BridgeWire MAKERSPACE

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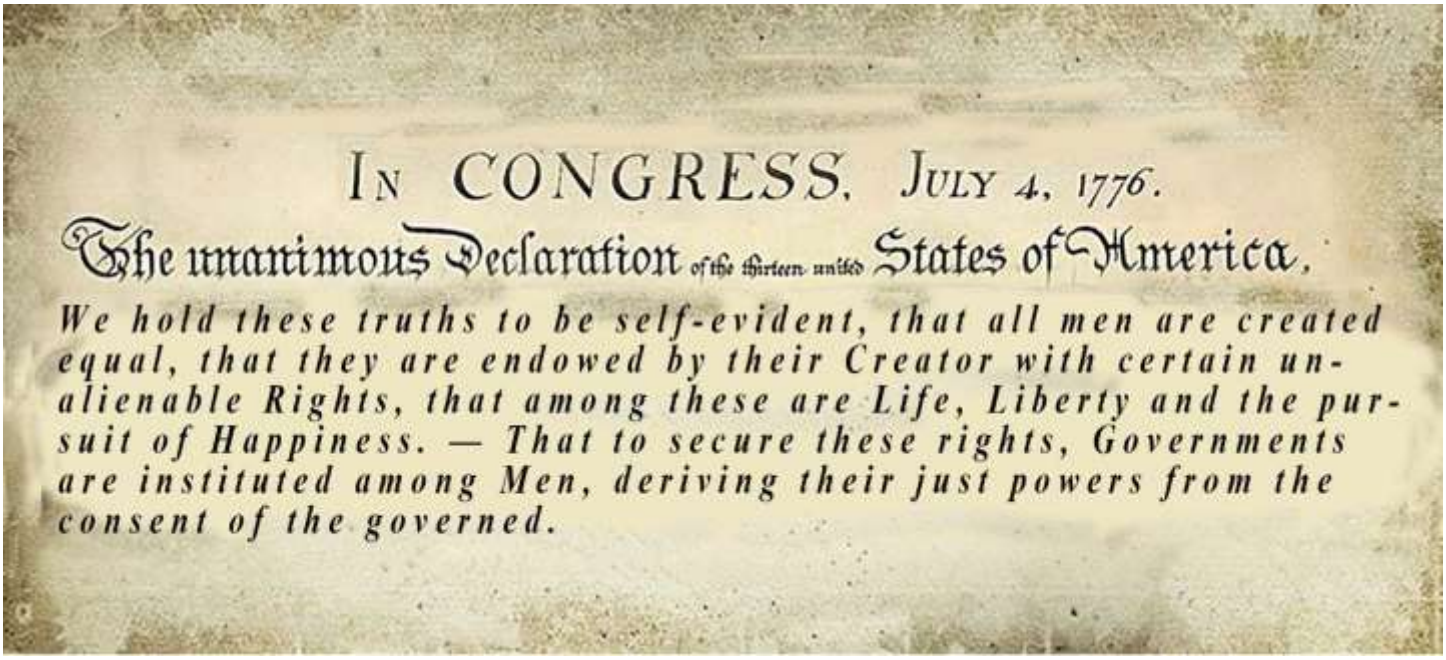
JULY 2020


IN CONGRESS, JULY 4, 1776.

The unanimous Declaration of the thirteen united States of America,

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. — That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed.

HAPPY JULY!

Bridgewire is Open!

President's Corner

A word about the state of Covid-19 and Bridgewire:

It's official, most states are seeing a significant uptick in cases, so Governor Sisolak has extended Phase 2 to the end of July. However, it could get worse. There is the possibility we may revert to earlier Phases in the coming weeks or months. In Phase 1 we did not offer classes, so you may want to cram in classes during July.

Currently as part of Covid-19 Phase 2, we have reopened to the public with limited access for non-members. We have also restarted classes for members only. Here are the Phase 2 guidelines.

1. Social distancing (6ft) and masks are required by all, while in the facility.

2. Open House Tours will occur every Thursday and Saturday. Check our website calendar for times. At any time, only 2 non-members will be allowed in the building for tours. Temperature tests will be conducted. First come first serve.

3. Classes will resume for members only.

Craig's Solar Corner

Since it appears this virus will be with us all for some time, it is probably a good idea to get used to sanitizing things. Here is a modification for our favorite FT2 solar cooker which will allow you to easily blast things with UV light.

Since glass blocks UVC light, a glazed solar cooker will only give you mostly heat, which may kill some germs but still will not allow much UV to get through.

You can easily make one of these with a cardboard box and a little bit of Mylar which is available in our shop. Rather than using glass as a cover I use a bit of screen which allows a lot of UV and also keeps your face mask and or any currency that you want to disinfect from getting too hot. It also keeps your currency from blowing away in the wind, which is kind of important to me.

While very little UVC radiation gets through the atmosphere, this is a way to concentrate it. UVC is the real virus killer I have read but then I may be wrong too. Anyway have fun with this if you build it and I generally leave my mask and currency in it for about 17 minutes at a time. And why 17 minutes you ask? Well, when I put stuff in the device I ask the sun to disinfect it for me. It takes a little over eight minutes for the message to get to the sun and another eight minutes for the sun to answer. That gives an extra minute in case the sun is feeling lazy that day. Yes, you know I'm weird, I belong to Bridgewire.

Member Communication Tool Even if we're not "hanging' out ' at Bridgewire, We can still communicate with other Bridgewire members and see if you want to plan various projects with them; including Covid-19 PPE support, by joining the members only forum using Discourse software. Just follow the link in the member notification email.

FACILITIES

Changes

While we were closed to the public our facility went through some layout changes. They provide a more organized and effective use of our space. Here are pictures of changes you may notice. Electronic project tables were moved adjacent to the Electronics Lab. The machine shop now has all equipment stored in new cabinets.

The shop is cleaner because we have also sold off several excess and old assets. The money raised will be reinvested into the facility assets and consumable materials.

Delta Bandsaw Refurbished

Our Delta-Milwaukee bandsaw had some work done. We replaced the tensioning spring with a new (yellow) stiffer spring. This will help improve any resaw work done on the machine. Also we replaced the upper wheel bearings and refurbished the tilt adjustment assembly. When changing the blade this will make adjustments much easier. The motor was also rebuilt and a new belt tensioning mechanism was created. We have also added dust collection to this 1940's vintage machine. It works incredibly well. Lastly all these improvements are showcased on a new stand which is more rigid and stable. Overall, these improvements should result in better resaw work, quality of general cuts, and blade life.

The woodshop has wheels

It was suggested a long time ago our equipment and tables need to be mobile. We are working toward this goal little by little. During the shutdown we made most of the equipment in the woodshop mobile. They will be stored together at the edge of the woodshop. When you need to use a piece of equipment just roll it out, hookup the central dust collection, and use it with minimal mess. This will provide a more spacious and cleaner shop.

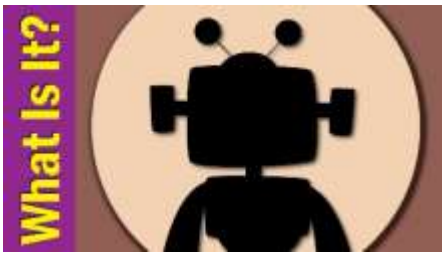
Who dunnit?

Inspector Policy is our house detective. He is always on duty looking for rules violations which disrupt the peace and fair maker environment. He lives by the maker credo “Be Excellent to each other”. Each month he will ask for your help to identify a rules violator.

This month’s case:

“Who Spray Painted on the Equipment.”

Here is the photo evidence. It appears someone sprayed their hand on this wood surface and spilled some green fluid. As we all know, the policy manual (section 3.2.1) clearly states that overspray and spillage must never damage equipment or tools. In fact we have a paint booth and painting/finishing table, just for that. Spraying your own hand…..well that’s not logical. If you can provide any leads or know the culprit, please drop a note in the Who Dunnit / Scavenger Hunt box at the front desk.



Scavenger Hunt

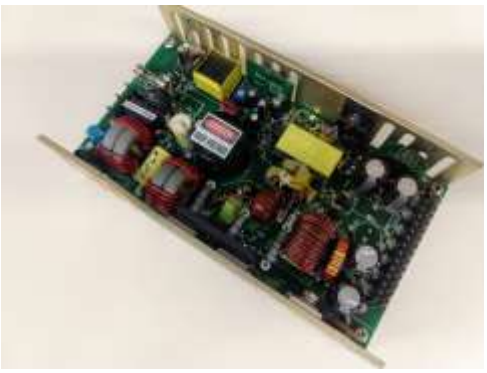
We are always adding new tools and kits at Bridgewire. The problem is most people don’t even realize what we have. We are starting a new game called, what is it? This will be conducted as a scavenger hunt within our facility.

Can you identify this grouping of Parts?

Figure 1 What is it

We have hidden this collection inside a toolbox somewhere within the Bridgewire Building. The objective is to:

1. Locate the toolbox
2. Retrieve an entry form from the toolbox.
3. Complete the entry form and deposit it in the “Who Dunnit / Scavenger Hunt” Box located at the front desk. The best winning entry(s) that can identify and name the grouping will be entered for a drawing to win a useful Switch Mode Power Supply (SMPS). Like this one.



If you can use this power supply in a project and/or write an article for the BW Newsletter Then we will have an additional; exciting surprise gift for you. Surprise TBA.

New online community for Bridgewire!

The Bridgewire Lounge is a feature of our new Discourse forum. . This is a space for all of us to talk shop, socialize and learn from one another when we aren't in the physical workshop. There are categories for each shop that you can post to. Do you have questions about certain tools, who can train on each tool/shop? This is a great place to start.

Finished an awesome project or have a work in progress that you'd like to share? Feel free to share your project's story in the **Show & Tell** area.

If you have any other ideas for how we might use this online community, feel free to reach out to colin@renocollective.com

Bridgewire online rummage sale in the Bridgewire lounge.

"The Bridgewire Lounge" is just one of the many features in Bridgewire's new online forum. Members can sign up for the Discourse forum to access these entertaining projects.

Given that many of us have been organizing our homes and garages, we thought it would be a good time to do an online rummage sale between Bridgewire members! Not to mention, it is the safest way to do this during the coronavirus.

Do you have extra tools that you've never used? Components or materials that you had the best of intentions for turning into a project? Looking for something that might be sitting in someone's garage without any use? Looking to buy, sell, or trade something from your own shop? This is the best place to do it.

First, Some Ground Rules

1. Create a **New Topic**
2. Add **[SELL], [BUY], or [TRADE]** to the beginning of your topic title
3. Add your price or OBO to the title of your topic
4. Example of a title: **[SELL] Ryobi Circular Saw w/ Battery - $25**
5. Post photos!
6. Please use a digital wallet to exchange money between members. Members are required to work out payment between one another. Venmo, Google Wallet, Apple Cash, Square Cash, etc.
7. Once the item is sold or no longer available, please edit your post title to reflect **[SOLD]**
8. Example of a sold item: **[SOLD] Ryobi Circular Saw w/ Battery - $25**
9. When meeting with the other member, please meet at Bridgewire as a neutral location.
10. Please wear a mask, practice social distancing and safety procedures implemented by Bridgewire in order for us to stay safe and stay open
11. Let's do this!

Bridgewire tool rentals

Another Bridgewire Forum feature We just wrapped up a Bridgewire Board meeting and are evaluating the feasibility of a tool rental program. If we end up doing this, it will likely be a specific set of rental tools that are available and ones that we have (or will have) extras of.

We will disclose more details on how this would work but we'd love to know **what tools or types of tools would you like to see made available in a tool rental program?** contact Colin at colin@renocollective.com

ARTICLES ALWAYS NEEDED!

The Newsletter

Things are looking up for the Bridgewire Newsletter, we're getting more and more interest in submitting articles, making the BWNL more interesting and relevant than ever. Thanks to Eric, Craig, Baljit and Colin for contributing to this month's issue. If you have an article in mind or just a particular subject that you would like to see in the newsletter please email your entries to Lance, at lance@ipc-solar.com .

EDUCATION HAPPENINGS

Embedded Systems Group: Every Tuesday of the month with lessons in soldering, basic circuitry and electronics projects. We are restarting this group. We plan to have a meeting every week during the summer. This would be the place to learn electronics and upgrade your knowledge. Projects will be presented every meeting. Tony will present using the ESP8266 Wi-Fi controller to drive a string of APA102 leds.

Bridgewire Classes and Workshops.

We offer a varying array of classes and workshops from month to month which can be viewed in our Calendar.

FINAL NOTES

Clean up for the cleaning crew?

We're back! And strict hygiene rules are in place. It's important that we pay attention to our workspace and be sure to consider the other members who come after us. Bridgewire's industrial cleaning service will again be doing a terrific job of keeping the shop tidy and dust free. We can all help them focus on the deep cleaning aspects of their job by keeping work areas organized and sanitized and cleaning up after ourselves. Let's not forget that Bridgewire is a co-operative facility that relies on member participation to maintain the facilities while keeping an affordable fee structure. This service frees us to spend more time on infrastructure issues. There's plenty of need for repair and maintenance of the tools and equipment.

New Members

Bridgewire is excited about starting up again with lots of new members starting projects .Here they are: Mairi Hennessy, Jonathan Wenthe, John Schillo, Daniel Barry, Camilo Neacato, Carmen Castillo

BRIDGEWIRE CALENDAR

Bridgewire Calendar
July 2020

JUL

Mon	Tue	Wed	Thu	Fri	Sat	Sun
	30	July 1 6 pm - 7 pm BW Officers Meeting 7:15 pm - 8:15 pm BW Board Meeting	2 6 pm - 9 pm Open House Night 7 pm - 9 pm Metal Shop and Welding	3	4 Independence Day	5
	7 6 pm - 7 pm Embedded Microprocessor Group meeting	8	9 6 pm - 9 pm Open House Night 7 pm - 8:30 pm Laser Cutting & Etching	10 6 pm - 8 pm CNC Wood Router Class (Intro)	11 6 pm - 9 pm Open House Saturday	12
	14 6 pm - 7 pm Embedded Microprocessor Group meeting	15	16 6 pm - 9 pm Open House Night 6:05 pm - 8:05 pm Wood Shop	17 6 pm - 9 pm CNC Wood Router Class (Adv)	18 9 am - 12 pm Open House Saturday	19
	21 6 pm - 7 pm Embedded Microprocessor Group meeting	22	23 6 pm - 9 pm Open House Night 7 pm - 8:30 pm 3D Printing	24 4 pm - 7 pm Reno Robot Club Sumo Challenge!	25 8 am - 12 pm CAD - Learning 3D CAD (2days)	26 Parents' Day 8 am - 12 pm CAD - Learning 3D CAD (2days)
	28 6 pm - 7 pm Embedded Microprocessor Group meeting	29	30 6 pm - 9 pm Open House Night	31	1	2

BELOW Click on “Calendar” to go to the Bridgewire calendar with interactive event details.

ALL MEMBERS, If you would like to add an event. Email us at info@bridgewire.org or click on the button below the calendar to schedule your event with details and contact info. The new event will be approved by an officer or director to make it show up. Your events can be any project you want to share or get help with. Add Event

Calendar