

# Tuckessesee Turners

Woodturners from North Central TN and South Central Kentucky

We provide an environment to help beginning woodturners get started with minimal start up costs

## June 2014 Newsletter

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### *Presidents Message...*

Fellow Woodturners,

Another month come and gone. The market place is doing ok with myself and Bryce being the only ones to show up on the third weekend. We would really like to have at least 3 people at each Saturday. (the 1st and 3rd Saturdays).

I have a total of 6 CBN wheels to order. We need two more to get the free light for the club. If you have ordered one or want to, please bring cash or check to the meeting on the 7th of July. I will submit the order on the 8th. The wheels are \$125 ea plus \$6 shipping. I'm sure a couple more of you are really wanting one (or more) of these fine wheels.

I hope everyone has a safe and happy 4th of July.

See you at the meeting, Mon. 7, July.

Jon Haigh  
931 647 3328  
[jonbh@charter.net](mailto:jonbh@charter.net)

### *Jack Bastin...*

#### *July Demonstrator...*

Jack will demonstrate making bottle stoppers. He is one of our clubs best turners when it comes to small items. You may remember his recent demonstration on ornament making. Don't miss this opportunity.

#### *In August...*

Andy Woodard will demonstrate bowl making. Andy did this for the Nashville Club in May and it was a big hit. Those of you who are new to turning will want to come and watch Andy.

### *Clarence Duzan...*

#### *Demonstrated in May...*



Clarence showing us how he makes pens

## ***Market Place Events***

*First and Third Saturdays*

July 5<sup>th</sup>            and    19<sup>th</sup>  
Aug 2<sup>nd</sup>            and    16<sup>th</sup>  
Sept 13<sup>th</sup>        and    20<sup>th</sup>  
Oct 4<sup>th</sup>            and    18<sup>th</sup>

First and third Saturdays.

## ***Monthly Turn-ins***

*Fourth Saturdays*

May 24<sup>th</sup>  
June 28<sup>th</sup>  
July 26<sup>th</sup>  
August 23<sup>rd</sup>



A sampling of the pens made by Clarence



The completed pen

As usual he put on quite a show. It is obvious he has made a few pens. Good job Clarence.

## **How long does it take to make a bowl?**

By Jim Mason

I quite often have someone ask me “how long did it take you to turn this bowl?” I have avoided answering the question until now. I have given the question some serious thought and I will try to answer it as I understand the definition of *turn a bowl*. I think most people feel that it is as simple as, how long did it take from the time you put it on the lathe until you shaped it and took it off. My definition, however, entails much more than that.

My first thought about turning a bowl, is where will I get the wood. For a 20 inch bowl, I will need a big log...just how big should it be? How long should I cut each piece? How long should it stay in the log before I can remove a piece needed for the bowl.

For example, I was recently offered some choice cherry wood in the form of a log 20 feet long with a diameter of 30 inches at one end, tapering to 20 inches at the other end. The tree had recently been cut. The first thing I did was decide how long each piece should be cut. At the 30 inch end of the log I could visualize a few 20 inch bowls...at the other end, some 16 inch bowls. My preference would have been to leave this 20 foot log uncut until

## ***Club Activities for 2014***

### ***Monthly Club Meetings***

*First Mondays*

July 7 <sup>th</sup>	Jack Bastin
August 4 <sup>th</sup>	Andy Woodard
September 1 <sup>st</sup>	Jimmy Greenwood
October 6 <sup>th</sup>	David Sapp
November 3 <sup>rd</sup>	
December 1 <sup>st</sup>	

needed. But, there was no way that I could handle that much log without first cutting it into smaller chunks. So I needed to decide then and there what length to cut each chunk.

In trying to decide where to cut, I remembered an incident a few years back where a lady called me to ask if I would turn her a 20 inch bowl from a maple tree that a tree trimmer was removing from her property. She had the fellow deliver a piece of it to me and called me to ask when she could expect a bowl. I gave her the very sad, bad news. The fellow had cut the 36 inch tree into a length of about 12 inches.

When I told her the wood was too small for her bowl, she wanted to know why, since the log was 36 inches. I explained what the length of the log must be for her bowl and she was, of course, heartbroken after having gone to trouble and the added expense of delivery to me.

Lets get back to the Cherry tree log story. Remember, this tree had only been cut down a few days earlier. I prefer to let wood that is this *green*, age a few months before I open it up vertically. The down side to cutting it into smaller log form now as opposed later as needed, is that, at every cut across the tree, the wood will check (crack) about 1 to 2 inches on each end during this time, even if it is properly sealed on both ends.

I prefer putting my freshly cut logs in a shaded area out in the open. To put these logs in the hot sun will certainly result in disaster. It will begin to check almost immediately, so if that is the only choice you have, it should be covered with a, properly elevated tarp, to allow for air circulation.

The next worst thing you could possibly do is to put it in a dry building with low humidity. This is a mistake that I see many woodturners make. It needs the moisture of the outdoors to slow down the drying process. Since wood shrinks as it dries, (the cause of cracking/checking) it makes sense to do everything possible to make sure that the entire log dries at the same, or close to the same rate.

When will it be dry? As long as the wood is in the log it will always be considered *green* wood. Depending on the diameter of the log, it will lose most of the excess moisture in 3 to 6 months. This keeps the water from flowing so freely during

turning, and the distortion of the completed bowl will be reduced significantly. So, I try to always wait 6 months before I *open* the log. I now refer to this wood as seasoned, as opposed to freshly cut.

If a person has no other choice, and turns a bowl from freshly cut wood, be prepared to sling water all over the shop. And expect to take some additional steps to prevent the completed bowl from cracking as it dries.

I digress, so back to “where should I make my first cut into the log?” Allowing for 2 inch checks on each end means I will need to allow for wasting 4 inches of the length of each log. So I cut the first chunk 24 inches (20” bowl + 4” of check) giving me a log 30 inches across and 24 inches long, which I can easily roll onto my tilting trailer with my cant hook, and head for home with a trailer full of choice wood for large bowls. I continue that process to the other end of the log. I don’t plan to make any small (11” to 13”) bowls from this wood because I can find plenty of smaller trees for this size bowl.

As I get to the smaller, 20 inch end of the log I begin to consider what size bowl I can get from this smaller diameter end. Allowing 1 to 2 inches on each side of the log for sapwood and bark, leaves 16 inches of clear wood for a nice 16 inch bowl. For these smaller size bowls, I only need 20 inches of length (16 plus 2 to 4 inches for check).

I treat the ends of each log with end grain sealer immediately (before it checks). Leaving it unsealed for only a few days will result in checking. If the wood has checked since it was cut, I cut those out before I seal with end grain sealer. Putting sealer over the cracks is a waste of time. It is virtually impossible to seal a crack. Sealing should be done before it cracks.

So, I think to myself, how much time have I already spent to turn a bowl? I still can’t honestly answer that. The chain saw had to serviced, and I had to mix gasoline for it. I had to sharpen the saw blade, add chain oil, hook up the trailer and make sure the tires were properly inflated. This will be a heavy trailer load of large cherry tree logs and it will take me a few more hours to harvest them.

Now...when could I begin to use this beautiful

continued...

wood? I can cut and use it immediately, but I would need a rain suit, and bowls made from it will distort severely, and it will be hard to dry the finished bowl without it cracking. The best way to avoid cracks in bowls from new, freshly cut wood is to go ahead and turn it to its final size, shape and thickness. It will distort but the advantage is that you have immediate gratification. Assuming you do this, let it dry for a day or so in a brown paper bag. After a couple of days of slow drying in a paper bag, it will be dry enough on the surface to sand without gumming up the sandpaper. Sand and apply finish and keep it in a room with high humidity or place it back into the paper bag for a few days and let it dry to its distorted form.

I prefer to have my bowls round (not distorted), so I always double turn each one. After the first turning it will distort (become oval shaped). The amount of distortion depends on a lot of variables...the type wood, the depth of the bowl, and how it is dried. The taller the bowl, the more it distorts and the more likely it is to crack. I don't have a magic formulae...I just rely on experience. I have lost a few bowls during this process, but am to the point now, that I seldom miss. After the first turning I place it in a brown paper bag or wrap it in a couple of layers of newspapers so that it loses its moisture gradually. It usually takes 6 to 10 weeks for this process, depending on the humidity.

The first turning of the bowl was so enjoyable because *green* wood is so much softer and easier on the turning tools. But, the second turning is a different story. The wood is hard and dry and dulls the tools quickly. And the oval shape of the bowl causes the tools to bounce, making it difficult to make it perfectly round. A 16 inch bowl will require sharpening the chisels several times. The last finish cut requires a freshly sharpened tool.

Because the bowl is oval shaped at the second turning, the first cuts will be on two sides, only on the outside of the bowl. For the inside of the bowl, the first cuts will be on two sides also, opposite the first cuts you made on the outside. To visualize this before beginning the cuts, I always flatten the top edge of the bowl, and draw pencil lines around the top edge just far enough apart that the marks go all the way around the bowl. Then it

is easy to see where the tool will be cutting on both the outside and the inside, and you will know if you have enough thickness to make a bowl that is not too thin.

During the first turning of the bowl, the only thing that dulls the chisel quickly is the bark. Bark has a lot of dirt, sand, and even gravel that was blown into it during growth. I try to remove as much bark as possible before mounting it on the lathe. It saves sharpening time and prevents large chunks from flying off and hitting the face shield.

Lets go back to the question "how long does it take to make a bowl? I don't know the answer yet. After the material for a 16 inch bowl is properly mounted between centers on my lathe, and the tenon is properly formed, the first turning of the bowl generally requires about an hour, and an additional hour to turn and sand it at the final turning. Based on this definition of *turning a bowl* it takes two hours. So, is that the answer? I don't think so, because, as you have already concluded, my definition is much broader.

Immediately after the final turning, if I intend for it to be used as a salad bowl, which most of mine are, I finish the completed piece by applying the first of 4 to 5 coats of food safe wipeon poly. Thorough sanding is required between coats making sure to wipe thoroughly with a tack cloth after each sanding. If the intended use is for a dough bowl, I suggest using mineral oil which can be reapplied as needed. Apply the mineral oil by flooding it thoroughly. Let it set overnight reapplying to areas that completely absorbed it. Wipe off the excess and it is ready to use.

Before any finish is applied, I sign and date each piece with a fine tip writing pen. I try to keep the signature portion in keeping with the character of the piece...neat and subtle. I often observe woodturners signatures, and notice how bold and unattractive some are. Somehow it seems to change their beautiful work from very nice, to ordinary.

I still don't know the answer to the question, how long does it take to turn a bowl, but I am reasonably certain that I don't make minimum wage, regardless of the sale price.

It is hard, hot, strenuous, time consuming work that

continued...

I thoroughly enjoy. But what really feeds my addiction is to see the way people observe by bowls, then gently pick them up, and notice how smooth they feel. The complimentary remarks, by some who buy my bowls, and the assurances that they will pass them down for generations, is very rewarding.

By: Jim Mason

[jmason@newwavecomm.net](mailto:jmason@newwavecomm.net)

Hopkinsville, KY June 2014

### ***The Library.....***

Billy Dickens, our Librarian, invites you to check out one of the many learning tools...books, videos, etc.

If you have checked anything out lately, be sure to check the return date. If more time is needed, give Billy a call at 931 645 9210 or email him at [billy.dickens@lildickens.com](mailto:billy.dickens@lildickens.com)

### ***Visitors...***



Austin Alberd and his Grandson, Eddie Davidson  
2465 Stone Hollow Rd, Cumberland Furnace, Tn  
615 830 0602 Austin is a first time visitor and a new member of our club. Welcome!

[fossiled@att.net](mailto:fossiled@att.net)

### ***Take Advantage of... Saturday Turn-ins...***

The turn-ins are where you can get hands on help with your turning. Practice your turns, sharpen your tools, learn from the professionals or share your skills with others who are there for help.

### ***The Editor's column...***

Several of our lathes need parts and service. The manufacturer will provide, at no charge, what ever parts we need. All we need to provide in exchange is the serial number of the Lathe we need the parts for. Any volunteers to look them over and let us know what parts are needed? If you can help let President Jon Know.

Jon mentioned in his Presidents column that only he and Bryce showed up for the Third Saturday Market Place event. Needless to say, it must have been a good workout for only two people. One reason for the light turnout could have been that you were expecting a reminder prior to the event. We failed to get the reminder out. This month we will try to remember to remind you.

It would be helpful if you could let Jon know ahead of time if you will be there. If you don't let him know ahead of time, then we will need to send an urgent message asking members to help. In that case we could have too many. If you fail to let us know, come on anyway, but to prevent a total no-show, please try to let Jon know for the 1<sup>st</sup> Saturday, and let Bob know for the 3<sup>rd</sup> Saturday.

### ***The monthly meeting is July 7<sup>th</sup>.***

We need donated items for the club to sell to raise money. There are club expenses that must be paid and there are other things the club hopes to afford to do. Any item will do.

Remember, we are all beginners to some degree, so to take advantage of the hands on help with turning, sharpening and know how, try the monthly turn-ins on the 4<sup>th</sup> Saturdays.

See you at the meeting, Monday 7:00 PM, July 7<sup>th</sup>.

Jim Mason

**Clarksville Downtown Market Place**



left to right.. Norbert, Jack, Bob, and Steve

**Steve Sabinash**



Cherry Salad Bowl

**Bob Forsythe**



Lady observing Jim Mason's Vase

**Steve Sabinash**



PVC Vacuum Coupling System

**Instant Gallery (Show 'n tell)**

**Steve Sabinash**



Cherry Salad Bowl

**Max Harris**



Cherry Salad Bowl

**Max Harris**



Walnut Salad Bowl

**Mike Patrick**



Natural Edge Cherry Bowl

**Max Harris**



Large Sycamore Salad Bowl

**Mike Patrick**



Elm Bowl

**Max Harris**



Acrylic Pen left and Maple Pen right

**Mike Patrick**



## Don Lyons



Sweet Gum Vase

## Jim Mason



Maple Hollow Form

## Don Lyons



Small Ambrosia Maple Bowl

## Jim Mason



Natural Edge Pedestal Elm Bowl

## CHILDREN'S PROVERBS

A first grade teacher collected well known proverbs. She gave each child in her class the first half and asked them to come up with the remainder of the proverb. Their insight may surprise you....

Better to be safe than.....punch a 5<sup>th</sup> grader  
Strike while the.....Bug is close  
It's always darkest before....Daylight Savings Time  
Never underestimate the power of.....termites  
You can lead a horse to water but.....how?  
Don't bite the hand that.....looks dirty  
No news is.....impossible  
A miss is as good as a .....Mister  
You can't teach an old dog new....math  
If you lie down with the dogs, you'll.....stink in the morning  
Love all, trust.....me  
The pen is mightier than the.....pigs  
An idle mind is.....the best way to relax  
Where there's smoke there's.....polution  
Happy is the bride who.....gets all the presents  
A penny saved is.....not too much  
Two's company, three's.....the musketeers  
Don't put off until tomorrow what.....you put on to go to bed  
Laugh and the whole world laughs with you, cry and.....you have to blow your nose  
None are so blind as.....Stevie wonder  
Children should be seen and not....spanked or grounded  
If at first you don't succeed....get new batteries  
You get out of something what you.....see pictured on the box  
When the blind leadeth the blind...get out of the way  
Better late than.....pregnant

## **Tuckessee Woodturners Board Officers, Directors & Chairmen**

**President** - Jon Haigh 931 647 3328 or  
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### **Directions to Club Meeting Place**

**FROM THE SOUTH:** Take N. 2<sup>nd</sup> Street north onto Hwy 41A (Providence Blvd), Turn Right on Market St, Turn Right on Chapel St, Turn Left on North Ford St. About ½ mi. rd turns hard right, continue about ½ mile to the last building on the Left. (F.O.P. Lodge)

**FROM THE NORTH:** From Hwy 41A (Providence Blvd) turn left on Chapel St ¼ mi. turn left on North Ford St. About ½ mi. rd turns hard right, continue about ½ mile to the last building on the Left. (F.O.P. Lodge)

Regardless of which route you take you will think you are lost before you get there.

### **Woodturning Clubs of Interest...**

**American Association of Woodturners**  
[www.woodturner.org](http://www.woodturner.org)

**Tennessee Association of Woodturners**  
Nashville, TN [www.tnwoodturners.org](http://www.tnwoodturners.org)

**Duck River Woodturners Club,**  
Columbia, TN [www.duckriverwoodturners.com](http://www.duckriverwoodturners.com)

**Tri-State Woodturners Club**  
Chattanooga, TN [www.tristatewoodturners.org](http://www.tristatewoodturners.org)

**Blue Grass Area Woodturners**  
Lexington, KY [bluegrassareawoodturners.org](http://bluegrassareawoodturners.org)

**Louisville Area Woodturners**  
Louisville, KY [louisvilleareawoodturners.org](http://louisvilleareawoodturners.org)

**Cumberland Woodturners**  
Crossville, TN [cumberlandwoodturners.com](http://cumberlandwoodturners.com)

**Smokey Mountain Woodturners**  
Knoxville, TN  
[smokeymountainwoodturners.org](http://smokeymountainwoodturners.org)

**West Tennessee Woodturners**  
Jackson, TN [tristatewoodturners.com](http://tristatewoodturners.com)

# Lathe SAFETY SHIELD

The Georgia Association of Woodturners' 19th Annual Turning Southern Style symposium had one noticeable addition—lathe safety shields. With the heightened focus on safety, our board of directors voted to build shields to help prevent missiles from flying into the crowd. I built a prototype and constructed four more shields for the symposium. The cost per shield was about \$300; if I had not made some of the simpler parts, the cost would have been \$100 more.

## Design criteria

I've borrowed the lathes from club members, so I did not want to modify their lathes; however, I did want the shields to clamp to the lathe to provide

stability and rigidity while not interfering with movement of the headstock, tailstock, or banjo. Our goal was to provide reasonable safety to stop any piece that might fly loose in a typical demonstration.

I wanted to design the shields with structural material that was readily available, versatile, easy to assemble, strong, and attractive. I selected model #1010 extruded aluminum struts from 80/20, Inc. The struts are 1" square in cross-section and have continuous 1/4" wide T-slots on all four sides. The T-slots are perfect for holding a sheet of clear polycarbonate plastic.

## Construction

The aluminum struts form a rectangle that holds the polycarbonate

sheet (Figure 1). They serve as stabilizers for the weight. The shields are 1" high with knees for height with knees sliding in the T-slots. The arms attach the shields to the lathe. These arms clamp the lathe bed with the lathe bed with into small angle brackets.

The brackets are 1 1/2" x 1/4" aluminum pieces (Figure 2). To attach the brackets to the lathe, I used a 5/16" bolt that fits into the external-tooth slots of the angle bracket. The angle bracket keeps the bracket from sliding out



Cindy Drozda demonstrated at a Georgia symposium behind a sturdy shield.

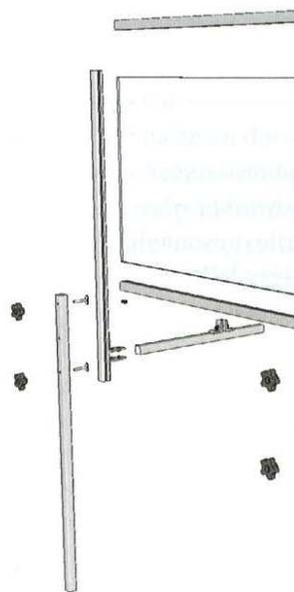


Figure 1. The shield consists of eight extrusions, a sheet of polycarbonate plastic, connectors and mounting hardware.

T-studs and knobs allow the legs to attach to the vertical sides of the rectangle and slide up and down (*Photo 2*). I made the T-studs from 1/4-20 x 1 3/4" studs and 1/4-20 T-nuts threaded together and locked with thin cyanoacrylate (CA) adhesive. Knobs are widely available.

**Tools and assembly**

Only two tools are needed: A 1/2" hex closed-end wrench to tighten the bolts against the lathe and a 5/32" ball-end T-handle Allen wrench (available from Home Depot) for screws in the slots of the aluminum struts. One person can assemble the shields, but it is easier with two. A flat worktable makes the assembly easier.

**Assembly**

**Attach arms to lathe first**

Lay the arms on the table. Thread the bolts into the angle brackets so the end of the bolt is flush with the surface of the angle bracket. Slide the angle brackets into position on the arms and attach them with the 1/4-20 x 1/2" screws, star washers, and T-nuts, but don't tighten them yet. Position the angle brackets so the arm is flush with the front of the lathe bed with the angle brackets inside and outside the back wall of the lathe.

For the Powermatic 3520-type lathe, the angle bracket outside the lathe bed will be 10" from the end of the arm, which is flush with the front of the lathe. The space between each pair of angle brackets is just wide enough to slide the angle brackets up onto the lathe bed wall. The arms need to be spaced 37" apart, outside to outside. Tighten the angle brackets securely to the arms. Then tighten the bolts against the lathe.

Use the #3356 hardware package to attach the #4101 corner brackets to the top and bottom surfaces of the support arms; position corner brackets flush with the ends of the ▶

Parts List		
Qty.	Part	Comments
2	80/20 #1010 extrusion	35" length. Ordered with #7042 counterbore in both ends of one slot
2	80/20 #1010 extrusion	36" length
2	80/20 #1010 extrusion	36" length. Drill three 1/4" holes spaced 1", 5", and 9" from one end through the extrusion.
2	80/20 #1010 extrusion	20" length
4	80/20 #3321 1/4-20 x 1/2" FBHSCS and T-nut hardware set	
4	80/20 #3395 anchor fastener assembly	
4	80/20 #4101 4-hole inside corner bracket	
8	80/20 #3356 double 1/4-20 x 1/2" FBHSCS and T-nut hardware set	
4	80/20 #3382 economy T-nut	
1	1/4" thick clear polycarbonate	20 1/2" x 35 1/2"
4	Angle bracket	1 1/2" x 1 1/2" x 1/4" thick x 1" wide with 1/4" hole and 5/16-18 threaded hole
4	5/16-18 x 1/2" hex bolts	
4	5/16" external-tooth star washer	
4	1/4-20 x 1 3/4" threaded stud	McMaster Carr #98750A017
4	1/4-20 star knob (female)	Peachtree Woodworking #977
4	Endcaps (optional)	Caplugs #VSC-1000-8

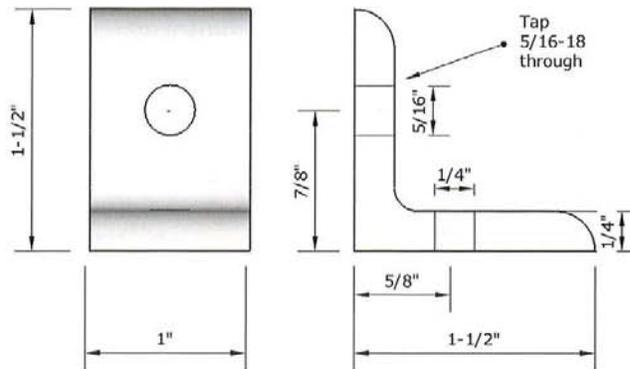


Figure 2. Dimensions for the aluminum angle brackets that clamp the shield to the lathe bed



1 Arms on the frame have angle brackets that hold the shield in place against the lathe bed.



2 Vertical support legs can be adjusted for height.

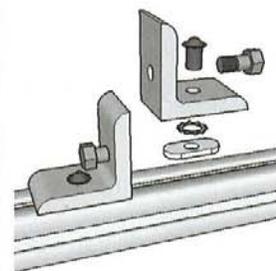
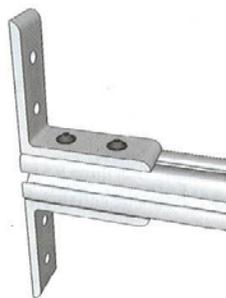


Figure 3. The oval T-nut rides in the channel of the aluminum arm. A star washer keeps the bracket from shifting.

Figure 4. Be sure the angle brackets holding the support arms are flush with the ends of the arms.



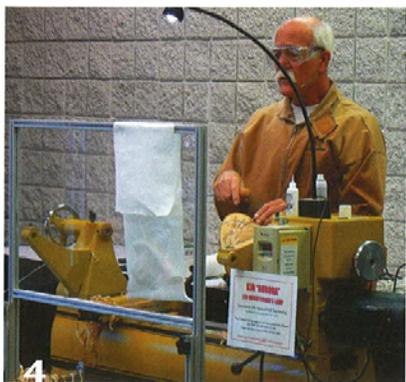
arms (Figure 4). Tighten the brackets securely. Also assemble the #3356 hardware on the vertical legs of the corner brackets, but leave the hardware loose so you can slide the T-nuts into their T-slots in the next step.

### Assemble polycarbonate in frame

Lay the two 36" struts without holes and the two 35" struts on the table. Fasten one end of a 36" strut to one end of a 35" strut using a #3395 anchor assembly. Be sure the counterbored hole in the 35" strut faces the outside. Slide the longer end of the T-nut into the T-slot of the 36" strut and put the round section of the fastener into the counterbored hole (Photo 3). Make sure the struts meet flush



3  
Special anchors join the four pieces of the frame. Order the horizontal pieces counterbored for the round part of the anchor.



4  
Jerry Kermode draped paper towels across the shield to protect it from splashes of finish.

at the corner. Use the ball-end Allen wrench to tighten the fastener securely. Fasten the other 36" strut to the end of the 35" strut in the same manner.

Use polycarbonate for the shield—not Plexiglas acrylic or other plastic. Slide the sheet into the T-slots. Capture the polycarbonate with the other 35" strut, making sure the counterbored holes are opposite the polycarbonate. Secure with the remaining anchor assemblies. Check that corners are flush, the sheet is secure, the anchors are seated in their counterbored holes, and all the hardware is tightened securely.

### Attach framed polycarbonate to arms

Stand the framed polycarbonate upright and prepare to attach it to the end of the arms. (This is where you really need two people.) Make sure the T-nuts on the corner brackets are loose so they can slide into the T-slots. Slowly slide the vertical struts into position. Be sure the struts are flush with the lower edge of the corner brackets. Tighten one of the screws on each side to hold it in place. Step back and make sure the position is right. The shield should be level and at a height the banjo can slide underneath. If everything looks good, securely tighten all screws in the corner brackets.

### Attach legs

Lay the two legs onto the table and attach the knobs with the 1/4-20 T-studs. I drilled 1/4" holes through the leg struts at 1", 5", and 9" from one end. The extra hole allows you to adjust the shield height for tall lathes or lathes on raised bases. For most applications, install the T-studs and knobs in the 1" and 9" locations.

Thread the knobs onto the T-studs just enough to get them started. Holding the legs vertically with the knob end up, slide the longer end of the T-studs down into the T-slots on the vertical struts. With the legs resting on the floor, lift up slightly on the shield and tighten the knobs. This will ensure that the legs, while on the floor, support the weight of the shield.

### Additional details

The polycarbonate is only 0.224" thick, which allows vibration from the lathe to rattle the sheet. To prevent that, put short lengths of soft, closed-cell foam in the bottom and top T-slots. When you reinstall the top strut, push it down tightly to compress the foam. If you do not plan to disassemble the shield, you could run a bead of clear caulk into the slots during assembly.

A cap on the end of the aluminum struts is a nice addition. A 1" square vinyl cap from Caplugs works nicely, but the company only sells them by the carton.

This design is versatile and flexible and can be adapted to many lathes. The angle brackets can be slid along the T-slots to fit your needs and the legs can be easily adjusted. The angle brackets can also be mounted on the sides of the arms, instead of on the top surfaces to fit a different type of lathe.

The polycarbonate can be easily replaced. To make it last longer, when applying finishes or CA, lay several sheets of paper towel over the shield to catch any spray (Photo 4).

The first day of our symposium, the shields got a real-world test when one of the demonstrators blew up a piece of mesquite. Half the piece hit the shield and bounced onto the floor; the other half hit the shield and landed behind the lathe. The shield successfully protected the crowd and no one was injured. Consider building a safety shield for your club to keep woodturning safe and fun for everyone. Send me an email with questions or suggestions at [wwjones@comcast.net](mailto:wwjones@comcast.net). ■

*Drawings by David Heim.*

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*Wes Jones is a lifelong woodturner and is known for large hollow forms. He is a past president of the Georgia Association of Woodturners and the Chattahoochee Woodturners, and a past vice president of the Peach State Woodturners. Wes demonstrates and teaches woodturning.*