



Next Meeting Details

Demo Topic: Dietrich Kulze, Making a Steady Rest
Learn and Turn with Dietrich, Fashioning a top.
Demo: Saturday, September 4, 2010
Mark St. Leger at Ken Dubay's shop.
See notice inside for more details

Minutes 08/05/2010

Tim Elliott

Chris Durkee ran tonight's meeting.

New/visitors: none

Jon Berke gave a treasurer's report

Starting Balance: \$477S
 Income: \$101
 Expenses: \$330
 Ending Balance: \$4547

Jon has been preparing old/delinquent tax returns that were not filed in years prior to his term. When these are complete, Jon would like to turn over the treasurer job to someone else.

Chris summarized upcoming meeting programs/demos (ideas for future demos are always welcome). Our September demo with Mark St. Leger has been moved to Saturday at Ken Dubay's shop [more details below]. There will be no September Learn & Turn. In October, Dennis Daudelin from the Cape Cod chapter will demo making a glass goblet. Learn & Turn will be on lidded boxes.

On October 17, CNEW will be at the Spirit of Wood show at Middlesex Community College in Bedford, MA from 9 to 4. We will again coach members of the public in making pens. There is an opportunity to enter turned items for judging and may be a table for display/sales.

President's Message

Rick Angus

It's been a hot summer with little woodturning for me; I hope that CNEW club members have had more time to partake of their favorite hobby. Those attending the picnic had a relaxing time dining on nice appetizers, fruits, salads, smoked salmon and a slightly late-to-be cooked chicken. On this hot and nice summer day, the Wilcox family lead us in croquet and horseshoes while many rested in the shade. Richard Hunt turned a nice bowl from butternut obtained at the August wood swap.

September affords us two opportunities for turning pleasure. Our regularly scheduled meeting will be held at the church where we will be hosting Dietrich Kulze for both the learn-and-turn as well as the evening demonstration. He will be assisting members in the fashioning of a top during the Learn-and-Turn and following that with a demonstration of making a steady rest. In addition to our regularly scheduled meeting, we will host Mark St. Leger on the following Saturday. Mark has a large repertoire of demonstration topics; from these he will focus on building woodturning skills. The St. Leger demonstration starts at 9:00 a.m., Saturday, 4 September at the turning shop of Ken Dubay; space is limited so please RSVP ASAP to Jerry Sambrook (sambrook@comcast.net, 413 569 0543). Chairs are limited at Ken's shop, so please bring your own chair, lunch and refreshments. I have had many inquiries about the replacement of our previous Executive Director Mary Lacer, by the board of AAW. Mary is a very well liked member and has many years of service to the AAW. While I do not know the details from within, I read the open letter that President Tom Wirsing **cont'd page 3**

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Our annual picnic will be at Rick Angus's house in Moosup CT on Saturday Aug 21.

Blackstone Valley Craft in Grafton will have an opening event on Saturday Sep 11. Cost to attend will be \$10. Details will be sent to the CNEW e-mail list.

Mark St. Legere will demo at Ken Dube's shop on September 4. Attendance will be limited to the first 40 people to sign up. The cost was unknown at meeting time. If you are interested, contact Jerry Sambrook. If you attend, please bring your own chair.

Dave Eaton announced that the ART chapter will again participate in the Marshfield Fair, and invites CNEW members to join them. Fair dates are Aug 20-29, with 2 demo shifts per day (opening to 4 PM, 4 PM to close). There will be 2 twelve foot booth spaces with lathes and gallery/sales space. Contact Dave Eaton if you would like to participate.

The CNEW store may soon carry CA accelerator, sanding pads, wipe-on poly finish.

If you have digital photos from old meetings, webmaster Dave Eaton would like to put them on our site. Our site also allows members to upload and manage their own photo galleries.

Thanks to Joe McGill and Dominic LeRoux for donating items for tonight's wood swap/silent auction.

Richard Hunt again asked if we had a better solution for moving the club lathe between storage and our meeting space. Many members believed that Jerry Sambrook might be working on this.

Dave Eaton raised the issue of paying people who demonstrate for our monthly meetings. This has come up in the past and has been tabled after inconclusive discussion. Some other chapters are paying demonstrators in the range of \$50 to \$150, recognizing that a demonstrator has material, travel and time costs. It is not always a simple matter to offer different payments to a member versus a non-member demonstrator. A motion was made that we should pay our demonstrators \$100 for a (roughly) 1-hour demo, with the alternative that the demonstrator may opt to have the next year's annual CNEW dues waived in place of payment. "Big name" demonstrators we bring in from outside the region would not be included in this policy; they negotiate fees individually. There was discussion

about the \$100 dollar amount, but no changes to the motion were made. The motion was put to a vote and passed by a large margin. Discussion followed on whether we need to retroactively pay some past demonstrators, but there was general agreement that this was not practical.

Dave Eaton again recognized and thanked Todd Heino and Kevin Nee for their work building cabinetry for the church where we meet. We voted to reimburse Todd \$300 towards his material costs and credit him with 10 years future membership dues.

Learn & Turn: sharpening the skew chisel
Program: Reid Gilmore on multi-axis ornaments
Attendance:26

LETTER OF APPRECIATION

June 30, 2010
Worcester Seventh-day Adventist School
2 Airport Drive
Worcester, MA 01602
508-753-4732

Dear Friends,

Thank you for the beautiful custom cabinets you club made possible for our school. I don't know how many of you know the story of how they came to be, but it was quite a journey. When your club first started meeting in this building several of the members contacted me about storing a lathe on site which we were able to do. They also asked if there was anything they might be able to do that would help the church and school and our first request was that someone try fixing the tracking on our hall closet door. That simple request snowballed into the dream for additional storage closets with customized shelving and locking doors.

Today they stand proudly in our hallway thanks to the support of your club members and the efforts of Tom Heino, Kevin Nee and Dave Eaton. Our school is non-profit and budgeting for something like this isn't available so please know that we feel overwhelmingly blessed. Thank you for your generosity.

Sincerely, Barbara Stowell, Principal

President's Letter continued

I read the open letter that President Tom Wirsing had published in the August *American Woodturner*. In this he stated that Mary Lacer was to be replaced with a candidate to be named later (a professional talent search is in progress) and mentioned some reasons for desiring an ED with a more fundamental financial background. Some members countered that this was a shameful turn of events and the official discussions of the changes were not the whole story. I read many accounts of this change on the AAW forums and found there to be many dissenting opinions. Some of them were less than professional. So how do we respond to this mess? In one respect, we voted for our board and should trust that their judgment is based on sound reasoning (as the majority of the board agreed with the decision). On the other hand, something sounds a little disconcerting. Many people feel that this was an outright tragedy. We clearly do not have the entire story; somewhere between the extremes officially reported and those in the forums lies the true story; we may never now enough details to satisfy our curiosity. While we elect our leaders and put our trust in them, they are as human as we are. We must be vigilant and be aware of the consequences of our governing board and keep aware of their actions and the ramifications for club members. If there is anything underhanded, as has been suggested, this will come out in the future and new leaders will be elected to right those wrongs.

I welcome discussion at the meeting or in private on this or any other club/AAW concern. Should members find any writings of concern, please submit them as letters to the editor or submit them to exec@cnew.org. It's our club and we should feel good about it. If we don't feel good about it, we should do something positive to improve it. Please don't keep concern to yourselves.

Rick Angus

Multi-Axis Holiday Ornaments

Reid Gilmore

These ornaments are made between centers using a drive and a live center that have a ring of spurs surrounding a spring-mounted center point. The drives/live centers are known as Stebcenter Drives (Craft Supplies) or Super Drives (Penn State Industries). I use a drive center that fits in a lathe chuck and is 7/8" diameter. You will also need a compass and a dial caliper to lay out the drive-center positions for the multi-axis turning steps.

Other items you can make using this method include boxes, wine-bottle stoppers and pepper mills. Since this is basically a spindle-turning procedure, the stock you should be aligned so that the grain is parallel to the lathe bed. This is important since you will be using a roughing gouge to do the turning. I have used a variety of woods to make these ornaments including, cocobolo and other rosewoods, bocote, black walnut, eucalyptus burl and yellowheart. I don't recommend using course grain woods like oak, leopardwood, or zebrawood because the woods tend to splinter when doing off-center entry cuts.

Laying out a 3-axis turning.

The ornaments are made using a 2" x 2" piece of turning stock cut to 1.75" in length.

1. Carefully mark the center on the 2 end-grain faces by drawing diagonals from the corners (see diagram).
2. Using the 3-axis turning chart (see below) look up the drive radius for 2" diameter turning stock (9/16" diameter).
3. Using the compass set to 9/16" draw the drive circle (red line) on both end-grain faces
4. Using an awl, place a mark where the drive circle crosses a diagonal, and mark this as drive axis #1.
5. Place the point of the compass on the drive circle where it intercepts the opposite end of the diagonal.
6. The point where the pencil on the compass now crosses the drive center circle is the location of drive axis #2 and drive axis #3. Use an awl to mark the points. On this first end, the three drive-axes are arranged in a clockwise manner.
7. Using the chart look up the solid radius (13/16" for a 3-sided layout on 2" stock). Draw this circle with the compass.
8. Laying out the opposite end-grain face.

Option #1 - Straight sides-no taper. Use the same dimensions for the drive radius and solid radius. Repeat the procedure used on the first side, except the drive axes are arranged counter-clockwise. Drive axis #1 is located on the same diago-

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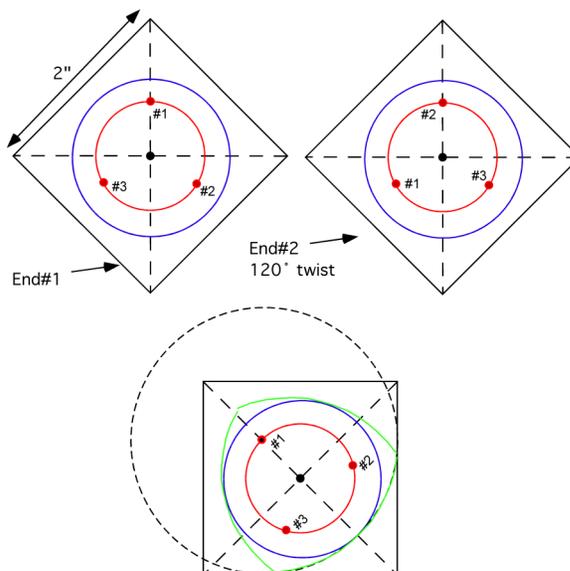
nal on both ends. (You can use this setup to make a 3-sided wine bottle stopper using 1 1/2 diameter stock.)

Option #2 – Straight sides with a taper. Use dimensions for a smaller stock size (for example 1 1/4" diameter. This is useful for making a box with tapered sides.

Option #3 – Twisted sides, no taper. This layout was used for the holiday ornaments. To get a 120° twist use the same layout method, but instead of assigning the first drive axis as #1 on the opposite face call it #2 (see diagram). A rotation of 60° or 120° looks fine on a 3-sided ornament. If you make the rotation 180° (drive axes #1 on opposite sides of the same diagonal) you will not get a twist when you make the cut. The largest rotation I have tried that works is 144° (for a 5-sided ornament).

9. The bottom diagram shows how this layout generates a 3-sided shape that includes the solid-radius circle. The dashed line is the "turned circle radius" using #1 as the drive radius.

Three axis chart			4-8 axis chart		
Stock diameter (")	Drive radius (")	Solid radius (")	Stock diameter (")	Drive radius (")	Solid radius (")
1	3/16"	7/16"	1	1/4"	1/2"
1 3/16"	1/4"	1/2"	1 1/4"	5/16"	9/16"
1 3/8"	5/16"	9/16"	1 3/8"	3/8"	5/8"
1 1/2"	3/8"	5/8"	1 1/2"	7/16"	11/16"
1 11/16"	7/16"	11/16"	1 11/16"	1/2"	3/4"
1 27/32"	1/2"	3/4"	1 27/32"	9/16"	13/16"
2"	9/16"	13/16"	2"	5/8"	7/8"
2 1/8"	5/8"	7/8"	2 1/8"	11/16"	15/16"
2 5/16"	11/16"	15/16"	2 5/16"	3/4"	1"
2 1/2"	3/4"	1"	2 1/2"	13/16"	1 1/16"
2 13/16"	7/8"	1 1/8"	2 13/16"	15/16"	1 3/16"
3"	15/16"	1 3/16"	3"	1"	1 1/4"
3.25	1 1/16"	1 5/16"	3.25	1 1/8"	1 3/8"



Laying out 4-8 axis turnings.

1. Use the 4-8 axis chart for the dimensions of the drive radius and solid radius.
2. Four axis layout. The drive axes are located on the diagonals that you used to locate the center axis of the stock (see diagram). Rotation for the twist is 90°.
3. Five-axis layout. After you have drawn the drive radius and assigned drive axis #1, you need to increase the compass measurement by a factor of 6/5. If you were using 2" stock, the drive radius was 5/8" (see chart). Set the compass at 3/4". Placing the metal point of the compass on point drive axis #1, make marks where the pencil intercepts the drive circle (these will be drive axes #2 and #5. Using these two points, now lay out drive axes #3 and #4. (The twist can be 72° or 144°).
4. Six sided layout. Use the 3-sided method to lay out the first 3 drive axes, then repeat the procedure using the opposite side of the diagonal.
5. Seven sided layout. Similar to the 5-sided layout, but the compass is adjusted to ~17/32. A dial caliper is useful for carefully setting the compass.
6. Eight sided layout. An additional drive center axis are located between each pair of points for the 4-sided layout.

Turning the multi-axis ornament body.

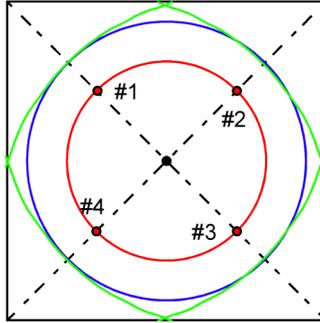
1. Place the marked block between centers using the point where the diagonals crossed, and use a roughing gouge to turn the block into a cylinder. Use a skew chisel to cut a 1/8" wide step down to the solid circle radius marked on each end.
2. Clamp the block in a chuck and use a 3/8" drill bit to drill a 1/4" deep hole on one end of the blank. This hole will be used to mount the turned ornament on a waste block for hollowing in a later step.
3. Mount the spur-center drive and spur-live center on the lathe. Place the center point in the awl-hole that marks drive axes #1 on both ends of the block. Make sure the center pins are fully depressed so that the ring of spurs bites into the block. Carefully tighten/lock the tail-stock. Manually check that the block can rotate without hitting the toolrest before turning the lathe on. A lathe speed of 1000-1200 rpm is about right, turn the speed up gradually to make sure you don't get excessive vibration.
4. I use a roughing gouge to do the wood removal. For the 7 or 8 sided objects I use a bowl gouge instead. Approach the stock carefully with the tool, since you only see a "ghost" at the point where your tool will cut. You can get a reasonably smooth cut if you are careful. Stop the lathe frequently to see what section needs more cutting, and to avoid cutting too far. It should feel like you are trying to cut a cove with the roughing gouge.
5. Move on to drive axes #2. Make sure that you keep the stock oriented in the same direction using the 3/8" drill hole as a marker. Your objective is to get the two cut surfaces to meet as a sharp line that intersects with the outer rounded surface. Repeat this procedure for drive axes #3. You may have to go back and recut #1 since if the initial cut was not deep enough.
6. Once you are satisfied with the initial multi-axis cutting it is time to mount the turning on a waste block that is flat in the center for ~3/4" and has swept back sides to be out of the way. I use a waste block that has a 3/8" hole drilled ~1/4" deep into the center. Cut a 3/8" dowel that is ~7/16" long. Superglue one end of the dowel into the waste block, and then superglue the multi-axis ornament body onto the dowel and the flat section of the waste block. I use thick superglue for this.
6. Use a spindle gouge to round out the top and bottom faces of the ornament. This removes the drive center points and any marks that were made by the spurs.
7. Use a 3/4" drill to start the hollowing procedure. I use 1/4" hollowing tools to reduce the wall thickness. One of the tools is straight, while the other has a curved end. Hollowing is done to reduce the weight of the ornament. Since the wall thickness varies, stop the lathe frequently and use your fingers to test wall thickness. I try to get the final ornament weight including the icicle to be between 1 and 1.5 ounces.
8. Sanding is done by hand (lathe off), starting at ~100 grit on the multi-axis section if you see major toolmarks. Once you

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get to ~150 grit, try wrapping sandpaper around a dowel so that you don't end up rounding out the sharp edges between the facets.

9. I put multiple coats of finish on the ornament before parting it off. To part off, use the 3/8" drill to through the dowel, so that when you part off using a thin parting tool, you don't have to cut through a dowel.

10. To complete the ornament you need to turn the top and the icicle. I use a 7" long piece of 1.5" diameter turning stock for the icicle and top. The icicle is turned to fit the 3/4" hole on the bottom of the ornament, and is basically a 6" long finial. The top fits the 3/8" hole on the body, and I insert a small brass eyelet into the top so that the ornaments can be hung with a standard ornament hanger.



Mark St. Leger Demonstration

Saturday, Sept 4 at 9:00 am

Presented by Central New England Woodturners

Location is: Ken Dubay's shop

154 Rt 6

Columbia, Ct

**Due to space limitations,
only 40 people will be allowed.**

Cost is \$20.00

**For registration, contact Jerry Sambrook:
413-262-5051 or jsambrook@comcast.net**

Mark has been working with wood since he was a young boy, helping his father who is a cabinetmaker/turner. Mark's interest in woodturning came from a weekend visit by his father who brought a weed pot and small tagua nut vessel he turned, along with his excitement about turning. Known for his sense of humor and ability to effectively teach a variety of age groups and skill levels, Mark's teaching techniques are easily followed and incorporate much skill building.

Mark will be demonstrating a few



different projects with an emphasis on skill building techniques.

Due to the limited space, bring your own refreshments, lunch, and a chair.

For directions, please see maps. Google or whatever map system you might use.

Once again, due to space limitations, attendance will be limited to the first forty people



Reid's Demonstration of Multi-Axis Ornaments, the ice cycle

Of course, Reid's face shield is lifted for photographic purposes only!

Notice the straight line between elbow and the object.



The finished icicle



Sample of the multi-axis ornament body



Show and Tell

Segmented Bowls, by **Ron Rocheleau**



Dave Eaton

Plywood vase

Assisted by **Mike Peters**

Red Bud Vase

Spindle washers

David Angelico

Bill LeClerc

Sea Urchin ornament



Pens by **Todd Heino**

Magnifying glass and top, **Todd Heino**

Burl bowl, **Richard Hunt**



Copies of two small pots **Mike Peters** discovered on his vacation



Membership Application

To join or renew membership, please complete this form and a check made payable to CNEW and bring it to a CNEW meeting or mail it to:

Treasurer, Central New England Woodturners
c/o Jon Berke
P. O. Box. 224
Hopkinton, MA 01748

Annual dues: \$30 including e-mail delivery of newsletter; \$35 for postal delivery of newsletter.



Central New England Woodturners
A Chapter of the American Association of Woodturners



Find us on the web @ www.cnew.org

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Name: _____

Please check appropriately below

Street: _____

New Member

City: _____

Returning Member

State: _____ & Zip: _____

e-Mail Newsletter (\$30.00)

e-Mail: _____

Snail Mail Newsletter (\$35.00)

Please let us know of your interests:

How long have you been turning? _____

What programs would you like to see at meetings? _____

Would you like to demonstrate at a meeting? Yes/No If so, what topics do you offer? _____