Calling all makers: RCBI's annual festival kicks off Oct. 7

The Robert C. Byrd Institute will host the 2016 West Virginia Makes Festival - a celebration of ingenuity and creativity to inspire artists, inventors, makers and students of all ages - on Oct. 7 in Huntington.

The annual festival, which coincides with national Manufacturing Day, is open to everyone and will feature 3D Printing, special exhibits and attractions, local food vendors and technology. A Design Challenge at the festival will provide makers the opportunity to demonstrate their new ideas and skills, and reward their creative inspirations.

"Our festival celebrates makers," said Charlotte Weber, RCBI Director & CEO. "It taps into the inventive community of entrepreneurs and innovators so they can interact with like-minded makers."

More details to come! For the latest information, go to www.rcbi.org/online/wvmakes.
RCBI partners with aerospace titan on 3D Printing project

The Robert C. Byrd Institute has been working nearly two years with Northrop Grumman at several aerospace fabrication facilities in California documenting a specific Additive Manufacturing process so the aerospace titan can 3D print functional aerospace components.

The ongoing activity of the Quality Implementation group at RCBI will establish best practices in the Electron Beam Powder Bed Fusion (ePBF) process necessary to 3D print quality parts that feature complex geometries.

The ePBF technique uses a powerful electron beam in a vacuum to produce the energy necessary to melt metal powder. The material then is fused layer by layer creating a single dense metal piece. This leading-edge, additive technique will eventually replace, in part, traditional subtractive manufacturing processes that rely on welding individually machined steel pieces to produce the complex aerospace component.

RCBI is a partner in the multi-phase project awarded competitively through America Makes - the National Additive Manufacturing Innovation Institute - that will develop industry standards for the rapidly developing technology of electron beam additive manufacturing.

Erica Cheetham, RCBI's Director of Quality Services, has made regular visits to aerospace facilities in California documenting the steps and procedures used to fabricate the specialized parts. Further - under Cheetham's supervision - RCBI will develop training guidelines and skill sets for industrial employees who use the EBM process.

Learn more
$40/MONTH
INTRODUCTORY
MEMBERSHIP OFFER

With membership you get:
- Access to all equipment
- Access to Maker Vault classes
- Monthly fee rate of $40 locked in for one year

For more information contact:
Diana Perdue
304.781.1675
dperdue@rcbi.org
W.Va. businesses eligible for up to $10,000 in flood relief

Small businesses affected by June's devastating flooding in West Virginia can receive up to $10,000 each through a program announced this week by Gov. Earl Ray Tomblin.

RISE West Virginia, a public/private partnership, will use individual contributions and funds from the state’s racetrack modernization fund to help businesses in the hardest hit communities rebuild and reopen. Intuit President & CEO Brad Smith, a Marshall University alumnus, has given $500,000 toward the business recovery effort.

At least 150 West Virginia businesses were destroyed and as many as 1,000 others were damaged by the June 23 flood.

For more information about RISE West Virginia, click here.

RCBI assists hard-hit state manufacturers

RCBI is reaching out to members of the manufacturing community who have had industrial equipment damaged by the devastating floodwaters. Our staff members will continue to evaluate affected machinery and help get companies up and running again as quickly as possible.

If you or manufacturers you know have been affected, call Arley Carpenter, Director of Manufacturing Services, toll-free at 800.469.7224 to schedule a visit by our experienced team of manufacturing engineers.

Women take center stage this summer at RCBI Huntington

In the advanced and mostly hands-on classrooms of the Robert C. Byrd Institute in downtown Huntington, an attentive group of women - daughters, sisters, wives and single mothers - has embarked on a new trajectory to a better paying career that also promises to bridge the critical, ongoing skills gap in American manufacturing.

The women are enrolled in Step Up for Women, a new Advanced Manufacturing Pre-Apprenticeship in which students from diverse backgrounds are immersed in manufacturing processes that involve everything from manual and computer-controlled machining to precision measuring, blueprint
reading and 3D printing. The first class will graduate next month armed with the knowledge and skills they need to secure rewarding jobs in manufacturing.

The effort is a collaboration between West Virginia Women Work and Apprenticeship Works, the National Advanced Manufacturing Apprenticeship Program at RCBI. Funded by the U.S. Department of Labor, Apprenticeship Works is a nationwide expansion of RCBI's proven apprenticeship model. The 10-week program is offered twice a year at RCBI Huntington. Applications are being accepted for classes that begin in January 2017.

Read more

Toyota, Manufacturing Institute grant boosts STEM initiatives

The Manufacturing Institute and the Toyota Foundation awarded the Robert C. Byrd Institute for Advanced Flexible Manufacturing (RCBI) a $7,000 grant to support its summer camp activities to engage young people in STEM (Science, Technology, Engineering & Math). The Manufacturing Institute partners with RCBI and other organizations across the country on the Dream It. Do It. effort, which works to change perceptions about careers in manufacturing.

With guidance from RCBI engineers, technicians and outside experts, the campers receive hands-on experience with computer-aided design, 3D Printing, coding and manufacturing. They also learn about career opportunities by interacting with West

Robotics season revs up with fall slate of events at RCBI

Robots will be roving around Huntington this fall as RCBI hosts a series of FIRST Lego League (FLL) events for students 9 to 14 years old.

Events get underway Sept. 10 with an FLL Season Kickoff. Area teams and others interested in robotics will gather to learn the details of this year's global challenge, "Animal Allies." Students will discover the intricacies of this year's challenge, learn about the different components of competition, network with other robotics enthusiasts and have a chance to show off the agility of their robotics creations. The free kickoff runs 10 a.m. to 2 p.m. at RCBI Huntington, located at 1050 Fourth Ave.

Events turn competitive Oct. 15 as RCBI hosts the 2016 FLL Scrimmage.

Read more
Virginia manufacturers and entrepreneurs.

Wayne High senior chosen state president of SkillsUSA

RCBI photography/video production intern Kyle Powers, an incoming senior at Wayne High School, is the new West Virginia president of SkillsUSA.

Powers was chosen from among 13 statewide candidates to lead the professional development organization.

"SkillsUSA is a student-led organization that provides individuals with workplace skills to help ensure that America has a skilled workforce," Powers said. "My major responsibilities are to help organize and plan the fall leadership conference and the state competition and conduct regular business meetings with chapters across the state."

He also will serve as West Virginia's official representative during national SkillsUSA events.

Powers became involved in SkillsUSA just last fall as a member of Wayne High School's crime scene investigation team. He said that in addition to workforce experience, the organization helps young people develop better life, leadership and time management skills.

Powers plans to attend Marshall University and pursue a degree in criminal justice and criminology. When not investigating crime scenes, Powers enjoys photography, playing football and spending time with friends. He is the son of Michael and Christine Powers of Lavalette.

THE VIDEO FILE

Entrepreneur right at home in RCBI's new makerspace

Dan Stevens has been making things for years. The technology at RCBI simply makes the making easier.
Technology enables Cabell fabricator to reap savings
Local manufacturer turns to RCBI to help reduce costs and fulfill a large contract.

Upcoming events

August 2016
Aug 3.: MT/CNC & Welding Orientation - RCBI Huntington, 10 am - 11:30 am
Aug. 3-5: Python Coding Camp, RCBI Charleston, 1:30 pm - 4:30 pm
Aug. 11: Alternative Funding Webinar - 2 pm - 3 pm
Aug. 15: First Day of Classes, RCBI Bridgeport & Huntington
Aug. 15: Raspberry Pi User Group, RCBI Huntington, 5:30 pm - 6:30 pm

September 2016
Sept. 10 - FLL Robotics Season Kickoff, RCBI Huntington, 10 am - 2 pm
Sept. 12 - Online & Mobile Payment seminar, Magnolia Room, Hinton, 4 pm - 6 pm
Sept. 15: Raspberry Pi User Group, RCBI Huntington, 5:30 pm - 6:30 pm

Call 800.469.7224 or email frontdesk@rcbi.org for more information.

ABOUT US
The Robert C. Byrd Institute for Advanced Flexible Manufacturing (RCBI) provides leading-edge equipment, specialized training and staff expertise so entrepreneurs and manufacturers of all sizes can innovate, create jobs and thrive. Learn more at www.rcbi.org.