



Chatter and Catches

the Newsletter of the



President's Gouge

The New Year started off with a 'little' surprise when we received notice from AAW that they were no longer providing liability insurance to their chapters, of which we are one. Dave Mills has been hard at work getting quotes from insurance companies to purchase liability insurance for the club and officers. I want to let everyone know that there is a possibility that we will need to increase our dues to cover the cost of this liability insurance. We hope to have this information back and considered prior to our February meeting so that we will have something to report to the members.

I would like to thank Wayne for hosting and demonstrating at our January meeting. Even though we could not turn at the session, Wayne did an outstanding job demonstrating the turning of a bowl. In my opinion this was one of the best presentations we have had in my five years in the club. It is apparent that Wayne is an excellent turner, instructor, and asset for the club, and I want to thank Wayne for all he does for us.

Gary James is hard at work on the club's new safety program, and we should have some proposals for the club members to review at this month's meeting. We will be working on numerous safety areas, and producing safety packages for each member and for visitors at club functions where power equipment will

be used. I am sure you will be hearing more regarding our safety program. Gary also has provided a safety article that you will find in this newsletter.

Dave Mills' brother has some property at Lake Tahoe and he is cutting down some pine trees on his property. His brother is going to give some of the wood to the club, so several of us are planning to get the wood hauled down from the lake. We will be having a cutting and sealing party later in February. We will let you know when this is planned so maybe some of you can give us a hand sealing and stacking the wood in Dave's storage container.



We had four new members join the club at the January meeting and another individual indicated that they were probably going to join. This is an exciting time for the club and I am looking forward to 2013! See you all at the February meeting. – John Compston, President [Photos by John Nikakis]

This Month's Program

Our February meeting will be held at Wayne Porter's shop at 9:00 a.m. on Saturday, February 9th. As discussed above, we do not have the liability insurance issue fully resolved, so Dave Mills and Wayne will show various texturing and accenting methods, including the application of InLace. – John Compston

The Role of Safety in Our Club: An Open Letter

You have probably already heard that for the next few weeks we will be conducting a review of our policies and practices in an effort to improve our club's safety awareness. A review of safety must start with the question, "What is the role of safety in our organization?" Some may feel that "safety" or a "safety program" is just common sense, something that one just knows and cannot be taught or something that is already learned and not worth revisiting. Maybe it's viewed as a roadblock or a "no left turn" sign that prevents us from getting to where we want to go. Some may feel that safety practices just get in the way of the fun we have when turning. Others may view safety as something we must do as a "CYA" measure! I view "safety" differently. I view safety as something that should be learned to a level that it becomes a brick in the foundation of what we do as turners. Learning to turn safely should be equal to learning proper turning technique because, at the end of the day, they are inseparable. Safety should be like a computer operating system, always running in the background and always taking us to where we want to go. I want a safety program for our club that will be there to protect us when equipment fails or to make us think twice before we have that "Jackass" moment! Fortunately, that's never been a problem for me, er ... well, there was that time when.....

What do the Pro's Say? Mike Mahoney, in his video *Heirlooms, Making Things That Last*, says that the size of the dovetailed tenon placed on a bowl for turning should be 40% of the bowl diameter and that the chuck jaws used should be large enough to completely grip that size tenon. Richard Raffan, in his book *Turning Wood*, says that good general light in your turning area is an important safety consideration. Lyle Jamison, in his DVD, *Bowl Basics, The Easy Way*, says when you are in control and working safely, the fun really begins. Let the fun begin! - Gary Iames

Book Review

Wood Identification and Use, Revised and Expanded by Terry Porter. Published by Guild of Master Craftsman Publications. \$23 to \$30.

Wood Identification and Use is a reference book. The introduction section covers the structures and characteristics of wood. The wood directory includes more than 400 different woods: Over 200 in the main section, and another 200 in the Woods-in-Brief section. The main section has full size photos showing the color and features of the wood and color drawings depicting the tree. It also has small details, detailed descriptions, and information on properties, seasoning, durability, and typical uses. The Woods-in-Brief section lists the names, origins, specific gravity, and properties. The sections are alphabetized by botanical names with the common name in bold print. There are common name and botanical name indexes at the back of the book. As reference books go, this one is very good. The photos give a good idea of what the wood looks like. The Properties paragraph lets you know what to expect when you work the wood. Learning the botanical name can make you seem really smart at show-and-tell! I highly recommend this book or its condensed version. - John Nikakis

Speed Kills

Always be aware of your lathe speed and the quality of the wood you are turning. While turning a 12-inch platter four years ago, I broke my left arm and could have been killed or permanently injured.

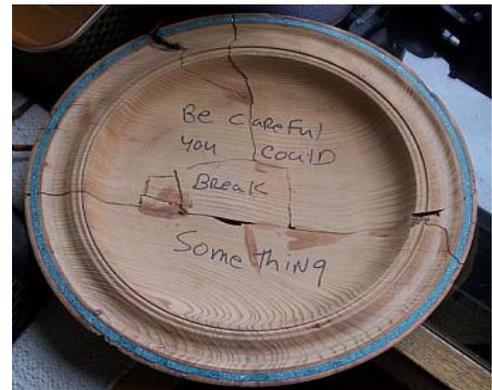
Looking back, what went wrong was the use of poor quality wood and improper lathe speed. A friend gave me an old redwood burl table. I'm always frugal and telling people that I'll take any old wood you don't want and turn it into something of beauty. Looking at the table, I thought I would make a large serving platter, so I cut a round out and mounted it up for turning. During the turning process, cracks kept showing up and I did my usual patch trick of saw dust and CA glue and continued the turning process. After I had it roughed out, I set it aside to turn a pepper mill.

My lathe speed turning the pepper mill was between 1000 to 1500 RPM. After finishing, I removed the pepper mill, re-mounted the platter, and turned on the lathe. I did not consider that I had just had the lathe running at high speed. My lathe is not a variable speed lathe, so whatever speed you were running previously is where it starts. Anyway, after about one or two seconds, the platter literally exploded hitting me in the arm just above the wrist. It was the most painful thing I have ever experienced. After walking around in circles for about five minutes holding my arm, I realized it was broken because every time I let go of it, it hurt like crazy. I was wearing a long sleeve tee shirt and a lined over-shirt so I started to roll back the clothing fearing a compound fracture, but I was in luck. The skin was broken and bleeding but no bone showing.

Kathy, my wife, wasn't home at the time, so I drove myself to the clinic. Sure enough, I had a broken arm, and lost the summer: No golf for 2 ½ months; chores put off; no turning; golf course mowed with one arm.

What went wrong? They say when turning, your lathe speed should always be between 6000 and 9000. It's not really RPM. It's just a reference number. The calculation is lathe speed times diameter of the piece you are turning. $1000 \times 12 = 12000$, so the platter was spinning between 12000 and 15000! Ouch! The other problem was the cracks I kept filling and gluing. After examining the broken pieces, the platter had separated along some of these glue lines.

Some turners talk about the kill zone when turning: That's where you stand between the headstock and tail stock and do your turning. If the piece comes off, chances are you will get hit. I am now always aware of that, so whenever possible, I try to work in such a way so if something happens, I might not get hit. It works great in theory, but sometimes you just have to get in there and do your thing. A fact about turning is that you are always going to have catches, and sometimes have pieces come off the lathe. The best turners in the world will tell you to wear your face shield, dust mask, watch out for loose clothing, and always keep a presence of mind when you are working around the lathe.



It took me a week to find all the pieces of the platter. I glued them together, and the platter sits with all my other turnings to remind me of that fateful day. - Dave Mills (Reprinted from the May 2010 issue.)

Skewed Points

There have been several discussions at our recent meetings regarding safe lathe operating speed. It was stressed that one should start at low speeds, especially with an out-of-balance piece, and work your way up to a safe, faster speed.

OK, so what is a safe, faster speed? Some turners suggest that the charts shown in various books written by prominent professional woodturners are adequate. The charts I have found seem to have been derived empirically, have no apparent mathematical basis, but seem to be safe. These charts also include reductions in speed as the piece thickness increases. The methods described below do not consider thickness. (Note that these methods assume that the piece has already been rough-turned to a round, balanced condition at low speeds.)

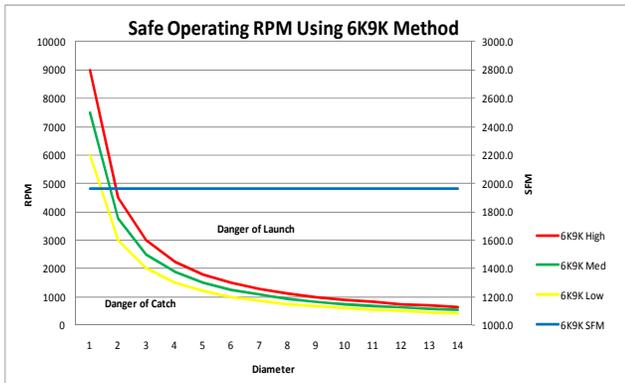
Other turners suggest that the method found in the Craft Supply catalog is a good one, and it seems to have a wide following. A quick web investigation finds many uses of this method. So, what is this method? I refer to it as the 6K9K method. It uses what I call a 'figure of merit' for a starting point into which a turner divides the diameter of the piece to derive revolutions per minute (RPM) for setting the

lathe speed. While noting again that one shouldn't start a lathe at the highest speed, I suggest starting at the low end of this 6000 - 9000 range.

Still other turners suggest that the speed of the piece at its outermost diameter is what one should carefully manage. This is called surface speed, and is given in surface feet/minute (SFM). It is a mathematical calculation based on RPM and diameter (D) using the formula at the right.

$$SFM = \frac{(\pi \cdot D \cdot RPM)}{12}$$

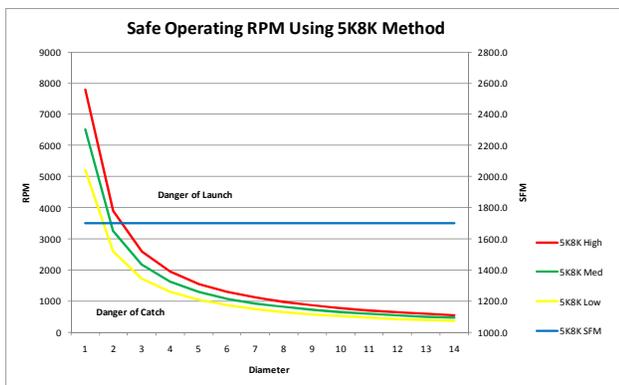
Interestingly, there is a relationship between the 6K9K method and the SFM method, and it is shown in the chart below. (Note that the smaller diameters are improbable due to lathe speed limitations, but are included for clarity.) Using the 6K9K range limits and a midrange point, I calculated and plotted the RPM values from 1" - 14" diameters (yellow, green, and red lines.) Using the math for the SFM method, I plotted the SFM at the 6K9K midrange point for the same diameters (blue line). You can see that as the diameters increase in size, the RPM necessarily decreases, but the SFM remains constant.



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Which method should you use? In practice, the 6K9K method is much easier to use because it is a less-involved calculation, and it will always result in a constant SFM within a certain range.

At this point we can ask ourselves whether these calculated speeds are safe. Looking at the RPM values, some would say they are too slow. Perhaps. Looking at the SFM values, a noted local machinist (Ron Burd) considers them to be on the high side. N the SFM values were calculated at the mid-range K value, the SFM at the red line must be even higher.



While investigating on the web, I found a professional woodturner in videos on YouTube who professes a slower 5K8K method. I believe I agree with both Ron and the turner on the video. The chart for the 5K8K values is at the left, and the SFM value is reduced by almost 150 SFM.

So, what is too fast, and what is too slow? Only you can ultimately decide. Some professional turners send people scattering from the front row at their demonstrations when they start their lathes at high speed with an unbalanced piece. Other professionals create long, arced ribbons of wet wood powered by their high lathe speeds. Speeds that are too slow can result in more catches, and speeds that are too fast might result in launches for distance records, or much more seriously, in a broken arm as chronicled earlier in this newsletter.

Perhaps the ultimate answer to the quest for speed is to loop back to the beginning of this article and to utilize the charted empirical knowledge of professional turners until you develop your own safety groove through your own years of experience. – Bill Draper (Reprinted from the May 2010 issue.)

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Dates to Remember

The 5th biennial Desert Woodturning Roundup symposium will be held at the Mesa Convention Center on February 22nd-24th, 2013. The symposium is hosted by the Arizona Woodturners Association. Featured presenters are Richard Raffan, Malcolm Tibbets, Michael Hosaluk, Molly Winton, David Marks, John Lucas, J. Paul Fennell, Matt Monaco, and Rex Burningham. The event includes a pen Carson Valley Woodturners

turner gathering, live and silent auctions, a vendor area, an instant gallery, and door prizes. Following the symposium, Richard Raffan will teach a hands-on workshop. Further information is available at <http://www.desertwoodturningroundup.com>, or call 480-650-5185.

The Big Island Woodturners 15th Annual Exhibit will be held at the Wailoa Center, 200 Piopio St. in Hilo, HI. The show will kick off with the "Meet the Artist" Reception on March 1st, 5 p.m.-7 p.m. The Woodturners Exhibit is free to the public and will be open Monday - Saturday from 8:30 a.m.-4:30 p.m. during March 2nd-23rd. Woodturning demonstrations are on March 2nd, 9th, 16th 10 a.m.-2 p.m. Visit the [website](#) for more information.

The **2013 Utah Woodturning Symposium** will be held May 16-18th, 2013. Make plans to be part of the highly acclaimed Symposium. Engage with today's top professionals and up-and-coming woodturners in a friendly, informal learning environment with over 80 demonstrations to choose from and a full schedule of special events. The roster of 2013 demonstrators and further information is available on their [web site](#).

The **27th AAW International Symposium** will be held at the Tampa Convention Center, Tampa, FL, June 28-30th, 2013. The AAW is calling for entries for the Juried Exhibition. Entries will be accepted online beginning November 1st, 2012 through February 3rd, 2013. All applicants will receive email notification by March 31st, 2013. Eligibility, fees, commissions, and other details are discussed on the [AAW web site](#). Additionally, registration information is now posted on the [AAW web site](#).

The **Woodturners of Olympia** will hold their annual **Woodturning Symposium: Creativity in Woodturning** and workshops July 27th – 31st, 2013, in Lacey, WA. Registration started on January 1st, 2013. Featured demonstrators are John Jordan and Jack Wayne. For more information, contact A. Price at aprice@aol.com or visit their [web site](#).

The **Southwest Association of Turners** recently announced that their 2013 symposium will be held on August 23rd – 25th, 2013, in Waco, TX. Details will follow when they are published. <http://www.swaturners.org>

Newsletter Editor's Request

Please send your newsletter contributions and suggestions for improvement to Bill Draper via cwvnews@charter.net no later than Monday of the week before the next regularly scheduled meeting. The submission deadline for the March 2013 newsletter is February 25th.

CVW Meeting Location and Directions

This month's CVW get-together will convene in Wayne Porter's shop on February 9th at 9 a.m. The address is 759 Gansburg Court, just off Highway 88 in Carson Valley. If you find yourself in California, you went too far. We all appreciate Wayne's willingness to hold CVW meetings in his shop.

Carson Valley Woodturners' Officers

President: John Compston – 775-690-6011

Treasurer: Wayne Porter – 775-265-7887

Vice President: Gary James – 530-541-2250

Secretary: Dave Mills – 530-694-2565

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