

Echoes from the "BAT" Cave

Baltimore Area Turners



July 11, 2007

Volume 2, Issue 7

Thanks to David Reed Smith



In appreciation of generously offering use of his home workshop and his time and expertise when he hosted the Tool-Making Workshop in May, Dave Smith (right) was given a certificate of appreciation, a check, and a warm round of applause by BAT. President Wayne Kuhn (left) made the presentation. Thanks, Dave!



Inside this issue:

- Show and Tell 2
- Tips and Tricks 3
- Bell Turning 4

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(Above) Woodcraft donated tote and \$15 gift card, Craft USA donated \$10 gift certificates, band saw blades, cedar logs, apple and cherry bowl blanks, walnut billets, purple heart blocks, black walnut crotch, face plates, and a Fine Woodworking Turning magazine donated by President Wayne. Almost everyone in the room went home satisfied.

Inside: Bell Turning

(Right) A bronze bell is turned in the cutting room of the Malmark bell factory in Plumsteadville, PA. See article on Page 4



Show and Tell



Bowls of all shapes and sizes, cups, tools, a top, multi-axis turnings, and a turned baseball were on display.



Dean Swaggart shows burl bowl.



Ed Smith shows top from WT Design



Susan Shane shows array of pens



Steve Lane explains scroll-saw, router, lamination process.



Ted Rein shows Box and Bowl



A skeptical Chuck Aaron (below), shows bullets in Ted Curtis' Cherry Bowl (above).

Wayne Kuhn— Screwdriver with cherry/holly laminated handle. **Keith Holt**— Baseball turned by Michael Hosaluk, small pouring vessel, carved cat face, 2 NE bowls. **Dean Swaggart**—burl bowl, turned sculpture. **Lou Rudinski**—Big Leaf Maple Burl NE Bowl. **Jim Oliver**—Corian/Australian cypress cups, Osage Bowl with Bondo Ring. **Chuck Aaron**—Sassafras NE Bowl, Dogwood Bowl. **Frank Martin**—Crepe Myrtle burl bowl ala Cindy Drozda, dyed Box Elder Bowl. **Ted Rein**— Brazilian Cherry box, Holly NE rectangular bowl. **Scott Tatina**—Butternut/Mahogany HF, Wired Cedar Bowl. **Ed Smith**—Spinning Top. **Susan Shane**—Portfolio of Pens—acrylic, Abalone, various woods. **Ted Curtis**—Huge Walnut bowl with bullets. **Steve Lane** (visitor) - two bowls made by routing, laminating and scroll sawing. **David Reed Smith**— Several ball shaped sanders complete with demo of their use.



Tips and Tricks

Corian

Jim Oliver reported that Corian is made of 2 parts of Aluminum Oxide and 1 part Lucite. The Aluminum Oxide makes it much harder than wood. At Show and Tell, he presented two small cups made of corian laminated with Australian cypress. The laminations were glued with medium viscosity CA.

Non-turned bowls

Visitor Steve Lane brought two excellent examples of bowls made by laminating and cutting wood with a template controlled router and scroll saw. The technique is detailed in the book Making Wood Bowls With a Router & Scroll Saw by Patrick Spielman and Carl Roehl.

Scraping

Keith Holt described a technique taught him by Raymond Overman:

When making a Natural Edge bowl, use a cabinet scraper to smooth out undulations around the bark edge. (Be sure to do this with the lathe turned off.)

Sanding

David Smith gave an extended Show and Tell demo of multiple approaches to ball-shaped sanders for sanding the inside of bowls. 2-3" units were made by wrapping craft foam over carriage bolt or all-thread. The craft foam is shaped by sanding. Velcro hooks are attached to the ball to hold loop-backed sandpaper. 1" is made by winding foam over a steel rod, then applying Velcro hooks and using a trimmed 3" wavy disk cut to shape as abrasive. He also showed a sanding drum made of a 2x2 turned to a cylinder and wrapped with 4 layers of craft foam. 3 grits of sandpaper are wrapped around the drum and held in place with duct tape. Mount on lathe and use to turn exterior of bowls.

Do you have a tip?

Send your tips to Admin@baltimoreareeturners.org
(write "Tips and Tricks" in the subject line)

Cindy Drozda Is Coming to Town

Our sibling club, Chesapeake Woodturners (CW), will be hosting Cindy Drozda, in Annapolis from September 19 through the 23rd. She will be holding a three-day class at Maryland Hall, and demonstrating for the club at the CW meeting on Saturday the 9/22, and then a one-day workshop at Troy Beall's shop in Millersville on Sunday 9/23.

Contact Bill Kost at casakost@comcast.net for the available

slots. Bill's phone number is (301)257-7930. Cost is \$350 for the three-day class, and \$125 for the one-day class. The deposit is \$100 for the 3 day-class and \$50 for the one-day class.

Cindy is a world-class turner famous for her finials and boxes. Check out her Elegant Finials DVD in the BAT library or visit her website: <http://www>.

Baltimore Area Turners

Baltimore Area Turners meets every month on the second Wednesday of the month at the Greater Baltimore Woodcraft Store at

1125 Cromwell Bridge Road
Towson, MD 21286

Next meeting:

August 8, 2007 at 7:00 PM

Workshop on Baseball Bat turning and Basic Bowl turning.

Treasury

Treasurer's Report

5/31/07 Balance: \$1,757.75

Additions:

June Raffle: \$60.00

Subtractions: (none)

6/30/07 Balance: \$1,817.75



Bronze Casting as received from the foundry.



Conical Jam Chuck ready for bell.



Turning the outside profile.



Bell Chucked for inside turning.



Turning the inner profile



Bronze shavings ready to be recycled.



Sanding through the grits.



Now, that's a power sander!



Final assembly of handbell

Handbell Factory Tour

► Situated about 20 miles north of Philadelphia, in Plumsteadville, PA, is the Malmark Bell Factory. They are one of only two manufacturers of handbells in the country. A handbell consists of a tuned metal casting with a regulated clapper mechanism. Each bell is tuned to a particular note and sets of bells are used by choirs, ensembles or soloists to make music. The note range is slightly wider than that of a piano, starting at G1 (a bell about as big as a kitchen sink) to C9 (thimble sized). (Piano range is A1 to C9.) Most bells are made of bronze; larger ones can be made of aluminum which makes for a much lighter bell.

► What does this have to do with turning? A bell starts its life as a sand casting. The casting has the basic profile of a bell and has a 1" tang. The inner center of the tang is drilled to establish an index

point. Centered on this index point, the casting is placed on a lathe with a conical jam chuck. The outer wall profile is turned using a graphite-lubricated cutter mounted on a 2-3" arm whose movement is controlled by a template. The bell is then flipped and chucked for hollowing. The inner wall is turned in a similar manner until the desired profile is obtained. Each note has a unique profile; many have wall thickness down to 1/16". About 2/3 of the material in the casting is turned into shavings. The bell's tone is then electronically tested and, if up to specs, will go to the finishing room.

► How do you remove tool marks from the bell? By sanding, of course. Rubberized abrasive strips are used to hand-sand the spinning bell, going through the grits 80 through 240. Then they are power-sanded with industrial abrasive and fi-

nally buffed to a mirror sheen. Finishing is the most critical job in the process as removing too much metal will cause the bell to ring out of tune.

► Next, in the assembly room, the polished casting is mated with a matching clapper and handle. All parts of every bell are made in the USA, though domestic screws are increasingly difficult to come by. Up to this point, only about 2% of the castings have been rejected.

► Finally, it goes to the voicing room for the final testing. Tone is judged electronically and by ear. 42% of the castings fail to make the cut and are junked. Those that pass are graded with a color code and stored. Sets of bells are assembled using bells with the same color code, so that all are similarly voiced.

► More information is available at the Malmark website www.malmark.com.