's Report
Joe reported a balance of $4915.21

Activity Announcements
Steve Fulgoni did some research based upon information from last month's presenters (Lauren and Alan Zenreich) who used an affordable, multi-camera setup. This would make it easier to switch from general (wide) camera angles to closeups without having to move the camera. It might also make it possible to arrange for presentations from "world-class" woodturners. Steve suggested we purchase a similar system. A discussion followed and Steve was given approval to pursue getting more information.

Steve also asked if there was interest in placing an order for club apparel and to let him know. Current stock (limited sizes) in turning smocks ($45.00) and shirts ($30.00)

Show-and-Tell

Les Hoffman –	Platter, cup using heavily spalted wood (TR Project copper beech). Minwax hardener to solidify the wood.
Don Lindsley -	Nested Bowls (Copper Beech) filled with Azurite; Large set of nested bowls from the Lake Ronkonkoma copper beech (6-7 coats of salad bowl finish); cherry burl bowl (4-5 coats of salad bowl finish).
Chris Petrone -	Large maple bowl
Len Mulqueen –	Rosewood container, Maple/Purpleheart stave construction; Mirrored tray (TR beech), bracelets with a glaze coat)
Paul Friedman –	Small bowl (TR beech)
John Halsey -	Lignum Vitae bowl
Ken Deaner -	Platers with bush oil and lacquer

Charlie Bell -	Pepper grinders using Spectra plywood
Jodi Gingold -	Platter and bowls (TR wood) bush oil/lacquer
Jim Cleary -	Segmented pieces (Cherry, cherry/maple – feature ring with purpleheart); vessel with feature ring (maple/Ipe)
Pete Richichi -	Multiple pieces from his presentation
John Kowalchuk -	Segmented turnings (yellowheart, gabon and purpleheart)
Barry Saltsberg -	Bottle stoppers, pens
Richard Fortunato –	Bottle stoppers (TR wood)
Carl Saenger -	Spalted maple, natural edge bowl, vasein progress (sapele), pens
Henry Zipperlin –	Blue dyed bowl; cherry burl (Cored bowl)
Bob Urso -	Copper beech bowl with plant
Barry Dutchen -	Segmented turning (Poplar and walnut)
David Burtt -	Cherry bowl
Ed Schneiderman –	Copper beech bowl; pen, bottle stopper and opener









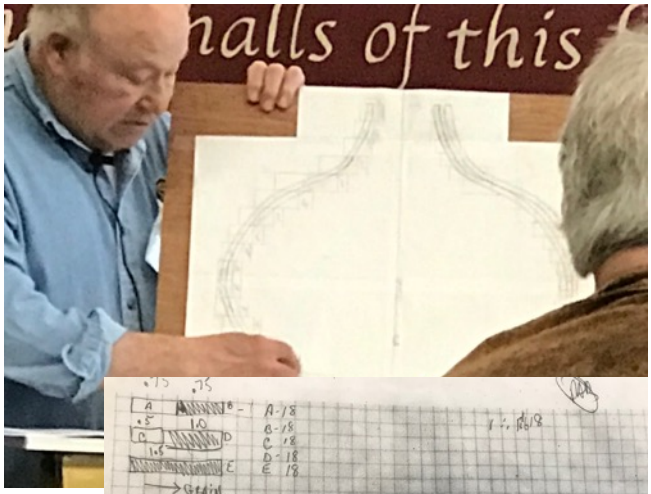
Main Event
Introduction to Segmented Turning

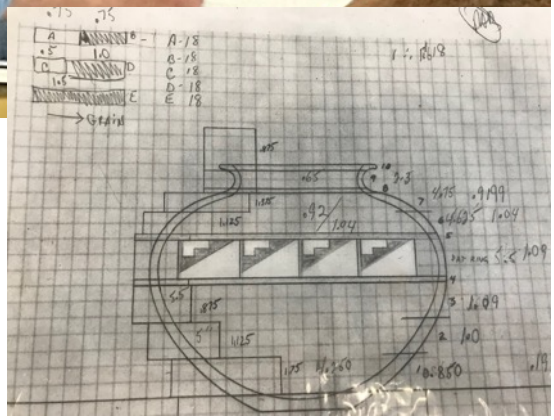
Presenter: Pete Richichi

Why segmented turning: unlimited designs, access to expensive and rare woods using cutoffs or flat boards. How: full size design on graph paper. Requires a great deal of time and exacting calculations. There are computer programs to help. Segments are cut and assembled into rings. Rings are glued and stacked. All are turned according to original plan.

The general steps are:

- Decide on design
- Put design on graph paper (shape of bowl, size of rings, number of segments, construction of feature ring)
- Cut the segments for a ring
- Assemble ring
- Repeat for all additional rings
- Attach a waste block to a faceplate
- True up face of waste block
- Glue on the base of the bowl (using a solid piece)
- Sand one side of a ring
- Glue ring to waste block
- True up other side
- After a few rings, turn the inside to size
- Add more rings, repeat
- Turn outside
- Finish

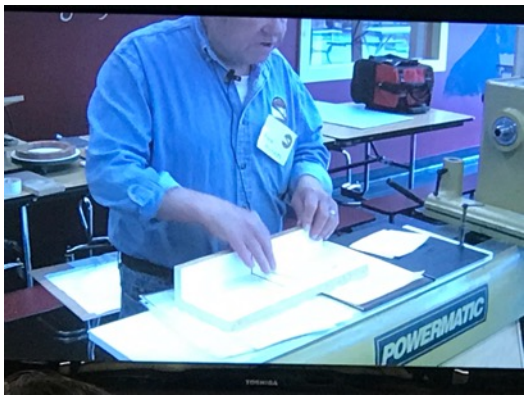




Introduction:

To accomplish this, the sawblade must be exactly at 90°. Pete discussed three methods to accurately cut the segments: disk sander, miter saw and table saw.

- A disk sander uses a jig to hold the segments while the turning plate removes excess wood. High accuracy can be achieved this way, but the process is slow.



- The miter saw setup requires extreme care. Pete displayed templates available from Rockler to set the blade and pieces also may require sanding.

- The tablesaw method uses a jig which you can construct from free plans at Jerry Bennett's website (seg easy). The adjustable jig requires templates (wedgies) which you can also make but he recommended purchasing a set from the seg easy website. Also recommended is a simple stop to set the length of each piece.

- After that, you place the wood on the sled and slide it through the blade. If you use a homemade zero clearance table saw inset which has a deflection guide on it, the pieces fall away from the blade after cutting. Move the piece to the adjacent fence and repeat (see photos). A light sanding to remove the fuzz is all that remains.

Next, assemble the segments into a ring. Place blue tape (sticky side up) on the table. Begin with one segment (the short side of the segment faces up), place it on the tape. Repeat with each segment (make sure the edges are tight to each other). Quickly put glue on each adjacent piece. When done pick up one end of the tape and move to towards the other end, turning the pieces into a ring (be sure to glue the first and last pieces).
Use a large (or connected) hose clamp to draw the ring together. Before completing the tightening process, make sure all the pieces are flat and there are no gaps. Pete uses Titebond II glue. Pete also showed an alternate process. Put the segments into a clamp, place tape on one side, flip over, spread glue on the pairs. Tighten the clamp, remove the tape.

Make sanding blocks from a 3" or 4" wide boards. Attach 80 and 120 grit sandpaper. Also make a sanding disk (faceplate attached to 12" (plywood or MDF board; glue 80/120 grit papers. Next, attach a faceplate to a waste block of wood.

Attach the first (80g) sanding disk. Hold the first ring against the sanding disk, sand and test for flatness. Only do one side of the ring. Remove the sanding disk and attach the faceplate and waste block. Sand the face of the waste block (test by holding a straight edge and shine light from beneath). Attach a solid piece of wood (according to the plan) to be the base of the bowl. Flatten the face.

When ready, apply glue to the flat side of the first ring and attach it to the base block. Stand a board up on the lathe bed and push the tailstock against it. This will serve as a clamp and hold everything tightly while the glue dries. Paul feels the "clamp" can be removed after an hour or two.

Some people glue on several rings before turning, others turn one ring at a time. There are several tools available to measure the thickness of the rings and the inside and outside diameters as you turn. Feature rings are the WOW factor in segmented turnings. They add interest and can make use of exotic woods.

Notes:
The number of segments in a ring is your choice. However, it is extremely important that the number of segments be multiples of this number. For example, if you use 16 segments in some rings, other rings should be 8 or 32, in order for them to line up in a pleasing manner.

When adhering rings, Pete showed how to use popsicle sticks attached to one ring with hot melt glue to align the next ring. Make sure the segment lines alternate from one ring to the next for appearance and strength.

Pete demonstrated the use of a homemade drum sander (designed by William Smith) to thickness sand boards and rings using 2" PVC or aluminum as a drum. The article is entitled "Drum Sander for Dimensioning Wood Stock".

Pete's Book Recommendations: Woodturning with Ray Allen (Nish), The Art of Segmented Woodturning (Malcolm Tibbets).

(Editor's note: Segmented Woodturning (William Smith – good for open segmented turning), Segmented Bowls (Jovag) and Fundamentals of Segmented Woodturning (Rodgers).

Thank you to Pete Richichi