



NEWSLETTER

November 2021

"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."

The year is coming to a close very soon - only 61 days left in this year. Susan and I have already been on-line shopping for Christmas gifts for the Grandkids. With all the talk of supply-line shortages, it is a good time to look at some hand-crafted gifts for the coming holidays. The Lab and Shop are getting busy with Santa's helpers, come join the fun.

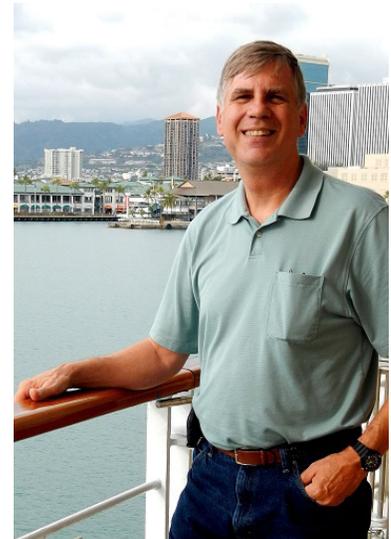
In October Yael and Tess held a candle making class. I wasn't there, but I heard everyone had a great time. I held a demonstration of making Mortise and Tenon joints using our new mortising machine. We had fun making a small table frame.

November 6th will be busy. Tess will be doing an Embroidery demonstration from 10:00am until 2:00pm. Personalized T-shirts make great gifts. In the afternoon, Jody will be doing a class showing how to use our new Resin 3D Printer suite. The suite consists of an Elegoo Mars 2 Pro and a Elegoo Clear and Cure station. Resin printers can produce extreme detail. They can be a bit messy, so you must attend the class if you want to use the resin printer.

We are always trying to improve The MakerBarn, so if you have any ideas, or see a need, post it on Slack or tell a Shop Manager.

- This month we purchased a **resin 3D printing** suite for The Lab. Jody will be holding a training session as mentioned above.
- We have also purchased a new **12" jointer** for the shop. This will replace the jointer that has been on loan. The 12" jointer will allow us to flatten boards as wide as 12 inches. It should be in within a week or so. If you go in the shop and see something that looks like a small aircraft carrier, that's the jointer!
- An additional **bandsaw** would fill the gap we have between our small scroll cutting bandsaw and the large resaw bandsaw. A member has graciously donated a beautiful Jet bandsaw for that purpose. This bandsaw can be used to make turning blanks for the wood lathe, and cut other things not suited for the Resaw or light blade on the other bandsaw.

So here we are in November. After you get done raking all those leaves, come to the Lab or Shop and make something, or just simply hang-out and learn about making stuff. See you there!



I

BrightLife Art Sale News

BrightLife is our YMCA special needs partner for community service projects.

This Fall there will be not one, but two BrightLife art sales and we are thrilled to participate in both of them. On October 28 the Fall sale was held and it included pumpkin crafts made from our wooden blanks. The next Christmas sale is scheduled for December 1 at the Branch Crossing YMCA and it will include various Christmas Ornaments that started out life as raw materials at MakerBarn.



Just ask any member that has participated in BrightLife & they will tell you what a wonderful way it is to enjoy making for yourself and others.

Join us in January for the Winter sale!



George Carlson's daughter and grandson Eli had fun making a boo bubble machine at MakerBarn in October. What's a boo bubble? Well, it's an ordinary bubble filled with dry ice smoke (carbon dioxide) instead of air and when you pop it goes 'poof' in a puff of smoke!

Learning at the Barn

In person classes are finally beginning again at MakerBarn!

The mortise/tenon, candle making and the welding classes held in October were very successful:



Now mark your calendar for these upcoming classes:

RESIN PRINTING - We will be offering a safety and operations demonstration for the new resin printing station at the Lab on November 6 at 2:30 PM. If you are interested in learning more about resin 3D printing make an effort to attend because training is required before use of this equipment.



EMBROIDERY - Tess will be doing an Embroidery demonstration from 10:00am until 2:00pm on November 6 at the Lab.

MADE AT MAKERBARN!



Ashley Dickson made a cheese board

Ashley Dickson made napkin rings and box on the 'other' small CNC machine in the Lab called "Carvey"



Brandi Anderson also made leather name plates she affixed to hats using lasers at the Lab



MADE AT MAKERBARN!

Robert Wozniewicz made Christmas puzzle boxes for his grandkids. They require 5 specific moves to open. The boxes are made from Paduak, Sycamore, Zebra, Alder and Birdseye maple wood.



MADE AT MAKERBARN!



CE Raum made a cheese board for his daughter with the logo of her school. The maple, walnut and cherry pieces were cut on the CNC and glued up in multiple phases.



George Carlson made a bowl from spalted yardwood

MADE AT MAKERBARN!



Candida Wolfram made place cards for Thanksgiving dinner. They were made on the laser from 1/8" scrap plywood.

Candida Wolfram made laser cut Halloween table decor - 3 layers of 1/8" plywood.



MADE AT MAKERBARN!



Candida Wolfram made Go Astros! earrings. Double sided unisub board cut on the laser and sublimated.

Candida Wolfram made band signs than I can count! 1/4" plywood (laser)



MADE AT MAKERBARN!

Mark Bush made multiple kitchen utensils for his wife; 1 Bubinga wood spoon, 3 spoons with a mix of Maple/Walnut, 1 Walnut pasta spoon, 1 Walnut cookie spatula, 1 Ambrosia maple spatula. These were created using the bandsaw, wood lathe, hand tools and sanders.



Mark Bush made 2 Maple bowls, 1 Elm bowl and 1 Walnut French rolling pin on the wood lathe.



CAD/CAM GCode Maker Barn Software Explained

The purpose of this document is verify where to find and how to use appropriate software for each CAD/CAM machine at MakerBarn. NOTE: This paper is current as of the date listed above. Please be sure you are reading the most current version for the most up to date information

At MakerBarn we are fortunate to have a number of machines that are capable of using computer generated code to drive the manufacture of an object. This type of configuration (computer + machine) is relatively new and has often been called Computer Aided Design (CAD) for the computer software side and Computer Aided Manufacturing (CAM) for the hardware machine side. This combination is often abbreviated as simply CAD/CAM.

CAD/CAM software typically outputs a special set of instructions for each manufacturing machine it supports. These instructions are called “generated code” or “G-code” and they are of a specific type for each supported manufacturer’s machine.

It is very important that you use a CAD software that generates the proper G-Code for the type and brand of machine you are using at MakerBarn!

There are three basic types of CAD/CAM available at MakerBarn: 1) Laser Cutting/Engraving, 2) Computer Numeric Control (CNC) and 3) 3D Printing.

Machine:	Software:	Special Price*	Contact
LASER	Lightburn	Yes	Greg Radliff
CNC	Vetric VCarve Pro	Yes	Jim Barron
3D PRINTER	Fusion 360/Cura/Simplify3D/Prusa	No	Jody Cochran

*reduced price available for makerspaces like MakerBarn

SOFTWARE	USED BY	MakerSpace Pricing
 LightBurn	LASER Thing One – The Lab LASER Thing Two – The Lab	LIGHTBURN is \$20 for MakerBarn users by using the special license code. \$30 per year for additional upgrades
 VCarve PRO	CNC 4’x4’ – The Shop CNC Carvey – The Lab CNC Mini for PCB – The Lab	VCARVE PRO Special Makerspace Client Edition is free by downloading the current version trial and then entering the special license code. Note that we keep a special Makerspace Master Edition at MakerBarn and only it can export code to CNC machines
 AUTODESK® FUSION 360™	SPEC #1 – The Lab SPEC #2 – The Lab PRUSSA – The Lab TAZ – The Lab Resin 3D – The Lab	N/A

Meet The Area Managers!

	<p><u>WOODWORKING & CNC</u></p> <p>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.</p>
	<p><u>LASER PRINTING</u></p> <p>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</p>
	<p><u>3D PRINTING</u></p> <p>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.</p>
	<p><u>METALWORKING</u></p> <p>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.</p>
	<p><u>ELECTRONICS</u></p> <p>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.</p>
<p>No Area Mgr Yet</p>	<p><u>WELDING</u></p> <p>We have no one assigned to area manager in this area at this time</p>

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!



Maker Barn: The Shop
28030 FM 2978, Suite 204 77354
Phone: 832-663-6377



MakerBarn: The Lab
28030 FM 2978 Suite 101 77354
Phone: 832-663-6377

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
Daniel Cielecy - Treasurer
John Buckley - Newsletter Editor

Area Managers: (Guru or Custodian)

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

Copyright @ 2020 MakerBarn, All rights reserved.

We are a 501(c)(3) non-profit corporation

You are receiving this message because you requested info at a Makerbarn event or through our website

Our mailing address is:

*MakerBarn Lab
28030 FM 2978 Suite 101
Magnolia, TX 77354*

If you no longer wish to receive this newsletter please write to info@themakerbarn.org