



NEWSLETTER

July 2020

"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."

Message from the president...



Unfortunately, the 4th anniversary party at "The Grounds" had to be cancelled due to the spike in Covid-19 infections in Montgomery County. Eventually all this will become just a bad memory, but for now it is quite real.

Also, you may have heard that Ed Fraini took a nasty fall at home. Bad enough it put him in the hospital for a few days. Ed is the Manager of the Barn Managers and has been doing a great job. Currently, John Buckley has taken on some of Ed's tasks. We all hope Ed recovers quickly; we miss him at the barn.

Even though we are still operating the Barn on a reduced schedule, good things have been happening.

For example;

-Raul did a great job changing the lighting in the shop from fluorescent to LED. It is much brighter in the shop. Thanks, Raul!

- We have spent \$9,000 on two new laser engravers - read inside about how to use them.

- One of our members graciously donated two professional grade welding machines.

- Jim Barron bought a 1/8" Flat Kerf blade to be used on the Dado saw *with appropriate safeguards!*

So, a lot going on. We can have the Barn open during more hours during the summer months. The challenge is finding Barn Managers to open it up. If you are interested in helping with Barn Manager duties, contact Jim Barron, he is helping Ed while he recovers.

Don't let Covid get you down. Don't be lazy, get up and make something!

Thanks,
George Carlson, Acting President

REMEMBER - Four new COVID Guidelines for the MakerBarn:

Masks: Everyone must wear a mask before entering the Barn and for the duration of your time at the Barn. Please bring your own.

Two's a crowd: We want to practice social distancing while also allowing for making. So let's keep it to one member using each area at a time, i.e. one member in the laser room, one member in the sanding room, one member using the sewing, one doing wood working, etc.

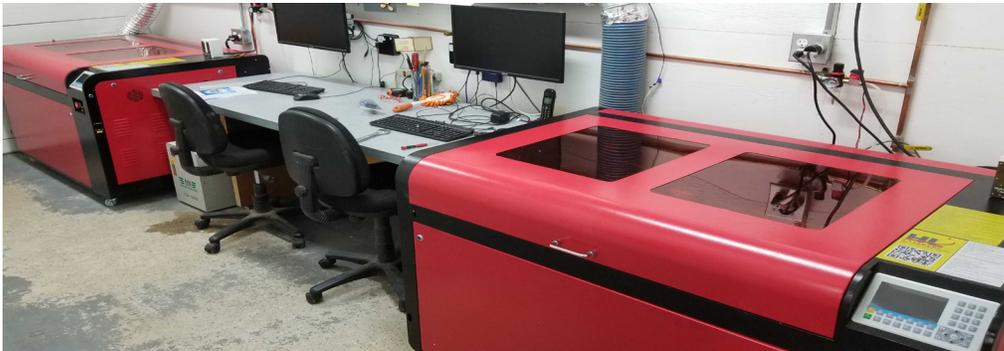
Use Sign-up Genius : Please do not come to the barn without reserving time to use equipment. It's easy now to go the website at <http://themakerbarn.org> and click on the new Sign-Up Genius icon. There you may reserve equipment in one hour blocks. You can always call 832-663-6390 & the manager on duty will confirm your time as shown on SignUp. We are all going to need to be respectful and considerate of one another during this time.

Members with guests: Guests and children are asked to stay at home until we have reliable information that shows the Covid-19 danger is considerably reduced. We are not there yet. Safety and health of our members is top priority.

NEW 100 WATT LASERS ARE HERE!

Yes, it's been a long wait, but MakerBarn's two new lasers have arrived from China and were recently installed. Please note, these are 100 watt lasers with a 24" x 38" working area - significantly more powerful than 40 watt lasers in common use today. The two machines are identical and have red dot pointers as well as auto-focus. The controllers are the newest Rudia RDC6445 units and work well with Light-Burn software.

There are several new features of the new lasers that take a bit of getting used to so be sure to watch the videos and spend some time with Greg Radliff on Thursday evenings at the Barn



Here are a couple links to YouTube videos that show their operation:

<https://www.youtube.com/watch?v=heL-GVxE64I>

https://www.youtube.com/watch?v=_614tC91W8I

TWO NEW WELDING MACHINES AT THE BARN



Recently, one of our members graciously donated two professional grade welding machines.

One is a **Millermatic 251 MIG machine**. This machine is setup to use 0.030” wire and can weld steel up to ½” thick. It also has a spool-gun for welding aluminum. The spool-gun is stored in the large welding cabinet.

You may download a manual from this link:

<https://www.red-d-arc.com/pdf/Millermatic%20251%20Operators%20Manual.pdf>

The other machine is a **Thermal Dynamics Cutmaster 50 plasma cutter**. This cutter can cut up to ½” steel, so it is a very powerful plasma cutter.

Be sure to read the manual before operating. You can download a copy of the manual using this link:

<https://www.manualslib.com/download/728903/Thermal-Dynamics-Cutmaster-50.html> , Check the “I’m not a robot” and click “Get Manual”

With thanks to Jim Barron, we have a new 1/8” Flat Kerf blade to be used on the Dado saw. This blade is to be used as a dado blade, that is, *no through cuts*. ***Please resist the temptation of using this blade for through cuts on the dado saw!!*** It is not safe to do so because the dado saw does not have a splitter (which can not be used for dado cuts) or the safety system of the SawStop. Be sure to use the proper table insert when using this blade.

You will find the blade and insert hanging on the wall next to the dado saw.



WHAT OUR MAKERS ARE MAKING...

Elizabeth Jones made these beautiful Corn Hole Boards for her friends (wouldn't you like to be her friend?!) She filled the routed out parts with epoxy resin. She uses mica powder and mixes it in after she combines the resin and the hardener.



John Buckley made a Christmas ornament box using the new laser. The wood compartments were laid out in VCarve software and cut out of 1/8 birch plywood. Each ornament was traced and converted to a vector image in LightBurn software. Then the foam packing of the new laser machines was repurposed to cushion each ornament!



Upcoming Events and Classes:

Ok, so we haven't been able to gather in groups at the barn lately, but that doesn't mean we can't plan some great classes for you. Here are a few that we have planned, and we will hold them as soon as we can get a safe start date:

Building a Frequency Counter. In this class we will solder a simple device for the digital measurement of frequency. This will be a great accessory for the Function Generators we built a few months ago. The cost of the kit is \$5. It is an easy kit and good to learn soldering skills.

Designing a Circuit Board Demonstration. Of course, learning to design a circuit, layout a printed circuit board, and cut out the circuit board on the small CNC router cannot be taught in a single night, we can do a demonstration of the process. We will use Eagle (part of Fusion360) to draw the schematic and design the circuit board. Then we will use CamBam to read the Gerber circuit board file and generate the G-Code for the router. Then we will use the Mini-Chop CNC Router to produce the circuit board. If there is sufficient interest, we can have a series of classes in the future teaching each step in the process. This is a free demonstration.



For the artistically inclined, the **Retro-Photo Class**. In this class we will hand out a Holga 120 film camera and a roll of black and white film to ten participants. The Holga is a cheap plastic camera that shoots medium format film. The photographers will shoot the roll of film during the following week. We will then process the film at the barn and scan the negatives. The beauty of the Holga is not its sophistication, but its simplicity. It has a single plastic lens that causes some distortion and vignetting. This makes it much like using a cheap box camera from the 1950's. The \$20 fee will cover film and processing.

Here is a message from our friends at BrightLife - a YMCA sponsored organization that helps people with special needs. We look forward to providing them again with wood blanks for their art projects.



Such exciting new things going on at the Barn even in the midst of a pandemic! It has been an interesting time for Bright Lifers. I have tried so hard to keep them engaged during this time with online lessons and Zoom calls 3 times a week. They have done remarkably well with adapting to being at home. However, they are ALL so ready to be back together again. We were scheduled to tentatively reopen July 6 but with the spike in cases I am pretty certain we will not. I will be talking with our Exec. today to discuss. Our initial plan was to reopen on a staggered schedule with small groups but not sure that is even feasible given the current environment.

Keep us in your prayers and we will do the same for you! Can't wait to get back and get to work on some new projects/partnerships with Maker Barn! Thanks so much for all you do!

Lisa Thompson, YMCA Bright Life Program Coordinator

And Another New Addition...

Thanks to George Carlson, we have a new crosscut sled for use with the SawStop table saw!



This one has a sliding stop block for repetitive cuts.

It is a precision device so treat it with care. Either leave it on the saw, or hang it on the wall when not in use.

If you would like to make special add-ons that use the T-Slot, the center of the slot is 2.25" above the bed.



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 meetups are open to the public and scheduled every second and fourth Thursday from 7-10 pm. All members and their guests are invited to attend and take the opportunity to get to know one another, as well.

The phone number at the Barn is 832-663-6390. Check the website calendar for open hours.

We look forward to seeing you at the Barn!

MakerBarn Directors:

George Carlson, Director and President

Jeanie James, Director

Greg Radliff, Director

Executive Committee:

Kathy Barbieri

Jody Cochran

Raul Garcia

Jim Barron

Matt Folsom

Daniel Cielecy

John Buckley - Newsletter Editor

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