Long Island Woodturner's Association Newsletter

March Issue

March 20, 2021

Paul Permacoff

Turning with a Twist
(aka Multi-Axis Spindle Turning)

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 8:30 AM until Noon at the Old Bethpage Village Restoration, Bethpage, L.I. However, during the COVID crisis, we meet virtually on Zoom. See listing below for 2020 scheduled meetings:

Upcoming Meeting Schedule for 2021. For now, all meetings run from 8:30 am to 12 noon on the 3rd Sat of the month.

Apr 17 Philip Rose (wavy Rimmed Bowl)
May 15
Jun 19
July 17
Aug 21
Sept 18
Oct 16
Nov 20
Dec 18

Club Officers for 2021

President:	Barry Saltsberg	(516) 349-1914	woodartist@optonline.net
Vice Pres:	Paul Permacoff	(631) 261-7207	classakid@aol.com
Secretary:	Barry Dutchen	(516) 443 5342	bdutchen@gmail.com
Treasurer:	Tony Fuoco	(631) 255-3956	sandman0830@aol.com
Chair of the Board:	Ken Deaner	(516) 239-7257	ggoosie@aol.com

Members at Large

Steve Fulgoni
Jodi Gingold
John Kowalchuk
Jim Maloney
Paul Permakoff
Pete Richichi

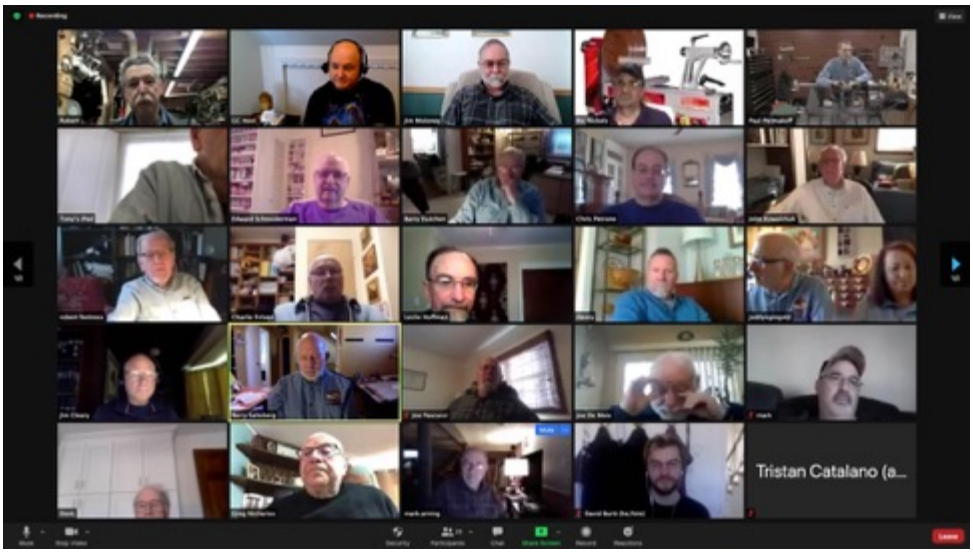
Thanks to photographer Bob Fentress for his screen shots.

Summary of Meeting

Barry S recommended that club members watch AAW webinars and that Women in Turning (WIT) demos are free. 34 participants watched today's presentation. The next Board meeting will be in May.

Treasurer's Report

$5615.00
Dues checks should be mail to Tony @ 7 Jody Court, Shoreham, NY 11786



New Members

No new members noted

Show-and-Tell

Main Event

Paul Permacoff

Turning with a Twist

Setup:
Headstock with a ½" steb-center (or a 4-prong drive

center) and use the tailstock to support the piece.

Paul showed a drawing of the concept he was going to produce. He actually draws the plan directly on the two ends of the wood block. For this demo, Paul used a 10" – 12" piece of spalted sycamore, but he recommended using inexpensive material while learning the technique. In this demo, Paul will turn napkin rings from the resulting block.

Paul uses a compass to create a ¾" radius circle, then divides it into 6 points along the outside, using every other point. Basically, he is dividing the circle into 120° segments (360/3)

since he wants to create three twists along this block of wood. To create a different number of twists, use: 360/# of twists. Example: 360/4 (90° to create a project with 4 twists.

Label one end of the block with a "H" (head) and the other, "T" (tail) and place roman numerals as the diagram shows. It is critical that the numerals follow the pattern shown, else your block will not have the twist you want.

Paul mentioned that multi-axis turning is actually turning a lot of air, so use as high a speed as you are comfortable with. Paul showed several completed pieces, including a spindle-cut, drilled and carved piece and a pepper mill.

Now mount the block in the lathe. Paul recommends using a spindle roughing gouge with a 40° bevel. Turning the block into a cylinder (he runs the lathe at ~1300 rpm). Then turn a tenon on each end. Use your pencil lines to get the correct diameters. Paul added a dovetail to his tenon (required for the chuck he uses.) He uses a black marker to highlight the tenons so that he does not accidentally remove too much material from the cylinder.

Re-mount the block on the headstock at the "I" position and do the same at the tailstock (remember, the labels are offset, which results in the multi-axis turning. Adjust the tool rest to ensure the middle to end of block is the same at both ends as the block rotates.

Begin cutting in the middle and work towards the ends, using a smooth swinging motion. Roll the tool toward the end of the cut. Stop cutting frequently to check progress. To improve the contrast with the cylinder and the lathe, Paul places a dark cloth (towel) on the lathe bed. Paul continued cutting until he just touched the tenons. He then remounted the cylinder using the "II" marks. He repeated the process for the "III" as well. Important: Do not move the tool rest – so that the distance stays the same and the twists remain the same.

Sanding: Use light cuts to get a smoother result and to reduce sanding. Be very careful, hand sand only and within the twists (along the grain). Avoid sanding across the sharp edges of the twists. Apply finish of choice.

Create napkin rings:

Replace the steb-center with a standard chuck and mount the cylinder in the headstock. Bring up the tailstock for support. Cut away the tail tenon, rollover the resulting edge and create pommels using the spindle gouge, part them off and drill through to separate the ring from the cylinder.

Cut another pommel, try to get them to match, using the gouge – straight in - then use a parting tool to almost separate the "ring" (when you drill through it will separate).

Put a drill chuck in the tailstock. Inset a small (1" forstner) bit and drill through ring. Replace with a larger bit and repeat.

Install small jawed chuck. Wrap the jaws with a piece of inner tube to help grip a ring. Expand the jaws for a tight fit. Use a skew (like a negative rake scraper) to true up face to match other side.

Create a Flower Cup

The shorter the piece, the more “radical” the wobble. Use a waste piece to extend the working piece to reduce the wobble. Paul calls it “taming the wobble”. He marks the ends just as before. Install the cylinder in the lathe. He uses the tool rest to draw a line along on side. Remove it from the chuck and use the line as a “top” indicator” (continue the line down to the tenon. He uses a center finder to extend the line across the tenon. Repeat for the other tenon face. Add the three labelled points as he did earlier.

On the tailstock end mark the correct positions (use the template).

Install the wood on the lathe. The "extension" acts like a tenon. Put a pencil line on the "cup" a little past the ½ way point, to mark where you will begin a "curve" for the flower. Roll the bottom of the "cup" to give it a "cup-like" shape.

Remove the chuck and replace it with the steb-center. Install number 1 on headstock end to number "1" on tailstock end. Align the tool rest, remove the wood from the line to the tail end. Remove some of the extra material at the headstock end – but not all.

Next, use a parting tool to start separating the cup from the "extension". Saw the remainder. Return the tenon to the chuck, drill out, carve as desired.

Fantastic job Paul