

# NEWSLETTER May 2023

"The MakerBarn is a member-driven family-friendly makerspace that exists to provide a place for our members to envision, design, and realize creative projects. We are dedicated to building a creative maker community among our membership and the community at large."

# **Getting Ready to Celebrate Seven Years!**

On June 3rd, we will be celebrating seven years of making at The MakerBarn. The MakerBarn has brought together hundreds of people who work together to make The MakerBarn the friendliest makerspace around. We currently have a membership cap of 240. Since 47 of those members are family memberships, we have 287 people who support and make things at The Barn . The waitlist for joining usually has 20 to 30 people on it. We must be doing something right. If you would like to get involved with the festivities June 3rd, let Kathy know.



We always have something new going on. We purchased 10 refurbished computers for the **classroom**. The computers are all-in-one computers with i5 processors and 256GB solid state drives. The keyboards and mice are wireless, so there are no wires cluttering the tables. The classroom worked very well for us during the recent Fusion 360 class. We can use our new classroom for teaching V-Carve, LightBurn, Simplify 3D, and other computer software. If you have something you would like to

learn about, or teach, be sure to let us know.

Thing 3, the green laser engraver, is ready for use. This machine is dedicated for rotary work. There are two types of rotary devices in the machine. One uses rollers to roll the object that is being engraved. The other device has a lathe chuck on it. It's a bit more difficult to operate. We have been having some problems with LightBurn on this rotary device, but we are working on a solution.



We are always looking for ways to improve The MakerBarn. There are three items we have been considering.

- We were seriously considering the **Wazer**, which is a small waterjet machine. The waterjet is a CNC machine that can cut almost any material. Everything from fabric to glass and cermic tile. The problem is it is expensive to operate.
- Another item is a **CNC plasma cutter** for the welding shop. These are used to cut intricate shapes from sheet metal. Almost any metal can be cut, it just needs to be conductive. These machines are inexpensive to operate but they can be a bit messy.
- The last item is a **horizontal bandsaw** to replace the Roll-In saw in the machine shop. Some of these saws are built with swivel heads that make precision cutting thick metal as easy as cutting wood with our miter saw.



If you have any ideas for new equipment to expand the possibilities at The MakerBarn, be sure to let us know.

For more news about what's happening at The MakerBarn, see the articles elsewhere in this month's newsletter.

Thanks, & happy making!

George Carlson President, MakerBarn

# Are you Manager Material?

The MakerBarn runs on volunteers. If you have been an active member for two months or more, we would like you to consider becoming a Shop MakerBarn Manager.

MakerBarn Managers work 3-4 hour shifts during which they supervise the general operation of the Shop keeping a close eye on safety and noting any maintenance issues that arise. They also devote a fair amount of time to general cleaning of the shop floor and emptying the dust collection and trash systems. They give prospective members tours and update MACS access cards as needed for members.

Oh, and they enjoy 24/7 access to the Shop!

If the Shop manager role sounds interesting to you, contact Jim Barron via Slack. Thanks!

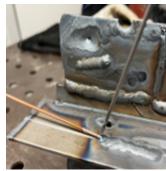
# **Hands on Welding Class Continues!**

We are offering MIG Steel, TIG Steel, and TIG-Aluminum basic hands-on training at no cost to the student (the student is responsible for metal costs paid to The Makerbarn). By the time you are finished you will be able to do a bead, butt, T, horizontal, and vertical welds. Each student receives one-on-one training, 2 hours a week for up to 4 weeks. The training does include suggested reading material which is provided at the beginning of the hands-on training.

The great news is that The Makerbarn is a low-pressure learning environment, so whether you are having a good day or not such a good day (see photos below) you still can have fun learning. The first photo is a student getting ready to MIG weld a T joint. The second is a very nice MIG T weld, and finally the last photo is a TIG bead that ended with the tungsten welded to the material (not intentional nor desirable).







Ready, Set, Go

A Good Day

Not Such a Good Day

To date, we have had 4 students complete the hands-on training. "Complete" generally means they can weld better than the instructor (!). We currently have 4 students in training, and 7 students on the wait list. If there are others that would like to help with the hands-on training, please reach out to me via Slack.

Learning is generally done welding 6" pieces of material in every imaginable way possible. The results are small pieces of art (see below). Graduating students are encouraged to take

their artwork with them at the completion of the hands-on training.

Hope to see you welding, Joe Member, The MakerBarn



Practice, Practice, and More Practice!

# Saturday May 6 Demo of Cactus Juice



Why would anyone want to use wood that was partially rotted in their project? It is because spalted wood (wood that has been partially decayed) has very interesting figuring and pattering. The patterns become even more beautiful when the wood is treated with certain dyes that fill and follow the grain and patterns of the spalting. The problem with working with this material is that it becomes soft and punky which makes it weak. A solution for this (pun intended) is to soak the wood in a material called Cactus Juice. After soaking, the Cactus Juice is cured in an oven where it becomes nearly rock-hard.

On Saturday May 6th, Bill Kimbrough will come to The MakerBarn and do a presentation on how to work with these woods. He has been doing research on producing interesting spalting by deliberately inoculating the wood with various types of fungi. He will also talk about the proper use of Cactus Juice and show samples of his work. Don't miss this if you make knife scales, pens, or small turnings.

Many thanks to Aniwat Akarasuthikorn (also known as "Parm" or Peter) who recently demonstrated his amazing wood whittling skill for us at the MakerBarn .

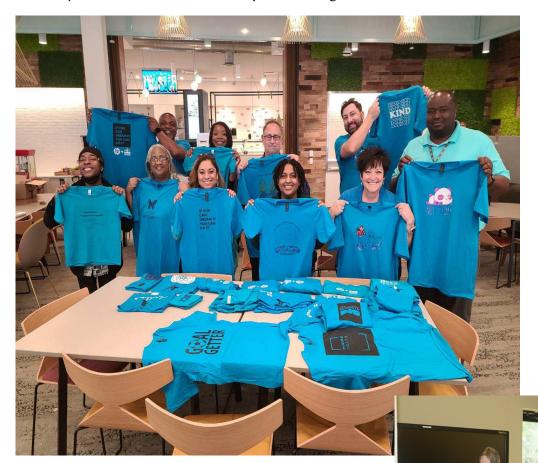




# HP Visits The MakerBarn in April

In March the Makerbarn visited Hewlett-Packard Campus in Spring and worked with employees to teach some various methods to make a custom t-shirt. These shirts were worn and distributed at our second event.

In April several HP employees volunteered to partner with the Makerbarn to teach kids how to make a custom journal. This event was organized in conjunction with HP's 40 days of Doing Good volunteer effort.







# **Ceramics Interest Group**

Do you want to be a mud cooker?

Someone (?) has suggested that "Mud Cookers" would be a good name for the new Ceramics Special Interest Group (SIG) that Lisa Lane is putting together, but the final decision on that is up to MakerBarn members who attend the first meeting in the Lab

on Tuesday May 23rd at 6:30 PM.



Now that the ceramics kiln is ready for use, we need to start organizing our ceramics operation. We are to the point where we can turn the give-a-way molds into throw-a-way molds. There are about 100 molds that nobody seems to want.

How should we setup the facility?

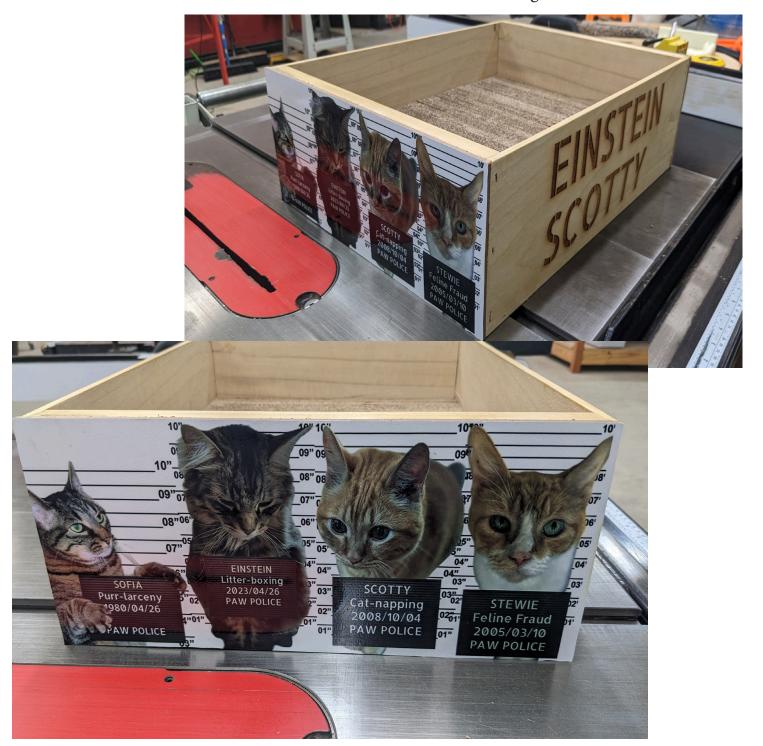
Do we have room for a wheel?

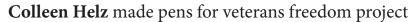
Should we charge for slip, or should people bring their own?

All kinds of things to consider. You don't have to have any experience with ceramic to join the meeting, just a desire to learn and help put together a great ceramics studio. Contact Lisa Lane on SLACK with any questions.



**Hamilton Alexandre** made a wooden box measuring 13x20x5 inches that has been lined with 2 inches of industrial corrugated cardboard. The box features photos of cats that have been photoshopped onto a "police lineup" background and then dyesublimated onto the box. The names of the cats have been laser engraved onto the box.







**David Grimmer** made a cabinet / TV Stand. The MakerBarn's planer, jointer, table saw, band saw and mortising machines were all used to build

this. The top comes off and the center posts are split down the middle to make moving easier.



**Hamilton Alexandre** made a tumbler, coasters, tray, notebook, and glass cutting board, all of which follow a black and gold color theme and feature a "Bee & B" motif.





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**Rick Leeth** made two night stands and a desk for his kids using cherry wood for the tops and drawer faces. He used the table saw, mortiser, bandsaw, dado saw,

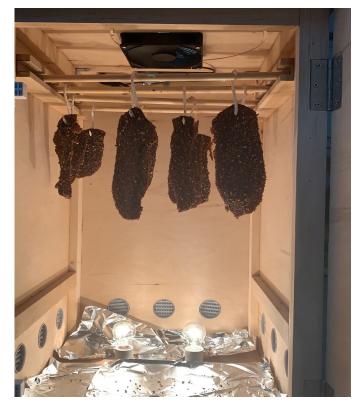
jointer, planer, drum sander and miter saw at the MakerBarn.





**Rick Leeth** made a Biltong Box to cure South African style dried meat. Picture attached of the outside that shows bug proof air intake vents on the bottom and computer fan to

draw air across the meat. Picture attached of the inside with a batch drying showing the lights, hanging rack, and fan. Rick used the tablesaw, dado saw, and CNC at MakerBarn.



# Cub Scouts and Derby Cars at MakerBarn



Recently the **Tiger Cub Den of Cub Scout pack #1774** of The Woodlands visited the MakerBarn and spent an evening of preparation for their annual Pinewood Derby car race. The scouts and parents alike had a great time learning how to make the most of their pinewood derby



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# Members, please remember!!

Members - PLEASE remember to clean up after using any equipment in the Shop or the Lab. Pictured here is equipment that was NOT left in acceptable condition.

Also, if you leave anything in the Shop or Lab you MUST label it with your name, date and when you will be returning to pick it up.



Items left without ID may be moved or disposed of at the manager's discretion!!

## **Meet The Area Managers**



## **WOODWORKING & CNC**

**Jim Barron** has lots of experience with woodworking and CNC. He holds occasional CNC classes that demonstrate the Vectric VCarve Pro software we use. Jim can check you out on woodworking and CNC tools at the Barn. Contact him via SLACK.



### **LASER PRINTING**

**Greg Radliff** is an artist and expert at using Laser Cutter and Engravers. Greg can show you the LightBurn software we use and can check you out for use of the Laser printers in the Lab. Contact him via SLACK



#### **3D PRINTING**

**Jody Cochran** is a graphic artist with deep experience in 3D printing and other graphics tools. Jody can show you slicer and other software used with the 3D printers. Contact him via SLACK.



#### METALWORKING

**Bryan Manka** is area manager for metalworking which includes the metal mill and the metal lathe at the Barn. He can check you out for use of either of these machines. Contact him via SLACK.



## **ELECTRONICS**

**Raul Garcia** is area manager for electronics. More of a fixer than designer, but willing to help and learn together. See Raul for anything related to microcontrollers, electronic devices or other electronics related projects. Contact him via SLACK.



#### **WELDING**

Daniel Claybaugh is area manager for welding

## For New Members

WELCOME to the wonderful world of making!! We know you'll come to love this place as much as we do. First and foremost, this place is about the people. We would like to encourage you to see yourself as more than just a member. We are a community. Because we don't have any employees, we rely heavily on our community to keep things running. So please join in, pitch in, and get involved. Ask lots of questions. We are a really friendly group and love to help one another. The MakerBarn is a fantastic community of makers and we are glad you are here!



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#### **MakerBarn Directors:**

George Carlson, Director and President Jeanie James, Director Greg Radliff, Director

#### **Executive Committee:**

Kathy Barbieri - Procurement and Acquisitions
Jody Cochran - Secretary
Raul Garcia - Member at Large
Jim Barron - Membership
Matt Folsom - IT
Doug Green - Web Site
Ashley Dickson - Member at Large
John Buckley - Newsletter Editor

## **Area Managers: (Guru or Custodian)**

Woodworking - Jim Baron Lasers - Greg Radliff 3D Printing - Jody Cochran Metalworking - Bryan Manka Electronics - Raul Garcia Welding - Daniel Claybaugh

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