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DECEMBER 2019

Merry Winter Solstice

The winter solstice, “Hiemal Solstice” or “Hibernal Solstice”, also known as midwinter, occurs when one of the Earth's poles has its maximum tilt away from the Sun. It happens twice yearly, once in each hemisphere (Northern and Southern). For that hemisphere, the winter solstice is the day with the shortest period of daylight and longest night of the year, when the Sun is at its lowest daily maximum elevation in the sky.[1] At the pole, there is continuous darkness or twilight around the winter solstice. Its opposite is the solstice. The winter solstice occurs during the hemisphere's winter. In the Northern Hemisphere, this is the December solstice (usually 21 or 22 December) and in the Southern Hemisphere, this is the June solstice (usually 20 or 21 June). Although the winter solstice itself lasts only a moment, the term sometimes refers to the day on which it occurs. Other names are "midwinter", the "extreme of winter" (Dongzhi), or the "shortest day". Traditionally, in many temperate regions, the winter solstice is seen as the middle of winter, but today in some countries and calendars, it is seen as the beginning of winter. In meteorology, winter is reckoned as beginning about three weeks before the winter solstice. Since prehistory, the winter solstice has been seen as a significant time of year in many cultures, and has been marked by festivals and rituals.[3] It marked the symbolic death and rebirth of the Sun. The seasonal significance of the winter solstice is in the reversal of the gradual lengthening of nights and shortening of days. ***Click here, for more on the Solstice season***

Holiday Gifts

Bridgewire is the perfect place to come on in and make your awesome holiday decorations and turn those gift ideas into reality. We have everything you might want to create your favorite Holiday table setting. Bridgewire has all the tools it takes to build awesome decorations. In this gifting season it’s always great to know that Bridgewire has what you need to create those special one of a kind gifts

Lithophane Picture making class (Christmas present anyone?)

On Dec 14th and 15th (time TBD), Eric will be teaching a 2 day class in how to make a lithophane picture with the laser engraver and CorelDRAW software. You must contact Eric at ericbradfordmeetup@gmail.com to register for this class. You don't have to know how to use the laser to take the class. We will cover that during the class. In the class you will also make a picture frame to go along with your lithophane.

So Bring several high resolution jpg images with you and make a personal Christmas present. The class will have a $40 fee which includes the materials. Space is limited to 5 participants. Non-members are welcome, but will not be allowed to operate some equipment. The instructor will charge non-members an extra $10 for his services. We hope to see you.

New Board of directors

Bridgewire has elected a new set of Directors to lead our community through the next year. We'd like to welcome Mark Pipes back this year and introduce Colin Loretz who has come to us with extensive experience form the Reno Collective. Welcome Chet Stites who has been instrumental in bringing the First Robotics competition to Bridgewire and organizing the Mill and Lathe classes. Welcome long time member Baljit Saini and Ryan Bibbey who will be board treasurer. This new board brings a renewed enthusiasm to the management of Bridgewire and a complete, working board taking where the broken board left off. The board is making decisions on insurance for our facilities, and new and better ways to bring the Bridgewire members a better and better experience.

Secretary

Mark Pipes continues on the Board of Directors this year taking on the secretary duties. Responsible for maintaining documentation for all officers, directors and members to utilize .Distribute the

agendas for directors and officer meetings, record Board and officer meeting minutes as handwritten or audio recording. Secretary must maintain, organize, and provide a separate backup. Work with other officers to organize and maintain their records in the Cloud. Maintain paper copies in the file drawers. Digitize them and archive in the Cloud. Ensure copies of current public documents are posted on the website. File Paperwork with Government agencies and archive copies: Maintain a supply of documents commonly used; Waivers, Membership Applications, Guest Pass, Welcome and orientation packets, etc. Obtain and maintain office supplies that aid in the operation of the organization. These include: computers, printers, printer ink, paper, staples, pens, batteries, cleaning supplies, postage. Manage office operating expenses, these include computer/web software, telephone, internet and domain items, coffee, manage spending within the budget provided for the Secretary role.

Treasurer

Ryan Bibby is continuing as Treasure. Ryan has done an outstanding job of getting all of Bridgewire's past financials updated and organized. The treasurer oversees and manages Bridgewire's budget, financial planning and cash management while limiting risk to the organization. This role is integral in the maintenance of positive relationships with donors, banks and other financial institutions

Facilities Officer

Welcome to James Lawson as Bridgewire's new facilities officer. This position has been vacant for a long time with Eric Bradshaw and Tony Badzioch filling in until someone came along who was interested in helping keep the Bridgewire facilities in tip top shape.

James bring lots of experience in facilities management from his day job in the auto parts business. James will be in charge of keeping the machinery running but also organizing work events to take some of the labor off his hands. You'll be seeing James around the shop so let him know you're on the team by just asking if there's anything you can do to help. Remember again that Bridgewire is a co-operative organization and it takes all of the members to make it work.

Membership Officer

Welcome back to Matt Hansen after a few months. Matt has returned to take on the Membership officer's position on the board officer's team. Matt wants to work on reviving old memberships and showing our past members how far Bridgewire has come and what new opportunities are available to them. Matt is one of the original founders of Bridgewire and proves his belief in the Bridgewire mission by taking on this responsibility.

Education Officer

Baljit Saini was confirmed as Education Officer Baljit is a long time member of Bridgewire and brings a lifetime of education experience to the position. As Bridgewire Education Officer, he will help organize and promote education and training opportunities in an effort to achieve the Bridgewire mission. Reporting to the Bridgewire President.

Marketing Officer

Colin Loretz has added Marketing officer to his board chairman duties to bring a more involved marketing presence to Bridgewire. Lance will continue to handle the media design and production aspects from Minden while Colin has a more hands on position to organize a viable marketing committee to really do the marketing work that's needed. It takes all of the member's effort to effectively promote Bridgewire in the community. The more members we have the more diverse our experience will be and the more facilities that Bridgewire can offer to the membership.

Bridgewire President

Eric Bradshaw is staying on as president in the hope that, with our new facilities officer taking over the facilities management duties that he has been doing all along, he will have the time and resources to devote more effort to the prescribed president's duties which include community outreach, setting up Bridgewire booths at various events and organizations to promote increased membership and connecting with other organizations to create co-operative public and membership events.

Lots of New Equipment

What a month! We have added many new pieces of high quality equipment. This equipment has replaced old equipment (look for a January sale of old assets).

Its pays to have a good relationship with other makerspaces. In November we were contacted by Truckee Roundhouse because they were receiving a large donation of equipment but did not have room to absorb all the equipment. They offered to pass on to Bridgewire the items they couldn't take. We all owe them a debt of gratitude.

I am happy to say we now have available to use, a Powermatic 66 cabinet saw, Rockler router table, and Jet 16 speed drill press for our wood shop. These are all significant upgrades to our old equipment. We invested a little money to make the equipment safe and put them into service. The cabinet saw required a redesign of our cyclone dust collector which is now short and squat. The router table now has dust collection which you will plug into our dust collection port near the miter saw. The drill press was ready to go. It's nice to have a drill that lines up with the hole on the work surface. Estate sales can yield some great value purchases. Eric picked up a small wood lathe with all the accessories that go with it. This lathe is perfect for small turning projects like pens and bottle stoppers. As part of the same purchase, we also scored a bench grinder which will be used only for tool sharpening. The Delta drum sander was down for repair all month but is back and working better than ever. Thanks to Chris for machining the height adjustment gear so we could press a bearing into the gear and eliminate wobble. Also, thanks to Lee for welding up some stiffer brackets for the same height adjustment mechanism. Lastly, thanks to Eric for creating foam inserts to eliminate the imbalance caused by the accumulation of saw dust in the drum.

ARTICLES ALWAYS NEEDED!

The Newsletter

Thanks to Eric Bradford for the Lithophane article and the "New Tools" 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.co

EDUCATION HAPPENINGS

BBBS upcoming January workshop

The next Big Brothers and Big Sisters Event is scheduled for January 29th to accommodate for the Holiday season. The project is to be determined. For more information contact John at renoscuba1@gmail.com .

Regular Monthly Classes and Equipment Safety Training:

- **1st Thurs – Welding Shop:** Safety Demo + knowledgeable user check off - by Lee Elliot
- **2nd Thurs - Laser Cutting:** Safety Demo + User Training.- by Eric Bradford
- **3rd Thurs - Wood Shop:** Safety Demo + knowledgeable user check off - by Roman Hruska.
- **4th Thurs - 3D Printing:** Safety Demo + User Training.- by Chris Spitler

Recurring Education classes and events:

- **CAD Class:** Learn 3D CAD modeling so you can make items to 3D print or machine on the CNC Wood router.
- **CNC Wood/Plastic Router Classes (Intro):** Learn the basic principles of CNC wood routing on the Shapeoko 2 router. This class will introduce you to the basic process steps so you can machine small items. This class is free to members and has a $20 fee for non-members.
- **CNC Wood/Plastic Router Classes (Adv):** Apply the principles of CNC wood routing on the Greenbull Router. This class introduces you to a powerful 3 Horsepower router spindle for cutting large and thick materials. The **(Intro)** class is a prerequisite to this class. You must be a member to take this class and has a $30 fee.
- **Embedded Systems Group:** 3rd and 4th Tuesday of the month with lessons in soldering, basic circuitry and electronics projects.

Groups meeting at Bridgewire

- Big Brothers & Big Sisters (activity monthly)
- Reno Robots
- Your group can meet here also. The only requirements are that at least one member of the group must also be a Bridgewire member and that the group obey the rules of our Policy Manual. Schedule your event per the calendar instructions below.

FINAL NOTES

Clean up for the cleaning crew?

Bridgewire's industrial cleaning service has been 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 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

Welcome to our only new member this month.

Will Tanneberger

BRIDGEWIRE CALENDAR

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