



Glenn's SCaN Testbed Launches from Japan

Employees gather to celebrate

On July 20 at 10:06 p.m. EDT, the Glenn-designed and built Space Communications and Navigation (SCaN) Testbed successfully launched to the International Space Station onboard the Japan Aerospace Exploration Agency "Kounotori 3" H-II Transfer Vehicle, from the Tanegashima Space Center in southern Japan.

The testbed is an advanced, integrated communications system and laboratory facility that allows researchers to develop, test and demonstrate new communications, networking and navigation capabilities in the actual space environment. NASA will conduct a suite of experiments over the next several years, enabling the advancement of a new generation of space communications.

A few hours before the launch, NASA employees and the general public gathered at Cleveland's 100th Bomb Group Restaurant's main parking lot,

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Pictured, top right: Excited guests gather for a wide-screen viewing of the launch; bottom, right: Janice Haas, DB/Space Communications Office, and her children, Mandy and Madeline, with Dante Genaturi, GLSC, at a SCaN Testbed technology display. Pictured below: the SCaN Testbed.



C-2012-2861



C-2012-2866

Photos by Marvin Smith

Notable Advancements in Sustainable Energy, Flexible Materials

Earning two R&D 100 Awards for technological innovation, Glenn is proud to represent NASA and continue a winning tradition during this year's 50th anniversary of the R&D 100 Awards Program.



A Glenn-developed technology and collaboration were chosen by the editors of *R&D 100 Magazine* and an independent panel of judges to be among the 100 most technologically significant products introduced to the marketplace last year. The winners will be acknowledged at the 2012 R&D 100 Awards banquet in November.

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NASA Day at Progressive Field featuring John Glenn on Aug. 26. See page 7.





Center Director Lugo

Gaining a New Perspective on Work

It's been said that "life is a series of making adjustments." Keeping this perspective in mind, I'd like to provide a status update on some current and new activities at the center.

I am pleased to announce that Janet Watkins has been hired as our new Associate Director. Janet joins us after serving over 30 years with the United States Air Force, most recently at Wright-Patterson Air Force Base in Dayton, Ohio. Janet's experience focuses on the institutional activities at the center, which enhances the diversity of our senior management team. I invite all of you to welcome Janet to NASA Glenn and make sure she feels a part of our great team.

Recently, I was briefed by the members of the center's reorganization team on the results of their work. They presented

a number of options with more work to follow. While they acknowledged a "clearly definitive" option was not presented, the current organization rated lower than all other options that were considered. Clearly, we need to make some changes. As her first assignment, our new Associate Director will continue to work in completing this reorganization effort.

Not long ago, I was asked why we were considering a reorganization at the center. As an organization, Glenn has continued to evolve and has made some changes, but we lag behind our peers in a very competitive and uncertain environment. For this reorganization to be successful, I would offer that an organization:

1. Must establish a "competency champion" that is fully aware of the status/condition of a center core competency and is accountable for maintaining the competency;
2. Must encourage and embrace "interdependence" at the center;
3. Must align with the center's identity and agency's mission;
4. Should be agile, flexible and results driven.

I will acknowledge that this reorganization may not be easy to measure. However, if we see stability in funding and headcount, consistent assignments of work that align with our center identity and a higher degree of "interdependence," I believe we will be successful.

As you know, this is an election year, and in any election year there is uncertainty. What I am certain of, is that we will do the best we can with the tools and resources we have available to us. In other words, we'll adjust.

Glenn's 2012 R&D 100 Award Winners

Continued from page 1

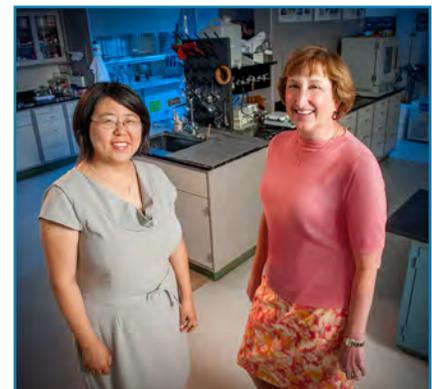
The following technologies bring the total to 114 of R&D's "Oscars of Innovation" presented to Glenn since 1963.

The SolarVolt™ module, the innovation of a team that includes Glenn's Michael Piszczor, and Entech Solar, Inc. (Ft. Worth, Texas) employees Mark J. O'Neill, A.J. McDanal and Robert Walters, was primarily developed for terrestrial use incorporating NASA space power technology advancements. The module is a highly efficient photovoltaic solar panel that can compete with fossil fuels to provide utility grid-scale power due to its unique solar concentrator design. It offers a combination of increased efficiency and reliability, lower weight, and competitive cost, and demonstrates how space technology can be adapted for our use here on Earth.

The Polyimide Aerogels, developed by Glenn's Dr. Mary Ann Meador and the Ohio Aerospace Institute's Dr. Haiquan Guo, are highly flexible, lightweight, thin and 500 times stronger than conventional silica aerogels, while maintaining the excellent insulation properties for which silica aerogels are known. This innovation is unparalleled in the aerogel marketplace, as no other aerogel possesses the compressive and tensile strength with simultaneous flexibility to contour to whatever shape is needed.

To learn more about this year's award recipients and the process of submission to the R&D 100 Awards, contact Kim Dalglish-Miller, Innovation Projects Office.

Pictured, right: Glenn's Michael Piszczor, a member of the award winning SolarVolt™ module team. Below, left to right: Dr. Haiquan Guo and Dr. Mary Ann Meador, 2012 winners for Polyimide Aerogels.



C-2012-2551

Photo by Michelle Murphy

—By S. Jenise Veris

Watkins New Associate Director of NASA Glenn



Watkins

Center Director Ray Lugo recently named Janet L. Watkins, a native of Dayton, Ohio, as the center's Associate Director.

In her new position, Watkins is responsible for the overall management of the institutional operations for Glenn and provides the coordination and integration of institutional activities which cross directorate organizations. She serves as Glenn's focal point for all institutional functions and coordinates the consideration and evaluation of means to improve the efficiency and effectiveness of the services provided by the institutional organizations at the center.

"Janet brings a wealth of knowledge and experience to our management team," said Lugo. "Her solid management

and leadership experiences make her a valuable asset as we continue to implement and improve our institutional base at the center."

Prior to coming to Glenn, Watkins served as the technical expert/sourcing and acting deputy director, Manpower, Personnel and Services at Wright Patterson Air Force Base in Dayton, Ohio, and as the organization division chief of Manpower, Personnel and Resources Directorate, United States Air Force (USAF) Headquarters at the Pentagon. Watkins held a number of increasingly responsible management positions for the USAF.

Watkins has received numerous awards for her leadership and professional accomplishments. She holds a bachelor's degree in business administration and management from Wright State University in Fairborn, Ohio, and her master's degree in public administration from Central Michigan University.

Glenn Hardware Launched to Station

Continued from page 1

patio and inside to watch the live launch and enjoy activities and exhibits presented by NASA Glenn, the Great Lakes Science Center; the Natural History Museum and the Cleveland Clinic.

On July 27, Expedition 32 Flight Engineers Joe Acaba of NASA and Aki Hoshide of JAXA welcomed SCaN with an open arm—station's Canadarm2, the Canadian Space agency-provided robotic arm. The arm reeled the vehicle in, docking it to the Earth-facing side of the Harmony node.

For details on Glenn's role in the project, revisit the March 2012 AeroSpace Frontiers at <http://aerospacefrontiers.grc.nasa.gov>.

Centralized Business Units Promote Efficiency and Expertise

Travel and purchase functions streamlined

The last wave of an initiative to consolidate NASA Glenn's Travel Request and Purchase Requisition (TR/PR) functions will be completed in September. Launched in April, this initiative improves work efficiencies in response to "Executive Order 13589—Promoting Efficient Spending," issued in November 2011.

"Based on an extensive business case analysis, we expect that the consolidation will reduce error rates, pool expertise and free up valuable human resources to focus on other important tasks," explained Frank Robinson, project manager.

The consolidation, which is being rolled out in two phases, began with the Office of the Director and four other directorates. Individuals within those directorates now make travel reservations and setup purchase

SGT employees, left to right: Alice Camburako, Ruth McClure, Kathy Wargo (standing) and Lauren Storrow in one of the new centralized business units.



C-2012-1718

Photo by Bridget Caswell

requisitions through a newly created TR/PR consolidated unit. The remaining directorates and offices are being incrementally rolled out throughout fiscal year 2012, with the last wave to be completed by Sept. 7. Individuals from those directorates and offices are each assigned to a designated business unit.

Robinson said that by using the consolidated units, employees could expect to receive expert knowledge

about travel request and purchase requirements, a consistent and stable process and excellent customer service.

Employees can book travel or setup purchase requisitions using three methods, which are outlined on the Office of the Chief Financial Officer's website: http://www.grc.nasa.gov/WWW/NEWCFO/TRAVEL_PR-consolidation.html.

—By Doreen B. Zudell



Golf Outing Fun >

NASA Glenn held its third Centerwide Golf Outing on July 13 at the Mallard Creek Golf Course in Columbia Station. The 4-person scramble, consisting of 252 golfers, began with a shotgun start at 9:30 a.m., followed by lunch, dinner and prizes. For results from the outing, including teams and scores, look in the *Today@Glenn* archives. Pictured, far right: Bob Hauer, Bill Saettel and Mike Krinov on the course; pictured immediate right: Center Director Ray Lugo presents an award to golfer Christine Pastor-Barsi.



C-2012-2793

Photos by Christopher Lynch



C-2012-2792

~ High Flyin' Good Time at Huriot Picnic



Photo by Mac Zborowski

The Huriot Sports Flyers Radio Control Club, based in Sandusky, held its annual summer picnic on July 14 at Plum Brook Station. During the event, club members—NASA Glenn employees and retirees—demonstrated their radio-controlled model aircraft and conducted a traditional airdrop, scattering candy across the airstrip. Nearly 100 attendees enjoyed a full day of activities

and the opportunity to share the hobby of flying radio-controlled aircraft. Pictured, left to right, club members Matthew Kunkel, VPL/Management Integration Office; and Matthew Myers and Sal Oriti, Power and In-Space Propulsion Division.

Greening Glenn One Event at a Time

August Event

Thursday, Aug. 23, building 15, Small Dining Room from 12 to 1 p.m.; Kathleen M. Rocco, an education specialist from the Cuyahoga County Solid Waste District, will be here to talk about the benefits of composting for your home.



September Event

The Sustainability Fair has been rescheduled from August to Thursday, Sept. 13, outside building 15 Cafe area with vendors, exhibits and more.



Astronaut and Associate Director of External Programs Greg "Box" Johnson is coming to a community near you! You can follow Greg's outreach efforts online or see him in person! Upcoming stops include: August 11, Space Saturday at NASA Glenn Visitor Center at Great Lakes Science Center, Cleveland. For more information visit http://www.nasa.gov/centers/glenn/events/wheres_box.html

NASA CIO Discusses I3P Plans >

NASA's Chief Information Officer Linda Cureton conducted an All Hands Meeting with employees at Lewis Field on June 25. Cureton, pictured, provided an overview of the current state of the Information Technology (IT) Infrastructure Integration Program (I3P), discussed agency action plans to address integration issues, and answered questions from the audience.



C-2012-2532

Photo by Michelle Murphy

Manufacturing Innovation Workshop >

NASA Deputy Administrator Lori Garver, pictured, joined Glenn Center Director Ray Lugo, Congressional leaders and White House representatives at Cuyahoga Community College's Main Campus, on July 9, for a workshop to share ideas on a proposed National Network for Manufacturing Innovation Institutes. This initiative, coordinated through the Advanced Manufacturing National Program Office and hosted by the National Institute of Standards and Technology, focuses on investments in innovation, advanced technology, education and infrastructure to make the U.S. manufacturing sector more competitive.



C-2012-2563

Photo by Marvin Smith



C-2012-2354

Photo by Bridget Caswell

Outreach Opportunities

Here are some upcoming events to consider staffing: Sept. 1-3: Cleveland Air Show, Cleveland • Sept. 3: N. Coast AFL CIO Parade, Cleveland • Sept. 15-16: Scott Air Force Base Air Show, Belleville, Ill. • Sept. 22: Wings of Women Conference at IWASM, Cleveland • Sept. 22-23: Duluth Air Show, Duluth, Minn. • Sept. 30: Woollybear Parade & Festival, Vermilion, Ohio. Visit <http://outreach.grc.nasa.gov> (internal only) for information and registration.

< Glenn Hosts Event for Small Businesses

The center hosted its Industry Day for the Historically Underutilized Business Zone, or HUBZone, on June 19 at the Ohio Aerospace Institute. The event enabled companies to meet with decision-makers to learn more about doing business with NASA. Over 300 people attended, including 221 small business representatives—82 from HUBZone businesses. Pictured, seated right: Timothy Bober and Deborah Giavasis, contracting officers in Glenn's Procurement Division, talking to business representatives.

˘ Federal Agencies Team on Diversity Workshop



C-2012-2330

Photo by Bridget Caswell

On June 12, NASA Glenn partnered with fellow federal agencies, the FBI and the U.S. Attorney's Office, to host the 11th Annual Diversity Workshop at the Ohio Aerospace Institute. The event featured Naomi Tutu, human rights activist, who shared the African philosophy of Ubuntu that encourages finding commonalities rather than fearing differences to build relationships. The workshop also offered breakout sessions and two student presentations from the winners of the "Stop the Hate" essay contest sponsored by the Maltz Museum of Jewish Heritage.



Photo by Dick Woodward

< Very Special "Artventure"

Members of NASA Glenn's Disability Awareness Advisory Group (DAAG), along with other center staff, participated in the Very Special Arts Festival at the Berea Fairgrounds on May 10. The annual event, sponsored by the Cleveland branch of the State Organization on Arts and Disability, is a venue for integrating the arts into the general education of children with disabilities. Glenn staff assisted the children on various art projects related to this year's theme, "The Great Outdoor Artventure," provided pictures from the Picture Yourself in Space Photo Booth, and Eva the astronaut. Pictured, far left, Sandy Barrow, Institutional Resources Analysis Division, and Ken Kirkland, WYLE/Office of Diversity & Equal Opportunity, assist with beading art.



Awards and Honors

FEB Wings of Excellence Award Winners

The Cleveland Federal Executive Board (FEB) honored five NASA Glenn employees with a Wings of Excellence award for being top performers among the 25,000 federal employees across the Greater Cleveland area. They were recognized during the 2012 Federal Employee Recognition Ceremony on May 11.

Dr. Amy Fagan, Optical Instrumentation and NDE Branch, for excelling as a nationally recognized optical research engineer, while annually committing to a robust schedule of charitable, civic and academic programs, including the FEB Tutoring program.

Caleb Fisher, Fluid Systems Branch, for his passionate support to the Cleveland inner-city tutoring program since 2004, including serving as program coordinator for Glenn tutors, training and orientation leader, and tutoring at three Cleveland public schools.

Jerry Kennemuth, Office of the Chief Counsel, for his 30 years of service as lead attorney advisor in the area of contract law, which has been invaluable in identifying fraud, waste and abuse of taxpayer funds; and pro bono legal work counseling homeless and disadvantaged men.

Ron McClanahan, Reliability and System Safety Engineering Branch, for serving with distinction as Glenn's Loaned Executive to the 2011 Combined Federal Campaign (CFC) leading a team that netted 24 percent of the local campaign's \$2,200,000.

Maryann Pawson, Procurement Division, for her exceptional efficiency and effectiveness as the center's Bankcard Program coordinator to assure the timely monthly reconciliation of thousands of transactions, giving Glenn the best record in the agency.

—By S. Jenise Veris



C-2012-1759 Photo by Michelle Murphy

Pictured, standing, left to right: Greg Harris, the keynote speaker and Rock and Roll Hall of Fame Museum vice president of Development, with McClanahan and Fisher. Seated, left to right: Fagan, Pawson and Kennemuth.

Newsletter Award



The *AeroSpace Frontiers* staff has earned a 2012 Gold Hermes Award, the fourth consecutive award for newsletter excellence! The Hermes Creative Awards is an international competition for creative professionals involved in the concept, writing and design of traditional and emerging media. The competition is run and judged by the Association of Marketing and Communication Professionals.



Retirements

Virginia Cestaro, Management Integration Office, Engineering Directorate, retired on June 30, 2012, with 30 ½ years of NASA service.

Jeffrey Haas, Testing Division, Facilities and Test Division, retired on July 3, 2012, with 42 years of NASA service.



Haas



Harrington

Sally Harrington, Community and Media Relations Office, External Programs Division, retired on July 27, 2012, with 30 years of NASA service.

Bipin Patel, Quality Engineering and Assurance Branch, Program and Project Assurance Division, retired on July 28, 2012, with 25 years of NASA service.



Patel

Gregory Schmitz, ISS and Human Health Office, Space Operations Project Office, retired on June 30, 2012, with 30 years of NASA service.

Cheryl Washam, Research and Space Operations Branch, Procurement Division, retired on July 27, 2012, with 36 years of federal service, including 16 ½ with NASA.

Quintile Receives SFA Award

Suzanne Quintile, Office of the Chief Financial Officer, received NASA's Space Flight Awareness (SFA) Program Honoree Award for outstanding contributions to human spaceflight. Quintile was recognized for supporting Glenn's Space Flight Systems Directorate as the lead resources analyst for five projects of various sizes crossing multiple NASA programs. The award included travel to NASA's Kennedy Space Center for a ceremony and tour of the center. The SFA



Photo/NASA

Pictured, left to right: Astronaut Rick Arnold with Quintile and Bill Hill, NASA HQ Exploration Systems Development.

Honoree Award is one of the highest honors presented to employees for their dedication to quality work and flight safety.



In Memory

James Bowser, Jr., 68, who retired in 2003 with 40 years of NASA service, died May 16. Bowser was a mechanical engineering technician who teamed with draftsmen in the Mechanical Equipment Engineering Branch, Aeropropulsion Facilities and Experiments Division, to demonstrate skills and imagination for designing complex research equipment and adapting existing facilities to house the equipment. Bowser's expertise was in design of compressor test rigs supporting the NASA Multistage Compressor Flow Physics Program to advance turbine engine technology.



Bowser



DeLiberato

Rocco DeLiberato, 73, who retired in 1995 with 29 years of NASA service, died April 30. DeLiberato was an electrician in the Test Installations Division. He supported the Icing Research Tunnel, the Small Engine Components Test Facility and the Nozzle Acoustic Test Rig in the Powered Lift Facility. DiLiberato won several service awards, including a 1990 NASA Group Achievement Award as part of the "Portable Cryogenics Research Team."



Article Deadlines

News items and brief announcements for publication in the September issue is noon, Aug. 24. Larger articles require at least one month notice.

READ US ON THE INTERNET:

<http://aerospacefrontiers.grc.nasa.gov>

Hermes Award 2009-2012



Albert F. Dolinshek, 93, who retired in 1973 with 32 years of NACA-NASA service, died April 26. Dolinshek was an aerospace mechanic leader who began his federal career at the NACA Langley Laboratory in November 1941 before transferring to NACA's Aircraft Engine Research Laboratory in Cleveland in January 1943. He won several Suggestion Awards, including two concurrently for new instrumentation on a punch press and a small portable electrical heater to uniformly heat the same punch press, resulting in over \$2,000 a year savings to the center. He retired from the NASA Lewis Materials and Rockets Service Branch, Test Installations Division.



Turske

Walter W. Turske, III, 62, who retired in 1995 with 26 years of NASA service, died May 10. Turske retired from the Test Installation Division, where he served as an aerospace technician. He was a former unit vice president of the American Federation of Government Employees (AFGE), Local 2128, representing the union on issues of wage grade and as a member the advisory body for the Trades Apprentice Program.



In Appreciation

Thank you for all the support you have given me the last few months. It has been extremely difficult to deal with the passing of my husband, Bob Yavoich, and the illness of my mom. Your prayers and acts of kindness are truly appreciated and have been a tremendous help. I am grateful for all the encouragement and support you continue to provide. —Linda Yavoich

Check out NASA Glenn's Exchange Online Gift Shop
www.nasagiftsshop.com



Calendar

WOMEN'S RETIREE LUNCHEON: The next NASA Retired Women's Luncheon will be held at Don's Pomeroy House, 13664 Pearl Road, Strongsville, on Thursday, Aug. 16 at noon. Contact Gerry Ziembra, 330-273-4850, to reserve your seat.

IFPTE LOCAL 28, LESA PICNIC: LESA will hold a summer picnic on Friday, Aug. 24 from 5 to 11 p.m. at the Glenn Picnic Grounds. POC: Sally Weiland, 216-433-5623.

CLEVELAND INDIANS GAME: Save the date of Sunday, Aug. 26 for NASA Day at Progressive Field featuring John Glenn. Join co-workers for a group outing to see the Cleveland Indians vs. New York Yankees. The first pitch is at 1:05 p.m., plan to arrive early for pregame activities. Look for announcements including discount ticket sales on *Today@Glenn*.

FARMERS MARKET AND WALK: Mark your calendar for Sept. 6 when Glenn will hold its Farmers Market and Walk from 10:30 a.m. to 1:30 p.m. at the Picnic Grounds. Several local vendors will offer fresh produce and natural items such as oils and honey. Free eco shopping bags while supplies last! POC: Fitness Center, 3-6313

FREE FACILITY TOUR: On Sept. 8, the public can learn more about Glenn's enhanced Zero-Gravity Locomotion Simulator, developed to address the detrimental physiological effects of spaceflight. On-the-hour tours of the facility begin at 10 and 11 a.m., 12 and 1 p.m. Call 216-433-9653 to register.

IFPTE LOCAL 28, LESA MEETING: LESA will hold its next membership meeting on Wednesday, Sept. 12 at noon in the Employee Center's Small Dining Room.

PLUM BROOK REUNION: The sixth PBS reunion will be Saturday, Sept. 22, at the Engineering Building. Current and former employees of PBS, support service contractors and surviving spouses are invited. Contact: Bill Brown at 3802 Windsor Bridge Circle, Huron, OH 44839, or e-mail huronbill@bex.net or Jack Crooks at jackcrooks@aol.com.

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NASA Offers Solutions to Local Manufacturing Sector

If the saying, “Everything old is new again,” is true, Gotta Grove Records, Cleveland, is hoping that NASA Glenn can help put a new “twist” on a 1970s vinyl record printing process to improve efficiency and reduce costs.

Gotta Grove Records is one of nine manufacturers in Greater Cleveland who will have the benefit of Glenn subject matter experts (SMEs) thinking out of the box on their behalf. The companies were selected by MAGNET (the Manufacturing Advocacy & Growth Network) to participate in the Manufacturing Innovation Project developed through a partnership between NASA, the City of Cleveland, Cuyahoga County and MAGNET.

NASA is committed to providing 40 hours of technical assistance to each company to identify potential solutions to challenges the selected companies face with a new or existing product. To support this partnership, the City of Cleveland and Cuyahoga County are making \$450,000 in low-interest rate loans available to help the companies with any costs that may occur from their participation.

“Providing assistance and support to local manufacturers represents a natural extension of Glenn’s efforts to be

an integral part of the Ohio community and the nation,” said Center Director Ray Lugo. “We look forward to sharing our expertise to help keep the economic engine moving in northeast Ohio.”

This project was developed through NASA’s Adopt a City Program, a 1-year pilot program incorporating key goals of the White House’s Council on Strong Cities, Strong Communities.

The names of the companies, projects and Glenn SMEs are listed below.



C-2012-2006

Marvin Smith

Center Director Lugo, at the podium, offers remarks at the news conference announcing the companies. NASA Chief Technologist Mason Peck looks on.

1. **BioInVision**, Mayfield Village—Three-Dimensional (3D) Imaging Microtome. SME: Michael Lewis
2. **Boundary Systems**, Middleburg Heights—Mold Cooling System for 3D Printed Molds. SMEs: Cathy Chuang, Gary Roberts, Chris Johnston, George Harpster and Justin Elschert
3. **Gotta Groove Records**, Cleveland—Vinyl Records. SMEs: Larry Oberle and Brent Nowlin
4. **Mega Joule**, Cleveland—Utility Scale Energy Storage. SMEs: Dr. Mike Meador, Rick Baldwin and Tom Miller
5. **Morrison Products, Inc.**, Cleveland—Fans/Blowers. SME: Milind Bakhle
6. **Pile Dynamics, Inc.**, Solon—Thermal Integrity Profiler. SMEs: Dr. Fran Hurwitz, Jim Sutter and Euy-Sik “Eugene” Shin
7. **Sensor Development Corporation**, Strongsville—Termite Detector. SMEs: Dr. Gary Hunter and Dr. Mary Ann Meador
8. **Vadxx Energy**, Cleveland—Synthetic Crude Oil Shredder. SMEs: George Harpster, Rick Kelsch, Mark Stevens, Monica Guzik and Bryan Fraser
9. **Zuga Medical, Inc.**, Cleveland—In-Oral Modifiable Dental Implant Abutment. SMEs: Stephanie Vivod and Frederick Dynys

—By S. Jenise Veris