



# NEWSLETTER

## September 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."*

## Of Classes and Machines...

Everyone expects August in Texas to be hot, but over 100 degrees every day? Thank goodness for air conditioning. A good place to escape the heat is to work on projects at The MakerBarn.

This month John Buckley will be teaching a course on Fusion 360. Fusion 360 is a 3D computer aided design (CAD) program that allows the user to design complex 3D structures. John's course is currently full, hopefully he can teach it again when this session is complete. In the mean time you can teach yourself Fusion 360 by watching videos on YouTube or getting a book like "Autodesk Fusion 360 for Beginners" which is available on Amazon. Fusion 360 is free for non-commercial use. You can also use one of the computers in the Learning Center. All machines have the free version of Fusion 360 installed.



Although Fusion 360 is fun and a challenge to learn, what could I possibly do with it? Printing objects on the 3D printers is fun, but downloading other people's designs from the Thingiverse website and printing them can get old. Here's where the beauty of Fusion 360 and 3D printing shines. You can do your own

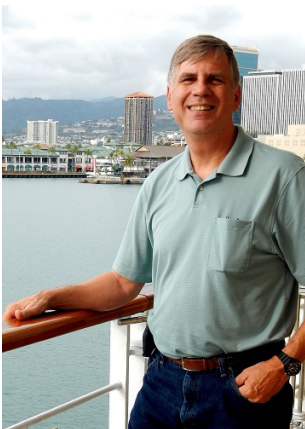
thing! It may be something silly, like the plumbing fitting in the photo, or it could be something useful. Each piece you design is a challenge. You can make things that have never before existed. Your brain, Fusion 360, and a 3D printer, what a team.

Sadly, our wide belt sander has broken beyond repair. The machine was donated to us about seven years ago. It has served us well, especially useful for surfacing end-grain cutting boards.

The good news is that we have a brand-new replacement machine on the way. The new machine is an updated design and has a couple of new features. The shop managers will be trained in the use of the new machine and will help get the new users certified on the machine. To get a head-start on using the machine download and read the manual for the

Grizzly Model G0819 Wide Belt Sander. The manual is available on the Grizzly website.

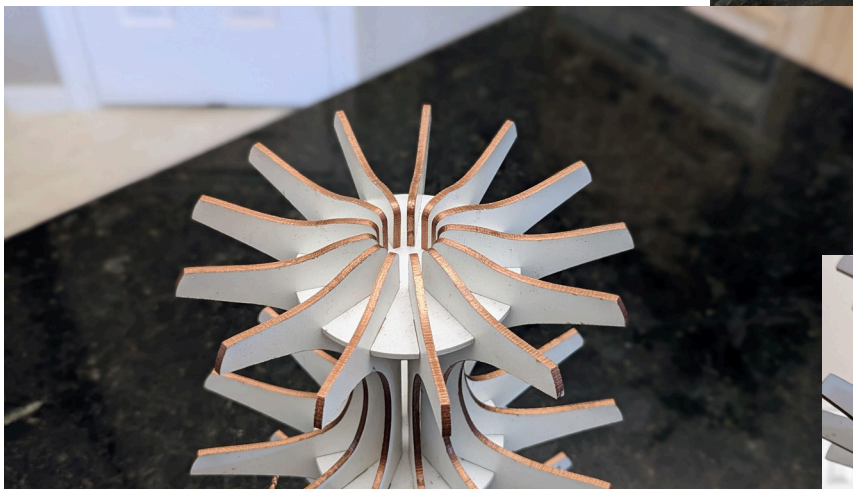
George Carlson  
President, MakerBarn



## MADE AT MAKERBARN!

**Alison Cozad** explains, “My niece has fully embraced the ‘tiara’ lifestyle. It’s incredible how she manages to have a tiara suitable for every occasion imaginable. Going out to dinner? She’s all set with the perfect tiara to compliment her outfit. Halloween? Of course, there’s a specially themed tiara for that spooky night. Even during gym class, she proudly flaunts a tiara, showcasing her love for these versatile accessories. Witnessing her passion, I wanted to see where I could be involved by creating a tiara stand.”

“To bring my idea to life, I used Fusion 360 to design the tiara stand’s overall shape. Then, I used “Slicer for Fusion360” to generate the required SVG “slices” which I cut with the laser cutter. Then, there was some painting and adding a chain and pomegranate seed beads.”





## MADE AT MAKERBARN!

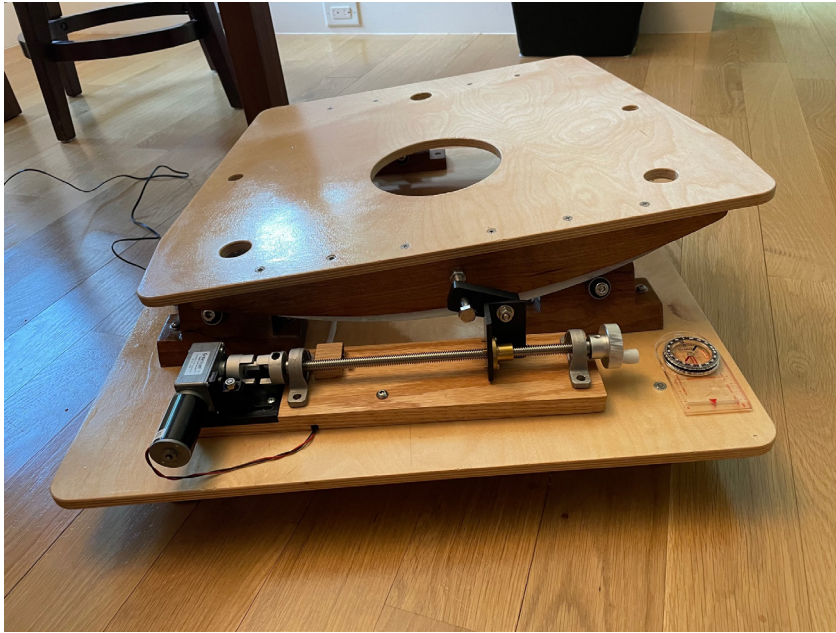
**David Grimmer** made a Deviled Egg / Serving Tray from scrap pieces of maple, brownwood and walnut. It is his first 2 sided project with the CNC router. Each side has a 1/8" deep pocket done with a bowl & tray bit. The deviled egg side has divots made with a cove bit with a 1.5" radius. The divots were made with a fluting toolpath with a smooth ramp over the complete length. He 3D printed a half of a sphere with a 1.5" radius so he could tape sandpaper to it and sand inside the egg divots. The tray was finished with 3 coats of Butcher Block oil.



**Matt Folsom** made dorm room signs using vinyl over 1/4" acrylic

## MADE AT MAKERBARN!

**Ed Fraini** made use of both the CNC router and CNC mill to build an equatorial platform. This device compensates for the rotation of earth to keep celestial objects in the field of view when using a dobsonian telescope



**Ed Fraini** came across an image on the internet and from that he constructed a LightBurn file. It was a challenge to build it so the pieces were of uniform sizes. He cut it out



on the laser and stained selective pieces. It looks like one cut, but actually each piece is constructed individually, with allowance for kerf to get a snug fit.



## MADE AT MAKERBARN!



**Mike Briggs** made a bat and ball holder for his son's baseball team.

**Ed Fraini** made a shade canopy for his small tractor. It is his first big metal project at the barn. Made from one inch square tubing and 22 gauge sheet metal.



## ***MADE AT MAKERBARN!***

**George M Carlson** made  
a few fun practice items  
with Fusion 360 and a 3D  
printer





## MADE AT MAKERBARN!



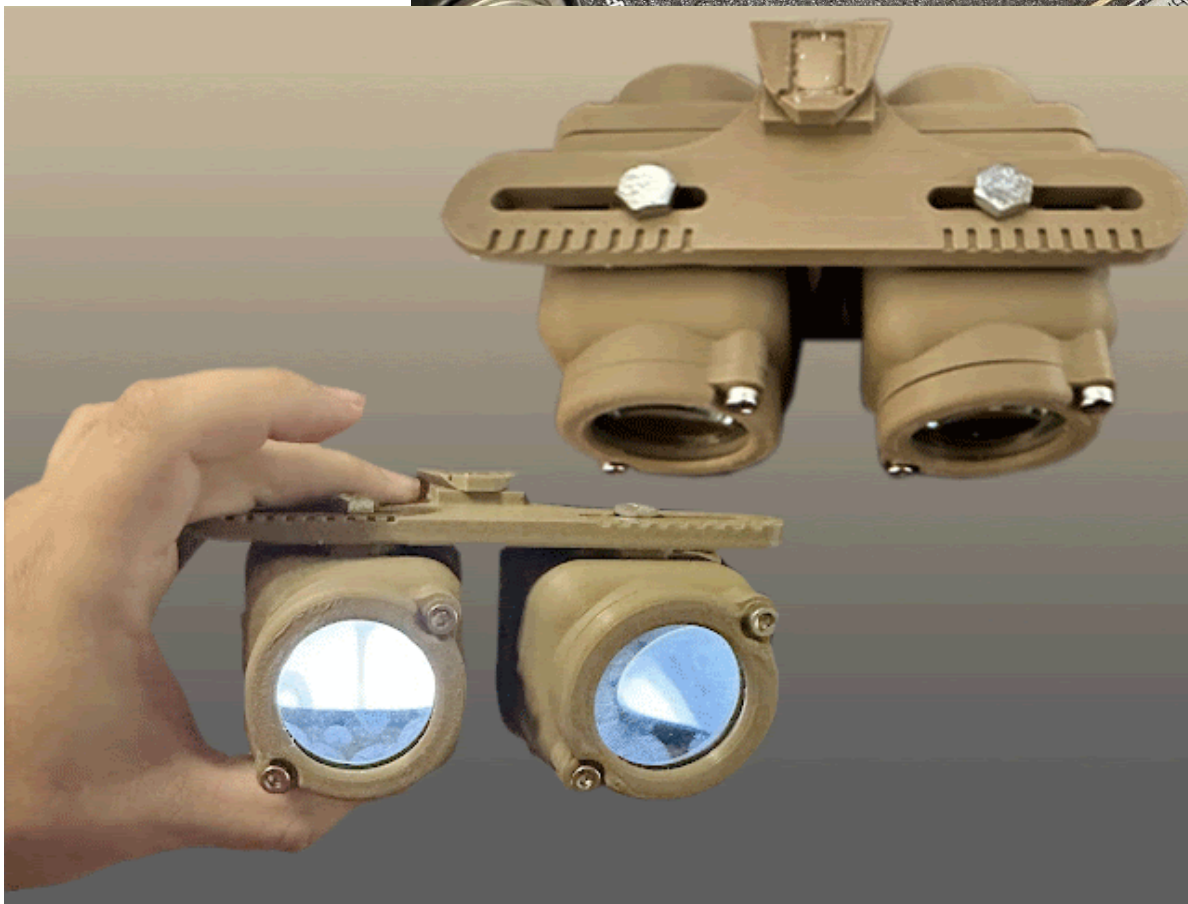
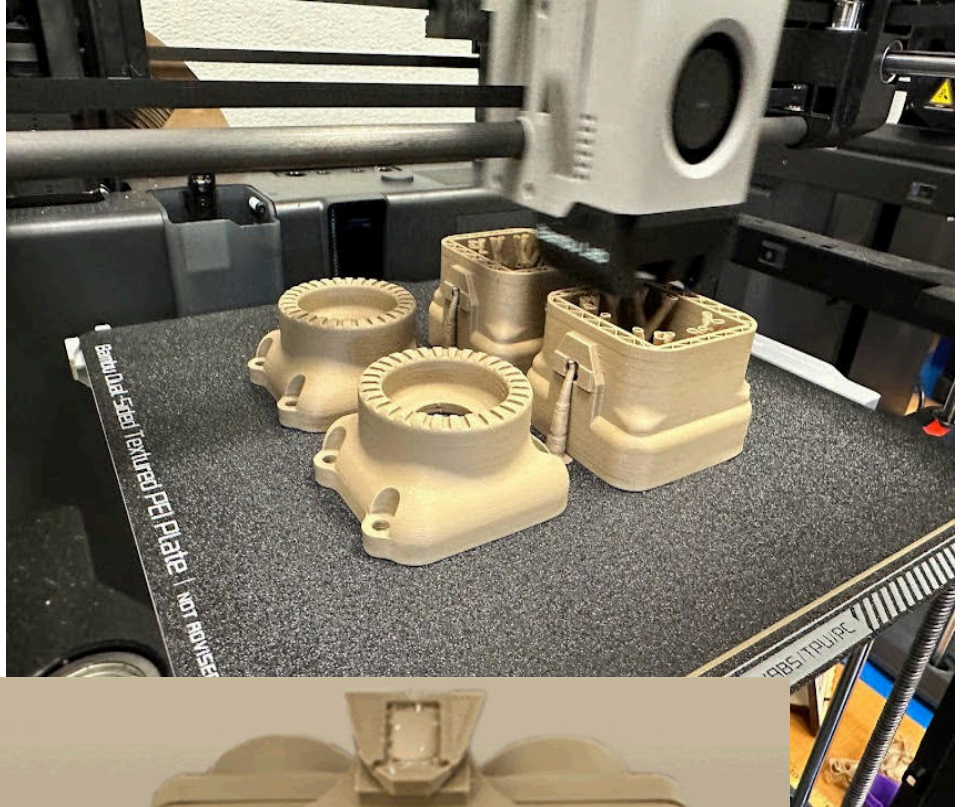
**Joe Foster** made a topsy-curvy bird house for a local grade school. Joe says it comes with a 4 year warranty.





## MADE AT MAKERBARN!

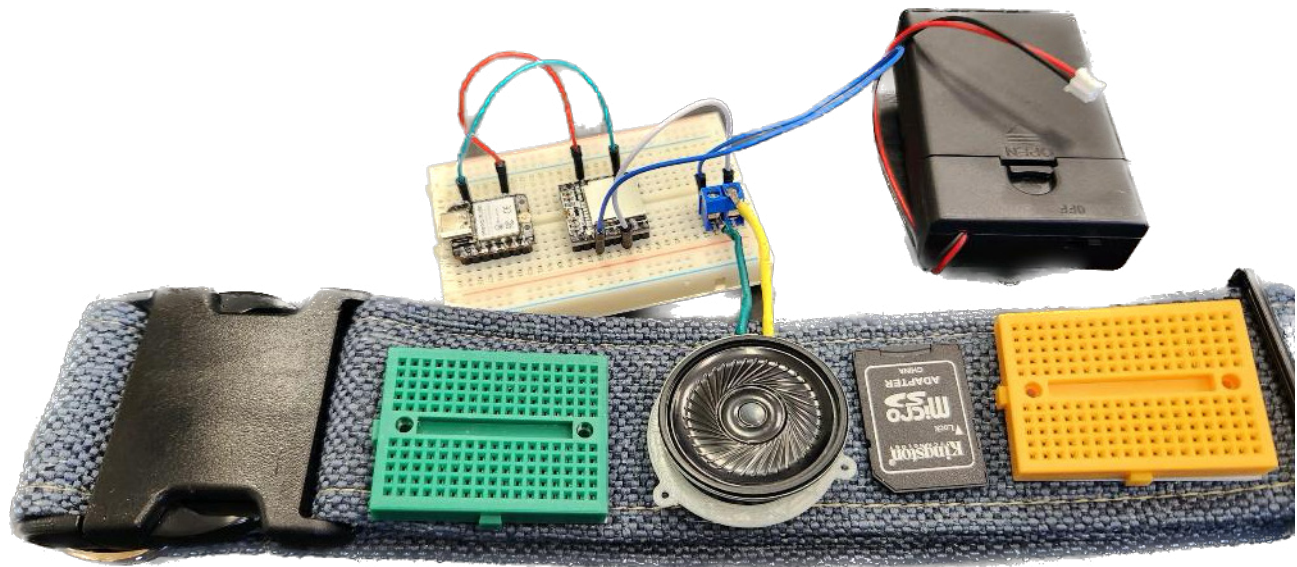
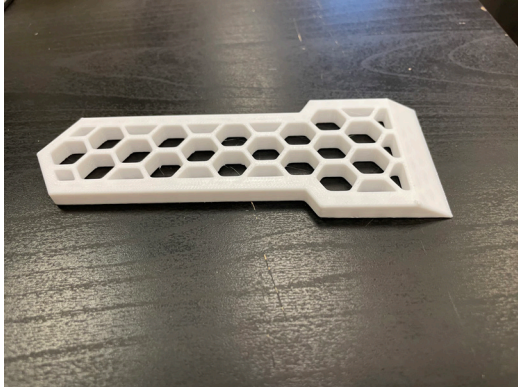
**Jody Cochran** made 3D printed digital night vision binoculars. The housing was printed on our new Bambu Lab printers with tan PLA filament. The internals are basically an Adafruit display with some special cameras and lenses wired together.





## MADE AT MAKERBARN!

**Charlie Lindahl** has made a Smart dog collar, a Dog bone (will eventually will be a baby rattle) and a 3d print scraper



## ***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!





## Meet the Area Managers



### WOODWORKING

Mark Bush is area manager of woodworking. 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



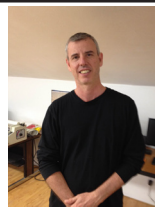
### METALWORKING

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.



### 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.



### 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.



### CERAMICS

Lisa Lane is area manager for ceramics. Contact her via SLACK.



### WELDING

Joe Foster is area manager for welding. Contact him via SLACK.

## For New Members

WELCOME to the wonderful world of making!! We know you will 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 & The Lab  
28030 FM 2978, Building #2, Magnolia 77354  
Phone: 832-663-6390

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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 - Mark Bush  
Lasers - Greg Radliff  
3D Printing - Jody Cochran  
Metalworking - Bryan Manka  
Electronics - Raul Garcia  
Welding - Joe Foster  
Lisa Lane - Ceramics

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