



VOLUME FIVE – ISSUE FIVE

JANUARY 2004

## CONTENTS

President's Column.....1	
<i>Art Liestman</i>	
Curt Theobald demo.....2	
<i>Ross Pilgrim</i>	
Hollowing tools.....4	
<i>J.Paul Fennell</i>	
Lathe Problems and Solutions....6	
<i>Larry Stevenson</i>	
AGM Announcement.....7	
<i>Art Liestman</i>	
Notes, Classifieds.....8	

## NEXT MEETING

**JANUARY 28, 2004**

Sapperton Pensioners' Hall  
318 Keary St., New Westminster  
Meeting starts at 6.30

### Focus on Fundamentals:

Level 1 – What do I do with this piece of wood?

Samples of different woods will be discussed, with suggestions for cutting for maximum efficiency

Level 3 – Basic Cuts

Using a bowl gouge and scrapers

Discussion forum on finished pieces

A group discussion on form and design

### Food providers:

Bill Olsen, Bill Ophoff, Gregg Parsons, Wayne Pilchak, Aymeric Ronse, Gordon Rosenthal, Lance Rossington, Anne Rostvig

## PRESIDENT'S COLUMN

*Art Liestman*

Happy New Year, everyone. It's been a long time since our Curt Theobald demo on December 13<sup>th</sup>. It must be time for another meeting. Let's bring in the new year in style! I hope to see you all there.

Don't forget to bring your President's challenge pieces made from the pieces of fruitwood that were passed out at the November meeting. Surely you've made something by now! (If you didn't get any of that wood, just bring something made from a green branch that started out about 3" in diameter and 8" long.)

Another big event coming up is the Jimmy Clewes demo to be held at Sapperton Pensioners Hall on Saturday, February 7<sup>th</sup>. (There is a \$25 charge for admission.) Jimmy is an excellent and entertaining demonstrator. Don't miss him! In addition, Jimmy is teaching hands-on classes at KMS Coquitlam on Sunday, February 8<sup>th</sup> and Monday, February 9<sup>th</sup>. Contact me as soon as possible if you are interested in the classes. There are more details in the previous (December) newsletter.

## NEW MEMBERS

Please make the following new members of the GVWG welcome.

Iris Bell, Robert Caffrey, Melody Carruthers, Bob Doop, Klaas Focker, Ron Grant, Bruce Hodgson, Fraser Stepanick, Van Valkenburg.

## CURT THEOBALD DEMO

*Ross Pilgrim*

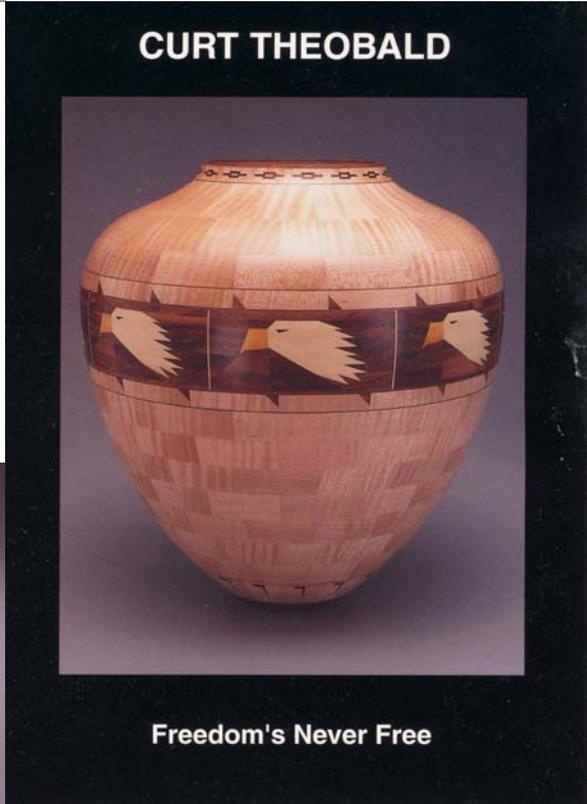
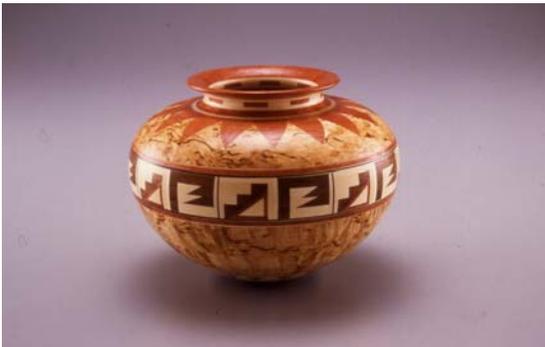
If you were among the 50 or so people that took in the December 13<sup>th</sup> Segmented Turning demo by Curt Theobald you are probably putting the finishing touches on your 300 piece bowl for display at the January Guild meeting. You haven't taken up the challenge yet? Well, you notice I didn't put a year on the January. Hopefully his demo did provide a challenge to many of you. Those who took the 2 day class with Curt following the demo went home with the bulk of the work done on a bowl and a couple of feature blocks in hand that they are trying to complete for display at the January 2004 meeting.

I have learned significantly more each of the three times I have seen Curt's demo. I am impressed with his professionalism and his unwavering focus on process precision and attention to detail. "Glue will only magnify any open joint that you have. Some say my approach is overkill, but I challenge them to find a loose joint in one of my turnings." The demo started with instruction on how to ensure the 12" disc sander is perfectly aligned and square, followed by the need for and adjustment of Jigs in order the have a repeatable process. Some may say he spends too much time on this aspect but put his segmented turnings on display beside those created without his level of precision and attention to detail, and the difference is quite obvious.

Once the sander and jigs were accurate to within 1-3 /1000ths he explained the process of building the segmented turning blank, a series of rings constructed to match a full size blueprint of the finished piece. As each ring is added to the turning block it is finished on the inside of the bowl leaving the outside barely more than trued to round. The outside is turned last and done to the specifications on the blueprint. The turning is all done with a single tool, a ½ inch bowl gouge with a long fingernail grind. Most of his cutting is done in a closed flute shear scrape action, which reduces the possibility for catches



The highlight of a segmented piece is usually one or more feature rings. The afternoon session was spent demonstrating the approach he uses to build feature blocks and reviewing a number of slides showing his finished product from the early “shopsmith” era where his pieces were but “acceptable beginnings with half inch wall thickness” right through to his recent “Freedom’s Never Free”, a 13” dia. x 14.25” high x ¼” wall thickness piece containing 8 eagle heads in the feature ring (the feature ring alone took 120 hours to build). On display were his 300 piece 1.75” dia x 2” tall entry into the Spring 2004 del Mano Gallery Small Treasures show and a 5” dia x 4” high piece with a daisy pattern on the inside that looked like a series of triangles from the outside. Most of his pieces sell directly to collectors at prices in line with other “big name” turners. If you want to read more about him refer to the Winter 2001 issue of American Woodturner page 42. If you missed the demo, the Guild Library has a copy of his video available for loan.



Thanks to Merv Graham for the photographs.

Those who attended J.Paul Fennell's demo were interested in how he makes his unique tools. He has been kind enough to write the following article for us to explain the process.

## **HOLLOWING TOOLS**

*J.Paul Fennell*

Having hollowed out wood vessels for over 15 years, I found that I needed to make my own tools, specifically for the small forms I was engaged in. I found that making tools was just another pleasurable aspect of woodturning.

I designed, used, and still use, a simple tool—not very pretty but very functional and inexpensive, so if I lost interest in doing hollow forms, I had very little money invested. It consists of a HSS cutter CA-glued into a steel shaft at an angle which allows me to get around the shoulder of the piece just beyond the opening. I realized that the off-set cutter will create a torque that your hand and wrist must resist, so I came up with a tool handle to accommodate this problem. Fig. A illustrates the handle's cross section. Fig. B shows the table saw set-up to make them, with suggested dimensions for a small handle that will fit comfortably in your hand. You can tweak the dimensions "a," "b," and "c" if need be. The initial tool handle blank will be a square stock of scrap hardwood about 7-8" long. The cross section is made by four successive cuts, one on each face of the blank (or 90 deg. to one another), then flipping the blank end-for-end and making four more similar cuts. The diagram illustrates the final cut being made.

The reason for the design is that it allows you to use your thumb and fingers to counteract the torque, rather than squeezing hard on a round handle so that the friction between your hand's skin and the handle tries to do the counteracting. There is a tremendous difference, and the tendons and joints in your hand and wrist will thank you for it.

A hole needs to be drilled for the tool shaft, which is done on the lathe by gripping one end of the handle in a four-jaw chuck, with a slightly oversized drill bit chucked into the tailstock. You need to center the free end of the handle carefully so the drill will be centered when entering the wood. I epoxy the shaft to the handle with JB Weld or something equivalent. For small work, I use a 5/16" shaft made from air or oil-hardening drill rod, and a 5/32" HSS drill blank, available from mail order houses or a good industrial supply house. Both are relatively cheap; you can, however, use the rear end of a broken HSS drill for a cutter at no cost. The business end of the cutter is ground flat to half the diameter and then ground to a fingernail point. Another option is to use an allen key wrench as a hollowing tool with the same handle. They work OK, but keep in mind the carbon steel used is not intended for cutting.

Hollowing out is inherently dangerous, and is not a process that should be pursued aggressively. Tool control is very important, regardless of which tool you use. Staying focused on what you're doing, not over-extending the tool's capability and using appropriate safety equipment will make the process much more enjoyable.

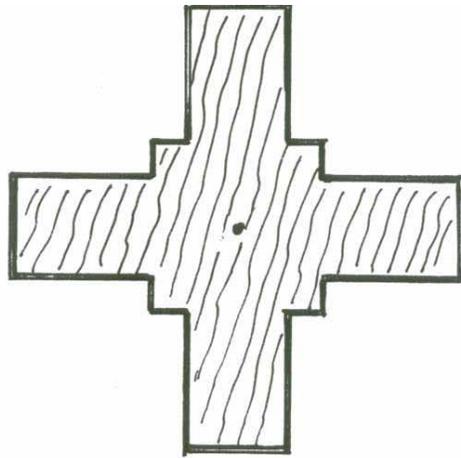
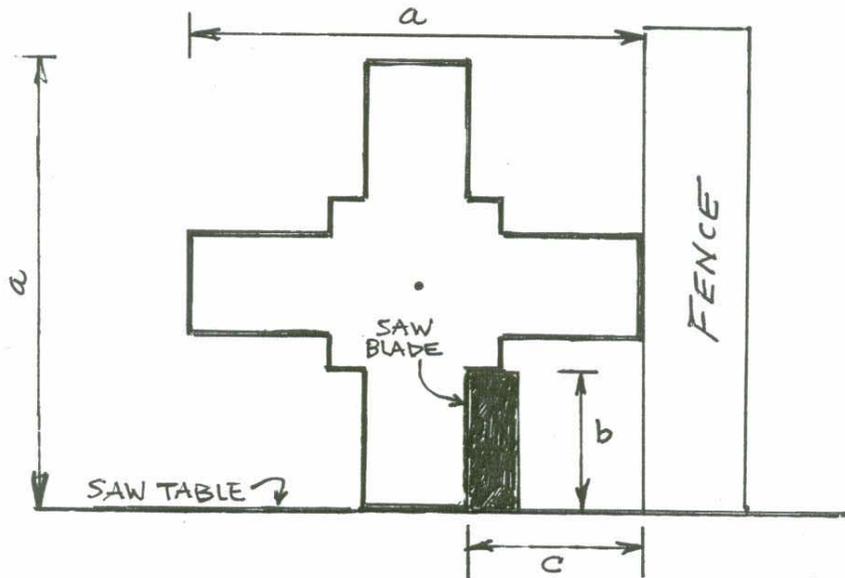


FIGURE A - CROSS-SECTION



- a - BLANK DIMENSION -  $1\frac{1}{8}$ "
- b - BLADE HT. -  $\frac{5}{16}$ "  $\pm$
- c - DIST. FROM FENCE -  $\frac{7}{16}$ "  $\pm$

FIG. B  
TABLE SAW  
SET-UP

## LATHE PROBLEMS AND SOLUTIONS

*Larry Stevenson*

Recently I had problems with my lathe and felt this was a good opportunity to share my experience in order to save others expense in the event of their own problem. I own a Delta DL-40 lathe with a variable speed DC drive. The Control Station allows you to set the speed in increments of 10 RPM and has a digital readout of your set speed as well as select forward or reverse. It is wired back to the Power Controller Assembly which is then wired to the motor. This Power Controller Assembly is the box with all the electronics. Speed is regulated with a tachometer feedback from the motor to the Power Controller Assembly. This unit has always been reliable even though it had an annoying habit of occasionally starting up at a faster RPM than desired. For those of you who do not know me, I'm a Biomedical Technologist who repairs and maintains patient care electronics at Vancouver General Hospital and I'm cheap. I wouldn't think of spending hard-earned money on replacing something that I could fix myself, much less hire someone to do it for me.

So, here is the scenario. I'm happily turning a jam chuck to hold a piece I'm finishing and I had a small catch. Nothing spectacular, but for some unknown reason the lathe came to a grinding halt. The digital display on the controller showed nothing, which generally means complete loss of power. I turn the power switch off and back on and the unit comes back to life but will only run in reverse. It tries to start in forward but will not run. The possible causes of this are (a) problem in the Control Station (b) problem in the Power Controller Assembly (c) problem with the Motor or (d) any combination of the above or wiring between assemblies.

I'm a logical kind of person, so I think about it for a minute or two. I'm fortunate enough to have gotten a spare Control Station and Power Controller Assembly with the purchase of this lathe. So the logical thing to do is try replacing the most easily replaceable part first, the Control Station. No such luck. Onto step two, the Power Controller Assembly. This unit is not as easily replaced as it means disconnecting the motor. So first of all I open the assembly and look for any signs of problems inside such as burnt out components, blown fuses, loose connections. There is nothing obvious so I swap this assembly for my spare. Again no luck, it still runs in reverse but not in forward. Lets start adding up the dollars had I not had the spare parts to try out first. The Control Station goes for about \$350.00 and the Power Controller Assembly \$1413.00. Unfortunately neither is available any more but there is a Kit selling for \$844.73 that replaces the above parts. That's \$844.73 plus tax folks.

I forgot to mention that I'm also a tenacious guy, I don't give up easily. This is where remembering all the little idiosyncrasies is very important so always keep a log of problems. It is also important to remember the sequence of events. If you look back, I gave two clues. I had a catch that made the lathe shake a bit and there was a problem with the lathe occasionally starting at too high a speed. After poking around further I found a poor connection between connectors in the wiring harness. The connector pin was never put on correctly at the factory. The pin was crimped onto the insulation of the

wire rather than the bare wire so that the wire was just barely touching the pin. The shake from the catch caused the wiring harness to move and this poor connection came open. This wire happened to be from the tachometer feedback. The Power Controller Assembly was doing what it is designed to do. If the motor stalls for any reason, there is no tachometer feedback and the unit shuts the power off. In my case with no tachometer feedback the Power Controller Assembly was treating it as if there was a stalled motor. Now you may ask, "Why then did it run in reverse? ". This is where it helps to be familiar with your particular lathe. With the Delta DL-40 the reverse is meant only for sanding, it does not develop any torque. When you are sanding in reverse you can slow the motor down with a little pressure, therefore the tachometer feedback is not used. In forward direction if the motor slows down the Power Controller Assembly sees this through the tachometer feedback and supplies more power thus maintaining the set speed of the motor.

The point in writing this article is to raise your own awareness to the cost of our toys and how to logically troubleshoot your own problems. Motors and speed controllers are complex devices that are not cheap to replace. Where would you take your lathe to be serviced and how? In my case it would have been logical to replace the Power Controller Assembly. Most electronics can't be returned even if it turned out that you didn't need it, as the suppliers have no way of knowing if you destroyed the new unit. There are steps to take to determine which component or assembly is at fault but sometimes when you have multiple faults this can be a frustrating process. I would recommend to anyone who is buying a lathe to make sure that a full set of schematics for the controller are included with the purchase. In the event that you have a problem, you at least have the schematics to assist someone in repairing it. If you do not have these, find out if they are available and get a copy while the manufacturer is still in business. In my case the original equipment manufacturer has closed and I'm having to reverse engineer it to draw my own, a very slow and tedious job.

## **AGM ANNOUNCEMENT**

*Art Liestman*

Our annual general meeting will be held during the February meeting (on February 25<sup>th</sup>). At that time, we will elect a new President. In addition, the terms of the current Secretary and some of the Members at Large are up.

The executive has appointed Don Hoskins and Ross Pilgrim as a search committee to seek out nominees for all of these positions. If anyone is interested in running for one of the offices, please make yourself known to Don or Ross. Of course, nominations will be allowed from the floor at the time of the meeting, but Don and Ross are charged with making sure we have at least some candidates. The new officers will assume their duties immediately after the February meeting.

The executive has recommended that we raise our annual dues from the current \$30 to \$35 effective in September 2005. This will be put to a vote of the membership during the AGM

## NOTES

Congratulations to Stan Clarke and Art Liestman, who both had pictures of their work accepted for publication in '500 Wood Bowls' to be published in the fall.

I would like to start a new section called 'Quick Tips'. If anyone has any suggestions that may be of use to other members, please let me know. Remember what may seem obvious to you may be a gift to someone less experienced.

Heads up for February food providers: Len Sawyer, Rich Schmid, Doug Schop, Russ Sewood, Fred Sherman, Larry Stevenson, Robert Turrell, Christine Vickers.

## CLASSIFIEDS

I am selling my older model 3400 Rockwell Lathe with stand. I have installed a 12" disk sanding unit with miter gauge on the head stock. Asking \$125.00 .

Gerry Hodgins 604-467-1426

New web catalog features: U-Build Wood Turning Lathes and Accessories, Heavy Duty Thickness Sanders, One-on-One 3-D Carving Duplicating Machine, 4-in. Jointer, Building Custom Gun Cabinets, Power Carving, Business Primer for Woodcraftsmen, Poor Man's Sand Blaster, Waste Oil Burners (for heating) Much, Much, More! All U-BUILD! All Guaranteed. Visit catalog at: [www.poormanspubs.us](http://www.poormanspubs.us) and SAVE!

## GVWG Officers, Appointees and Volunteers

### PRESIDENT

Art Liestman 604-939-3843

### VICE PRESIDENT

Bruce Campbell 604-944-3028

### SECRETARY

Larry Stevenson 604-438-3947

### TREASURER

Ted Fromson 604-876-0267

### MEMBERS AT LARGE

Fred Baldwin 604-531-9395

Colin Delory 604-576-1172

Andrew Forrest 604-990-9667

Steve Hansen 604-585-0638

Gina Myhill-Jones 604-467-0474

Ross Pilgrim 604-985-6423

### FOF COORDINATOR

Bob James 604-980-9192

### MENTOR PROGRAM ORGANIZER and MEMBERSHIP SECRETARY

Al Koehn 604-273-6995

### EDUCATIONAL COORDINATOR

David Wagner 604-983-3852

### LIBRARIANS

Michelle Jacobs 604-581-7097

Russ Selwood 604-224-4126

### WOOD EXCHANGER

Steve Kent 604-937-0145

### FOOD CHIEF

Rich Schmid 604-538-7012

### NEWSLETTER

Anne Rostvig 604-467-2755

[gwwgnews@yahoo.ca](mailto:gwwgnews@yahoo.ca)

### DIGITAL PHOTO GUY

John Flanagan 604-777-1133

### WEBMASTER

Steve Fairbairn

[sgfmail@shaw.ca](mailto:sgfmail@shaw.ca)

